

# **State of Maryland Interagency Commission on School Construction**

## **Maintenance of Maryland's Public School Buildings Fiscal Year 2022 Annual Report**



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# FY 2022 Annual Report: Maintenance of Maryland's Public School Buildings

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# I. PreK-12 Public School Maintenance in Maryland

## A. Defined Terms

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.

# I. PreK-12 Public School Maintenance in Maryland

## A. Defined Terms

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
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



# I. PreK-12 Public School Maintenance in Maryland

## B. Background

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.<sup>1</sup>
- 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.

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

# I. PreK-12 Public School Maintenance in Maryland

## B. Background

- 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 total cost of ownership. 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.

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.

# I. PreK-12 Public School Maintenance in Maryland

## C. The Changing Landscape of Facilities Maintenance

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.

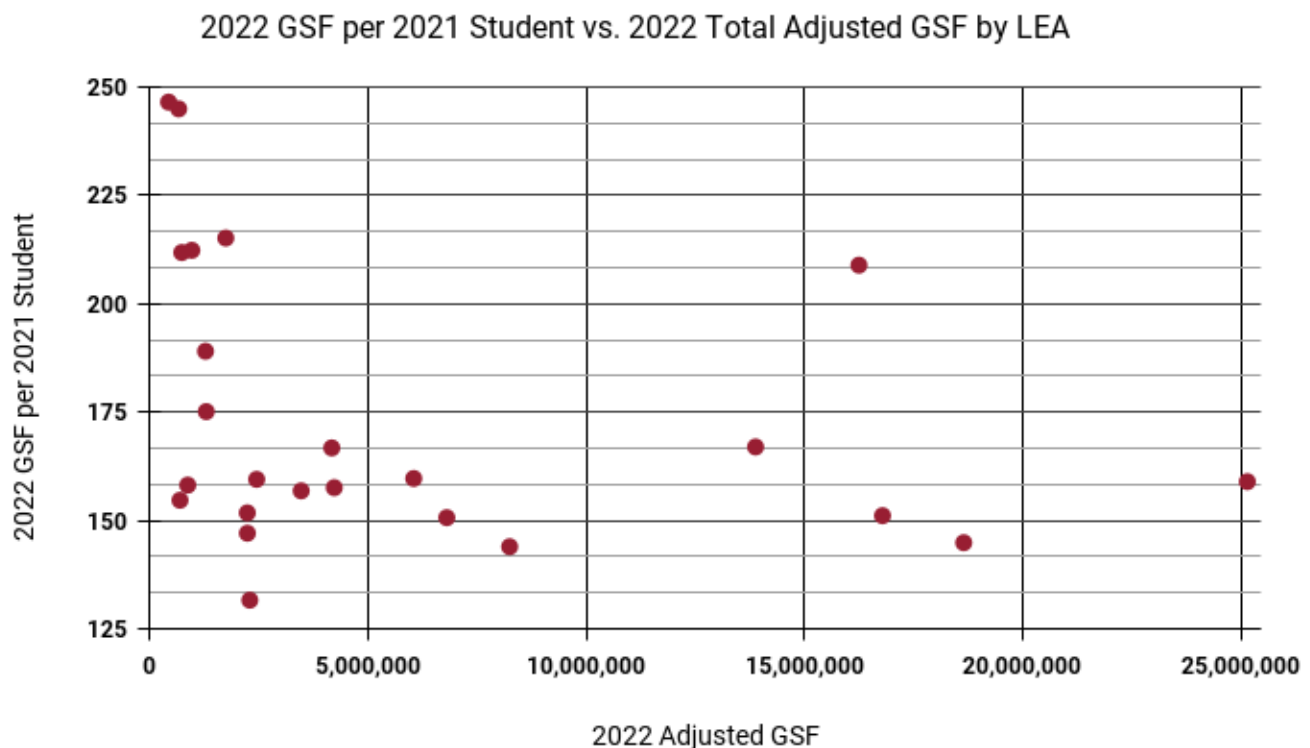


# I. PreK-12 Public School Maintenance in Maryland

## C. The Changing Landscape of Facilities Maintenance

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 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 2022, Maryland's LEAs operated more than 141 million GSF of educational space to serve about 881,700 PK-12 students, for a statewide average of about 161 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 161.



School facility size and total cost of ownership 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 total cost of ownership and to sustain our schools.

# I. PreK-12 Public School Maintenance in Maryland

## C. The Changing Landscape of Facilities Maintenance

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 total cost of ownership 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.

# I. PreK-12 Public School Maintenance in Maryland



## D. The Post-FY 2020 Maintenance-Effectiveness Assessment

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;

<b>Superior and Good</b>	Maintenance is likely to extend the life of systems within the facility beyond their expected lifespans.
<b>Adequate</b>	Maintenance is sufficient to achieve the life of each system within the facility and, with appropriate capital spending and renewal, the total expected lifespan.
<b>Not Adequate and Poor</b>	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
 <b>Minor Deficiency</b>	Poses a <u>potential threat</u> to life, safety, or health of occupants; delivery of educational programs or services; or the expected lifespan of the facility.	-34%
 <b>Major Deficiency</b>	Poses an <u>immediate threat</u> 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 after. 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. Schools 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.**



# I. PreK-12 Public School Maintenance in Maryland

## D. The Post-FY 2020 Maintenance-Effectiveness Assessment

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

# I. PreK-12 Public School Maintenance in Maryland

## D. The Post-FY 2020 Maintenance-Effectiveness Assessment

The rubric also includes the following four categories under the heading of Maintenance Management:

Group	Category	Weight
Maintenance Management	22. Preventive Maintenance (PM) Plan	10
	23. Computerized Maintenance Management System (incl. Equip. Data)	10
	24. Pest Management	4
	25. Custodial Scope of Work (SoW)	5

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	<ul style="list-style-type: none"><li>• No problems or issues visible; and</li><li>• Evidence that only normal preventive maintenance is required.</li></ul>
Good	<ul style="list-style-type: none"><li>• Evidence of systems functioning normally with no signs of deterioration, corrosion, leaks, or delivery issues;</li><li>• Evidence of issues that may require minor repairs or cleanup but do not affect structural integrity or intended uses; and</li><li>• Evidence of routinely above-standard custodial and maintenance practices.</li></ul>
Adequate	<ul style="list-style-type: none"><li>• Evidence of systems functioning normally with few signs of deterioration, corrosion, leaks, or delivery issues;</li><li>• Evidence of issues that may require repairs or cleanup but do not significantly affect structural integrity or intended uses; and</li><li>• Evidence of regular competent custodial and maintenance practices.</li></ul>
Not Adequate	<ul style="list-style-type: none"><li>• Systems are not functioning as intended;</li><li>• Evidence of significant deterioration, corrosion, leaks, or delivery issues;</li><li>• Evidence of issues requiring significant repairs or replacement; or</li><li>• Evidence of inconsistent custodial or maintenance practices.</li></ul>
Poor	<ul style="list-style-type: none"><li>• System is nonfunctional or unsafe to operate;</li><li>• Evidence of extensive deterioration, corrosion, leaks, or delivery issues;</li><li>• Evidence of issues requiring extensive repairs or replacement; or</li><li>• Evidence of consistently sub-standard custodial or maintenance practices.</li></ul>

# I. PreK-12 Public School Maintenance in Maryland

## D. The Post-FY 2020 Maintenance-Effectiveness Assessment

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.<sup>2</sup> Each rating has a factor as follows:

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

The IAC's software<sup>3</sup> 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. Because the IAC does not have enough staff to assess every facility 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.<sup>4</sup>

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

<sup>2</sup> 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.

<sup>3</sup> The formulas used in the IAC's software are shown in the [MEA scoring calculator](#) provided on the IAC's website.

<sup>4</sup> For more detail about the school selection process, see Overview of FY 2022 Assessment Results on page 17.



## II. The Assessment: Fiscal Year 2022

### A. Procedures and Methods

In conducting a total of 265 MEAs between July 2021 and May 2022, the team implemented the following process:

#### **Prior to the Site Visit**

At least two weeks prior to beginning the site visits for each LEA, the IAC provided to the LEA a list of the school facilities to be assessed and coordinated with the LEA 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 the assessment score. 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.

## II. The Assessment: Fiscal Year 2022

### A. Procedures and Methods

As described in the following section on the results of the FY 2022 MEAs, the LEAs accrued a total of 685 minor deficiencies – an average of 2.6 per assessed school facility – and 4 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.



Beall Elementary, Allegany County



Pinehurst Elementary, Wicomico County

## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

The IAC is reporting on 265 MEAs performed in FY 2022 representing 19% of Maryland's PK-12 public school facilities.<sup>5</sup> These MEAs constitute the second 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 2022, 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 20% of facilities in each LEA, but limited the maximum number of assessments to 39 in any 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. At the request of Montgomery County Public Schools (MCPS), the school facilities chosen at MCPS were distributed proportionally across all three MCPS maintenance service centers.

Table 2 provides a summary of the maintenance-effectiveness results for each LEA from FY 2022. 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.

#### **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.

As compared with results from FY 2021, the average overall rating for a facility in FY 2022 decreased by 0.82%. The FY 2022 data shows the following:

- The statewide average maintenance-effectiveness rating by facility was 73.06%, which falls within the Adequate range under the IAC's rating system.
- 19 of 24 – or 79% – of LEAs earned an average overall maintenance-effectiveness rating of Adequate.
- 22 of 24 – or 92% – 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 remaining two LEAs only accrued a total of four major deficiencies between them.
- Excluding the minor deficiencies accrued by the two LEAs that accrued the largest number, Maryland's LEAs averaged fewer than two minor deficiencies per facility.

5 Individual school reports are available upon request.



## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

**Table 1: Maintenance-Effectiveness Assessment Results by Fiscal Year**

<b>TABLE 1: MEA RESULTS FISCAL YEARS 2021-2022</b>					
<b>NUMBER OF MEAS PERFORMED WITH RATINGS AND PERCENTAGES</b>					
<b>Fiscal Year</b>	<b>Superior/Good</b>	<b>Adequate</b>	<b>Not Adequate</b>	<b>Poor</b>	<b>Total</b>
2021	63	131	72	2	268
<b>2022</b>	<b>22</b>	<b>189</b>	<b>52</b>	<b>2</b>	<b>265</b>
Total Ratings	85	320	124	4	533
<b>Total Percentages</b>	<b>15.95%</b>	<b>60.04%</b>	<b>23.26%</b>	<b>0.75%</b>	<b>100%</b>



Mary E. Rodman Elementary # 204, Baltimore City

Dowell Elementary, Calvert County

## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

**Table 2: Summary of Maintenance-Effectiveness Assessment Results**

LEA	LEA Characteristics in FY22			FY22 Maintenance Assessment Results				
	Total # of School Facilities	Total Square Footage	Average Adjusted Age of Schools	# of Schools Assessed	LEA Average Rating		# of Deficiencies	
							Major	Minor
TOTALS	1370	141,714,338	31	265	73.06%	Adequate	4	685
Allegany	22	1,749,398	35.3	4	65.75%	Not Adequate	0	26
Anne Arundel	121	13,883,724	29.1	24	75.33%	Adequate	0	37
Baltimore City	141	16,251,586	37.0	27	73.94%	Adequate	2	82
Baltimore Co	165	16,791,691	32.8	30	73.18%	Adequate	0	48
Calvert	25	2,456,795	24.2	5	76.72%	Adequate	0	1
Caroline	10	877,773	22.5	3	71.66%	Adequate	0	7
Carroll	40	4,176,741	31.3	8	72.10%	Adequate	0	27
Cecil	29	2,242,569	30.0	6	75.85%	Adequate	0	7
Charles	39	4,233,893	28.6	8	75.92%	Adequate	0	7
Dorchester	14	970,840	30.3	3	70.54%	Adequate	0	7
Frederick	68	6,811,025	27.2	13	78.19%	Adequate	0	28
Garrett	13	741,671	34.0	3	71.70%	Adequate	0	8
Harford	52	6,054,298	30.9	10	76.41%	Adequate	0	16
Howard	76	8,250,880	20.6	15	77.11%	Adequate	0	27
Kent	5	440,226	43.8	3	69.47%	Not Adequate	0	5
Montgomery	210	25,147,251	25.1	37	73.66%	Adequate	0	65
Prince George's	197	18,652,099	39.0	36	66.12%	Not Adequate	2	217
Queen Anne's	14	1,302,658	21.0	3	67.28%	Not Adequate	0	14
St. Mary's	27	2,300,101	25.6	5	73.94%	Adequate	0	8
Somerset	10	671,356	21.3	3	68.14%	Not Adequate	0	14
Talbot	8	700,971	17.1	3	70.83%	Adequate	0	10
Washington	46	3,476,622	34.8	9	73.25%	Adequate	0	16
Wicomico	24	2,244,318	29.4	4	78.83%	Adequate	0	1
Worcester	14	1,285,852	26.6	3	73.17%	Adequate	0	7

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

Updated 7/1/2022



## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

- Of the four major deficiencies, two were in the playgrounds category, one pertained to windows, and one concerned electrical distribution. All four deficiencies related to life/safety issues, such as damaged play equipment that could injure users and unsafe conditions in student-occupied areas. No deficiencies that posed a threat to the condition of other building systems and to the longevity of buildings were left unremediated.
- Of the minor deficiencies assessed, 35.9% pertained to Building Equipment & Systems; 31.7% pertained to Site; 23.2% pertained to Building Interior; and 8.5% pertained to Building Exterior. Less than 1% pertained to Maintenance Management, in large part because issues arising in that area generally are most appropriately addressed through the category rating rather than through a deficiency.

**Table 3: Major and Minor Deficiencies by Category**

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	80
	Grounds	0	40
	Positive Site Drainage Away from Structure(s)	0	11
	Playgrounds, Equipment, & Fields	2	55
	Relocatables & Additional Structures	0	31
	<b>Site Subtotals</b>	<b>2</b>	<b>217</b>
Building Exterior	Exterior Structure & Finishes	0	19
	Roof Drains, Gutters, & Downspouts	0	6
	Windows, Caulking, & Skylights	1	6
	Entryways & Exterior Doors	0	21
	Roofs, Flashing, and Gravel Stops	0	6
	<b>Building Exterior Subtotals</b>	<b>1</b>	<b>58</b>
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	30
	Floors	0	18
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	25
	Ceilings	0	27
	Interior Lighting	0	59
	<b>Building Interior Subtotals</b>	<b>0</b>	<b>159</b>
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	37
	Electrical Distribution & Service Equipment	1	49
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	40
	Plumbing Fixtures and Equipment	0	30
	Fire and Safety Systems & Utility Controls	0	80
	Conveyances	0	10
	<b>Building Equipment &amp; Systems Subtotals</b>	<b>1</b>	<b>246</b>
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	5
	Custodial Scope of Work (SoW)	0	0
	<b>Maintenance Management Subtotals</b>	<b>0</b>	<b>5</b>
<b>Total</b>		<b>4</b>	<b>685</b>

## II. The Assessment: Fiscal Year 2022

## B. Overview of FY 2022 Assessment Results

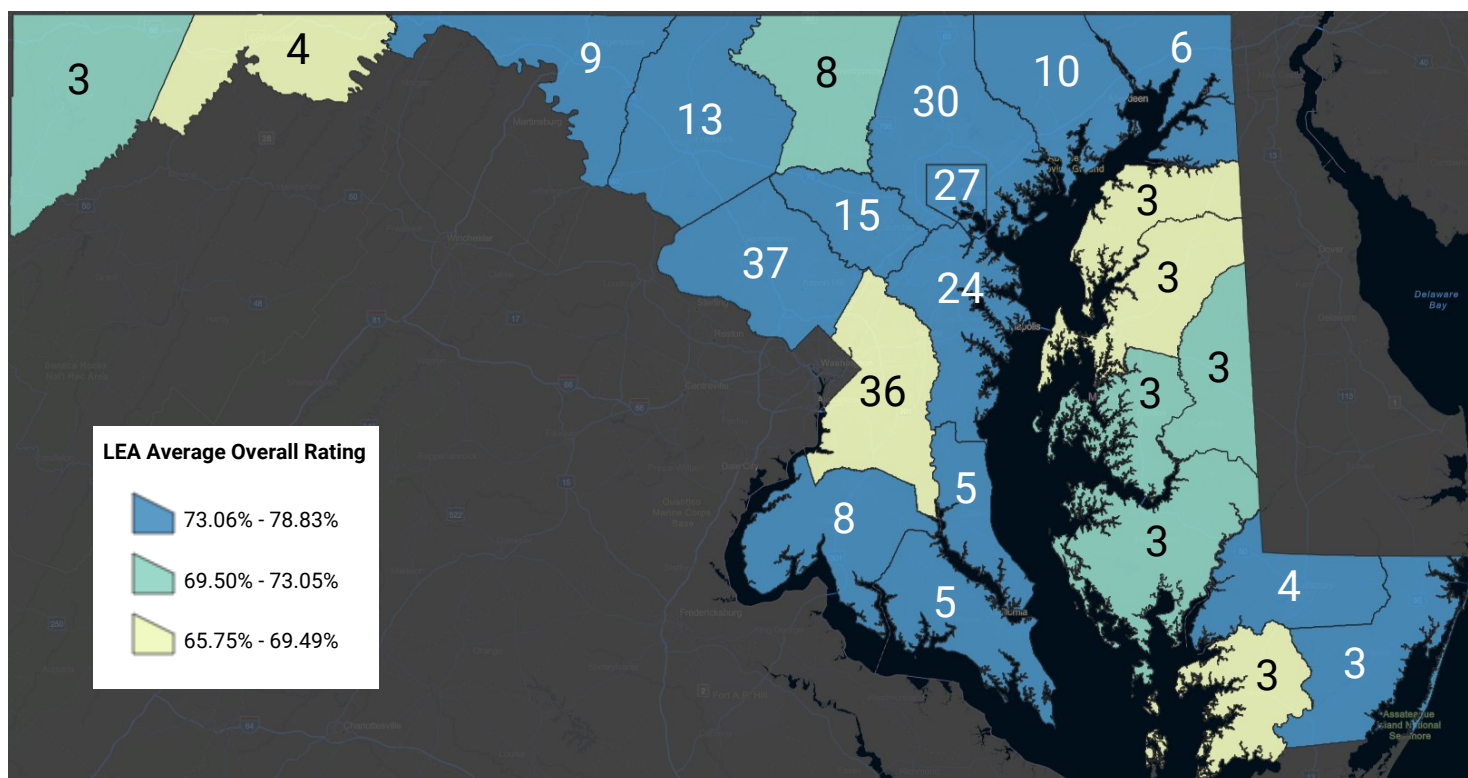
The specific ratings of facilities assessed in each school district are shown on the FY 2022 Results: Summary of School Ratings pages in the district-by-district overview section starting on page 25. Of the 265 school facilities rated in FY 2022,

- 0 facilities (0.0%) were rated Superior;
- 22 facilities (8.3%) were rated Good;
- 189 facilities (71.3%) were rated Adequate;
- 52 facilities (19.6%) were rated Not Adequate; and
- 2 facilities (0.8%) 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 2022 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.

**Figure 1. Number of Assessments and Average Overall Rating by LEA**

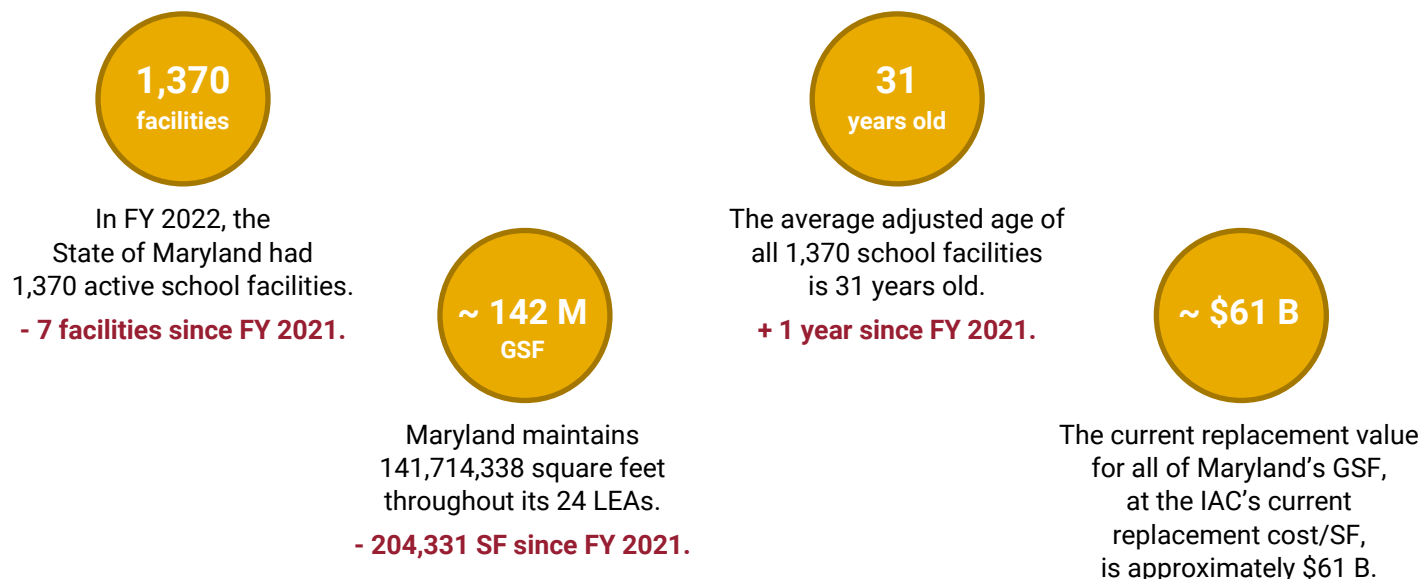
As a result of these facility-level scores, nineteen LEAs received overall ratings of Adequate, fourteen of which (in blue) are above the Statewide average and five of which (in green) are below. Five LEAs (in pale yellow) received overall ratings of Not Adequate.



## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

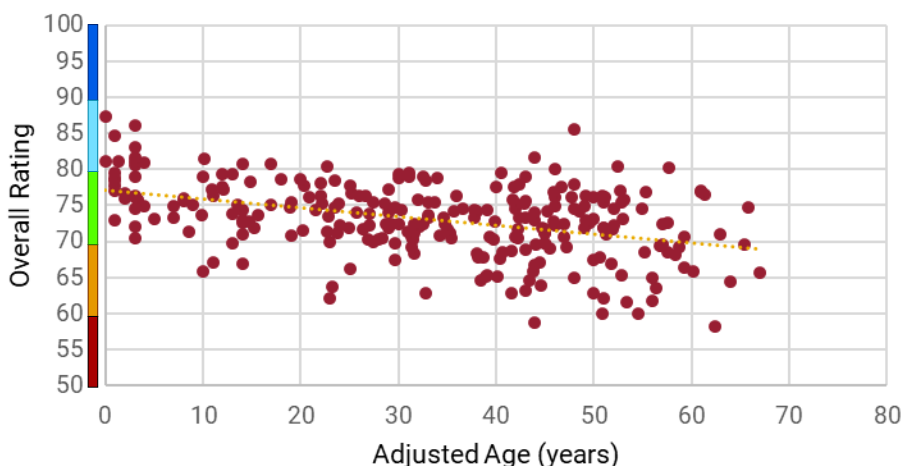
## Fiscal Year 2022: Statewide Summary



**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.

### Overall Rating vs. Adjusted Age

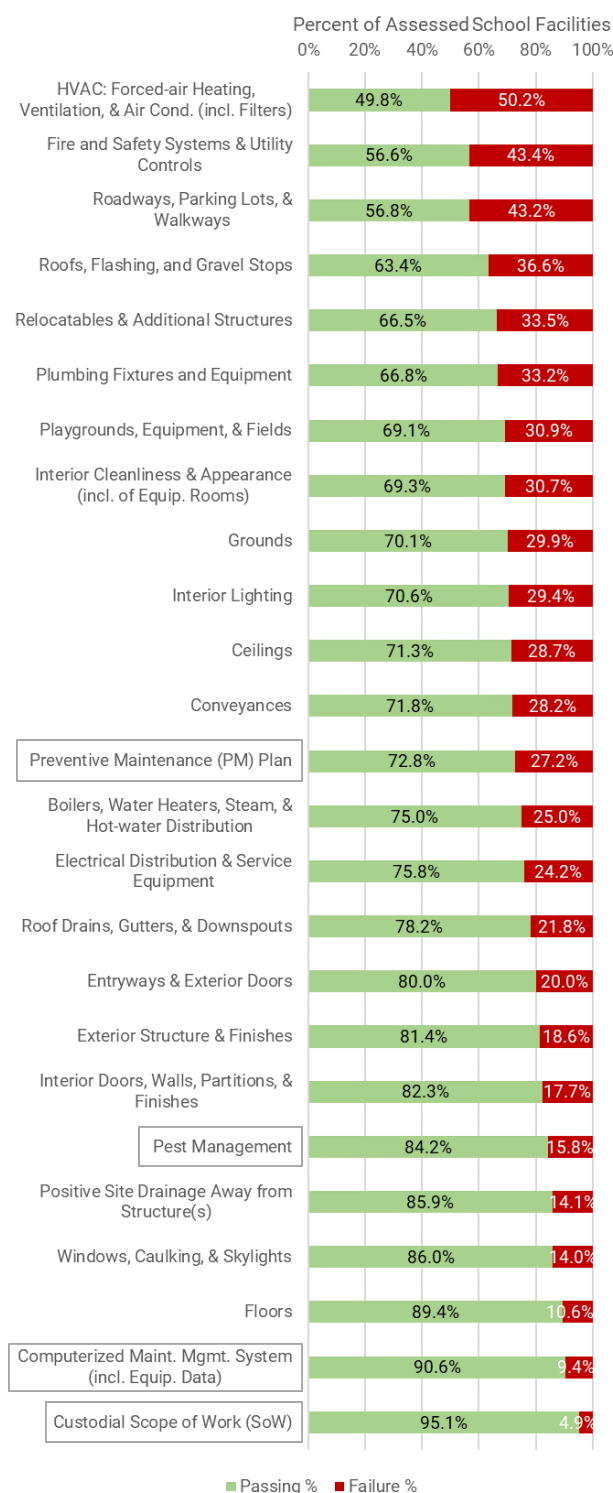


## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

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.

FY22 Passing vs Failing Rating per Category



**Figure 3: FY 2022 Passing vs. Failing Rating per Category**

Across the body of 265 school facilities assessed, 34.5% of the building-system categories received a failing rating. This result shows that, within the facilities assessed during FY 2022, 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 2.6 deficiencies per facility assessed.

#### Strengths

- ◆ **Boilers:** Every LEA had at least one facility earn a passing rating for Boilers, Water Heaters, Steam, & Hot-water Distribution. Of the 198 school facilities that received a passing rating, 17 facilities were Superior. This area was only one of two building categories to not have any facilities earn a Poor rating; the only other building category to do so was Roadways, Parking Lots, & Walkways.
- ◆ **Floors:** The floors were the most consistently maintained area again this FY. Most LEAs either did not receive any deficiencies in this area or remediated them within the required 45-day period, and 15 LEAs received a passing rating for every facility assessed.
- ◆ **Roadways:** The number of school facilities with minor deficiencies decreased by 33 and the percent of passing ratings increased by 2.7%. Even though this category is tied with Fire and Safety Systems & Utility Controls for most minor deficiencies, the impact on the delivery of educational programs or services, or the expected life span of the facility is much less than most other categories. The fact that so many deficiencies remain in this category are likely due to LEAs prioritizing their resources and finances in other areas that are more beneficial to the students, staff and facilities.

## II. The Assessment: Fiscal Year 2022

### B. Overview of FY 2022 Assessment Results

#### Weaknesses

- ♦ **Fire/Safety:** The percent of failing ratings in Fire and Safety Systems & Utility Controls increased by 15% since last FY. The number of deficiencies also increased, with 80 school facilities with minor deficiencies. This was tied with Roadways, Parking Lots, & Walkways for most deficiencies.
- ♦ **HVAC Systems:** The number of school facilities with minor deficiencies decreased from 72 last FY to 37 this FY, but the percent of failing ratings for HVAC systems increased by 14% with just over half of all facilities assessed this FY receiving a failing rating. Only two LEAs, Somerset and Talbot, earned a passing rating for every facility assessed in their district.
- ♦ **Roofs:** Last FY, there were 40 school facilities with deficiencies in Roofs, Flashing, and Gravel Stops, contributing to 26.9% failing ratings. This FY, there are only six facilities with minor deficiencies in this category, one of only seven categories that had less than 10 facilities with deficiencies; however, despite the low number of facilities with deficiencies, the percent of failing ratings increased by 9.7%.
- ♦ **CMMS Usage:** While every LEA has implemented some type of CMMS to enter and track work orders, most LEAs are not using the full functionality of the system to auto-populate PM work orders or track the repairs, maintenance, and costs of specific essential assets or contractual work. An effective CMMS is a useful tool to improve the management of facilities, including streamlining processes, increased resource accountability, and data transparency.

# ALLEGANY COUNTY

Total School Facilities Assessed in FY 2022: 4



## Fiscal Year 2022: Key Facts

22  
facilities

Allegany County has 22 active school facilities.  
**No change since FY 2021.**

35.3  
years old

The average adjusted age of all 22 school facilities is 35.3 years old.  
**+ 1 year since FY 2021.**

> 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 2021.**

> \$0.7 B

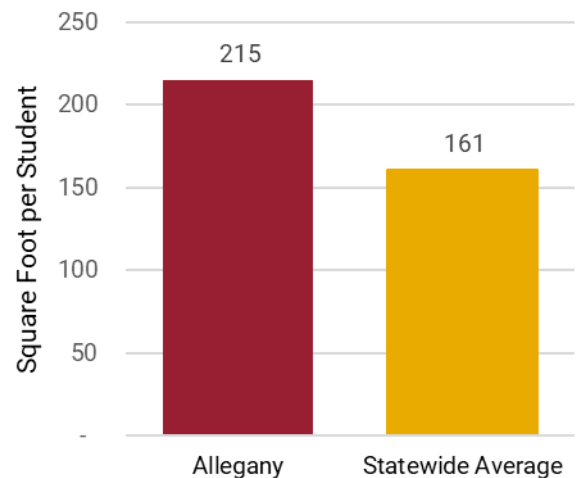
The current replacement value for Allegany County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.7 B.

**65.75% (Not Adequate) = Average Overall Rating for FY 2022**  
**- 6.42% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student





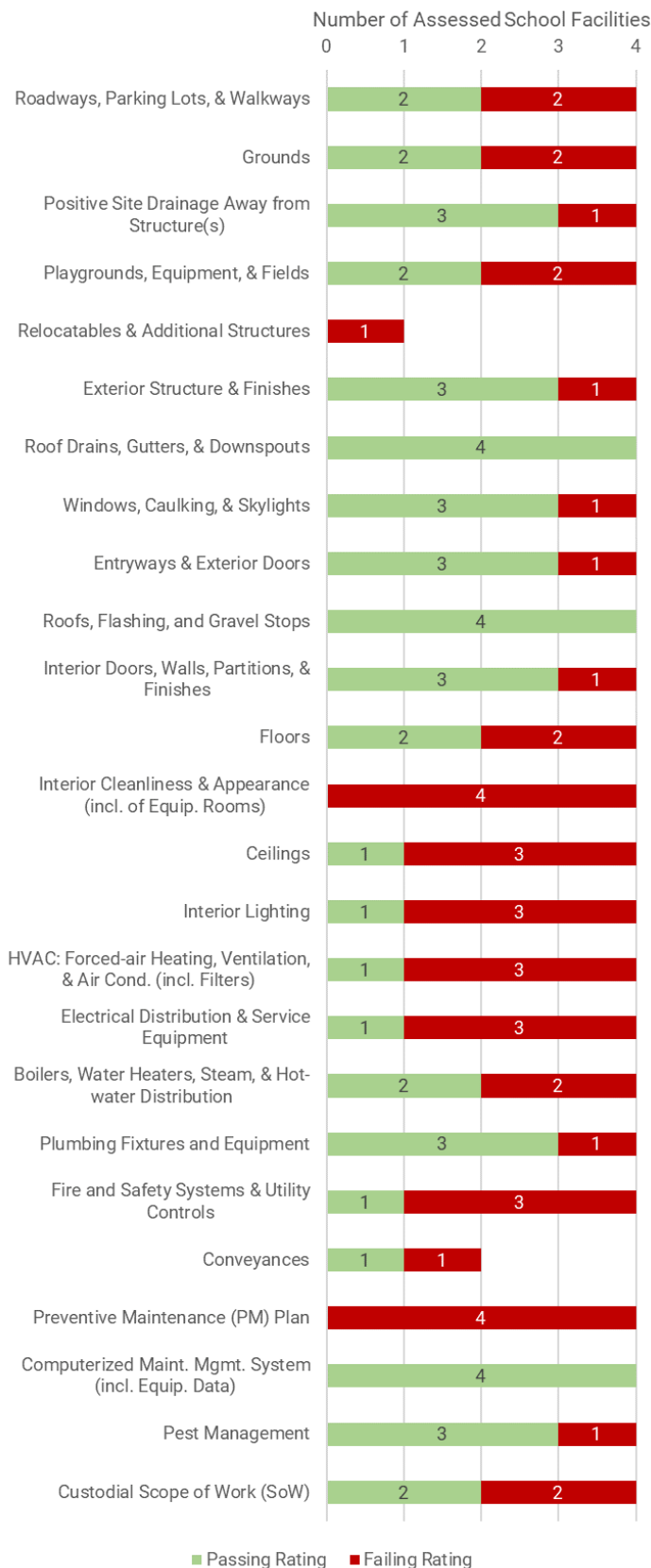
## FY 2022 Results: Summary of School Ratings

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. Beall Elementary (01.002)	Elementary	57,290	45	Adequate	0	2	14	7	0	0	3
2. John Humbird Elementary (01.004)	Elementary	42,451	44	Not Adequate	0	0	16	8	0	0	6
3. Flintstone Elementary (01.020)	Elementary	68,108	44	Poor	0	0	10	13	0	0	12
4. South Penn Elementary (01.021)	Elementary	67,802	42	Not Adequate	0	1	19	5	0	0	5
Totals					0	3	59	33	0	0	26
Percentage of Total Ratings for System					0%	3%	62%	35%	0%		



## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



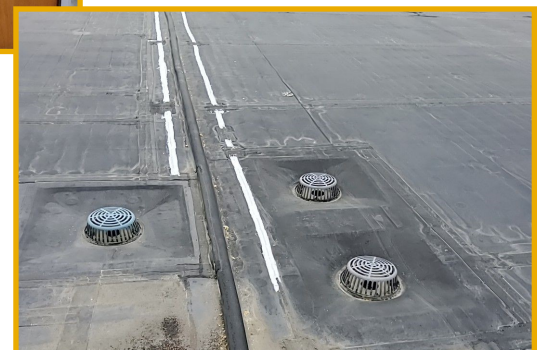
At the two facilities with conveyance systems, the DLLR certificates were up to date. One facility earned a Good rating for Conveyances.

All four facilities' roofs were 20 or more years old. All four facilities still earned a passing rating for Roofs, Flashing, and Gravel Stops despite the extra effort needed to adequately maintain aging roofs.



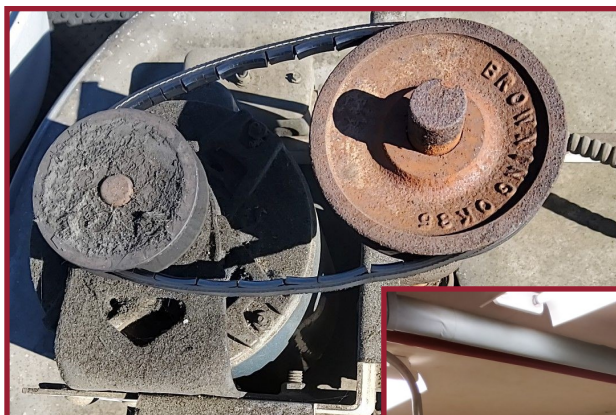
All four facilities received an Adequate rating for Interior Doors, Walls, Partitions, & Finishes. No extensive or major issues were observed.

All four facilities received an Adequate rating for Roof Drains, Gutters, & Downspouts. No issues were identified that would require extensive upgrades or repairs.



### Weaknesses

Exhaust fans were observed not working at all four facilities. Two facilities were identified with damaged drive belts. All four facilities had issues with filters, such as them being dirty, damaged, or installed backwards.



Items were found obstructing electrical panels or mechanical equipment at all four facilities. Three facilities received a Not Adequate rating for Interior Cleanliness & Appearance.

There are very few PM work orders in the CMMS, and there does not appear to be a PM plan in place that indicates PM activities for specific assets and their frequencies.

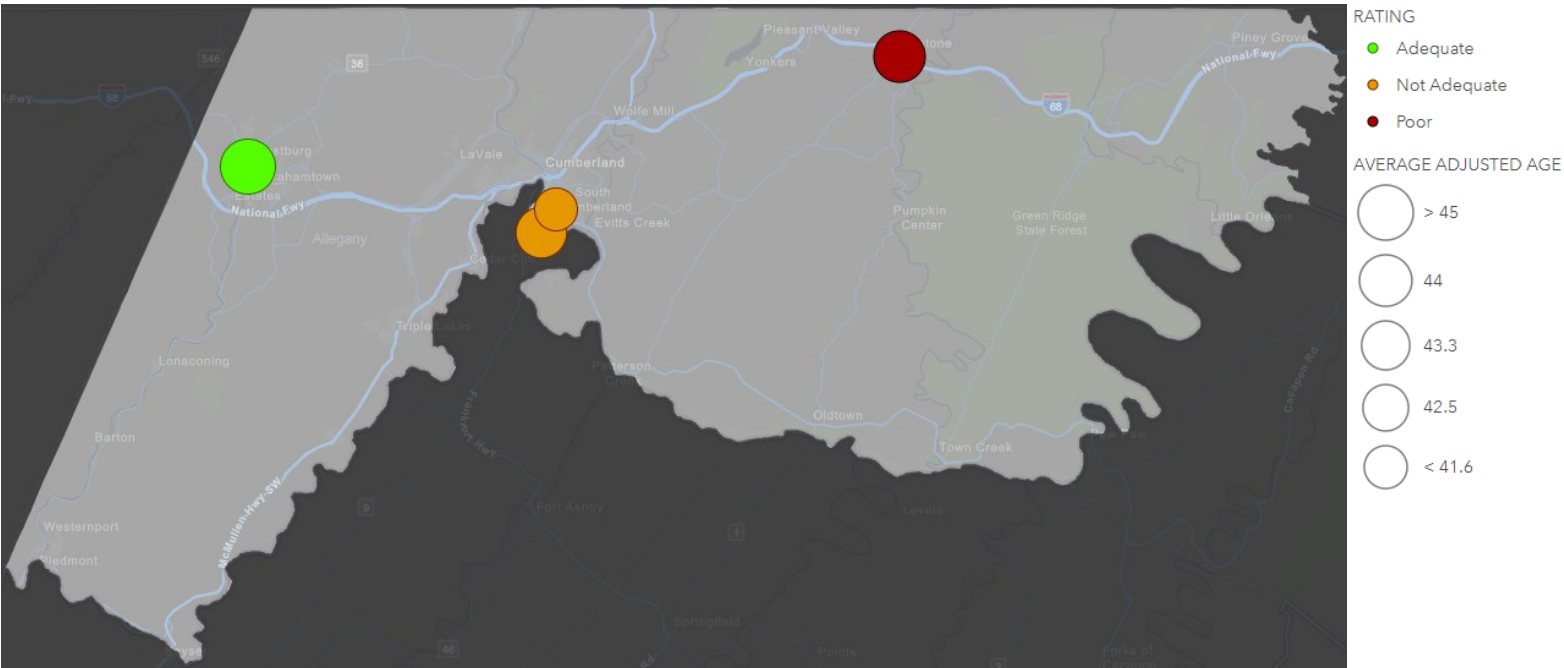


Three facilities were observed with emergency lights not working properly.

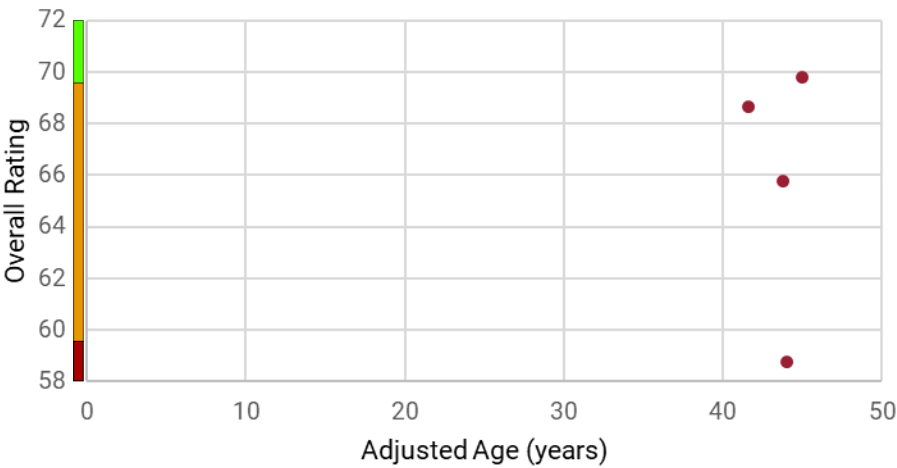
## FY 2022 Results: Summary of Deficiencies by Category

	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	2
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	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	2
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	2
	Ceilings	0	2
	Interior Lighting	0	3
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	2
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	3
	Conveyances	0	1
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	26

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





- Wall cracks should be evaluated and crack monitors used to track crack progression.
- PM tasks identified in the CMP and the custodial checklists should have auto-populating PM work orders created in the CMMS.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as leaks, excessive storage blocking essential equipment or causing egress issues, and non-functional emergency lights.
- 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.

# ANNE ARUNDEL COUNTY

Total School Facilities Assessed in FY 2022: 24

Edgewater Elementary

## Fiscal Year 2022: Key Facts

121  
facilities

Anne Arundel County has 121 active school facilities.  
**No change since FY 2021.**

29.1  
years old

The average adjusted age of all 121 school facilities is 29.1 years old.  
**+ 0.9 years since FY 2021.**

> 13.8 M  
GSF

Anne Arundel County maintains 13,883,724 SF throughout its 121 school facilities. It has the 5th greatest amount of SF of LEAs in MD.

**+ 35,728 SF since FY 2021.**

~ \$6.0 B

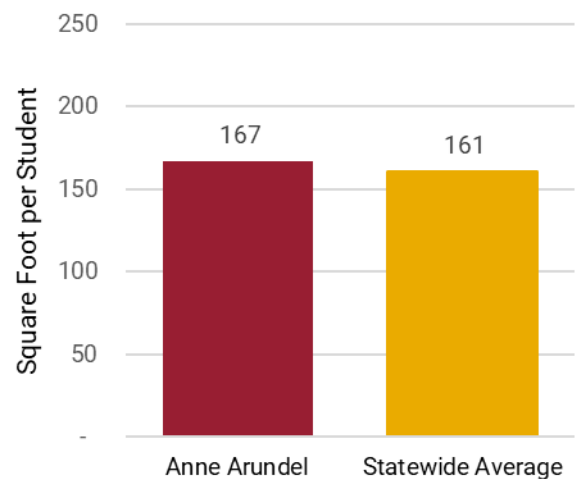
The current replacement value for Anne Arundel County's GSF, at the IAC's current replacement cost/SF, is nearly \$6.0 B.

**75.33% (Adequate)** = Average Overall Rating for FY 2022  
**- 4.48% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good	3			3
Adequate	12	7	1	20
Not Adequate			1	1
Poor				
Totals	15	7	2	24

### Average Square Foot per Student



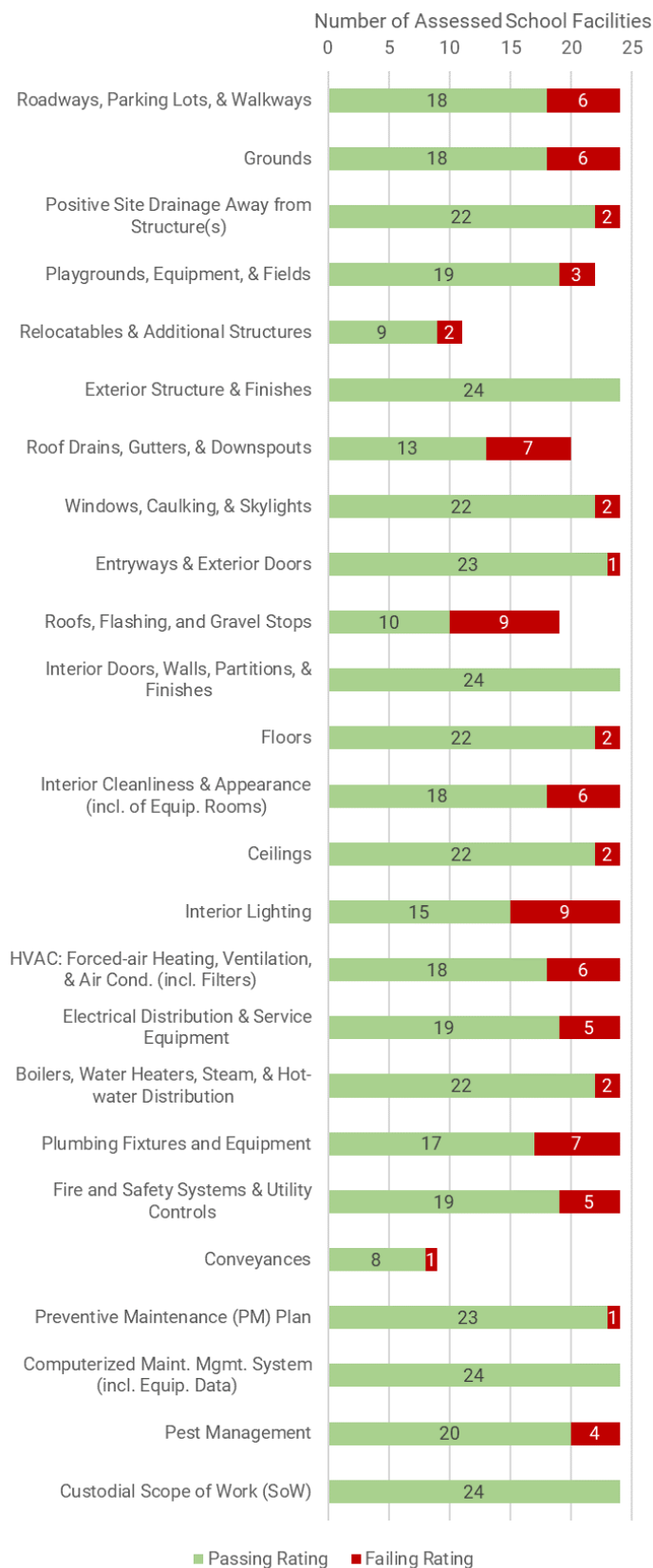
## FY 2022 Results: Summary of School Ratings

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. Old Mill Middle North (02.001)	Middle	159,635	47	Adequate	0	2	14	4	0	0	2
2. Old Mill High (02.002)	High	283,194	47	Adequate	1	3	17	4	0	0	3
3. Linthicum Elementary (02.008)	Elementary	81,718	27	Adequate	0	8	14	2	0	0	0
4. Chesapeake Bay Middle (02.009)	Middle	343,446	35	Adequate	0	6	17	1	0	0	4
5. High Point Elementary (02.015)	Elementary	98,681	3	Good	2	16	7	0	0	0	0
6. Jessup Elementary (02.016)	Elementary	98,879	3	Good	1	15	6	2	0	0	0
7. Edgewater Elementary (02.033)	Elementary	89,634	0	Good	2	14	5	1	0	0	0
8. Crofton Middle (02.038)	Middle	131,789	33	Adequate	0	4	17	2	1	0	3
9. Arundel High (02.040)	High	292,177	32	Not Adequate	0	2	13	10	0	0	5
10. Odenton Elementary (02.048)	Elementary	89,287	26	Adequate	0	6	14	2	0	0	3
11. Mills-Parole Elementary (02.058)	Elementary	89,767	7	Adequate	0	1	17	5	0	0	0
12. Annapolis Middle (02.061)	Middle	216,000	57	Adequate	0	4	15	5	0	0	3
13. Tyler Heights Elementary (02.069)	Elementary	84,813	1	Adequate	0	7	16	0	0	0	0
14. Manor View Elementary (02.074)	Elementary	71,576	3	Adequate	0	11	11	1	0	0	0
15. Quarterfield Elementary (02.078)	Elementary	45,885	52	Adequate	0	9	13	2	0	0	2
16. Freetown Elementary (02.080)	Elementary	82,460	13	Adequate	2	8	13	1	0	0	0
17. MacArthur Middle (02.087)	Middle	211,620	55	Adequate	2	6	13	2	0	0	4
18. Severn River Middle (02.096)	Middle	170,000	35	Adequate	0	0	16	7	0	0	3
19. Riviera Beach Elementary (02.097)	Elementary	57,867	45	Adequate	0	0	22	1	0	0	0
20. Lake Shore Elementary (02.103)	Elementary	63,422	12	Adequate	1	11	9	1	1	0	1
21. Oakwood Elementary (02.109)	Elementary	55,674	52	Adequate	0	3	13	6	0	0	1
22. Southgate Elementary (02.114)	Elementary	87,165	11	Adequate	2	7	11	3	0	0	2
23. Central Elementary (02.117)	Elementary	83,381	31	Adequate	1	9	13	1	0	0	0
24. Old Mill Middle South (02.133)	Middle	159,635	46	Adequate	0	5	18	1	0	0	1
Totals					14	157	324	64	2	0	37
Percentage of Total Ratings for System					2%	28%	58%	11%	0%		



## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

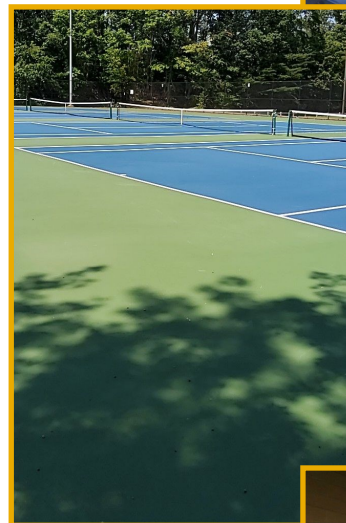


### Strengths



The interior doors, walls, partitions, and finishes appeared well kept. Eight facilities earned a Good rating in that category.

All boiler and water heater DLLR certificates were current. The PM plan identifies boilers and water heaters for annual PM.



The PM plan identifies some essential and non-essential assets, such as annual bleacher inspections, monthly turf field inspections, and bi-annual tennis court inspections. Some PM work orders are auto-populated in the CMMS.

The exterior structure and finishes appeared to be maintained well. Eight facilities earned a Good rating in that category.



### Weaknesses

Plumbing fixtures were observed with leaks or potential leaks at 14 facilities.

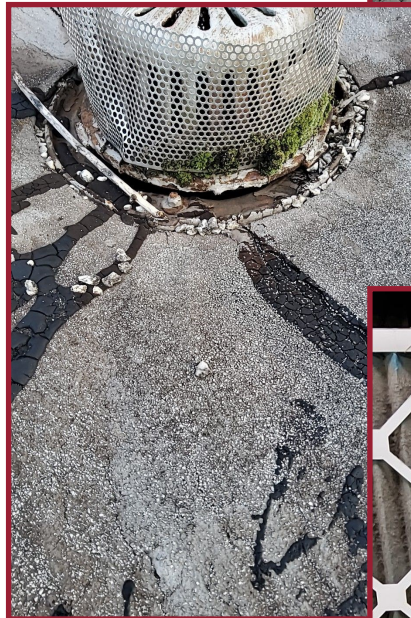
Toilets and/or toilet seats were not secured properly at eight facilities.

Seven facilities received a Not Adequate rating for Plumbing Fixtures and Equipment.



15 facilities had debris or growing vegetation on their roofs. Cracked or deteriorating roofing sealants were observed at a majority of facilities. Eight facilities received a Not Adequate rating for Roofs, Flashing, and Gravel Stops.

Roof drains and/or roof drain strainers were observed with vegetation or accumulated debris or roof gravel at 16 facilities. Six facilities received a Not Adequate rating for Roof Drains, Gutters, & Downspouts.



Dirty HVAC filters were observed at 14 facilities. Some filters were also missing, installed improperly, collapsed, or sucked into the HVAC unit.

## FY 2022 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	4
	Grounds	0	2
	Positive Site Drainage Away from Structure(s)	0	1
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	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	0
	Floors	0	1
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	3
	Ceilings	0	1
	Interior Lighting	0	9
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	5
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	2
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	3
	Conveyances	0	1
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	37



Overall Rating

Adjusted Age (years)

- Additional PM checks are recommended to ensure the HVAC systems receive the necessary amount of PM work to remain functional and efficient.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.
- All PM tasks identified in the PM plan and the custodial checklists should have auto-populating PM work orders created in the CMMS.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as plumbing leaks and HVAC issues.

# BALTIMORE CITY

Total School Facilities Assessed in FY 2022: 27



Arundel PK-2

## Fiscal Year 2022: Key Facts

141  
facilities

Baltimore City has  
141 active school facilities.  
- 8 facilities since FY 2021.

37.0  
years old

The average adjusted age of  
all 141 school facilities  
is 37.0 years old.  
No change since FY 2021.

> 16.2 M  
GSF

Baltimore City  
maintains 16,251,586 SF  
throughout its 141 school  
facilities. It has the 4th  
greatest amount of SF  
of LEAs in MD.  
- 633,834 SF since FY 2021.

~ \$7.0 B

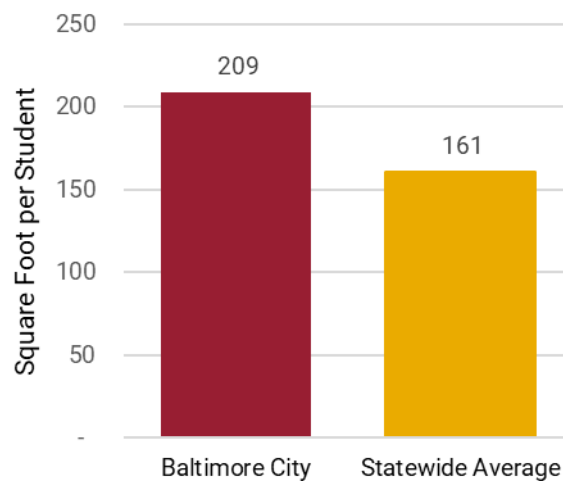
The current replacement value  
for Baltimore City's GSF,  
at the IAC's current  
replacement cost/SF,  
is approximately \$7.0 B.

**73.94% (Adequate)** = Average Overall Rating for FY 2022  
+ 4.79% since FY 21

### FY 2022 Overall Rating Results by School Type

	Elementary	PreK-8	Middle	Middle/ High	High	
Superior						
Good	4	1		1		6
Adequate	4	5	2	1	3	15
Not Adequate		1		1	4	6
Poor						
Totals	8	7	2	3	7	27

### Average Square Foot per Student



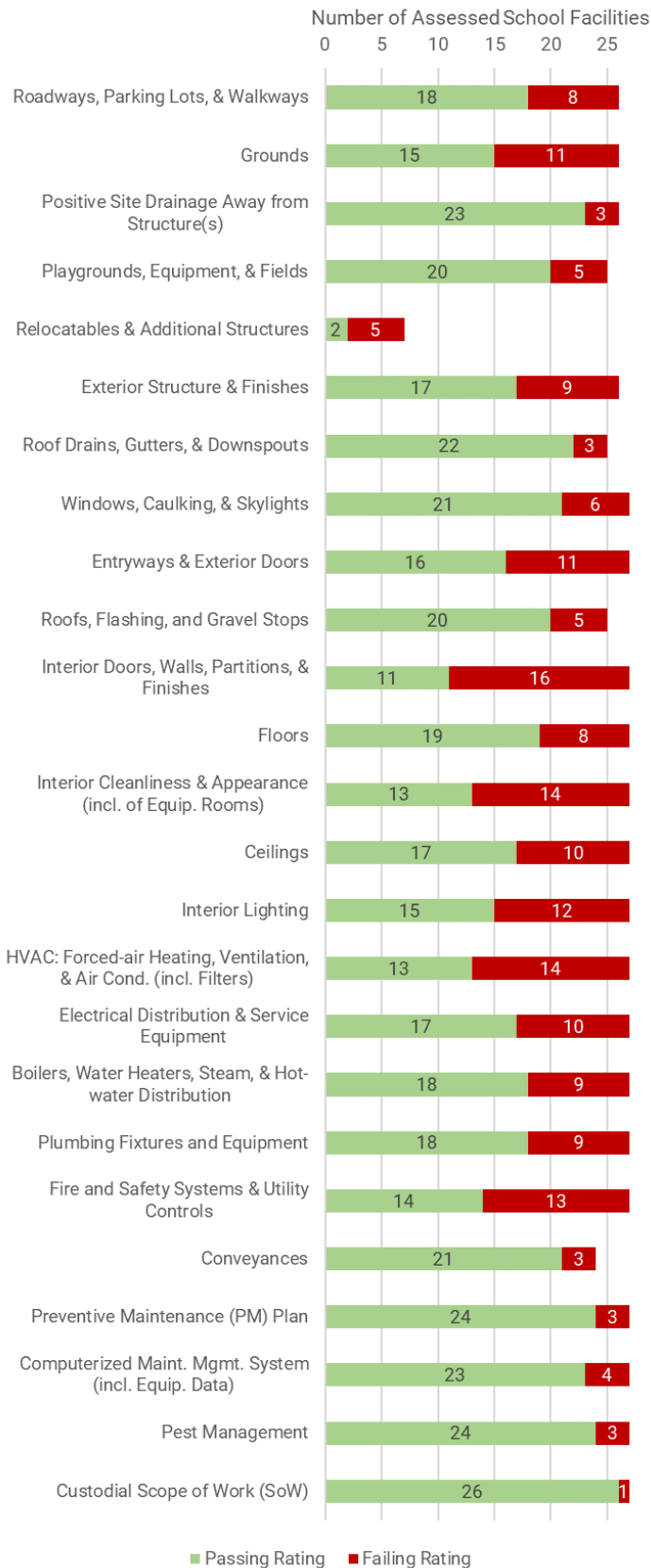
## FY 2022 Results: Summary of School Ratings

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. Walter P. Carter PK-8 # 134 (30.064)	PreK-8	149,750	1	Adequate	1	9	12	3	0	0	4	
2. Govans Elementary # 213 (30.076)	Elementary	88,380	0	Good	11	8	4	1	0	0	1	
3. Arlington PK-8 # 234 (30.094)	Elementary	102,300	3	Adequate	3	6	11	4	0	0	1	
4. Benjamin Franklin Building # 239 (30.099)	High	98,846	31	Adequate	0	1	15	6	0	0	2	
5. Paul Laurence Dunbar High # 414 (30.128)	High	307,112	28	Adequate	0	3	10	10	1	0	1	
6. Robert W. Coleman Elementary # 142 (30.140)	Elementary	50,973	1	Good	7	6	10	1	0	0	0	
7. Maree G. Farring PK-8 # 203 (30.159)	PreK-8	46,025	42	Adequate	1	7	9	8	0	0	1	
8. Robert Poole Building #056 (30.165)	Middle/High	135,896	3	Good	8	10	7	0	0	0	0	
9. Booker T. Washington Building # 130 (30.168)	Middle/High	211,992	39	Not Adequate	1	0	12	11	0	0	3	
10. Northern Building #402 (30.174)	High	344,057	55	Not Adequate	1	2	4	11	7	1	10	
11. Bay Brook PK-8 # 124A (30.175)	PreK-8	118,138	1	Adequate	4	6	11	3	0	0	3	
12. Westside Skill Center (CTE) # 400B (30.180)	High	219,525	39	Not Adequate	2	3	9	7	3	0	9	
13. Calverton PK-8 # 075 (30.184)	PreK-8	122,525	1	Good	6	7	7	4	0	0	1	
14. Hazelwood K-8 # 210 (30.189)	PreK-8	65,977	60	Not Adequate	0	0	6	17	0	0	2	
15. Coldstream Park PK-8 # 031 (30.198)	Middle	82,600	51	Adequate	0	3	15	4	1	0	4	
16. Mary E. Rodman Elementary # 204 (30.201)	Elementary	81,488	1	Adequate	5	8	10	1	0	0	3	
17. City Springs PK-8 # 008 (30.202)	PreK-8	80,310	53	Adequate	2	1	11	5	0	0	1	
18. Dr. Bernard E. Harris Sr. Elementary # 250 (30.204)	Elementary	84,636	50	Adequate	2	5	12	2	2	1	4	
19. Yorkwood Elementary # 219 (30.205)	Elementary	71,861	63	Adequate	0	5	10	7	1	0	2	
20. Chinquapin Building # 046 (30.206)	Middle/High	176,407	65	Adequate	0	1	19	5	0	0	4	
21. Lake Clifton Park Building # 456 (formerly Fairmount Harford (30.219)	High	181,922	3	Adequate	1	10	9	4	0	0	6	
22. Graceland Park/O'Donnell Heights PK-8 # 240 (30.222)	PreK-8	94,070	2	Adequate	4	9	8	3	0	0	3	
23. Southside Building # 181 (formerly #180 Dr. Arnett J. Brown) (30.228)	High	164,490	64	Not Adequate	0	2	12	7	3	0	8	
24. Arundel PK-2 # 164 (30.239)	Elementary	113,647	3	Good	3	11	10	0	0	0	1	
25. Edmondson High School Building # 400A (30.246)	High	213,041	59	Not Adequate	0	2	12	9	2	0	7	
26. James Mosher Elementary # 144 (30.252)	Elementary	75,611	1	Good	2	12	9	1	0	0	1	
27. Thomas G. Hayes Building #102 (30.275)	Middle	88,634	61	Adequate	1	4	14	3	1	0	0	
Totals					65	141	278	137	21	2	82	
Percentage of Total Ratings for System					10%	22%	43%	21%	3%			



## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



No issues or concerns were identified with the roofs at five facilities. 20 facilities received a passing rating for Roofs, Flashing, and Gravel Stops.

The conveyance systems at most facilities appeared to have current DLLR certifications and were included in the PM schedule and PM work order history.



20 facilities received a passing rating for Playgrounds, Equipment, & Fields. Of those facilities, eight had no visible issues or problems. Playground inspections are included in the grounds assessment.

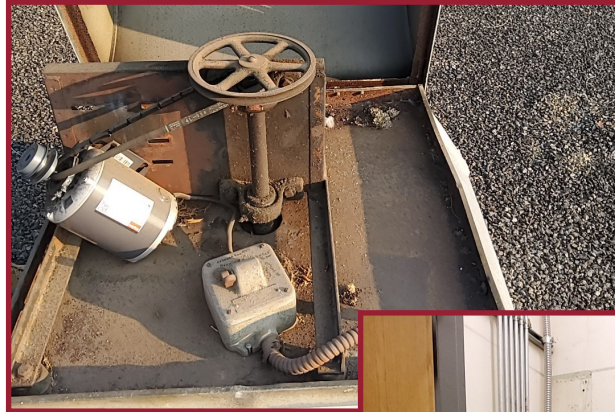


The roof drains were observed clean and free of debris at 13 facilities. 22 facilities received a passing rating for Roof Drains, Gutters, & Downspouts.



### Weaknesses

Exhaust fans were observed inoperable or not functioning properly at 10 facilities. The HVAC filters and/or coils were noted as dirty at 17 facilities. One facility earned a Poor rating and 11 facilities received a Not Adequate rating for HVAC.



Unorganized storage and/or unsafe storage practices were observed at 19 facilities, most of which were noted as blocking mechanical equipment or egress. One facility earned a Poor rating and 12 received a Not Adequate rating for Interior Cleanliness & Appearance (incl. Equip Rooms).



Cracks were observed on the interior walls at 11 facilities. An additional 15 facilities did not have cracks in their walls, but were observed with damage, including walls with water damage, holes, marks, and/or discoloration. Three facilities earned a Poor rating and 11 facilities received a Not Adequate rating for Interior Doors, Walls, Partitions, & Finishes.



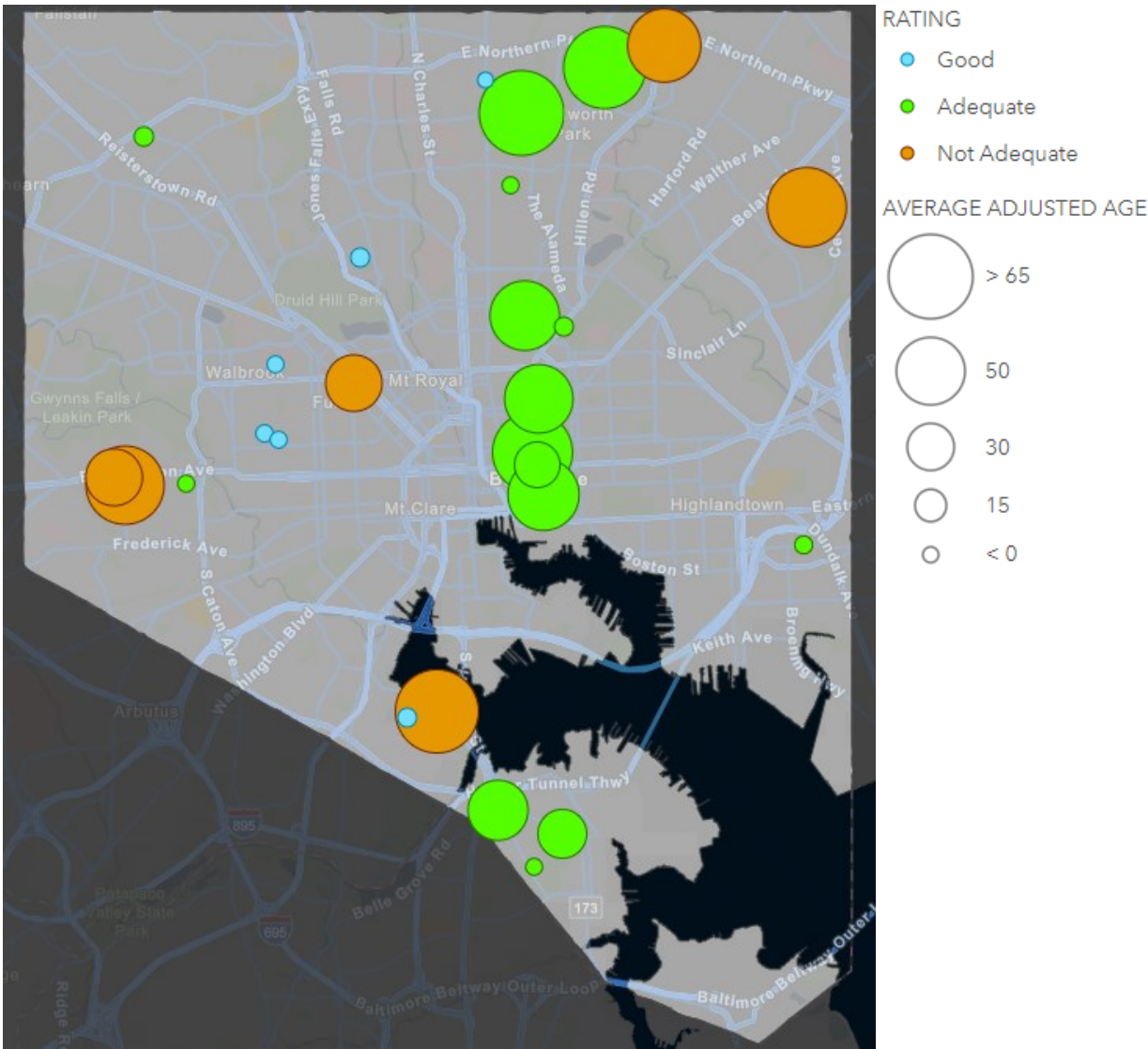
Ceilings are included in the blitz maintenance assessment. However, every facility was observed with at least minor ceiling issues. 19 facilities had stained ceiling tiles. Six facilities were observed with a mold-like substance on their ceilings.

## FY 2022 Results: Summary of Deficiencies by Category

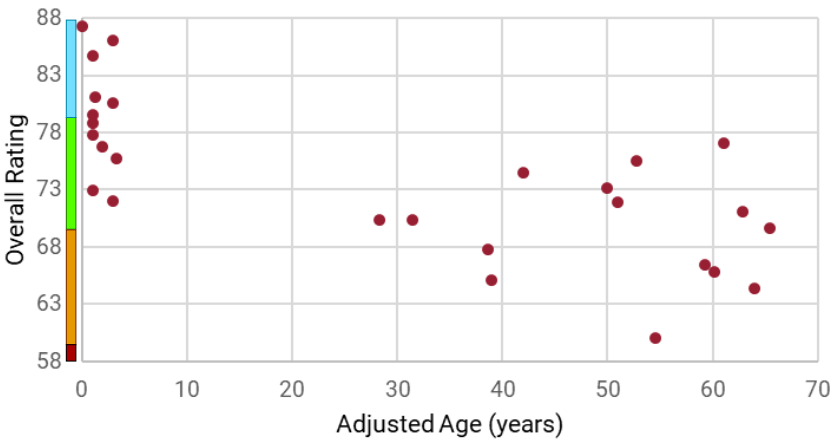
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	7
	Grounds	0	5
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	1	4
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	5
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	1	0
	Entryways & Exterior Doors	0	7
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	9
	Floors	0	5
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	3
	Ceilings	0	4
	Interior Lighting	0	8
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	4
	Electrical Distribution & Service Equipment	0	8
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	4
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	7
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		2	82



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- Interior ceilings should be regularly inspected for damage and early identification of leaks. Ceiling tiles that are stained or damaged should be replaced after the root cause of the damage is corrected. The CMMS and corrective work orders could help to identify recurring problems in specific areas.
- Crack monitors should be considered for tracking the growth and further expansion of wall cracks.
- A minimum of 36" clearance is required in front of all electrical equipment, including controls and panels. Additional training may be necessary on safe storage practices and/or using bright-colored floor markings to indicate where storage is prohibited.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as plumbing and roof leaks and exhaust fan issues.
- The blitz assessment Baltimore City Public Schools (BCPSS) conducts to perform PM work encompasses 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.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.

# BALTIMORE COUNTY

Total School Facilities Assessed in FY 2022: 30



Honeygo Elementary

## Fiscal Year 2022: Key Facts

**165**  
facilities

Baltimore County has 165 active school facilities.  
**No change since FY 2021.**

**32.8**  
years old

The average adjusted age of all 165 school facilities is 32.8 years old.  
**+ 0.8 years since FY 2021.**

**~ 16.8 M**  
GSF

Baltimore County maintains 16,791,691 SF throughout its 165 school facilities. It has the 3rd greatest amount of SF of LEAs in MD.

**- 54,502 SF since FY 2021.**

**> \$7.2 B**

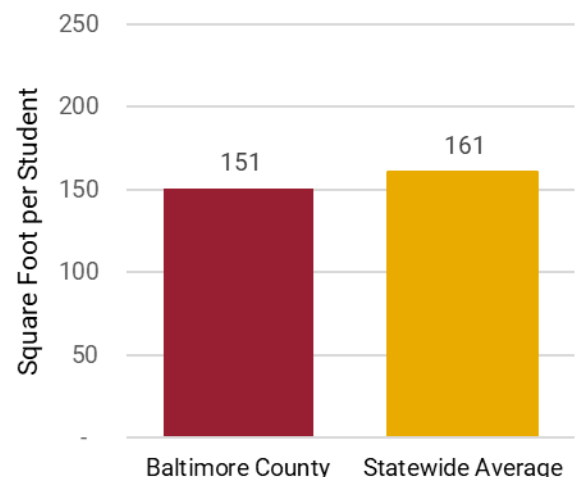
The current replacement value for Baltimore County's GSF, at the IAC's current replacement cost/SF, is greater than \$7.2 B.

**73.18% (Adequate)** = Average Overall Rating for FY 2022  
**+ 0.33% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	22	4	2	28
Not Adequate		1	1	2
Poor				
Totals	22	5	3	30

### Average Square Foot per Student



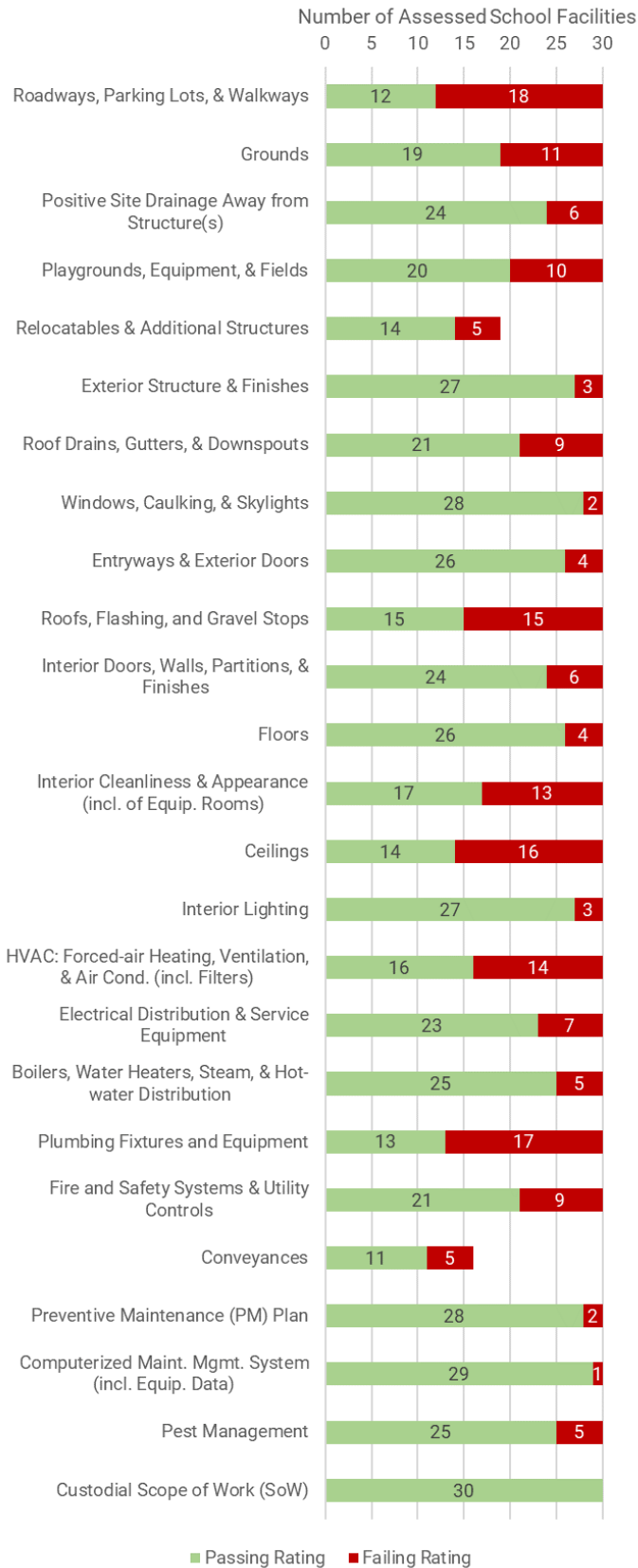


## FY 2022 Results: Summary of School Ratings

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. Pine Grove Middle (03.001)	Middle	152,725	29	Adequate	1	1	13	9	0	0	1
2. Villa Cresta Elementary (03.012)	Elementary	72,432	42	Adequate	0	2	14	7	1	0	0
3. Mars Estates Elementary (03.020)	Elementary	64,840	40	Adequate	1	2	18	3	0	0	3
4. Stoneleigh Elementary (03.022)	Elementary	86,387	10	Adequate	0	1	21	1	2	0	0
5. Randallstown High (03.032)	High	218,135	50	Not Adequate	0	1	12	11	0	0	3
6. Sandalwood Elementary (03.034)	Elementary	76,950	50	Adequate	0	3	14	6	0	0	2
7. Stemmers Run Middle (03.038)	Middle	159,017	43	Not Adequate	0	4	10	10	0	0	8
8. Rodgers Forge Elementary (03.042)	Elementary	68,575	42	Adequate	0	2	15	8	0	0	3
9. Victory Villa Elementary (03.057)	Elementary	97,878	4	Adequate	0	6	13	5	0	0	0
10. Padonia International Elementary (03.069)	Elementary	59,090	3	Adequate	0	7	15	2	0	0	1
11. Elmwood Elementary (03.072)	Elementary	58,195	61	Adequate	0	7	15	2	1	0	1
12. Oliver Beach Elementary (03.079)	Elementary	50,400	40	Adequate	0	12	8	3	0	0	1
13. Kingsville Elementary (03.080)	Elementary	53,920	42	Adequate	1	0	17	6	0	0	0
14. Lansdowne Middle (03.084)	Middle	120,700	33	Adequate	1	0	14	8	0	0	0
15. Milbrook Elementary (03.091)	Elementary	45,168	38	Adequate	1	5	12	6	0	0	1
16. Hereford High (03.094)	High	244,828	9	Adequate	0	5	17	2	1	0	3
17. Seven Oaks Elementary (03.096)	Elementary	56,987	30	Adequate	0	6	12	6	0	0	2
18. Johnnycake Elementary (03.103)	Elementary	63,495	57	Adequate	0	2	14	9	0	0	2
19. Lansdowne Elementary (03.105)	Elementary	96,330	3	Adequate	0	8	15	1	0	0	3
20. Parkville High (03.121)	High	281,530	32	Adequate	0	6	15	4	0	0	3
21. Deer Park Middle Magnet (03.147)	Middle	161,107	29	Adequate	0	4	12	8	1	0	0
22. Norwood Elementary (03.155)	Elementary	56,285	42	Adequate	0	8	16	0	0	0	2
23. Sandy Plains Elementary (03.157)	Elementary	88,375	38	Adequate	0	2	18	4	0	0	1
24. Sussex Elementary (03.163)	Elementary	55,075	44	Adequate	0	3	15	6	0	0	0
25. Southwest Academy (03.176)	Middle	136,000	14	Adequate	1	2	9	11	0	0	0
26. Orems Elementary (03.182)	Elementary	51,870	61	Adequate	0	11	13	1	0	0	1
27. Halstead Academy (03.186)	Elementary	61,130	39	Adequate	0	2	19	3	0	0	1
28. Carney Elementary (03.188)	Elementary	66,012	37	Adequate	0	2	18	4	0	0	0
29. McCormick Elementary (03.191)	Elementary	54,450	35	Adequate	0	2	19	3	0	0	3
30. Honeygo Elementary (03.219)	Elementary	95,085	2	Adequate	0	14	10	1	0	0	3
Totals					6	130	433	150	6	0	48
Percentage of Total Ratings for System					1%	18%	60%	21%	1%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



The majority of lighting appears to be LED. No major or extensive issues were noted with the interior lighting.

No issues were noted with the windows, caulking, and skylights at five facilities. 15 facilities earned a Good rating in that category.



Sweeping floors and vacuuming carpets are identified as daily tasks in the custodial scope of work, which also details general procedures for floor care. Eight facilities earned a Good rating for Floors.

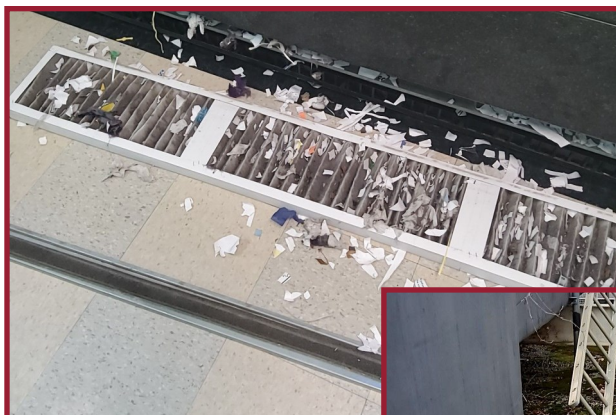
No issues were noted with the exterior structure and finishes at two facilities. Five facilities earned a Good rating in that category.





### Weaknesses

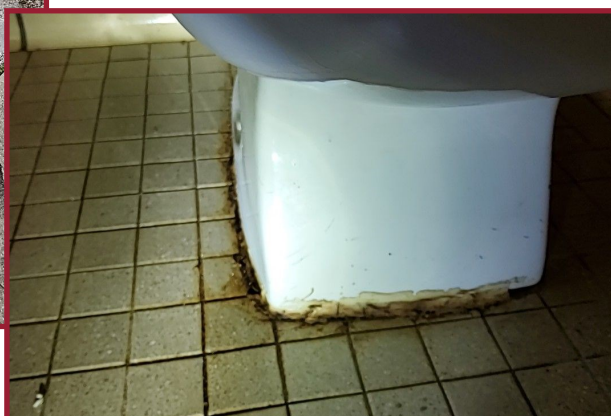
The filters and/or coils in HVAC units at 18 facilities were observed dirty. Exhaust fans and/or other HVAC equipment were identified as not working or not working properly at 25 facilities.



Five facilities were observed with active leaks from the roof to the interior of the building. Vegetation and/or debris were identified at 20 facilities. It was noted at several facilities that deficiencies identified on roof inspections were not remediated and/or did not have follow-up corrective work orders in the CMMS.



Uneven walking surfaces were observed at 17 facilities. The driving surfaces at 22 facilities were damaged and/or deteriorated. 14 facilities received a Not Adequate rating for Roadways, Parking Lots, & Walkways.

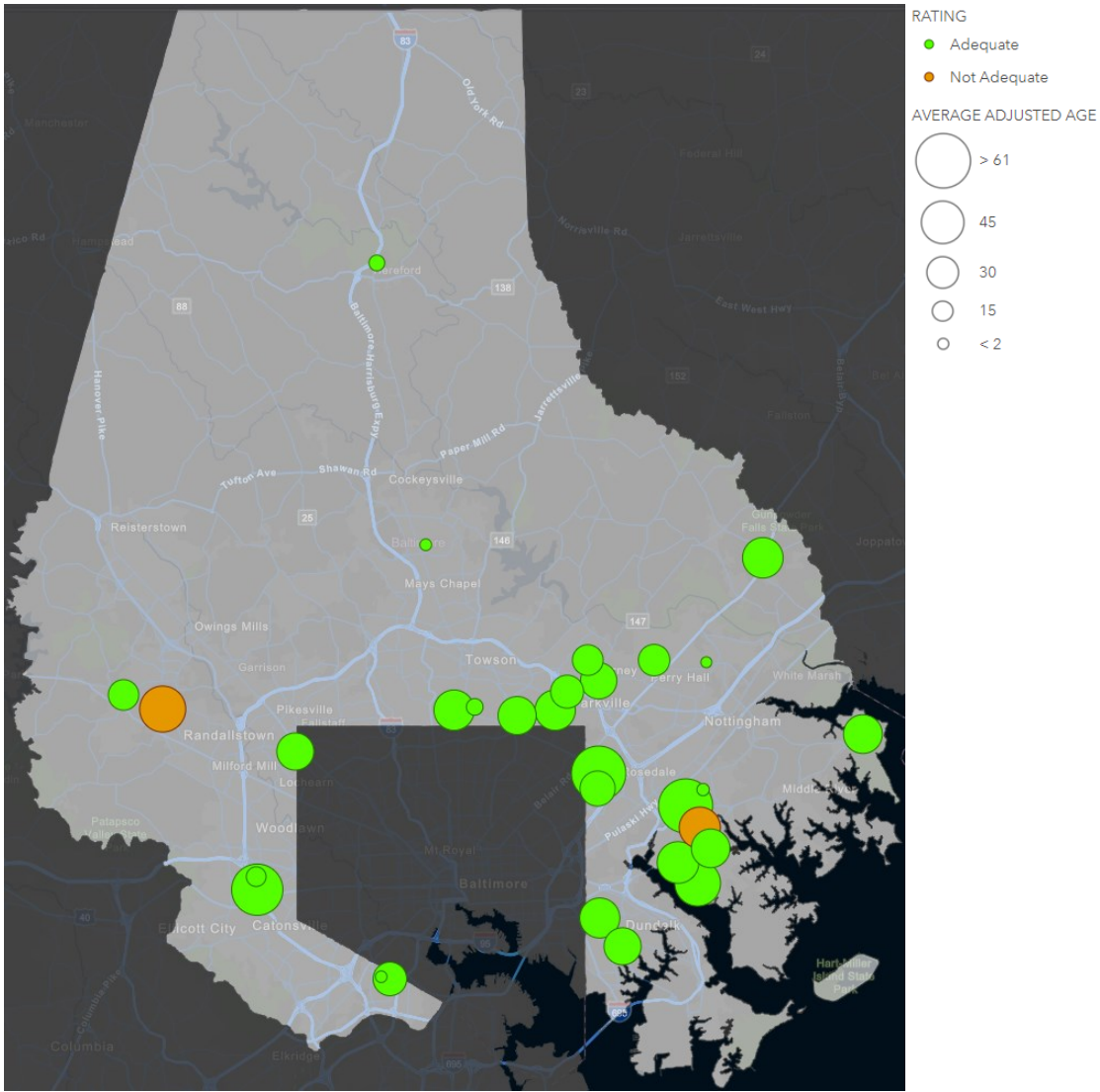


All 30 facilities were observed with one or more leaks from plumbing fixtures. 16 facilities received a Not Adequate rating and one facility received a Poor rating for Plumbing Fixtures and Equipment.

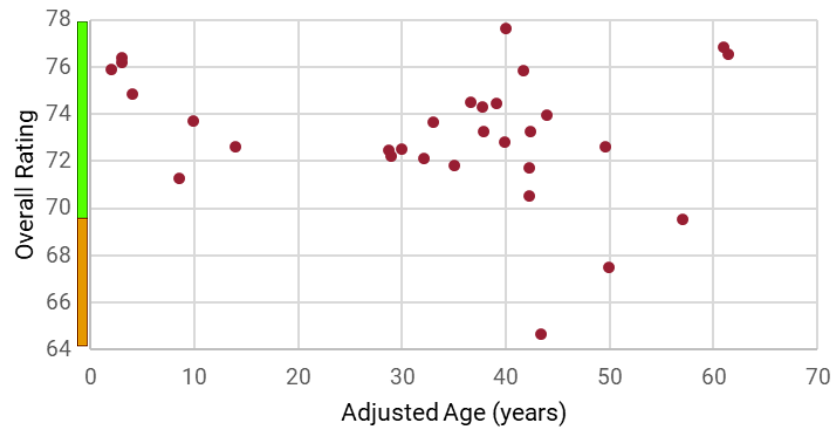
## FY 2022 Results: Summary of Deficiencies by Category

Category		# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	5
	Grounds	0	4
	Positive Site Drainage Away from Structure(s)	0	1
	Playgrounds, Equipment, & Fields	0	7
	Relocatables & Additional Structures	0	2
Building Exterior	Exterior Structure & Finishes	0	2
	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	3
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	2
	Ceilings	0	3
	Interior Lighting	0	3
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	2
	Electrical Distribution & Service Equipment	0	3
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	4
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	4
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	1
	Custodial Scope of Work (SoW)	0	0
Total		0	48

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- Additional PM checks are recommended to ensure the HVAC systems and exhaust fans receive the necessary amount of PM work to remain functional and efficient.
- Roadways, parking lots, and walkways should be added to the PM schedule.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as trip hazards on walking surfaces and plumbing and roof leaks.
- 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.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.
- 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.



# CALVERT COUNTY

Total School Facilities Assessed in FY 2022: 5



Dowell Elementary

## Fiscal Year 2022: Key Facts

25  
facilities

Calvert County has 25 active school facilities.  
- 1 facility since FY 2021.

24.2  
years old

The average adjusted age of all 25 school facilities is 24.2 years old.  
+ 0.9 years since FY 2021.

> 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.

- 7,005 SF since FY 2021.

> \$1.0 B

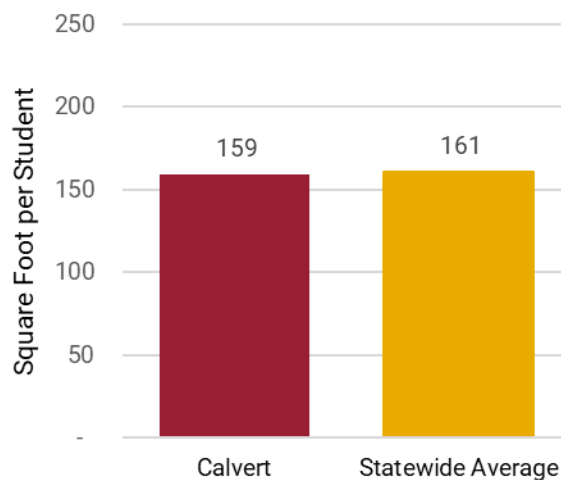
The current replacement value for Calvert County's GSF, at the IAC's current replacement cost/SF, is greater than \$1.0 B.

**76.72% (Adequate)** = Average Overall Rating for FY 2022  
+ 2.98% since FY 21

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student

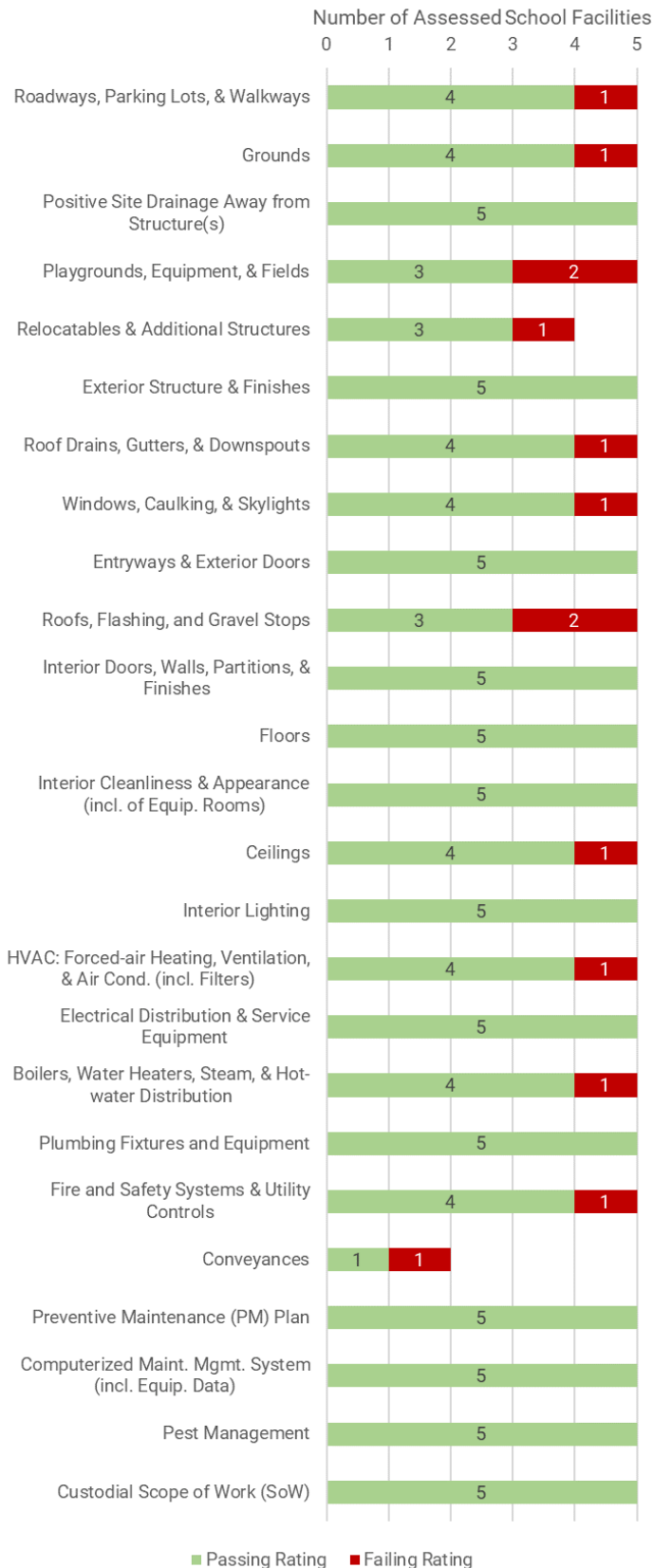


## FY 2022 Results: Summary of School Ratings

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 Elementary (04.004)	Elementary	63,362	48	Adequate	0	3	16	4	1	0	0
2. Northern High (04.005)	High	248,973	3	Adequate	0	8	14	3	0	0	1
3. Plum Point Elementary (04.015)	Elementary	62,337	30	Adequate	0	11	13	0	0	0	0
4. Patuxent Elementary (04.018)	Elementary	59,049	29	Adequate	0	5	14	4	1	0	0
5. Dowell Elementary (04.023)	Elementary	70,435	23	Good	1	9	14	0	0	0	0
Totals					1	36	71	11	2	0	1
Percentage of Total Ratings for System					1%	30%	59%	9%	2%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

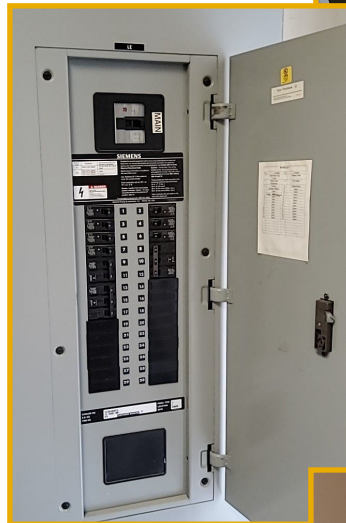


### Strengths



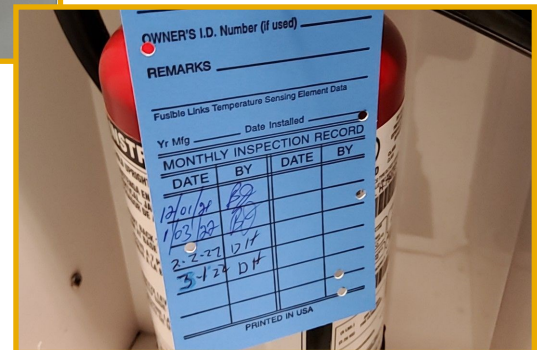
The majority of educational spaces appeared well lit. Three facilities received a Good rating for Interior Lighting.

Filters at four facilities were clean, dated, and appeared to be replaced in accordance with industry standards. One facility earned a Superior rating for HVAC.



No issues or concerns were identified at three facilities. The majority of electrical panels appeared to be well maintained and properly labeled.

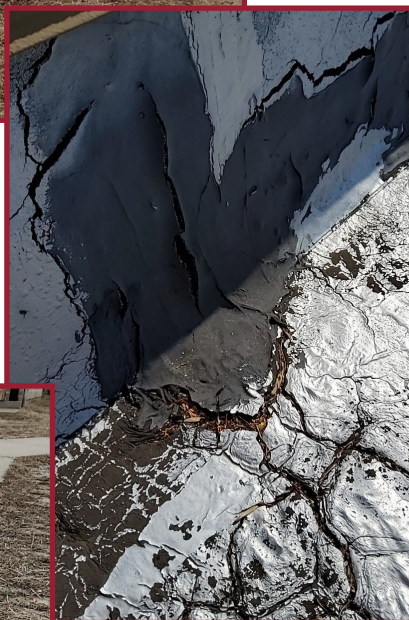
No issues or concerns were identified in three facilities. Annual fire extinguisher inspections are identified in the PM plan.





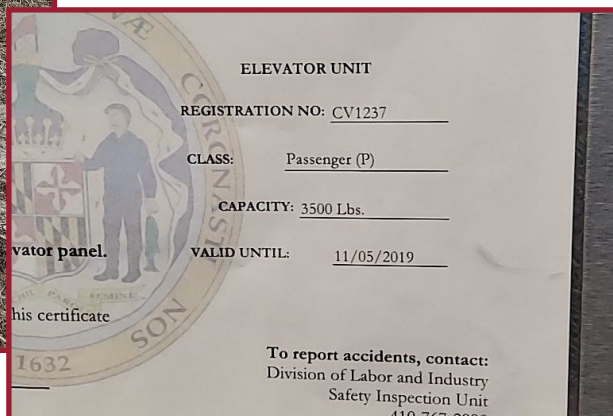
### Weaknesses

Two facilities were identified with broken playground equipment. The rubberized coating on the playground equipment at three facilities was deteriorated. Muddy patches and ruts were observed in the impact material or play areas at three facilities.



Alligatoring and/or cracking were identified on roofs at four facilities. One facility received a Poor rating for Roofs, Flashing, and Gravel Stops.

Uneven walking surfaces and cracks in the walkways and/or roadways were observed at three facilities. One facility received a Not Adequate rating for Roadways, Parking Lots, & Walkways.



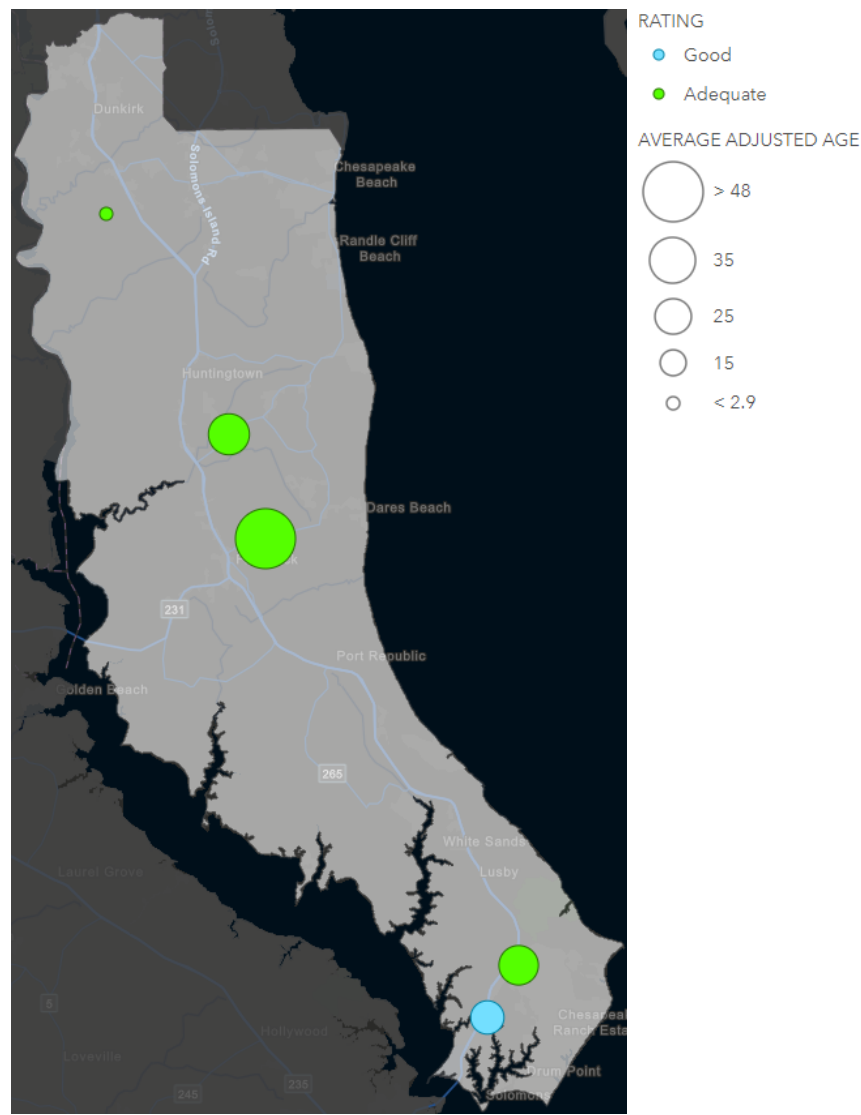
Of the two facilities with conveyance equipment, one received a Not Adequate rating. The DLLR certificate at one facility was expired for over two years and the most recent inspection identified multiple failed items.

## FY 2022 Results: Summary of Deficiencies by Category

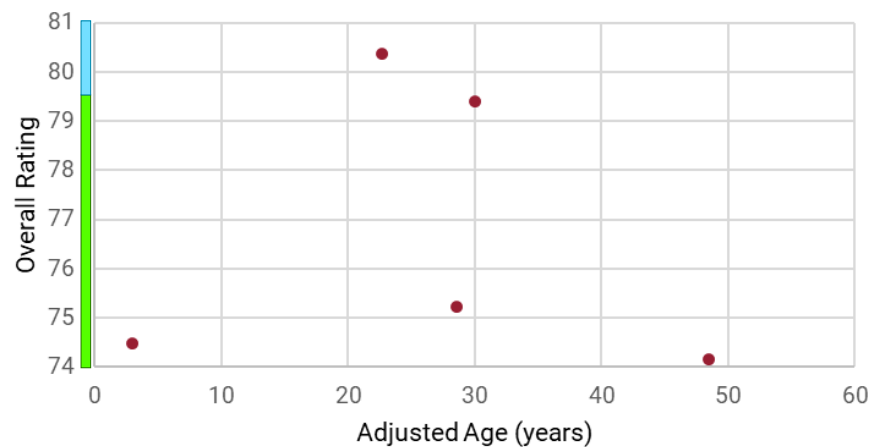
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof 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	1
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	1



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- Roadways, parking lots, and walkways should be added to the PM schedule. Deficiencies noted during the PM checks should be entered and tracked using the CMMS.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as playground issues and roof leaks.
- Using the CMMS to track roof inspections and deficiencies identified during the inspections is recommended. Creating, following, and tracking a good PM plan for the roof systems throughout the LEA is recommended.
- The Custodial SoW lists only general responsibilities of custodial staff, similar to a job description for hiring purposes, as opposed to listing specific tasks and assigned frequencies. A more effective scope would list each activity, the area the activity is performed, equipment, materials, and methods to be employed, and the frequency of the activity.

# CAROLINE COUNTY

Total School Facilities Assessed in FY 2022: 3



## Fiscal Year 2022: Key Facts



Caroline County has 10 active school facilities.  
**No change since FY 2021.**



The average adjusted age of all 10 school facilities is 22.5 years old.  
**- 0.9 years since FY 2021.**



Caroline County maintains 877,773 SF throughout its 10 school facilities. It has the 20th greatest amount of SF of LEAs in MD.  
**- 74,849 SF since FY 2021.**



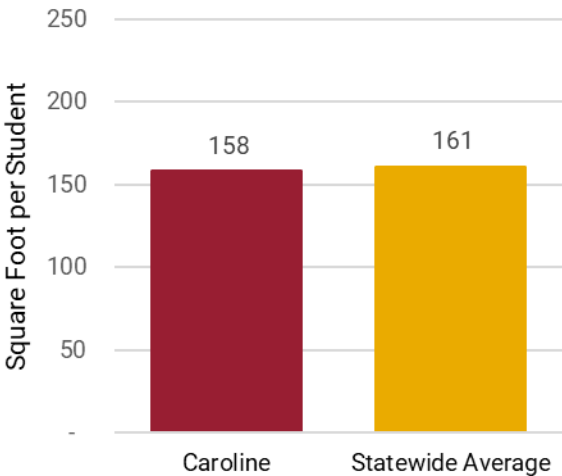
The current replacement value for Caroline County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.3 B.

**71.66% (Adequate)** = Average Overall Rating for FY 2022  
**- 1.33% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student

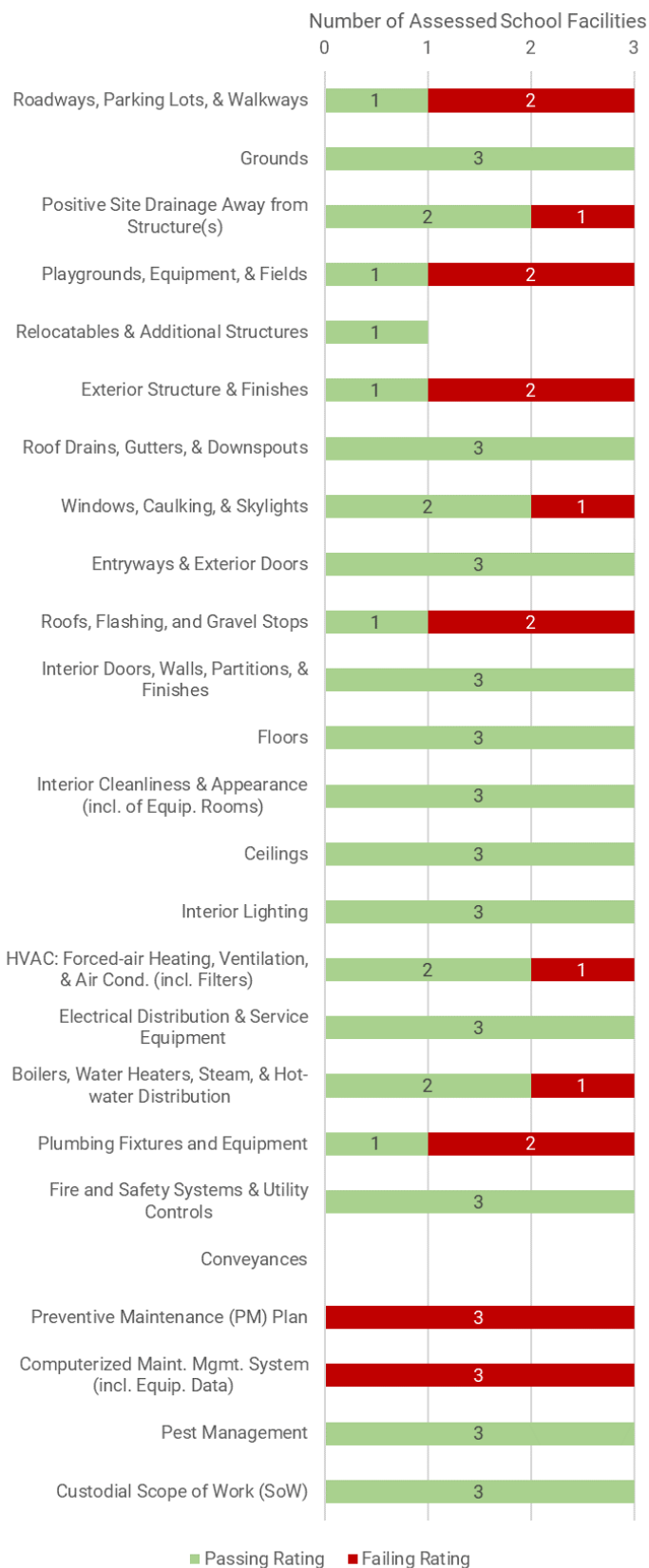


## FY 2022 Results: Summary of School Ratings

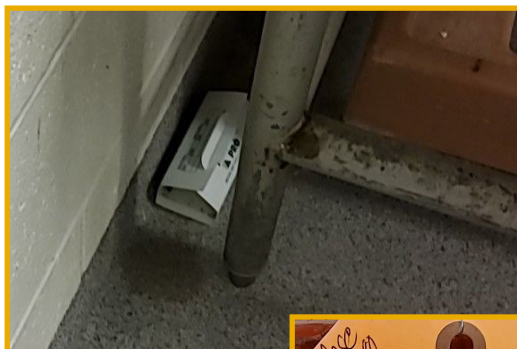
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Lockerman Middle (05.005)	Middle	108,842	39	Adequate	0	3	15	5	0	0	2
2. Ridgely Elementary (05.006)	Elementary	52,005	35	Adequate	0	2	17	5	0	0	2
3. Preston Elementary (05.008)	Elementary	64,952	5	Adequate	0	11	9	3	0	0	3
Totals					0	16	41	13	0	0	7
Percentage of Total Ratings for System					0%	23%	59%	19%	0%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

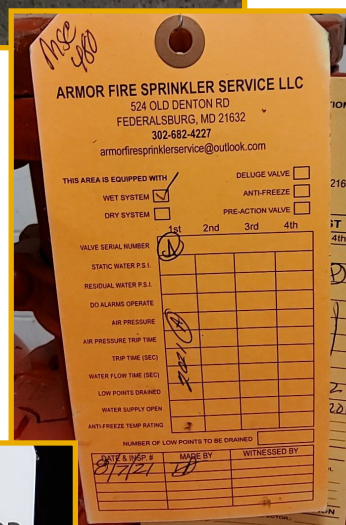


### Strengths



All three facilities had documented, contractual pest inspection records available on site. PM measures were present in all three facilities.

All three facilities received an Adequate rating for Fire and Safety Systems & Utility Controls. In August 2021, all three facilities had their fire suppression systems inspected.



INSPECTION RECORD			
DATE	BY	DATE	BY
3/17/20	RSC	ARMOR	253.6
4/18/20	RSC	LS	240.1
9/10/20	RSC	FOR PM	253.9
10/8/20	RSC	COULM/HARRIS	256.8
2/27/21	RSC	24E/LB	271.4
6/12/21	RSC	MINO	281.2
8/1/21	RSC	ARMOR	308.9

All three facilities have generators, and two facilities had documented inspections for their generators.

Two out of the three facilities had no issues or concerns identified with their interior lighting.





### Weaknesses

Two out of the three facilities had completed playground equipment inspections, but no corrective action work orders were identified in the CMMS for deficiencies cited during the inspections.



All three facilities were observed with leaking plumbing fixtures or equipment. Inoperable plumbing fixtures were present in the restrooms at two facilities.



Damage or deterioration of the exterior building envelope sealants were identified at all three facilities. Two facilities were identified with deteriorated mortar joints.

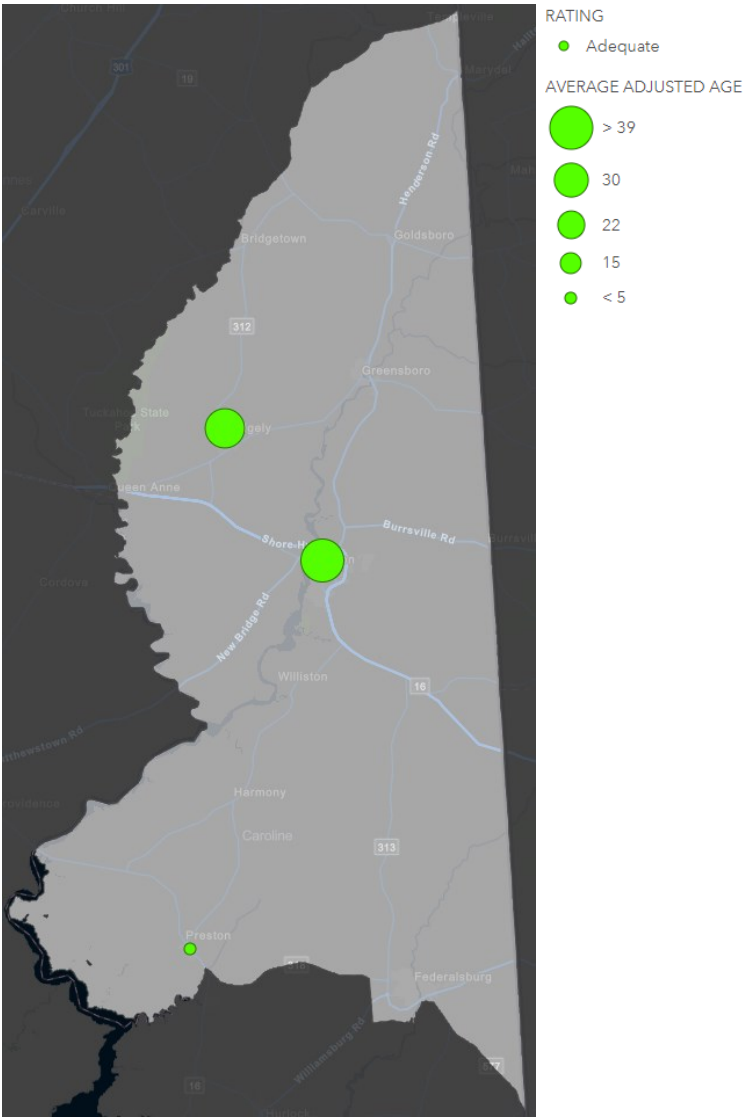


Vegetation growth and ponding water were identified on the roofs of two facilities.

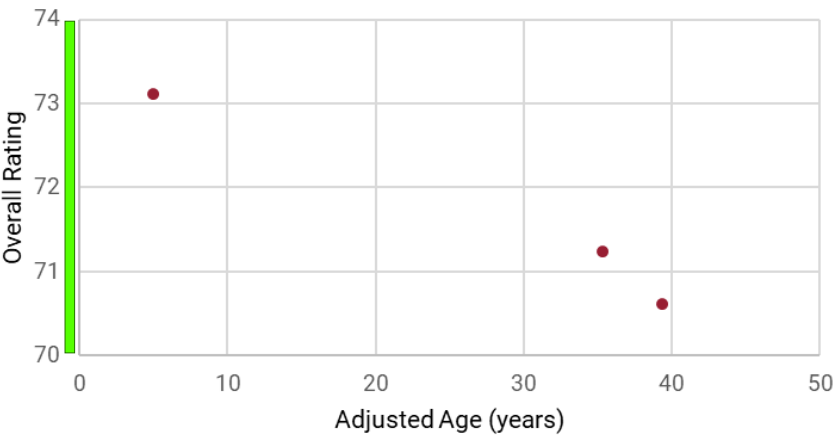
## FY 2022 Results: Summary of Deficiencies by Category

	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	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	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	0
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>7</b>

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- The CMMS should be used to track the contracted playground inspections as well as follow-up work for deficiencies identified on the reports.
- Incorporating routine inspections of the exterior building sealants is recommended. Use the CMMS to track the inspections and to create follow-up corrective action work orders.
- Using the CMMS to track roof inspections and deficiencies identified during the inspections is recommended. Creating, following, and tracking a good PM plan for the roof systems throughout the LEA is recommended.
- Custodial staff should clean and operate plumbing fixtures and equipment on a daily basis. Additional communication from the custodial staff to the head custodian is recommended. Utilizing the CMMS to create corrective maintenance work orders for deficiencies identified by the custodial staff is recommended.

# CARROLL COUNTY

Total School Facilities Assessed in FY 2022: 8



Westminster Elementary

## Fiscal Year 2022: Key Facts

**40**  
facilities

Carroll County has 40 active school facilities.  
**No change since FY 2021.**

**31.3**  
years old

The average adjusted age of all 40 school facilities is 31.3 years old.  
**+ 1 year since FY 2021.**

**> 4.1 M**  
GSF

Carroll County maintains 4,176,741 SF throughout its 40 school facilities. It has the 10th greatest amount of SF of LEAs in MD.

**No change since FY 2021.**

**~ \$1.8 B**

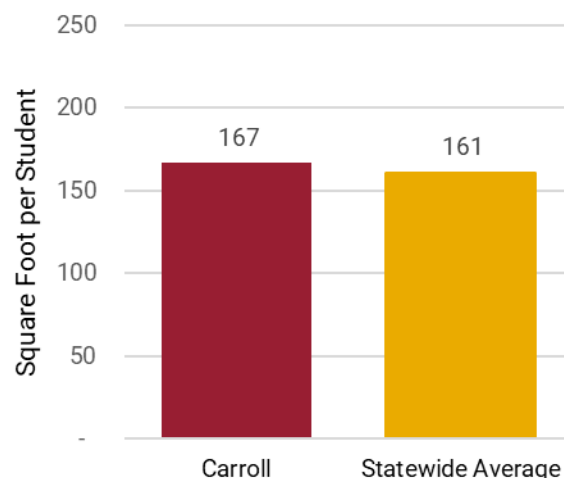
The current replacement value for Carroll County's GSF, at the IAC's current replacement cost/SF, is approximately \$1.8 B.

**72.1% (Adequate)** = Average Overall Rating for FY 2022  
**+ 1.51% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Special Education	Elementary	Middle	High	
Superior					
Good					
Adequate	1	4	1	1	7
Not Adequate				1	1
Poor					
Totals	1	4	1	2	8

### Average Square Foot per Student



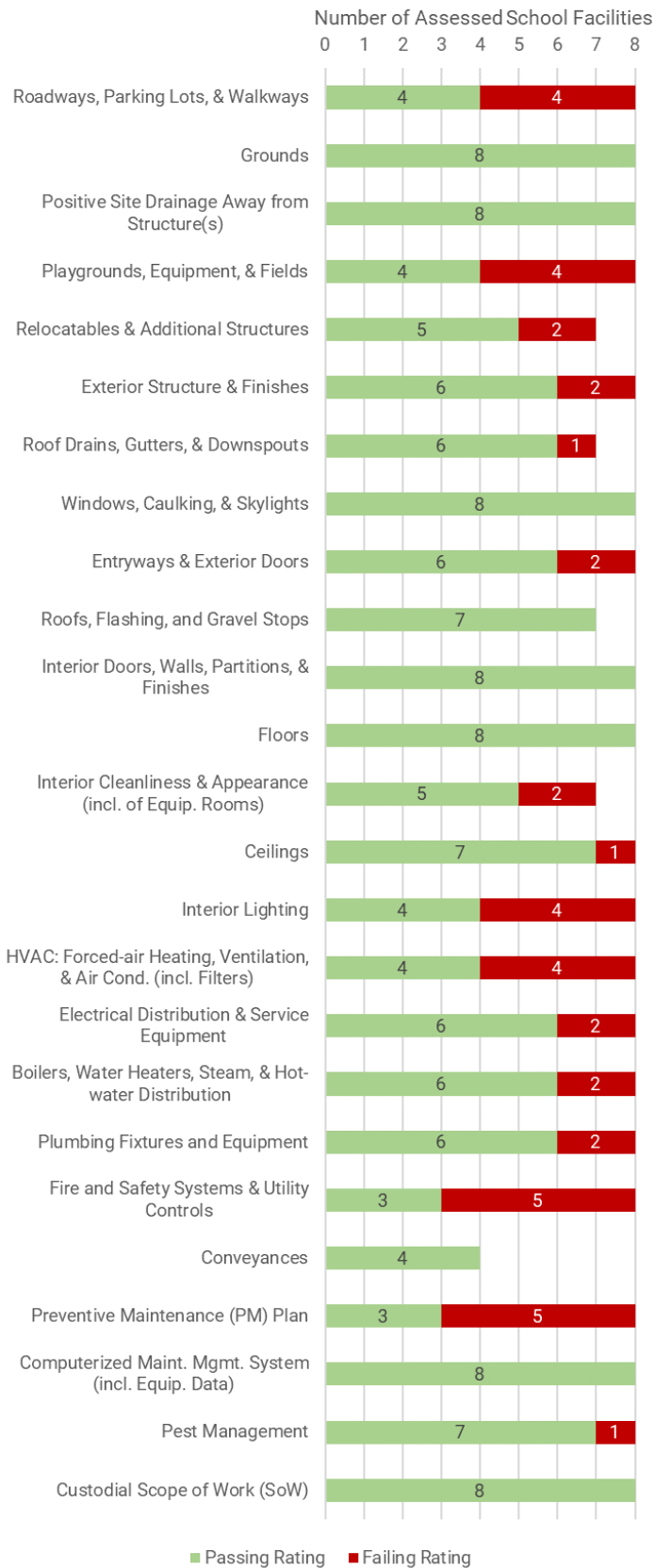


## FY 2022 Results: Summary of School Ratings

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. Westminster Elementary (06.003)	Elementary	69,648	31	Adequate	1	5	17	1	0	0	5
2. Carrolltowne Elementary (06.014)	Elementary	81,576	33	Adequate	0	7	14	3	0	0	1
3. Robert Moton Elementary (06.018)	Special Ed.	85,743	29	Adequate	0	8	14	2	0	0	3
4. Liberty High (06.019)	High	156,000	40	Not Adequate	0	1	18	6	0	0	5
5. Hampstead Elementary (06.022)	Elementary	59,200	34	Adequate	0	3	18	3	0	0	3
6. Winfield Elementary (06.023)	Elementary	73,037	26	Adequate	0	6	14	1	0	0	4
7. Westminster West Middle (06.036)	Middle	135,733	59	Adequate	0	7	15	3	0	0	5
8. Westminster High (06.042)	High	355,760	47	Adequate	0	13	11	1	0	0	1
Totals					1	50	121	20	0	0	27
Percentage of Total Ratings for System					1%	26%	63%	10%	0%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



Four facilities received a Good rating for Floors. Floor maintenance is listed as a daily task on the custodial checklist.

Four facilities received a Good rating for Interior Doors, Walls, Partitions, & Finishes. No major issues were observed. One of the Building Supervisor's weekly tasks is to check the building interior and repair or report all problems.



All windows were operational. Five facilities received a Good rating for Windows, Caulking, & Skylights. One of the Building Supervisor's daily tasks is to check doors and repair or report all damage.

All eight facilities received a passing rating for Grounds. No issues were observed that would require significant repairs to property or equipment. One of the Building Supervisor's daily tasks is to check the outside grounds.



### Weaknesses

Of the seven facilities with relocatables and/or sheds, six were identified with damaged roofs and/or damaged or rotten siding or skirting.

There is no documentation showing that relocatables or additional structures, such as sheds, receive PM.



The majority of the essential assets for the buildings are not included in the PM plan, such as water heaters. There are assets included in the CMP's PM plan that do not have PM work orders in the facilities' work order history documentation.

Five facilities were observed with inoperable emergency lights. Two facilities had water leaking from the sprinkler system.



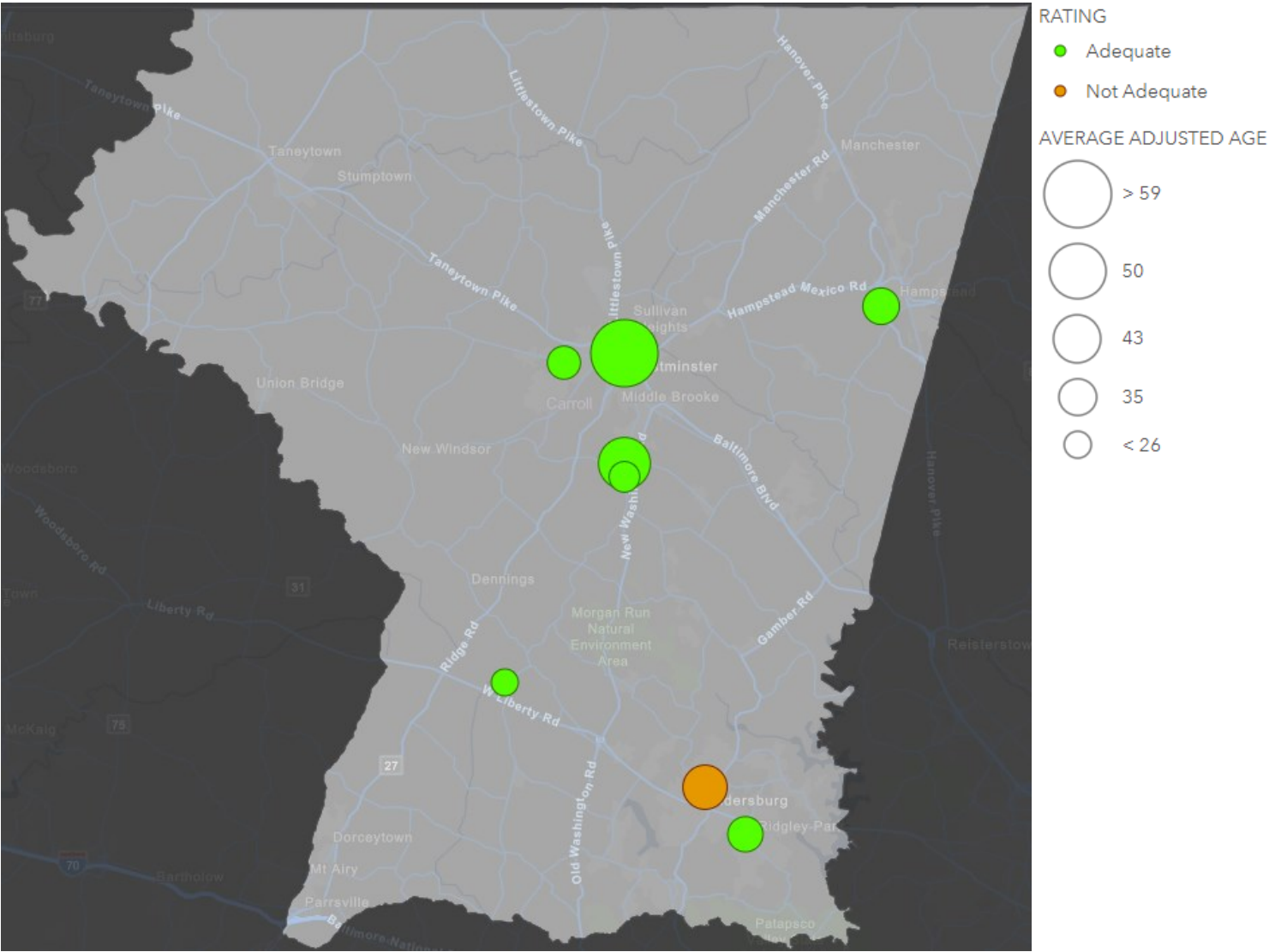
All eight facilities were observed with HVAC issues, such as dirty coils or filters in HVAC units and inoperable exhaust fans.

## FY 2022 Results: Summary of Deficiencies by Category

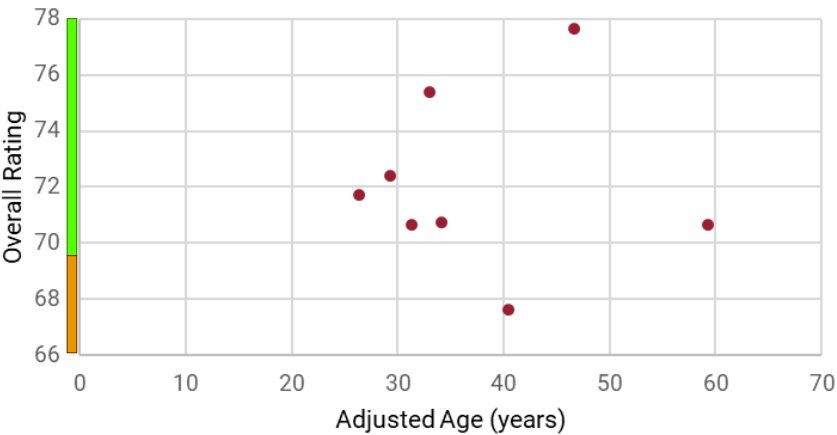
Category		# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	4
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	4
	Relocatables & Additional Structures	0	2
Building Exterior	Exterior Structure & Finishes	0	2
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	2
	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	3
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	2
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	2
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	5
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	27



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





## FY 2022 Results: Recommendations

- PM tasks identified in the CMP and the custodial checklists should have auto-populating PM work orders created in the CMMS.
- Immediately following an inspection or PM task, work orders should be created for any deficiencies or issues identified.
- Additional PM checks are recommended to ensure the HVAC systems and exhaust fans receive the necessary amount of PM work to remain functional and efficient.
- The custodial checklist for maintenance employees identifies quarterly PM checks for playground equipment. More frequent checks should be implemented to ensure the playgrounds and equipment remain functional, safe, and clean.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as leaking sprinkler systems, blocked egress routes, and non-functional emergency lights.

# CECIL COUNTY

Total School Facilities Assessed in FY 2022: 6

Cecilton Elementary

## Fiscal Year 2022: Key Facts

29  
facilities

Cecil County has 29 active school facilities.  
**No change since FY 2021.**

30.0  
years old

The average adjusted age of all 29 school facilities is 30.0 years old.  
**+ 1 year since FY 2021.**

> 2.2 M  
GSF

Cecil County maintains 2,242,569 SF throughout its 29 school facilities. It has the 15th greatest amount of SF of LEAs in MD.

**No change since FY 2021.**

> \$0.9 B

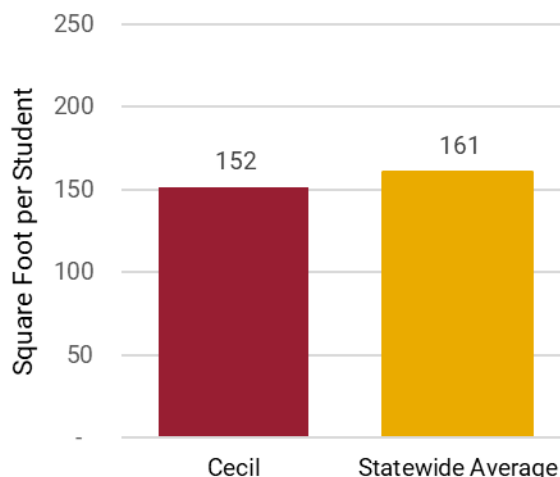
The current replacement value for Cecil County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.9 B.

**75.85% (Adequate)** = Average Overall Rating for FY 2022  
**+ 0.41% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Elementary	Middle/High	
Superior			
Good			
Adequate	5	1	6
Not Adequate			
Poor			
Totals	5	1	6

### Average Square Foot per Student

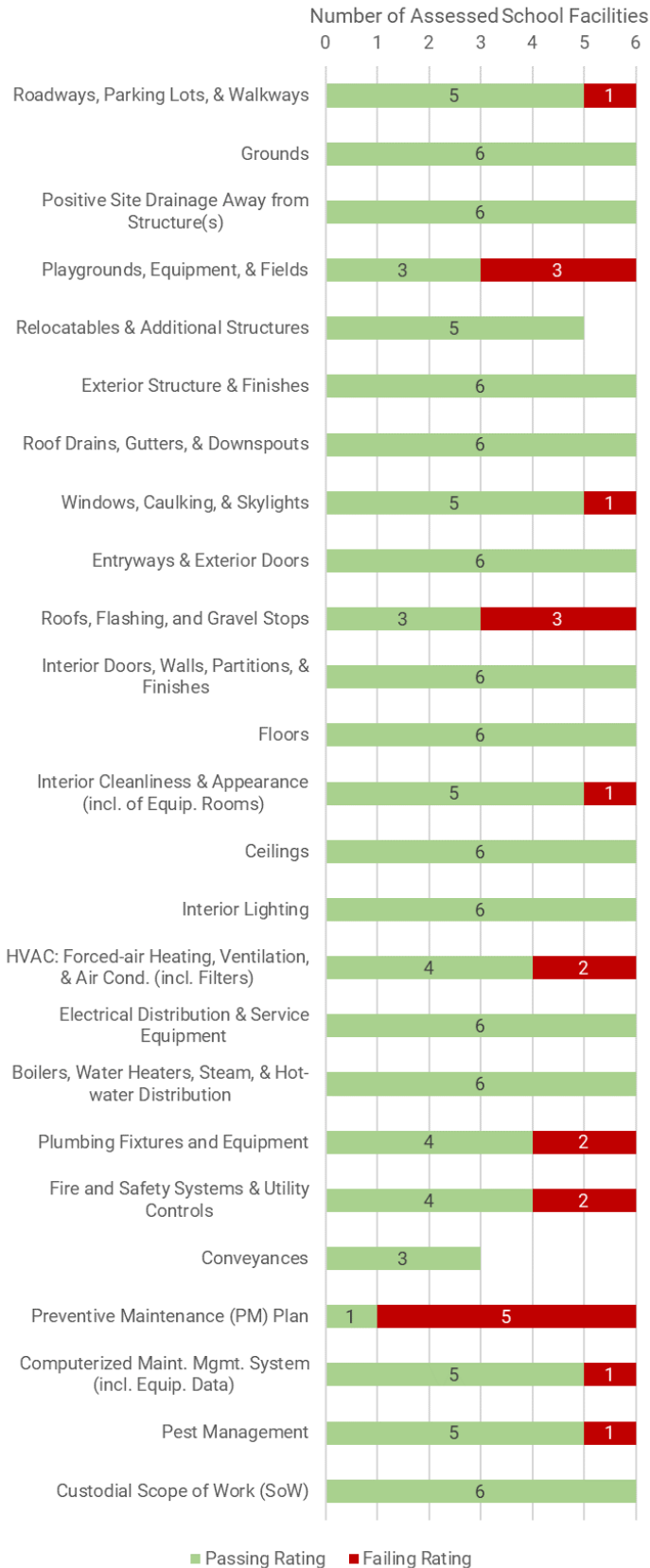


## FY 2022 Results: Summary of School Ratings

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. Rising Sun Elementary (07.026)	Elementary	62,496	30	Adequate	1	9	10	5	0	0	2
2. Bohemia Manor Middle/High (07.027)	Middle/High	136,024	27	Adequate	0	5	17	2	0	0	2
3. Cecilton Elementary (07.031)	Elementary	35,321	23	Adequate	0	11	12	2	0	0	0
4. North East Elementary (07.035)	Elementary	61,396	20	Adequate	1	10	10	3	0	0	1
5. Holly Hall Elementary (07.037)	Elementary	61,711	21	Adequate	1	6	14	3	0	0	1
6. Leeds Elementary (07.041)	Elementary	40,414	51	Adequate	0	12	8	4	0	0	1
Totals					3	53	71	19	0	0	7
Percentage of Total Ratings for System					2%	36%	49%	13%	0%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



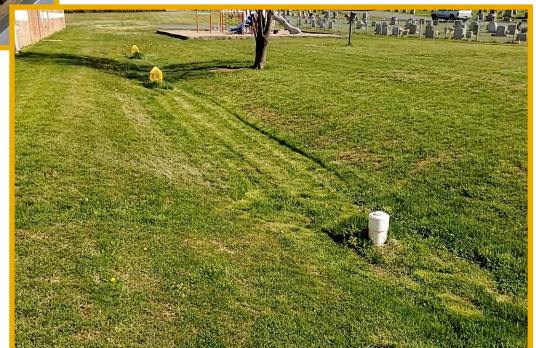
Three facilities had no issues with their interior lighting. Five facilities received a Good rating for Interior Lighting.

Three facilities received a Good and one facility earned a Superior rating for Entryways & Exterior Doors. Annual exterior doors and hardware inspections are included in the PM plan.



No issues were observed with the electrical distribution and service equipment at four facilities. The back-up generator was included in the PM plan at three facilities.

No issues were identified with the grounds at four facilities, and no issues were noted with the retention ponds at any facility.





### Weaknesses

Plumbing fixtures and backflow preventers were not identified in the PM schedule. One facility was observed with multiple leaks, two of which were black water leaks. Corroded fixtures were noted at three facilities.



Damaged playground equipment and/or potential safety hazards concerning playground equipment were identified at four facilities. Damaged playground equipment that was not adequately taken out of service was noted during the MEAs at two facilities.

Cracked and deteriorated asphalt surfaces were identified at all six facilities. Uneven walkway surfaces were noted at three facilities.



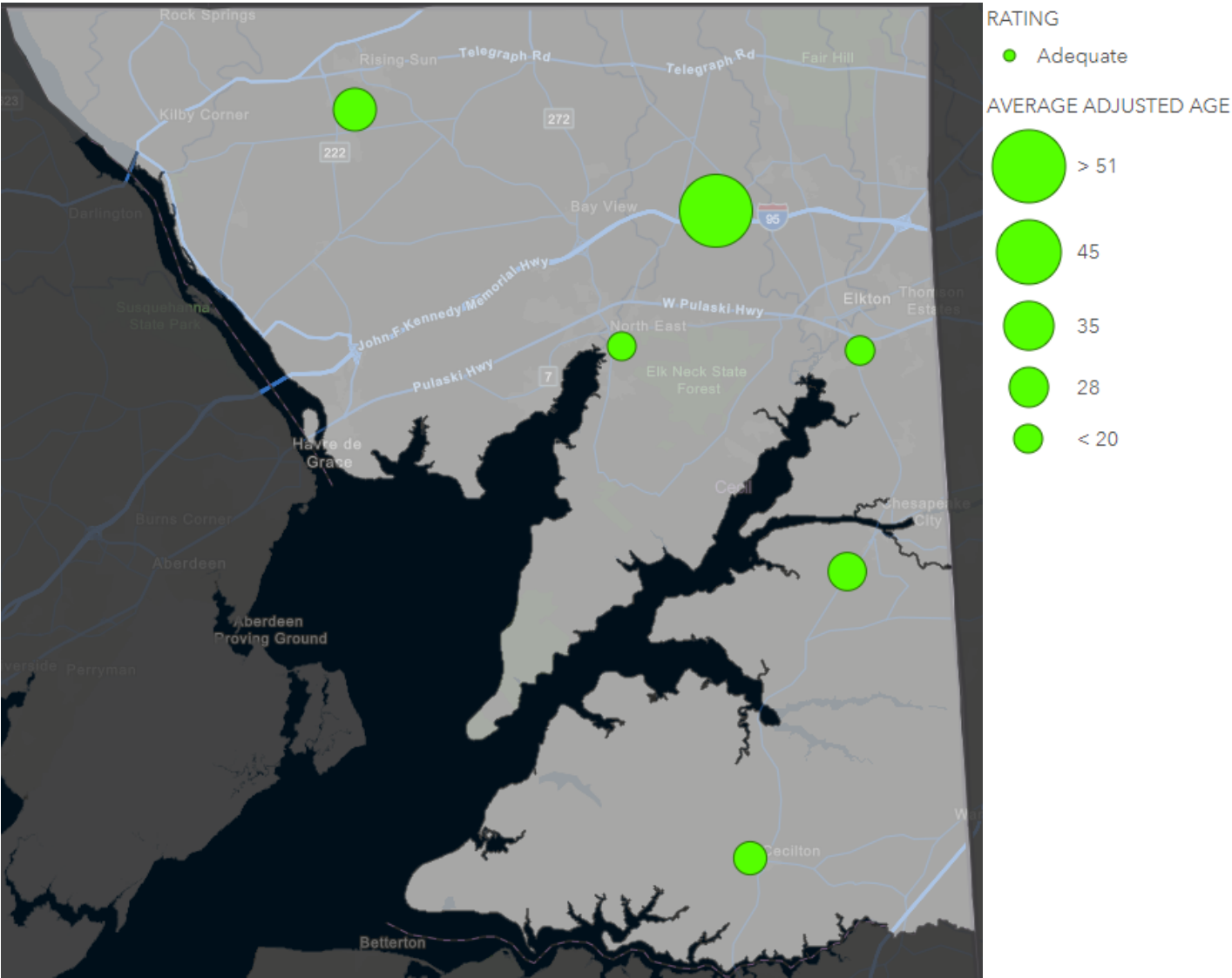
Five facilities received a Not Adequate rating for their PM plans, and all five had fewer than 10 PM items listed on their respective plans. Essential assets, including sprinklers, fire extinguishers, and emergency lights were omitted from every facility's PM plan.



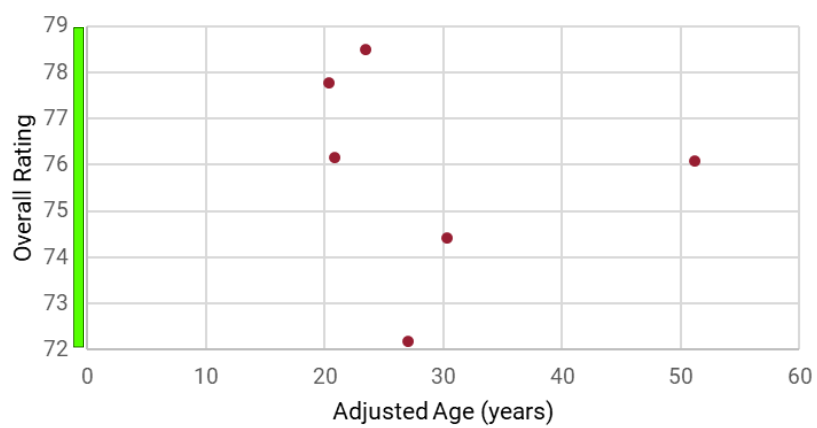
## FY 2022 Results: Summary of Deficiencies by Category

	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	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	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	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	2
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	7

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements listed in the CMP.
- Roadways, parking lots, and walkways should be added to the PM schedule. Deficiencies noted during the PM checks should be entered and tracked using the CMMS. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.
- Consider more appropriate methods of removing unsafe or damaged equipment from service. Remove broken, warped, cracked, or otherwise unsafe equipment to prevent potential injuries to students. This is especially important for outdoor playground equipment which may be used by unsupervised students or the general public outside of school hours. Avoid using materials which can become dangerous when weathered, such as plywood, untreated fasteners subject to rust, etc. Include checks for link wear in playground inspections.
- Improved auto-populating PM checks and asset identification in the CMMS will help to ensure that all equipment is being serviced within the required periodicity.
- Auto-populating PM checks specific to inspecting student restroom plumbing fixtures is recommended to identify, document, and rectify issues prior to more serious problems developing, such as black water leaks.

# CHARLES COUNTY

Total School Facilities Assessed in FY 2022: 8

F.B. Gwynn Center

## Fiscal Year 2022: Key Facts

39  
facilities

Charles County has 39 active school facilities.  
**No change since FY 2021.**

28.6  
years old

The average adjusted age of all 39 school facilities is 28.6 years old.  
**No change since FY 2021.**

> 4.2 M  
GSF

Charles County maintains 4,233,893 SF throughout its 39 school facilities. It has the 9th greatest amount of SF of LEAs in MD.  
**+ 142,507 SF since FY 2021.**

> \$1.8 B

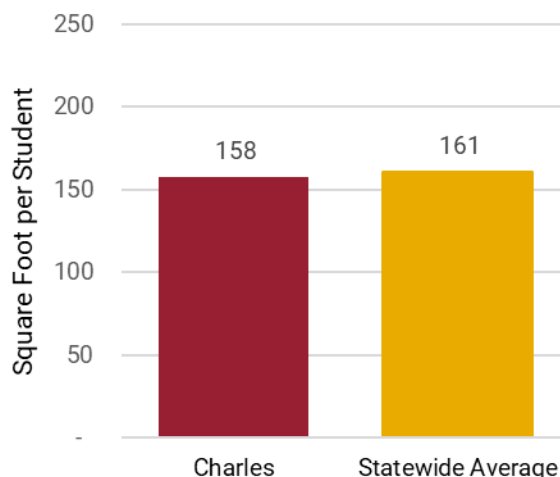
The current replacement value for Charles County's GSF, at the IAC's current replacement cost/SF, is greater than \$1.8 B.

**75.92% (Adequate)** = Average Overall Rating for FY 2022  
**+ 2.57% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Special Education	Elementary	Middle	High	
Superior					
Good		1	1		2
Adequate	1	4		1	6
Not Adequate					
Poor					
Totals	1	5	1	1	8

### Average Square Foot per Student



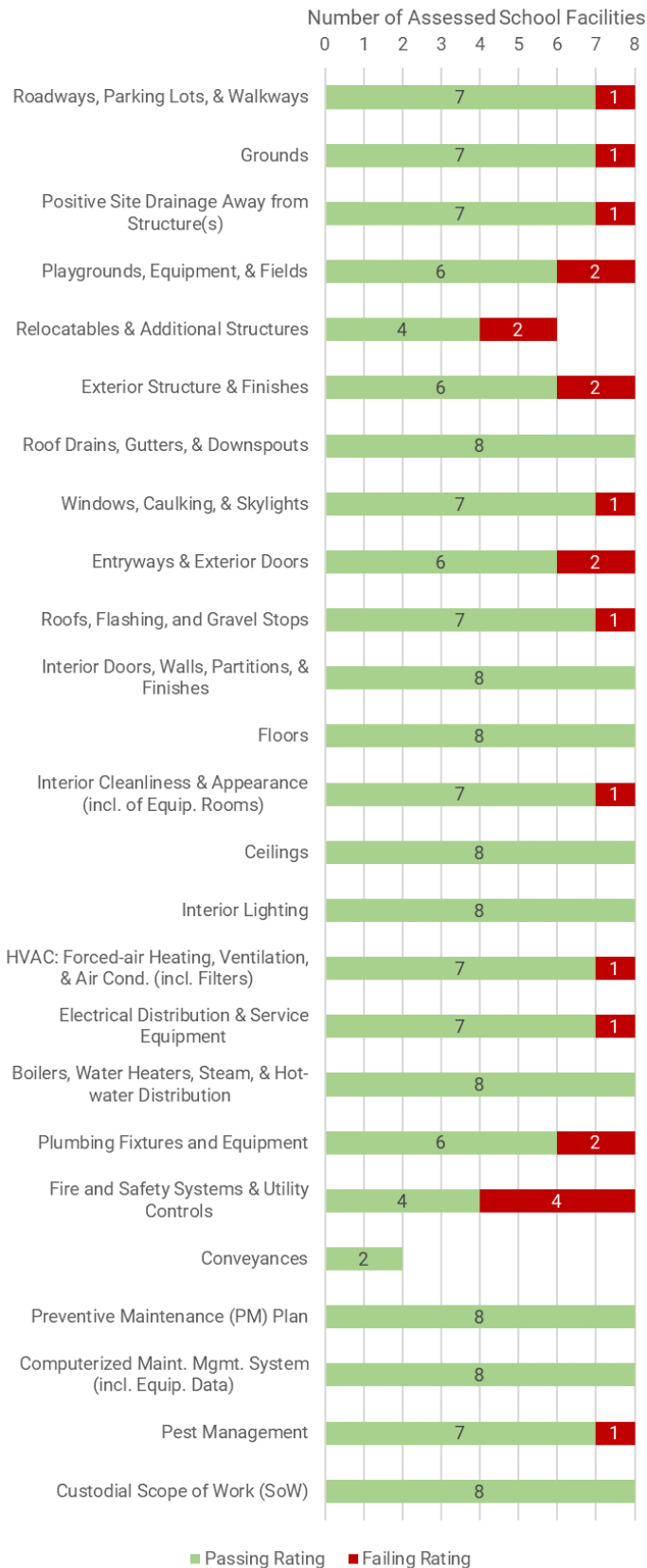
## FY 2022 Results: Summary of School Ratings

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. Benjamin Stoddert Middle (08.002)	Middle	105,800	46	Good	0	13	12	0	0	0	0
2. Maurice J. McDonough High (08.009)	High	174,315	45	Adequate	0	2	19	3	0	0	2
3. F.B. Gwynn Center (08.012)	Special Ed.	50,238	42	Adequate	0	6	16	1	0	0	0
4. Mt. Hope/Nanjemoy Elementary (08.023)	Elementary	42,780	30	Adequate	0	8	15	1	0	0	3
5. Daniel of St. Thomas Jenifer Elementary (08.025)	Elementary	66,285	32	Adequate	1	1	13	9	0	0	0
6. Dr. Thomas L. Higdon Elementary (08.027)	Elementary	52,000	33	Adequate	0	4	16	3	0	0	2
7. T C Martin Elementary (08.040)	Elementary	54,349	43	Adequate	0	5	17	2	0	0	0
8. Billingsley Elementary School (08.048)	Elementary	103,737	3	Good	2	13	10	0	0	0	0
Totals					3	52	118	19	0	0	7
Percentage of Total Ratings for System					2%	27%	61%	10%	0%		



## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



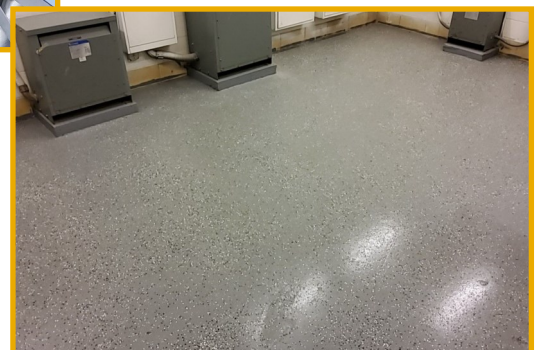
No significant issues were noted with the ceilings. Ceiling cleaning is identified as a task for the Building Service Manager. Four facilities obtained a Good rating for Ceilings.

Two facilities received a Good rating for Interior Doors, Walls, Partitions, & Finishes. Restroom cleaning and disinfecting of floors, walls, and partitions was identified as a daily task.



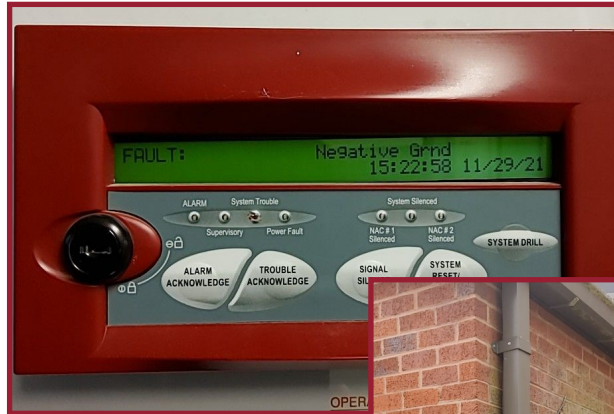
The PM plan includes essential and non-essential assets for the facility such as backflow preventers, water heaters, boilers, HVAC unit air filter changes, roofing, exhaust fans, and parking lot weed control.

All flooring surfaces are cleaned daily according to the task list for building service workers. It includes dusting, mopping, vacuuming, and scrubbing.



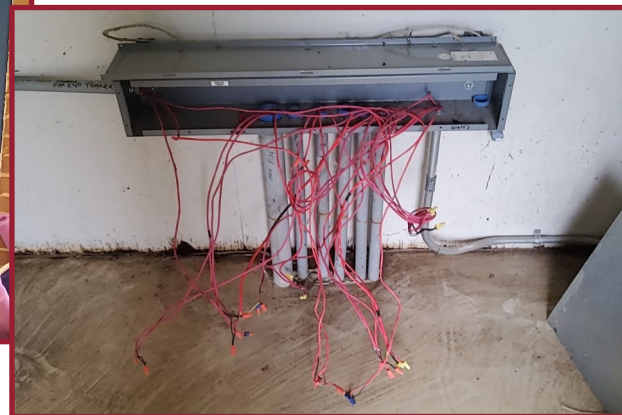
### Weaknesses

Three facilities received a Not Adequate rating for Fire and Safety Systems & Utility Controls. The sprinkler system and fire alarm system were not included in the PM schedule for any facility. Two facilities had messages on their fire alarm panels: one indicated a fault, the other indicated a supervisory alarm.



Staining was observed around the exterior structures at five facilities. There were also five facilities where sealants or mortar were noted as damaged, deteriorated, or missing. Exterior structures and finishes are not specified in the PM schedules or the PM plan in the CMP to receive any PM work.

Entryways and exterior doors are not specified in the PM schedules or the PM plan in the CMP to receive any PM work. Six facilities were noted with exterior doors that either closed too hard or did not close on their own.



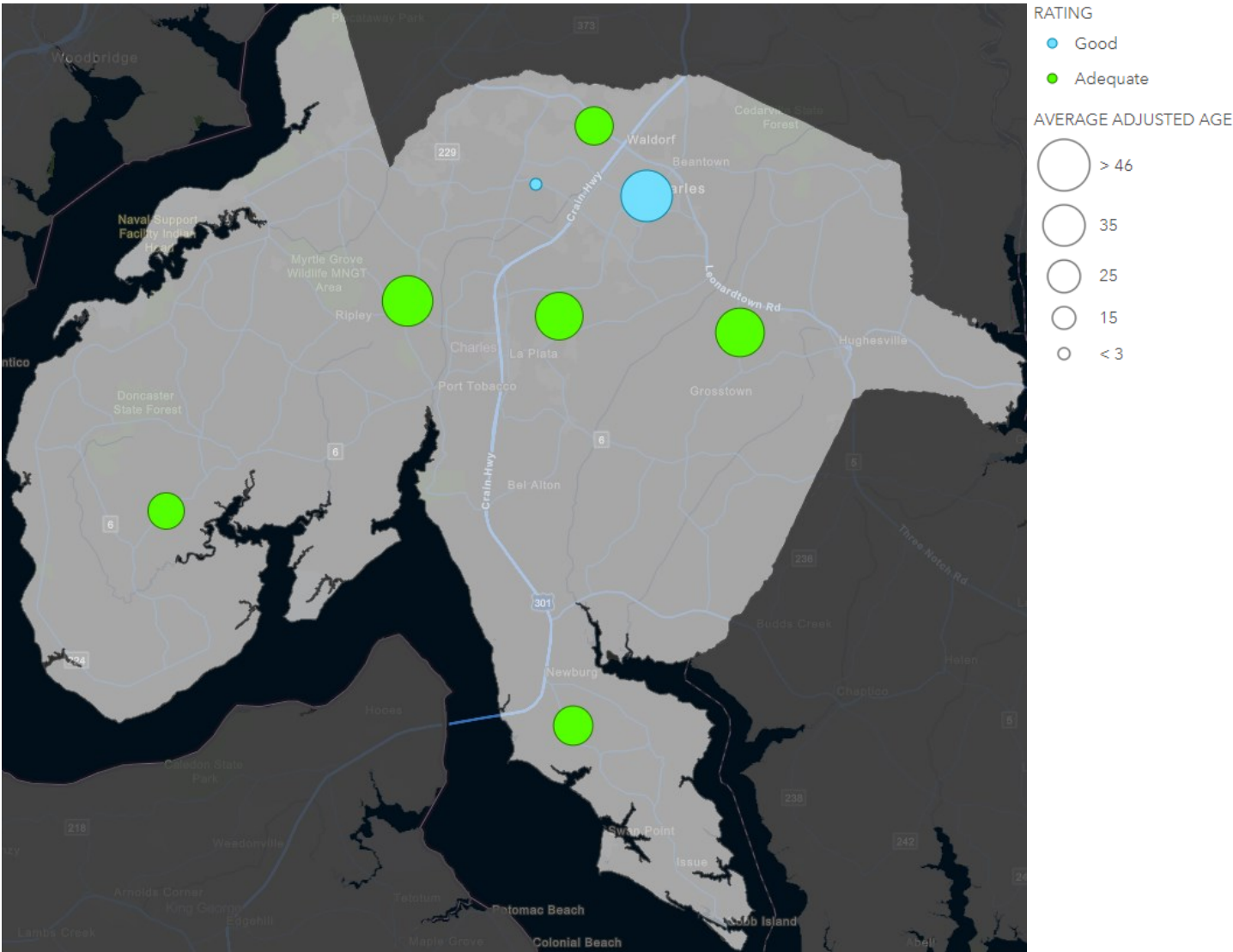
The emergency lights and/or exit signs failed to illuminate at three facilities. Wiring/cabling issues were noted at five facilities.

## FY 2022 Results: Summary of Deficiencies by Category

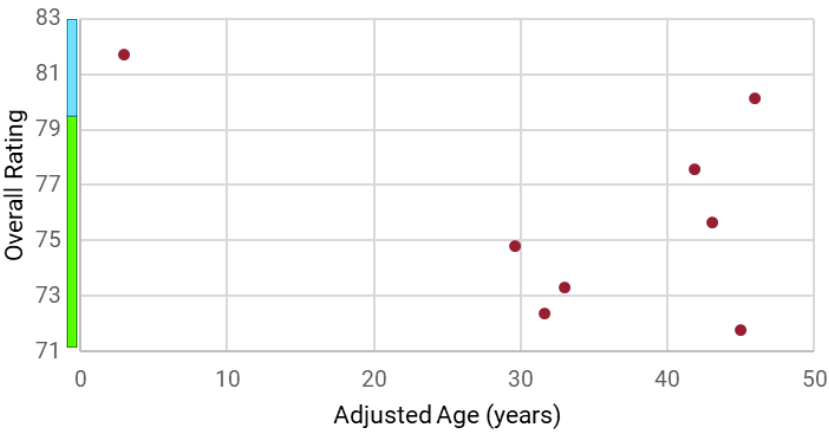
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	1
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	2
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	0
	Roof 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	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	2
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	7



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



## FY 2022 Results: Recommendations

- Additional training on playground maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as non-functional emergency lights.
- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements, especially items already identified for PM in the CMP such as fire suppression systems.



# DORCHESTER COUNTY

Total School Facilities Assessed in FY 2022: 3

Cambridge-South Dorchester High

## Fiscal Year 2022: Key Facts

14  
facilities

Dorchester County has 14 active school facilities.  
**No change since FY 2021.**

30.3  
years old

The average adjusted age of all 14 school facilities is 30.3 years old.  
**- 3.2 years since FY 2021.**

> 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.

**+ 21,720 SF since FY 2021.**

> \$0.4 B

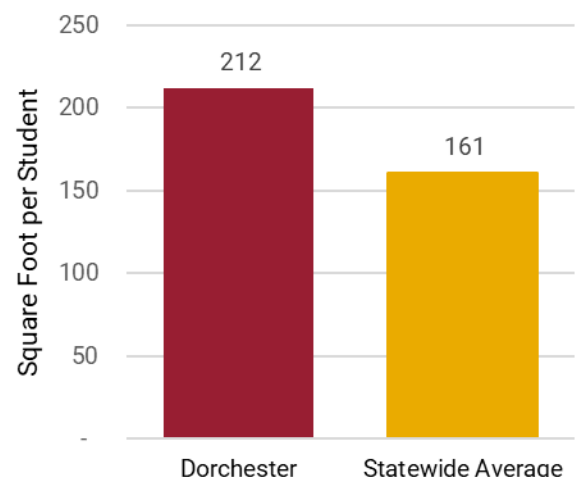
The current replacement value for Dorchester County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.4 B.

**70.54% (Adequate)** = Average Overall Rating for FY 2022  
**- 11.18% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Special Education	PreK-8	High	
Superior				
Good				
Adequate	1	1	1	3
Not Adequate				
Poor				
Totals	1	1	1	3

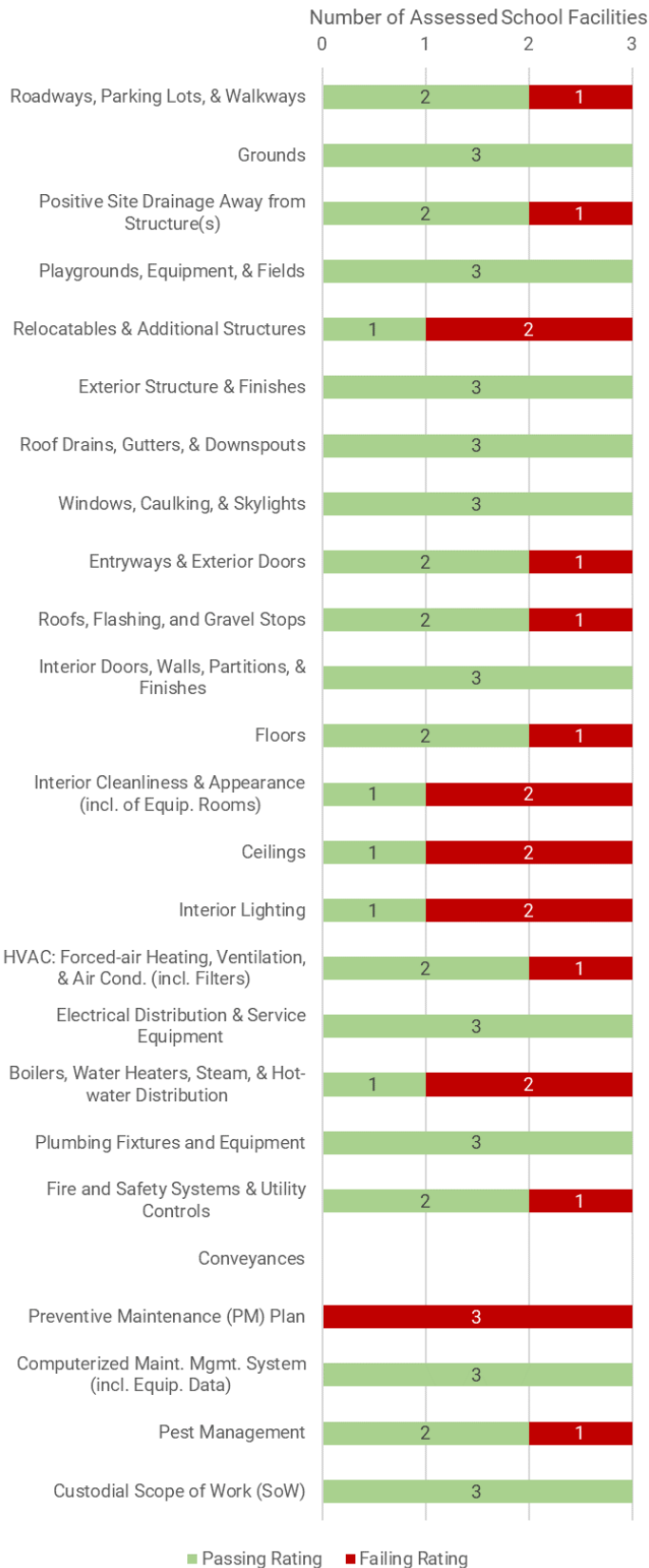
### Average Square Foot per Student



## FY 2022 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. Cambridge-South Dorchester High (09.009)	High	189,050	45	Adequate	0	0	17	7	0	0	2
2. Maple Elementary (09.010)	Special Ed.	62,000	45	Adequate	0	2	18	4	0	0	3
3. South Dorchester Pre K-8 (09.012)	PreK-8	35,000	42	Adequate	0	2	19	3	0	0	2
Totals					0	4	54	14	0	0	7
Percentage of Total Ratings for System					0%	6%	75%	19%	0%		

FY22 Passing vs Failing Rating per Category



### Strengths



The roof drains, gutters, and downspouts appeared to be well maintained. All of the assessed facilities received Adequate ratings.

All of the assessed facilities received Adequate ratings due to well-maintained windows. The windows opened and closed properly, were able to be locked, and had the necessary hardware.



The grounds appeared well cared for. One facility received a Good rating for the appearance and maintenance efforts at that facility.

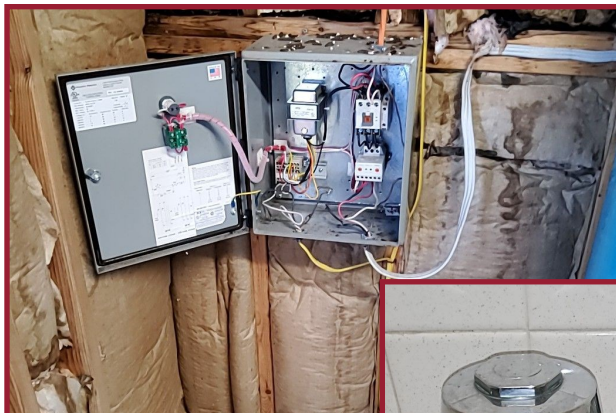
The exterior structures appeared to be maintained. One facility received a Good rating for above-average maintenance efforts.





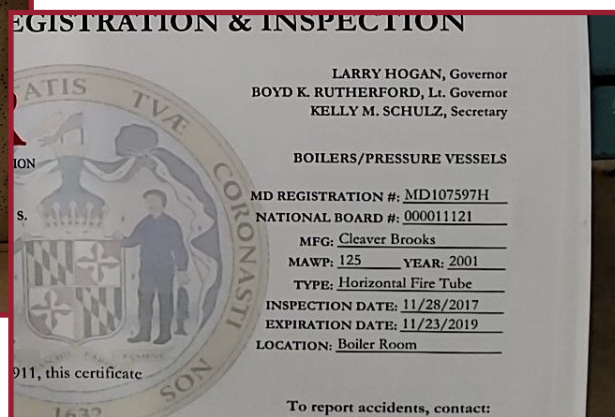
### Weaknesses

Multiple issues were identified with the relocatables and additional structures at all three of the facilities assessed, including open junction boxes, improper storage, and non-functional lighting. Two facilities were rated Not Adequate.



Dirty floors, corroded plumbing fixtures, and improper storage practices were identified at all of the facilities assessed.

Damaged and stained ceiling tiles were identified at all of the facilities assessed.



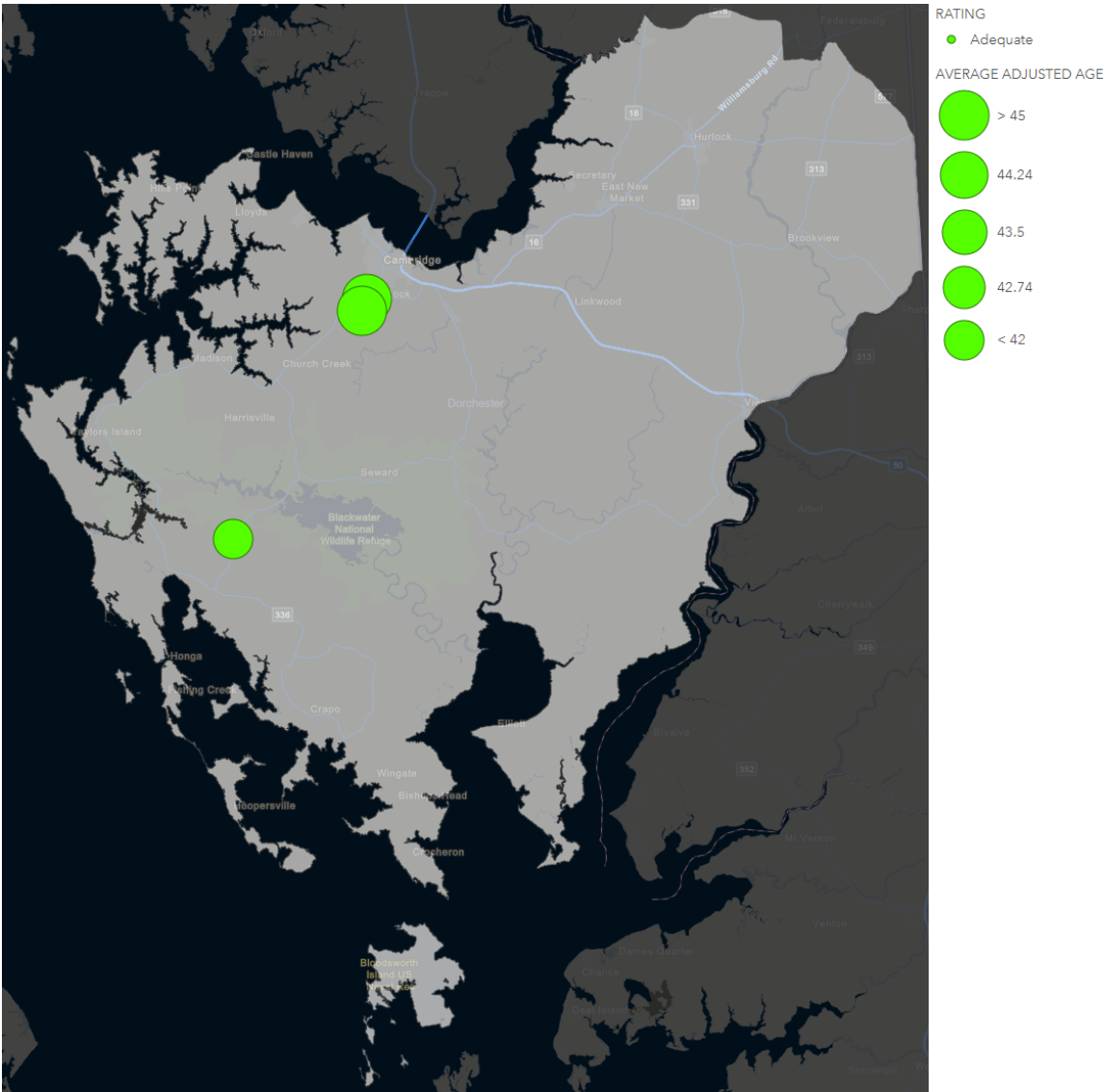
One facility had expired DLLR certificates for the boilers and hot water heater. These assets were not included in LEA's PM plan.

## FY 2022 Results: Summary of Deficiencies by Category

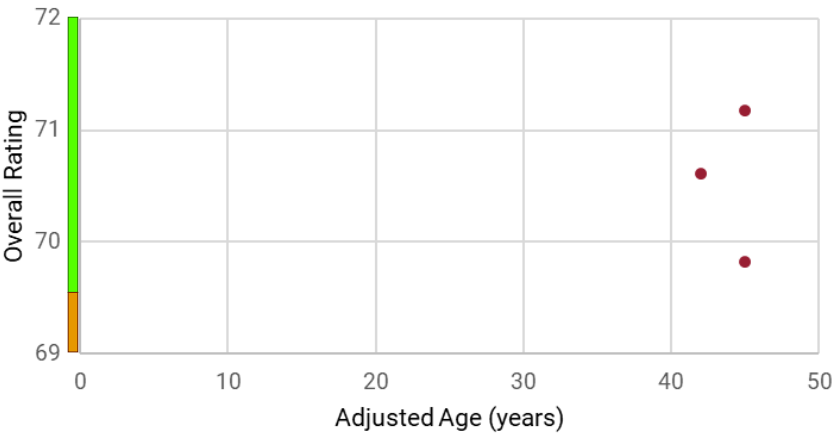
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	1
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	1
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof 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	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	1
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	1
	Custodial Scope of Work (SoW)	0	0
Total		0	7



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- Relocatable classrooms and additional structures should be included in all inspections and PM programs. Equipment used in the relocatables or additional structures should be included in the asset list to ensure that it is serviced on a regular basis.
- A detailed custodial scope of work that outlines tasks to be completed on a daily, weekly, and monthly basis could help to improve the efficiency and overall cleanliness inside the facilities.
- Drop ceilings should be regularly evaluated and work orders should be entered into the CMMS to correct deficiencies. The root cause of repetitive stained tiles should be investigated and tracked using the CMMS.
- The CMMS should be used to track and manage all work being conducted in the facility. Including equipment in the facility with unique identification in the asset list can assist with ensuring that all assets are serviced.

# FREDERICK COUNTY

Total School Facilities Assessed in FY 2022: 13



Thurmont Middle

## Fiscal Year 2022: Key Facts

68  
facilities

Frederick County has  
68 active school facilities.  
**No change since FY 2021.**

27.2  
years old

The average adjusted age of  
all 68 school facilities  
is 27.2 years old.  
**+ 0.1 years since FY 2021.**

> 6.8 M  
GSF

Frederick County  
maintains 6,811,025 SF  
throughout its 68 school  
facilities. It has the 7th  
greatest amount of SF  
of LEAs in MD.

**- 3,311 SF since FY 2021.**

> \$2.9 B

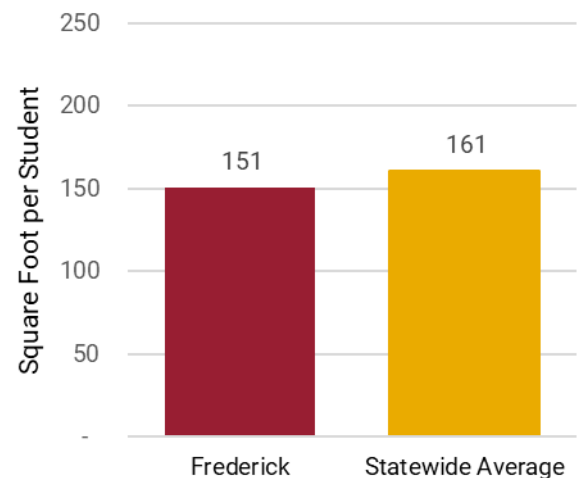
The current replacement value  
for Frederick County's GSF,  
at the IAC's current  
replacement cost/SF,  
is greater than \$2.9 B.

**78.19% (Adequate)** = Average Overall Rating for FY 2022  
**- 4.53% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Special Education	Elementary	Middle	High	
Superior					
Good	1	1		1	3
Adequate		6	3	1	10
Not Adequate					
Poor					
Totals	1	7	3	2	13

### Average Square Foot per Student

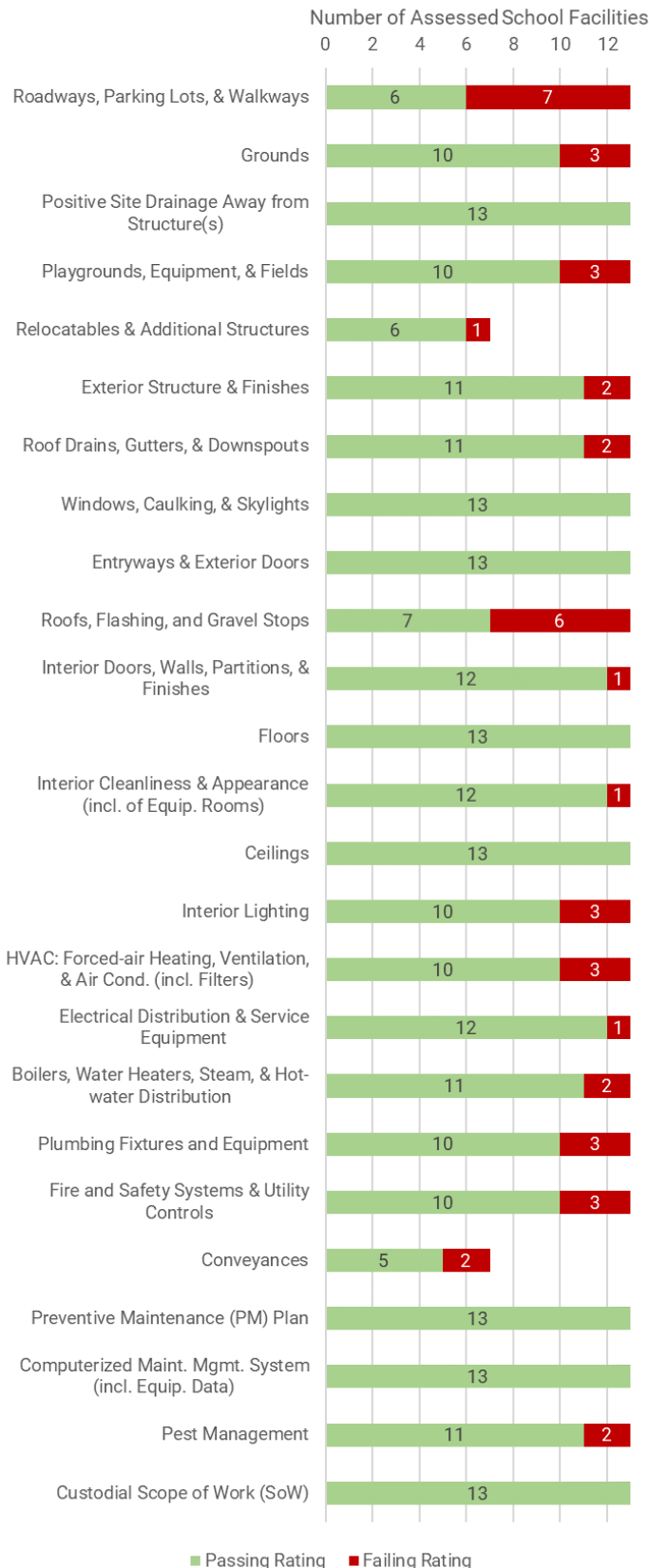


## FY 2022 Results: Summary of School Ratings

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. Lincoln A (10.003)	Special Ed.	20,334	48	Good	10	8	6	0	0	0	2
2. Emmitsburg Elementary (10.006)	Elementary	45,080	48	Adequate	4	7	10	3	0	0	3
3. Thurmont Middle (10.008)	Middle	135,260	43	Adequate	3	5	15	2	0	0	2
4. Frederick High (10.009)	High	270,618	4	Good	2	15	7	1	0	0	1
5. Middletown Middle (10.010)	Middle	114,974	53	Adequate	2	6	15	1	0	0	3
6. Woodsboro Elementary (10.014)	Elementary	28,557	55	Adequate	2	8	13	0	0	0	2
7. Thurmont Elementary (10.015)	Elementary	64,250	58	Adequate	1	2	16	4	0	0	4
8. Liberty Elementary (10.035)	Elementary	40,720	42	Adequate	2	7	14	1	0	0	2
9. Spring Ridge Elementary (10.049)	Elementary	66,276	30	Adequate	2	8	10	3	0	0	1
10. Gov Thos. Johnson High (10.057)	High	312,533	22	Adequate	1	6	18	0	0	0	3
11. Gov Thos. Johnson Middle (10.059)	Middle	126,700	22	Adequate	2	10	7	4	1	0	3
12. Lewistown Elementary (10.060)	Elementary	50,898	58	Good	4	9	9	3	0	0	1
13. Carroll Manor Elementary (10.066)	Elementary	77,593	33	Adequate	2	7	14	1	0	0	1
Totals					37	98	154	23	1	0	28
Percentage of Total Ratings for System					12%	31%	49%	7%	0%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

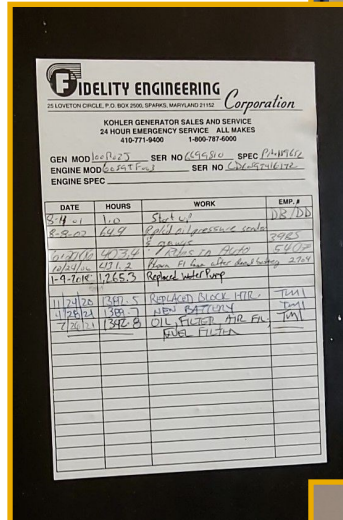


### Strengths



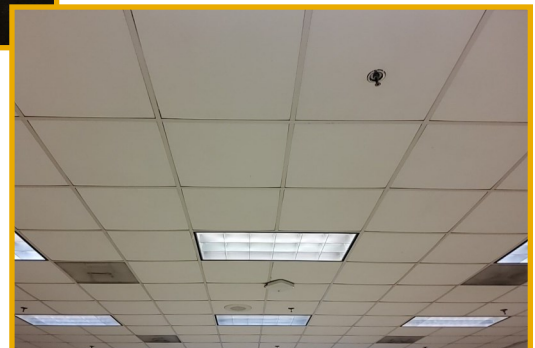
11 facilities had current DLLR certifications for their boilers and/or water heaters. This equipment is included in the PM plan. Seven facilities earned a Superior rating for Boilers, Water Heaters, Steam, & Hot-water Distribution.

Windows are included in the PM plan. All facilities received a passing rating for Windows, Caulking, & Skylights, and no issues or concerns were identified at five facilities.



12 facilities received a passing rating for Electrical Distribution & Service Equipment. No issues or concerns were identified with the electrical systems at six facilities.

Ceiling tiles are maintained by the on-site custodial staff and the maintenance department as needed. One facility earned a Superior rating for Ceilings.





### Weaknesses

Seven facilities received a failing rating for Roadways, Parking Lots, & Walkways. Uneven surfaces were identified at six facilities, and cracks in the roadways and/or parking lots were observed at 10 facilities. There were no PM work orders for the roadways, parking lots, or walkways at any facility.



Even though entryways and exterior doors were identified in the PM plan and CMMS work order history, nine facilities were noted with entryways and exterior doors not functioning properly.

The PM plan identifies semi-annual maintenance for exhaust fans. Exhaust fan issues were noted at six facilities, such as cracked belts, rusted pulleys, and non-functional equipment.

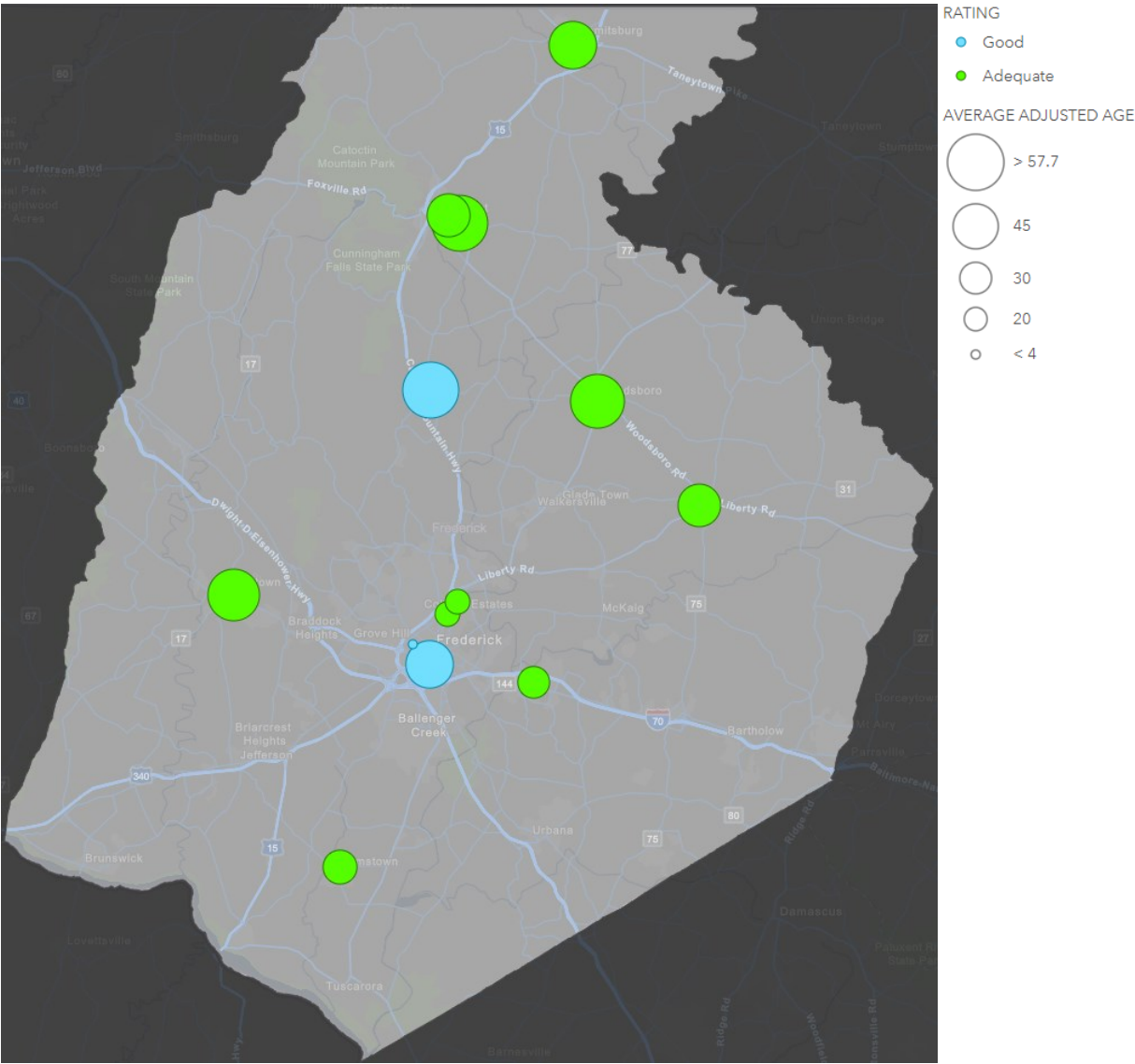


Vegetation growth or vegetative debris were identified at nine facilities, and exposed felts were observed on several of the ballast-covered roof sections at eight facilities. Six facilities received a Not Adequate rating for Roofs, Flashing, and Gravel Stops.

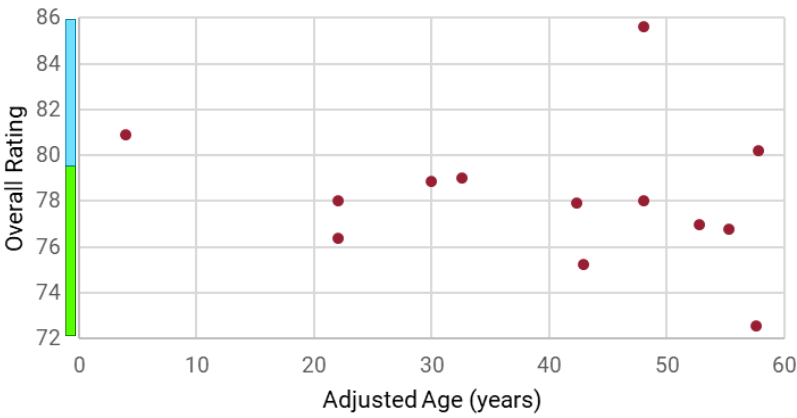
## FY 2022 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	7
	Grounds	0	3
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	2
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	1
	Roof Drains, Gutters, & Downspouts	0	1
	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	0
	Ceilings	0	0
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	2
	Electrical Distribution & Service Equipment	0	1
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	1
	Plumbing Fixtures and Equipment	0	3
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	2
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>28</b>

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements.
- Roadways, parking lots, and walkways 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 training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as issues with roofs, exterior door hardware, and exhaust fans.
- Deficiencies noted during the PM checks should be entered and tracked using the CMMS.
- 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.

# GARRETT COUNTY

Total School Facilities Assessed in FY 2022: 3

Broad Ford Elementary

## Fiscal Year 2022: Key Facts

13  
facilities

Garrett County has 13 active school facilities.  
**No change since FY 2021.**

34.0  
years old

The average adjusted age of all 13 school facilities is 34.0 years old.  
**+ 1 year since FY 2021.**

> 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 2021.**

> \$0.3 B

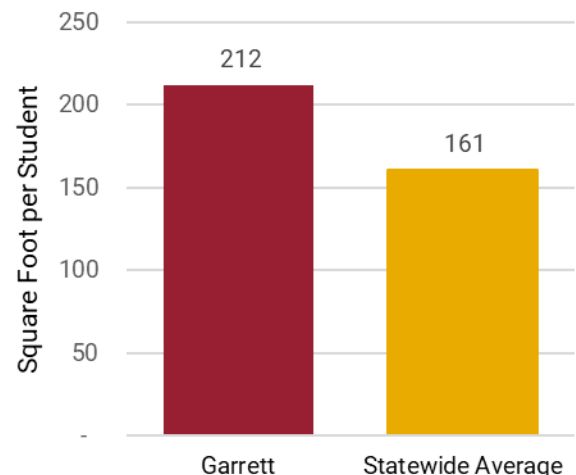
The current replacement value for Garrett County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.3 B.

**71.7% (Adequate)** = Average Overall Rating for FY 2022  
**+ 0.46% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student



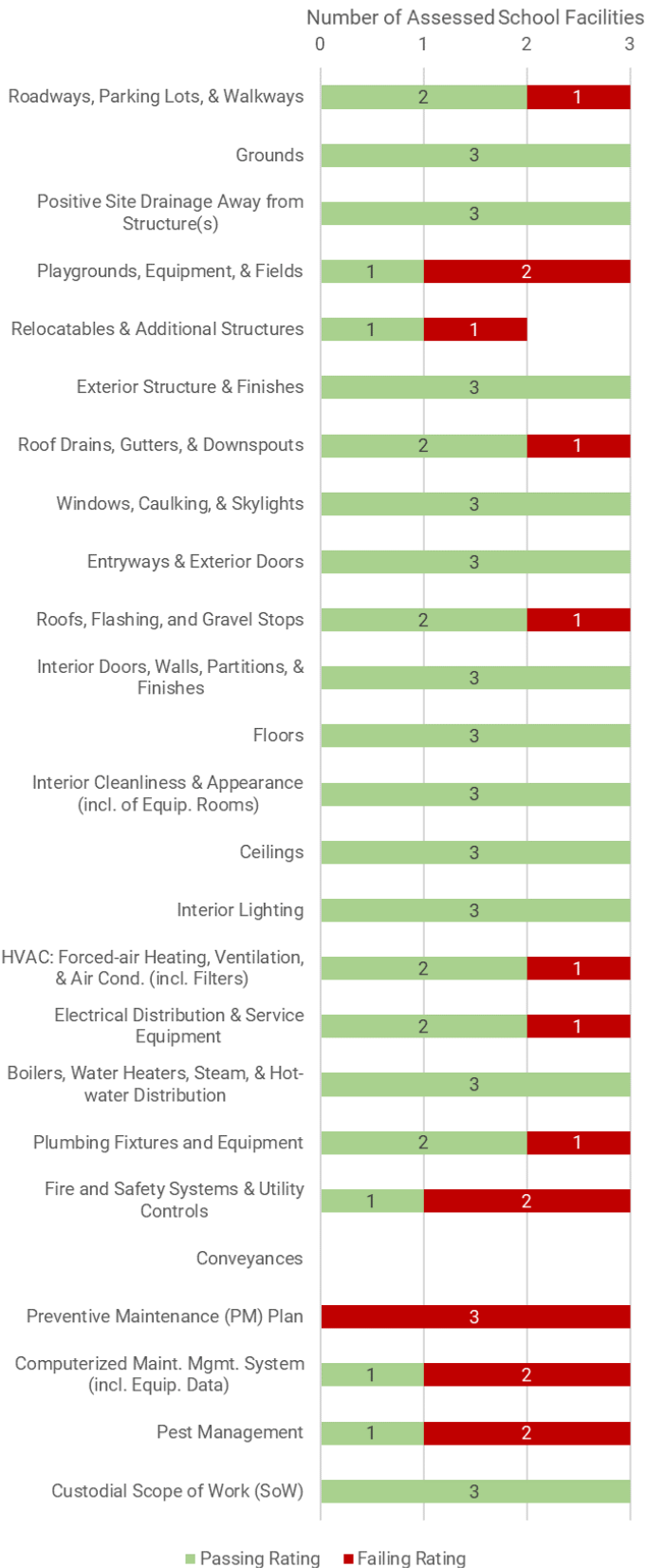


## FY 2022 Results: Summary of School Ratings

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. Broad Ford Elementary (11.006)	Elementary	54,760	45	Not Adequate	0	2	15	7	0	0	3
2. Southern Middle (11.008)	Middle	92,000	45	Adequate	0	3	18	2	0	0	4
3. Crellin Elementary (11.012)	Elementary	12,514	49	Adequate	0	8	13	3	0	0	1
Totals					0	13	46	12	0	0	8
Percentage of Total Ratings for System					0%	18%	65%	17%	0%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



While more progress is still needed, the usage of the CMMS to submit and track work orders appears to have vastly improved since FY21's MEAs.

No issues were observed with the windows, and all functioned properly.



All three facilities received a Good rating for Boilers, Water Heaters, Steam, & Hot-water Distribution. No issues were observed with the functionality of the assessed equipment. The boilers and water heaters are identified in the PM plan.

Interior cleaning is included in the custodians' SoW. One facility received a Good rating for Interior Cleanliness & Appearance (incl. of Equip. Rooms).



### Weaknesses

Pest management does not appear to be tracked using the CMMS. At two facilities, the pesticide business license and other pesticide paperwork were expired. Both facilities were also observed with ineffective sticky traps.



The walkways were cracked and the roadways were cracked and/or deteriorated at all three facilities.

Many essential and non-essential assets were not listed or identified in the PM plan or asset list. Emergency lights and/or emergency exit signs were not working properly at all three facilities.



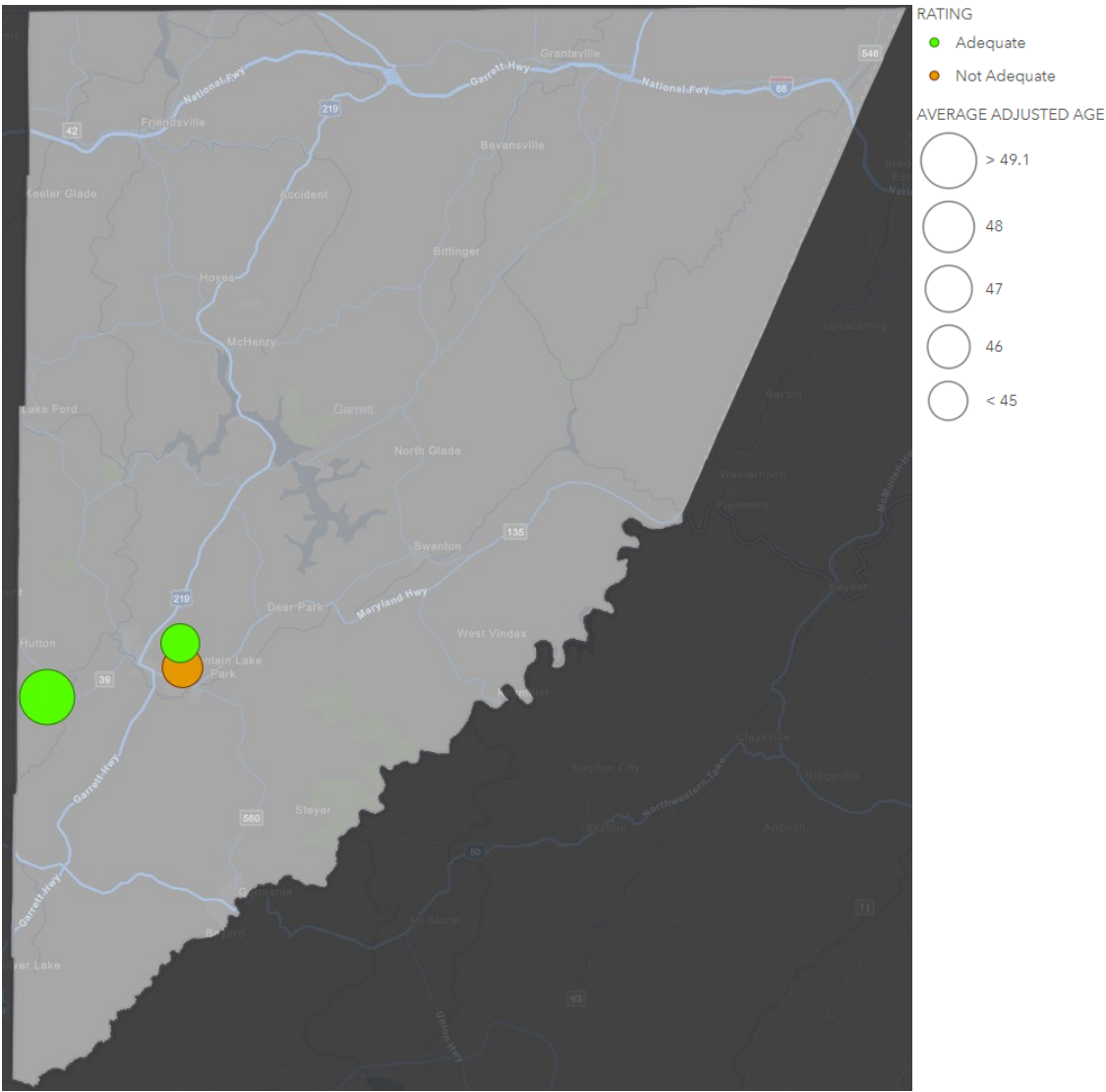
The pea gravel impact surface was low at two facilities. Vegetation was growing from the playground pea gravel at one facility.

## FY 2022 Results: Summary of Deficiencies by Category

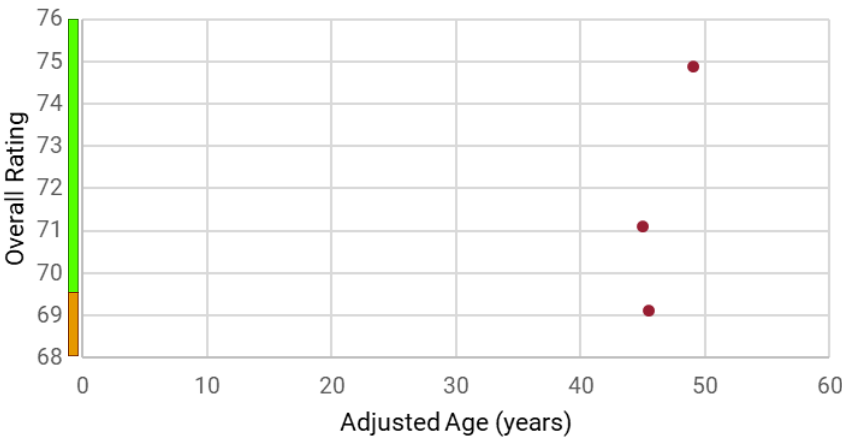
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	2
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	1
	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	1
	Fire and Safety Systems & Utility Controls	0	2
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	8



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements listed in the CMP.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as non-functional emergency lighting and damaged playground equipment.
- Emergency lights maintenance should be tracked using the CMMS. Regularly scheduled PM should generate work orders for the assets that need to be inspected.
- 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.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.

# HARFORD COUNTY

Total School Facilities Assessed in FY 2022: 10



Dublin Elementary

## Fiscal Year 2022: Key Facts

52  
facilities

Harford County has  
52 active school facilities.  
- 1 facility since FY 2021.

30.9  
years old

The average adjusted age of  
all 52 school facilities  
is 30.9 years old.  
+ 0.8 years since FY 2021.

~ 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.  
- 83,665 SF since FY 2021.

> \$2.6 B

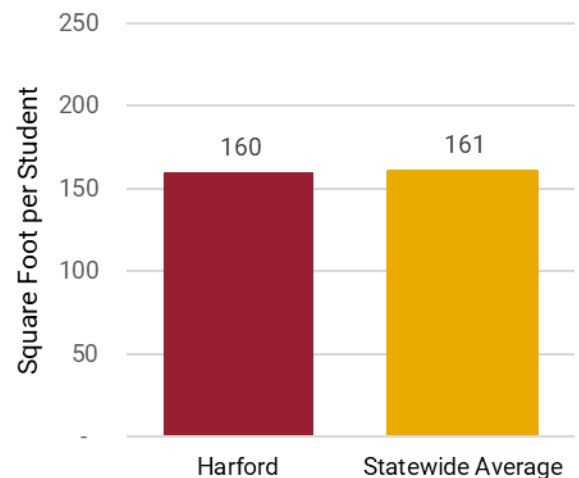
The current replacement value  
for Harford County's GSF,  
at the IAC's current  
replacement cost/SF,  
is greater than \$2.6 B.

**76.41% (Adequate)** = Average Overall Rating for FY 2022  
- 1.15% since FY 21

### FY 2022 Overall Rating Results by School Type

	Elementary	Middle	Middle/High	High	
Superior					
Good	2				2
Adequate	4	2	1	1	8
Not Adequate					
Poor					
Totals	6	2	1	1	10

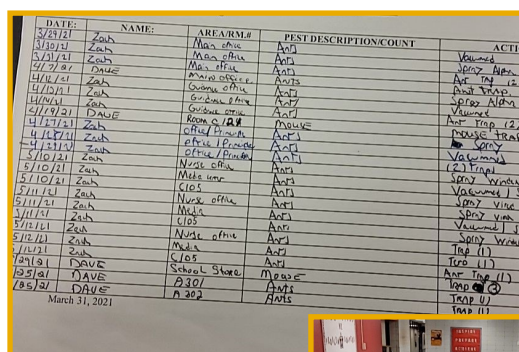
### Average Square Foot per Student



## FY 2022 Results: Summary of School Ratings

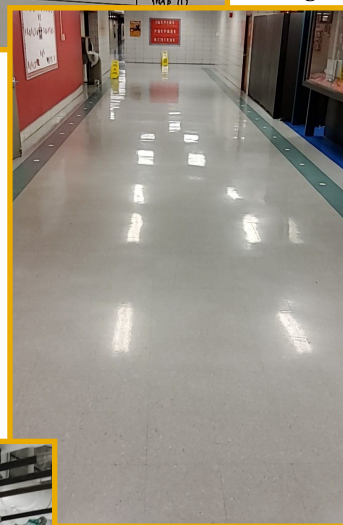
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. William Paca/Old Post Rd. Elementary (12.003)	Elementary	112,417	51	Adequate	1	1	12	7	0	0	2
2. Bel Air High (12.004)	High	262,454	13	Adequate	0	6	16	1	0	0	2
3. Prospect Mill Elementary (12.012)	Elementary	75,538	41	Good	4	5	14	0	0	0	1
4. Edgewood Middle (12.014)	Middle	166,530	51	Adequate	0	7	16	2	0	0	0
5. Jarrettsville Elementary (12.017)	Elementary	61,275	44	Good	3	11	11	0	0	0	1
6. Magnolia Middle (12.021)	Middle	149,100	43	Adequate	1	1	17	3	0	0	2
7. Dublin Elementary (12.027)	Elementary	44,385	34	Adequate	2	11	12	0	0	0	1
8. Havre de Grace Middle/High (12.039)	Middle/High	250,111	1	Adequate	2	12	11	0	0	0	3
9. Riverside Elementary (12.045)	Elementary	55,711	53	Adequate	0	7	14	0	0	0	2
10. Edgewood Elementary (12.054)	Elementary	67,341	19	Adequate	0	6	13	3	0	0	2
Totals					13	67	136	16	0	0	16
Percentage of Total Ratings for System					6%	29%	59%	7%	0%		

## Strengths



The CMMS is utilized along with on-site pest sighting and tracking logs for pest management activities. One facility earned a Superior and six facilities received a Good rating for Pest Management.

Floors were observed to be polished and well maintained throughout most areas. Two facilities achieved a Superior rating for Floors.



All facilities achieved passing ratings for Boilers, Water Heaters, Steam, & Hot-water Distribution. The DLLR inspections were current for all applicable equipment.



Grounds were well maintained in most locations. One facility earned a Superior rating and three facilities received a Good rating for Grounds.





### Weaknesses

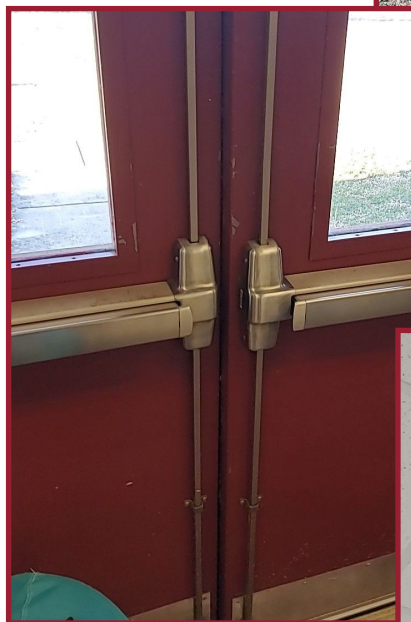
Multiple toilet leaks were identified in five facilities. Three facilities received a Not Adequate rating for Plumbing Fixtures and Equipment.



Uneven walkway surfaces or curbs higher than the walkways were observed at four facilities. Cracked and sunken walkways were noted at six facilities.



Five facilities were identified with exterior doors that did not close properly or slammed shut. Based on the supplied documentation, it was unclear whether PM was being scheduled or performed on exterior doors.



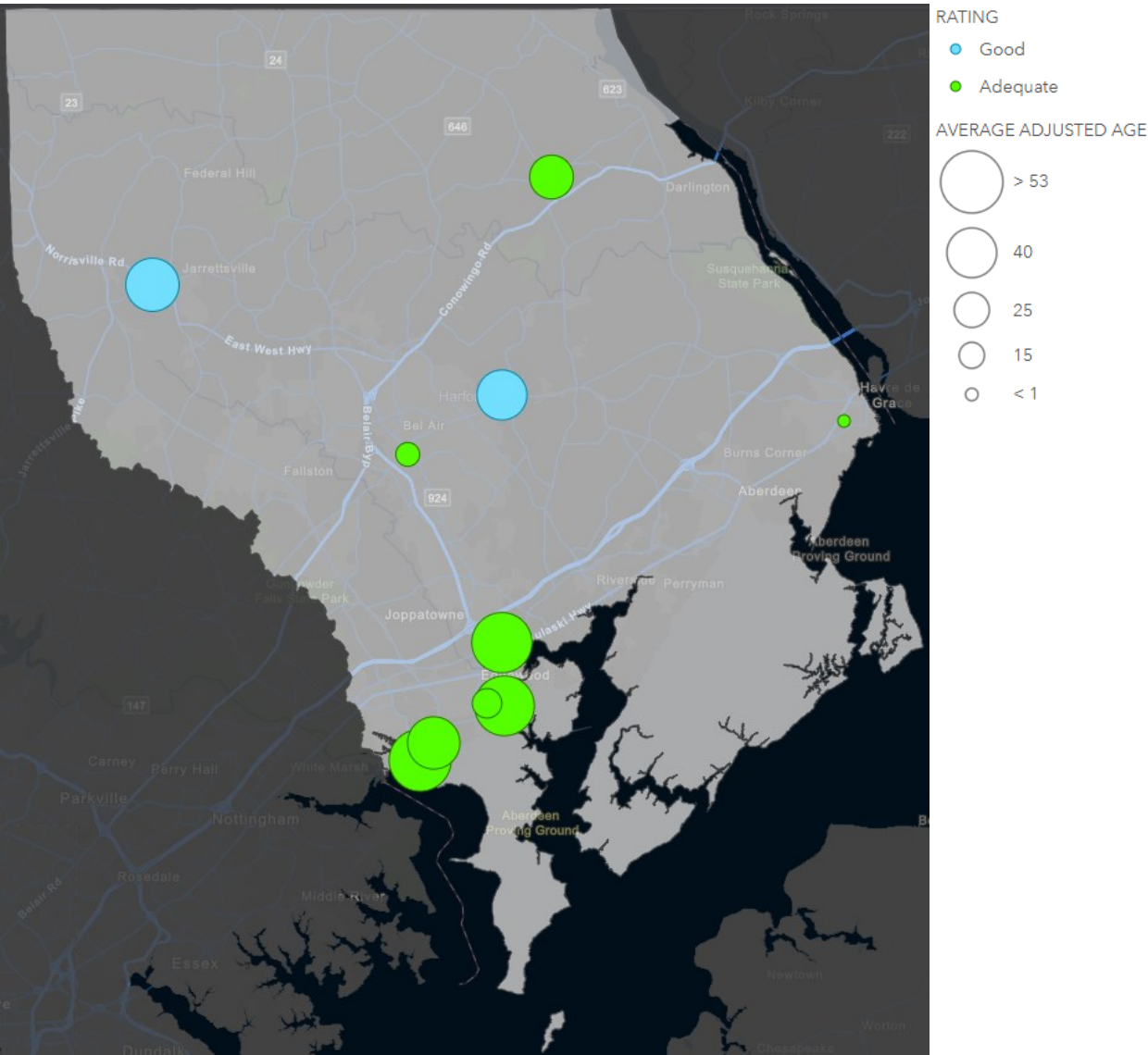
Multiple stained ceiling tiles were identified in all 10 facilities.



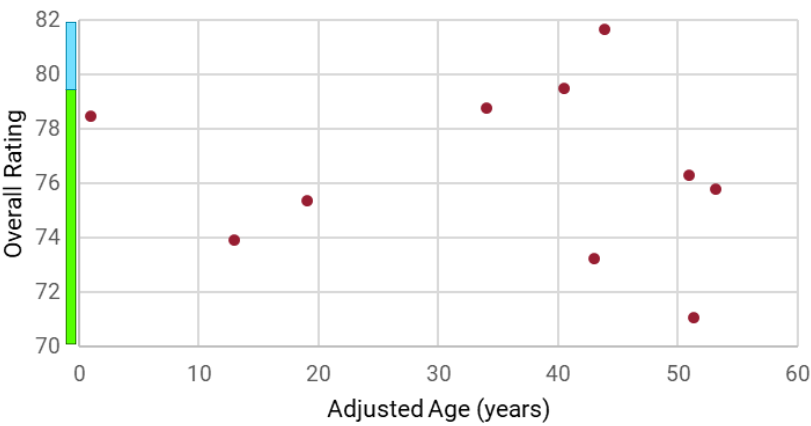
## FY 2022 Results: Summary of Deficiencies by Category

	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	3
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	1
	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	2
	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	1
	Fire and Safety Systems & Utility Controls	0	2
	Conveyances	0	1
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	16

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating work orders created to address all maintainable features of equipment and systems.
- Per the custodial scope of work, custodial staff should clean and operate plumbing fixtures and equipment on a daily basis. Additional communication from the custodial staff to the head custodian is recommended to address any issues noted during daily tasks.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as leaking plumbing fixtures and exterior door hardware issues.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.

# HOWARD COUNTY

Total School Facilities Assessed in FY 2022: 15

Harpers Choice Middle

## Fiscal Year 2022: Key Facts

76  
facilities

Howard County has 76 active school facilities.  
**No change since FY 2021.**

20.6  
years old

The average adjusted age of all 76 school facilities is 20.6 years old.  
**+ 1 year since FY 2021.**

> 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 2021.**

> \$3.5 B

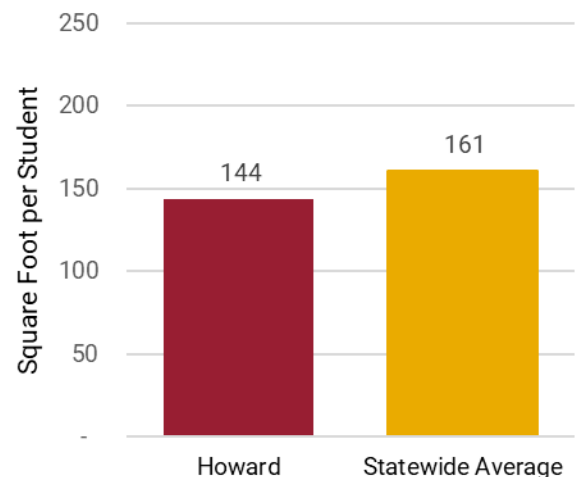
The current replacement value for Howard County's GSF, at the IAC's current replacement cost/SF, is greater than \$3.5 B.

**77.11% (Adequate)** = Average Overall Rating for FY 2022  
**+ 0.7% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Elementary	PreK-8	Middle	High	
Superior					
Good	3				3
Adequate	7	1	3	1	12
Not Adequate					
Poor					
Totals	10	1	3	1	15

### Average Square Foot per Student



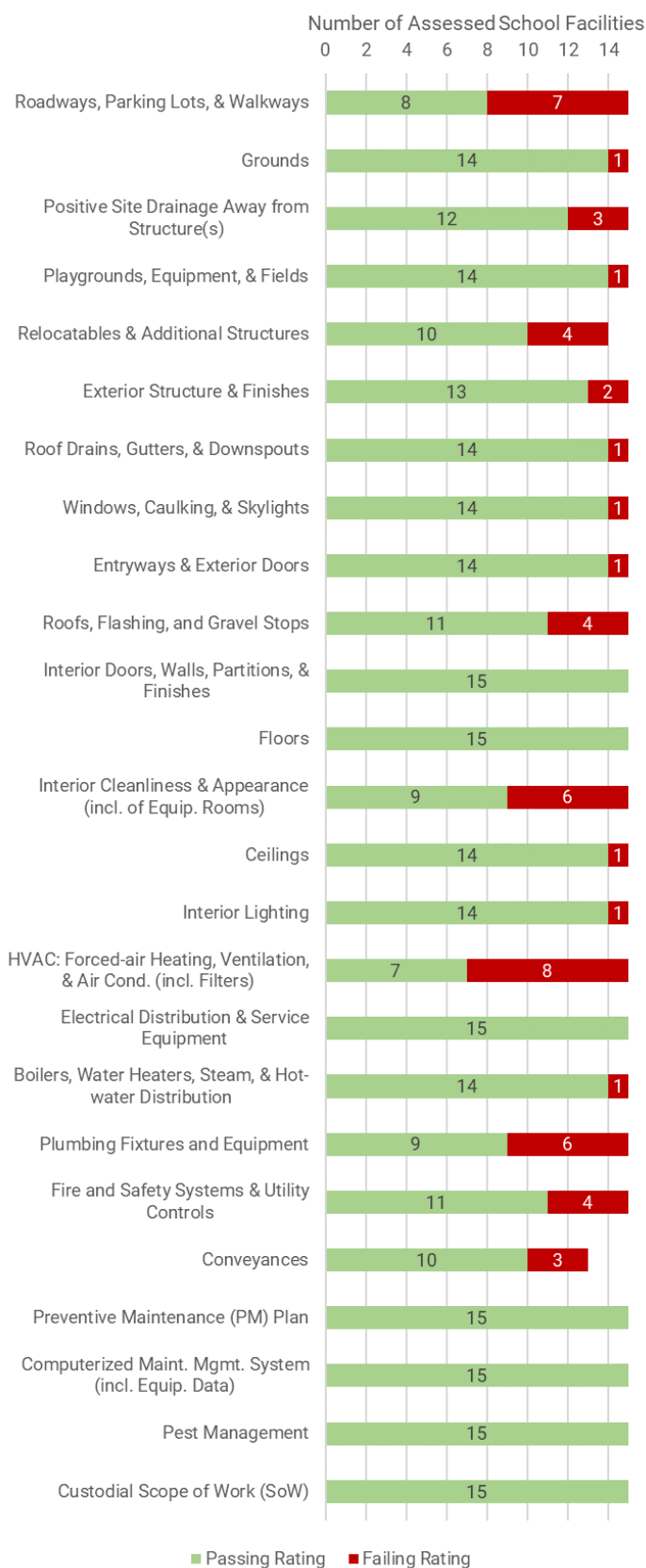
## FY 2022 Results: Summary of School Ratings

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. Oakland Mills High (13.002)	High	204,578	34	Adequate	2	6	17	0	0	0	3
2. Harpers Choice Middle (13.003)	Middle	79,220	20	Adequate	3	11	9	2	0	0	2
3. Phelps Luck Elementary (13.024)	Elementary	75,695	8	Adequate	3	6	13	2	0	0	4
4. Atholton Elementary (13.030)	Elementary	52,666	23	Adequate	0	1	18	6	0	0	1
5. West Friendship Elementary (13.032)	Elementary	47,810	17	Good	4	8	10	3	0	0	1
6. Clemens Crossing Elementary (13.034)	Elementary	60,535	12	Adequate	3	11	9	2	0	0	3
7. Cradlerock ES/Lake Elkhorn MS (13.035)	PreK-8	132,400	19	Adequate	2	6	14	3	0	0	3
8. Bollman Bridge Elementary (13.039)	Elementary	90,240	11	Adequate	0	7	18	0	0	0	1
9. Burleigh Manor Middle (13.046)	Middle	102,663	29	Adequate	0	12	10	3	0	0	1
10. Northfield Elementary (13.048)	Elementary	77,772	10	Good	4	11	9	0	0	0	1
11. Mount View Middle (13.049)	Middle	106,736	29	Adequate	1	4	18	2	0	0	2
12. Laurel Woods Elementary (13.065)	Elementary	73,448	13	Adequate	0	5	16	4	0	0	0
13. Running Brook Elementary (13.066)	Elementary	62,289	15	Adequate	4	5	16	0	0	0	1
14. Bryant Woods Elementary (13.079)	Elementary	44,401	18	Adequate	3	9	12	1	0	0	3
15. Bushy Park Elementary (13.085)	Elementary	116,818	14	Good	4	13	6	1	0	0	1
Totals					33	115	195	29	0	0	27
Percentage of Total Ratings for System					9%	31%	52%	8%	0%		



## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



Roof drains, gutters and downspouts were identified in the roof inspections. Semi-annual roof inspections are included in the PM schedule.

All 15 facilities received a passing rating for Floors. Floor care is included in the custodial scope of work as a daily task.



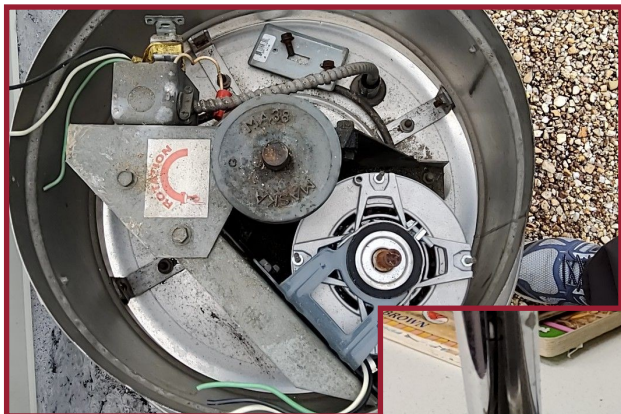
Four facilities earned a Superior rating in Electrical Distribution & Service Equipment. Infrared inspections and monthly generator inspections are tracked through the CMMS.

Eight facilities earned a Superior rating for Interior Lighting. Replacing burnt-out bulbs is performed by the on-site custodial staff as needed. Interior and exterior lighting is inspected yearly and tracked in the CMMS.



### Weaknesses

Five facilities received a Not Adequate rating for HVAC. Seven facilities were identified with inoperable exhaust fans and seven facilities had dirty filters.



Eight facilities were identified with loose toilets. Eleven facilities had leaking fixtures or equipment. Six facilities received a failing rating for Plumbing Fixtures and Equipment.



Five facilities received a Not Adequate rating for Interior Cleanliness & Appearance. Stored items were restricting access to equipment in eight facilities and dirty floors were identified in seven facilities.

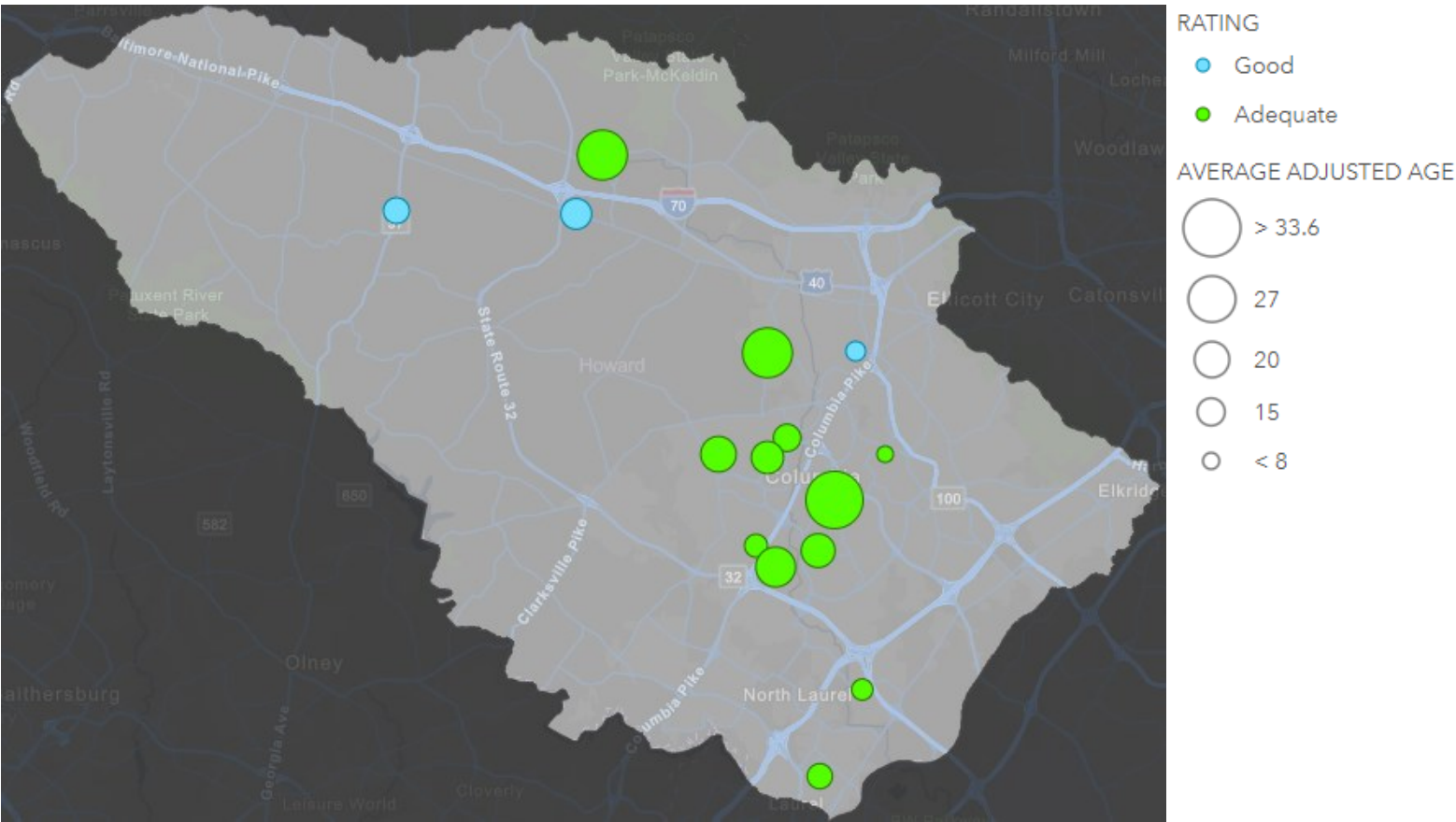


Trip hazards due to uneven surfaces at the roadways, parking lots, and walkways were noted at seven facilities.

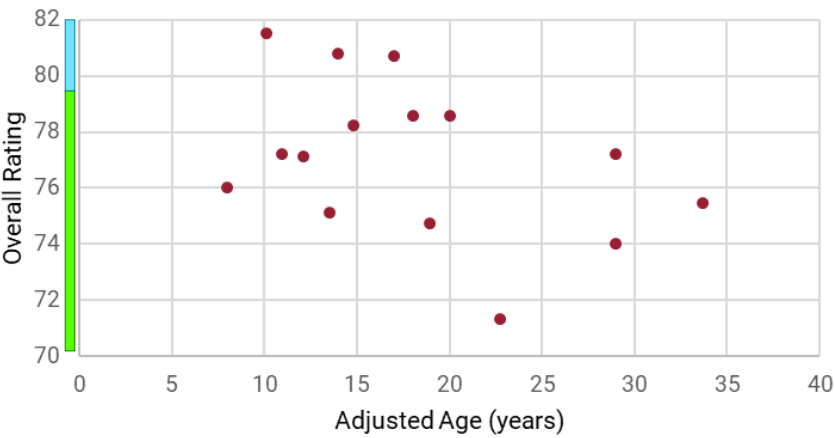
## FY 2022 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	7
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	2
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	3
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	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	1
	Ceilings	0	1
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	3
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	2
	Fire and Safety Systems & Utility Controls	0	4
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>27</b>

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





- 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.
- Daily inspections of the restroom fixtures and equipment should be incorporated into the custodial scope of work and would not add additional time to cleaning routines.
- Encourage staff members to add descriptive action taken comments when updating a work order that was not or cannot be completed.
- It is recommended that staff adhere to the inspection procedures outlined in the Custodial Services Standards and Procedures manual. Areas of needed improvement would be identified on the bi-weekly building supervisors' inspection forms.



# KENT COUNTY

Total School Facilities Assessed in FY 2022: 3

Garnett Elementary

## Fiscal Year 2022: Key Facts

5  
facilities

Kent County has  
5 active school facilities.  
**No change since FY 2021.**

43.8  
years old

The average adjusted age of  
all 5 school facilities  
is 43.8 years old.  
**+ 1 year since FY 2021.**

> 0.4 M  
GSF

Kent County  
maintains 440,226 SF  
throughout its 5 school  
facilities. It has the  
least amount of SF  
of LEAs in MD.

**No change since FY 2021.**

> \$0.1 B

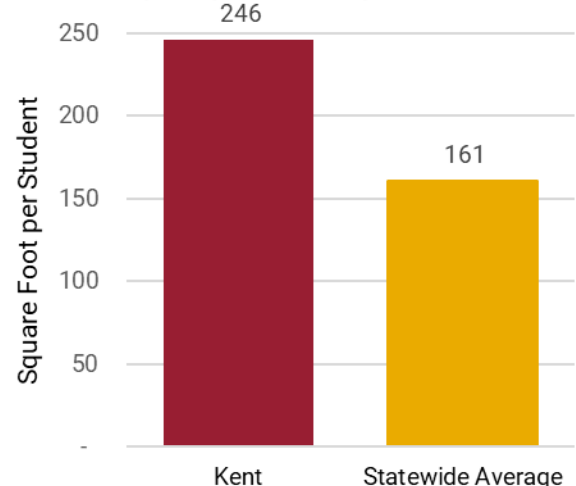
The current replacement value  
for Kent County's GSF,  
at the IAC's current  
replacement cost/SF,  
is greater than \$0.1 B.

**69.47% (Not Adequate) = Average Overall Rating for FY 2022**  
**- 3.1% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student



## FY 2022 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	58,285	58	Not Adequate	0	1	16	5	1	0	2
2. Garnett Elementary (14.006)	Elementary	59,009	47	Not Adequate	0	1	15	8	0	0	2
3. Kent County High (14.007)	High	189,626	32	Adequate	0	3	14	7	1	0	1
Totals					0	5	45	20	2	0	5
Percentage of Total Ratings for System					0%	7%	63%	28%	3%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



Good custodial care was evident with all classrooms being clean and organized.

The floors at all three facilities were clean and had a good finish.



Pest management received a Good rating at two facilities. Documented pest inspections were present at two facilities. Pest traps were present at all facilities.

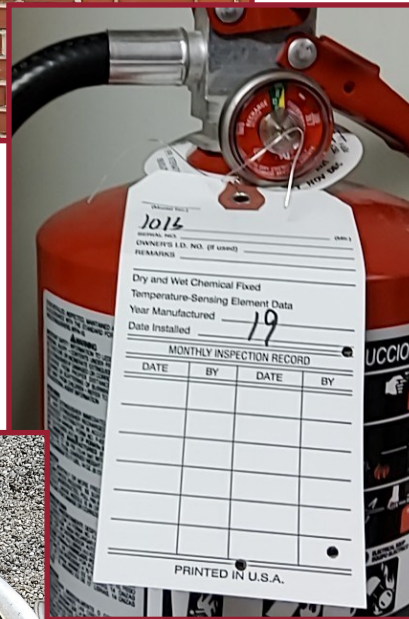
The windows were fully functional and no issues were observed at two facilities. Two facilities received a Good rating for Windows, Caulking, & Skylights.





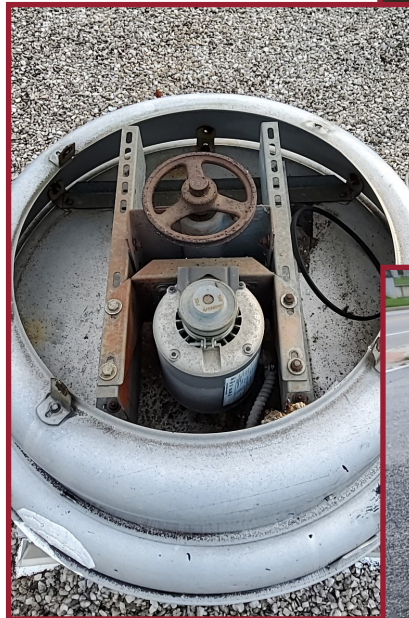
### Weaknesses

Deteriorated exterior building envelope sealants were identified at all of the facilities. Deteriorated mortar joints were identified at two facilities.



Monthly fire extinguisher inspections were not being routinely completed at two facilities. Inoperable emergency lights were present at two facilities, and one facility had a fire alarm system in “trouble” status.

Inoperable exhaust fans were identified at two facilities. Two facilities received a Not Adequate rating for HVAC.



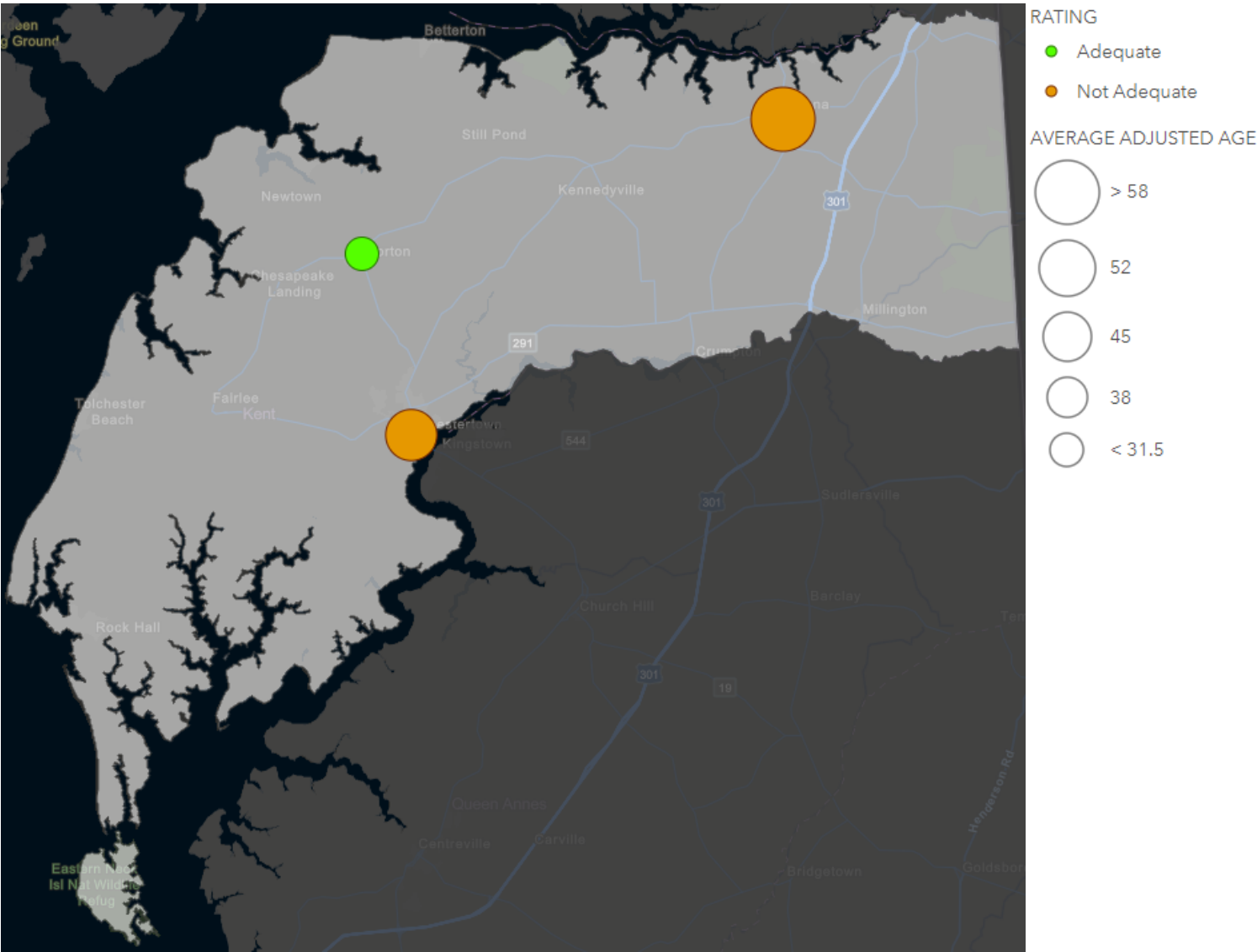
Deteriorated walkways were identified at all three facilities. Cracked and deteriorated asphalt roadways and parking lots were identified at two facilities. All three facilities received a Not Adequate ratings for Roadways, Parking Lots, & Walkways.

## FY 2022 Results: Summary of Deficiencies by Category

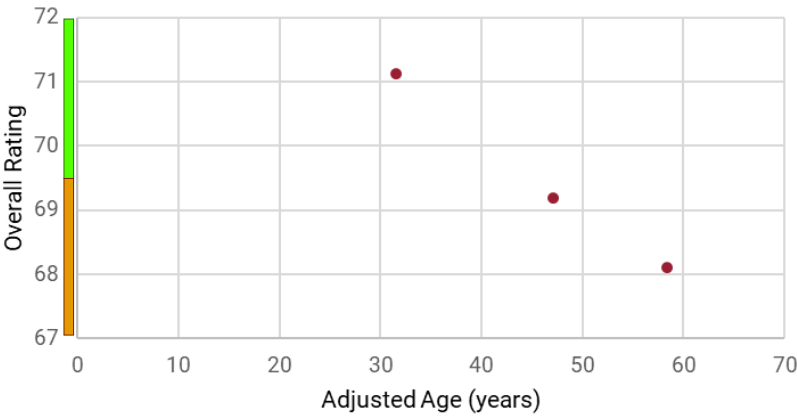
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof 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	1
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	2
	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
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	5



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- Roadways, parking lots, and walkways should be routinely inspected. Deficiencies observed during the inspections should be documented and work orders created using the CMMS to ensure the problems are tracked and remediated in a timely manner.
- Routine inspections of the building envelope are recommended to ensure a weathertight facility. The CMMS should be utilized to initiate inspections, document deficiencies observed during the inspection, and ensure deficiencies are corrected in a timely manner.
- Ensuring all ventilation equipment is fully functional is recommended for all schools. Additional oversight is recommended to ensure PM is being completed as documented in the CMMS.
- Fire extinguishers and emergency lights should be checked on a regular basis using auto-populated PM work orders in the CMMS. An asset list should be used with the PMs to ensure that all of the equipment in the building is being serviced appropriately.

# MONTGOMERY COUNTY

Total School Facilities Assessed in FY 2022: 37

Quince Orchard High

## Fiscal Year 2022: Key Facts

210  
facilities

Montgomery County has 210 active school facilities.  
**+ 1 facility since FY 2021.**

25.1  
years old

The average adjusted age of all 210 school facilities is 25.1 years old.  
**+ 1 year since FY 2021.**

> 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.

**+ 40,101 SF since FY 2021.**

> \$10.8 B

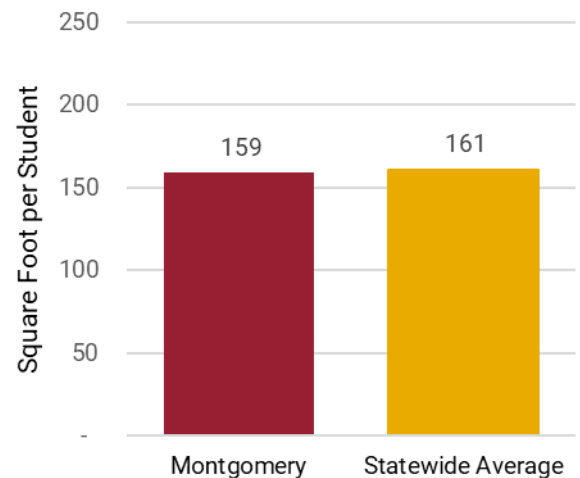
The current replacement value for Montgomery County's GSF, at the IAC's current replacement cost/SF, is greater than \$10.8 B.

**73.66% (Adequate)** = Average Overall Rating for FY 2022  
**- 1.65% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Alternate	Elementary	Middle	High	
Superior					
Good					
Adequate	1	20	7	7	35
Not Adequate			1	1	2
Poor					
Totals	1	20	8	8	37

### Average Square Foot per Student

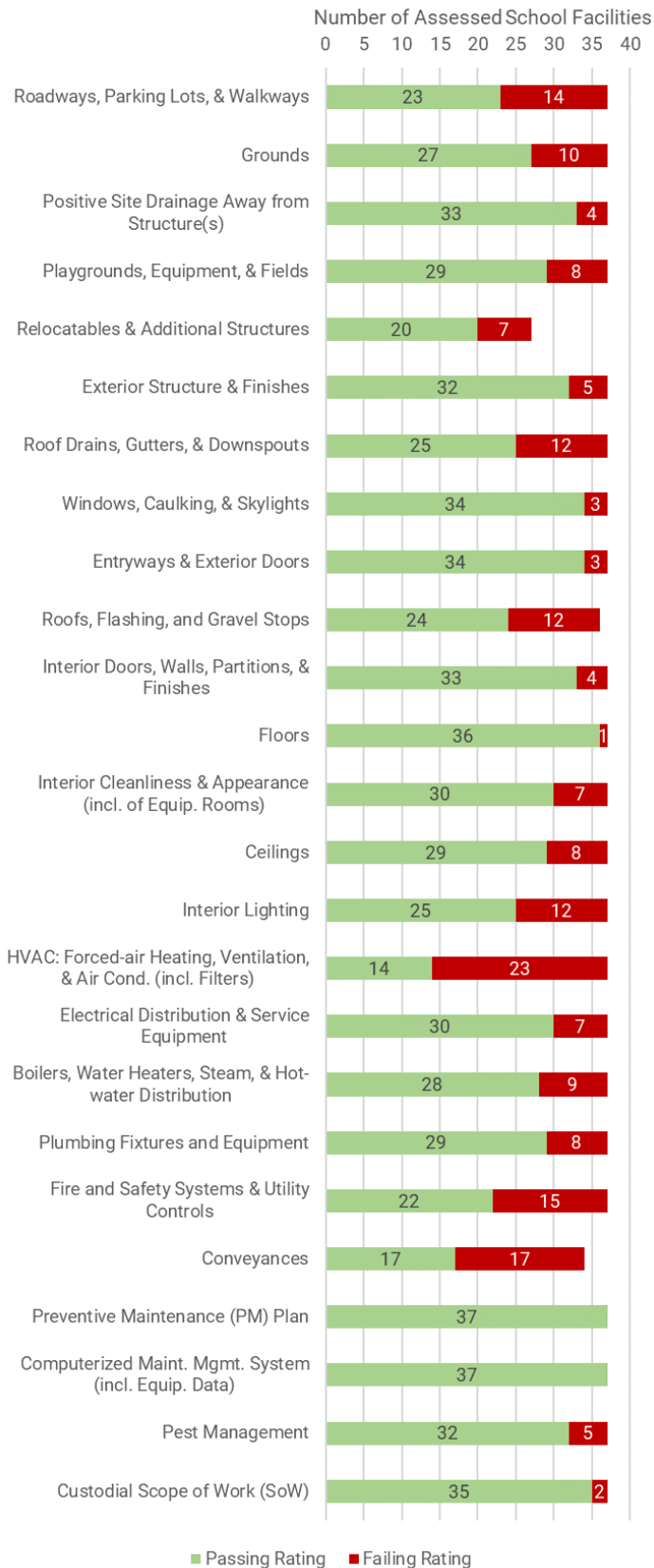


## FY 2022 Results: Summary of School Ratings

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. Silver Spring International Middle (15.002)	Middle	154,386	50	Not Adequate	0	0	7	14	4	0	5
2. Germantown Elementary (15.013)	Elementary	57,668	49	Adequate	0	3	20	2	0	0	2
3. Bethesda-Chevy Chase High (15.030)	High	392,833	15	Adequate	0	2	18	4	0	0	1
4. Einstein (Albert) High (15.031)	High	276,462	24	Adequate	0	6	15	4	0	0	0
5. Pine Crest Elementary (15.036)	Elementary	77,121	22	Adequate	0	8	13	3	0	0	2
6. Darnestown Elementary (15.051)	Elementary	64,840	24	Adequate	0	1	15	9	0	0	1
7. Glenallan Elementary (15.054)	Elementary	98,700	8	Adequate	0	9	14	2	0	0	2
8. Wood Acres Elementary (15.060)	Elementary	96,358	16	Adequate	0	6	12	6	0	0	1
9. Weller Road Elementary (15.061)	Elementary	121,346	9	Adequate	0	5	16	3	0	0	1
10. Walter Johnson High (15.067)	High	365,138	15	Adequate	0	1	22	2	0	0	3
11. Gaithersburg Middle (15.068)	Middle	157,694	32	Adequate	0	6	16	2	0	0	1
12. Wyngate Elementary (15.075)	Elementary	89,104	20	Adequate	0	2	16	5	1	0	1
13. Takoma Park Elementary (15.081)	Elementary	85,553	26	Adequate	0	6	17	2	0	0	0
14. Rockville High (15.087)	High	316,973	17	Adequate	0	5	18	2	0	0	1
15. Damascus High (15.090)	High	235,986	44	Adequate	0	1	14	10	0	0	1
16. Olney Elementary (15.093)	Elementary	68,755	31	Adequate	1	4	15	4	0	0	3
17. Fairland Elementary (15.098)	Elementary	92,227	23	Adequate	0	2	22	1	0	0	1
18. Highland View Elementary (15.101)	Elementary	59,307	27	Adequate	0	0	18	5	2	0	2
19. Dufief Elementary (15.105)	Elementary	59,013	46	Adequate	0	3	19	3	0	0	3
20. White Oak Middle (15.119)	Middle	141,163	28	Adequate	1	5	13	5	1	0	5
21. Neelsville Middle (15.136)	Middle	131,432	40	Adequate	0	1	12	11	0	0	1
22. Poolesville Elementary (15.137)	Elementary	64,803	46	Adequate	0	6	17	0	0	0	2
23. Rock Creek Forest Elementary (15.138)	Elementary	98,140	7	Adequate	0	4	17	4	0	0	0
24. Ritchie Park Elementary (15.139)	Elementary	58,500	27	Adequate	3	3	17	2	0	0	2
25. Washington Grove Elementary (15.146)	Elementary	86,266	24	Adequate	0	9	9	6	0	0	0
26. Quince Orchard High (15.158)	High	284,912	33	Adequate	0	15	8	2	0	0	1
27. Watkins Mill High (15.166)	High	301,579	31	Not Adequate	0	4	14	7	0	0	5
28. Baker (John T.) Middle (15.182)	Middle	120,532	46	Adequate	0	5	19	1	0	0	0
29. Bells Mill Elementary (15.185)	Elementary	77,244	12	Adequate	0	12	11	1	0	0	0
30. King (Dr. Martin Luther, Jr.) Middle (15.198)	Middle	135,867	27	Adequate	3	1	16	5	0	0	2
31. Rosemont Elementary (15.203)	Elementary	88,764	22	Adequate	0	5	17	3	0	0	0
32. Paint Branch High (15.211)	High	347,169	10	Adequate	5	7	13	0	0	0	2
33. Parkland Middle (15.212)	Middle	151,169	14	Adequate	0	6	16	3	0	0	4
34. Ewing (Blair G.) Center (15.224)	Alternate	85,400	50	Adequate	0	11	13	1	0	0	3
35. Redland Middle (15.238)	Middle	112,297	35	Adequate	0	7	17	0	0	0	3
36. College Gardens Elementary (15.240)	Elementary	96,986	14	Adequate	1	9	11	3	0	0	2
37. Meadow Hall Elementary (15.250)	Elementary	61,964	25	Adequate	0	10	14	1	0	0	2
Totals					14	190	561	138	8	0	65
Percentage of Total Ratings for System					2%	21%	62%	15%	1%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

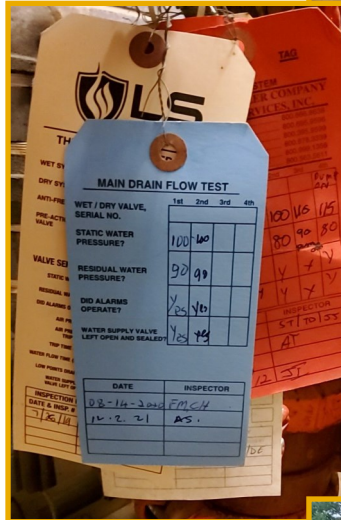


### Strengths



Floors are listed as a daily task in the PM task list and as daily and weekly tasks in the custodial task list. One facility earned a Superior rating and 15 received a Good rating for Floors.

Boilers and water heaters were identified on the CMMS asset list and are listed as a weekly task in the PM task list.



The PM plan appears to include many essential assets. Some PM work orders auto-populate, such as fire alarm and sprinkler testing, roof inspections, and filter changes. Tasks lists were also created for the PM team and the building service staff outlining specific tasks and frequencies.

Windows are listed as a weekly task in the PM task list and custodial task list. Two facilities earned a Superior rating and 14 received a Good rating for Windows, Caulking, & Skylights.





### Weaknesses

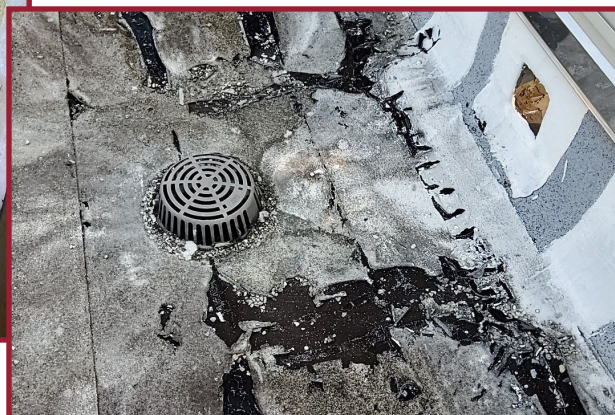
Three facilities were observed with ice covering the sprinkler head in the kitchen freezer. The fire alarm panels displayed trouble alarms at seven facilities.



Growing vegetation or vegetative debris were observed on the roofs at 18 facilities. Ponding water on the roofs or water leaking into the building were noted at six facilities. Roofs, Flashing, and Gravel Stops was rated Not Adequate at 11 facilities.



The filters and/or coils in HVAC units were dirty at 25 facilities. Several facilities were also noted with filters missing, installed incorrectly, or the incorrect size. 21 facilities received a Not Adequate rating and one facility earned a Poor rating for HVAC.



23 facilities were observed with debris collecting around the roof drains. 12 facilities received a Not Adequate rating for Roof Drains, Gutters, & Downspouts.

## FY 2022 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	10
	Grounds	0	2
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	5
	Relocatables & Additional Structures	0	4
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	1
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	2
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	2
	Ceilings	0	1
	Interior Lighting	0	7
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	2
	Electrical Distribution & Service Equipment	0	5
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	5
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	12
	Conveyances	0	4
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	1
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>65</b>

**RATING**

- Adequate
- Not Adequate

**AVERAGE ADJUSTED AGE**

- > 50
- 40
- 30
- 18
- < 7

A scatter plot showing the relationship between Adjusted Age (years) on the x-axis and Overall Rating on the y-axis. The x-axis ranges from 0 to 60 with major ticks every 10 units. The y-axis ranges from 62 to 80 with major ticks every 2 units. A vertical color bar is positioned on the left side of the plot, with a gradient from orange at the bottom (rating 62) to green at the top (rating 80). The data points are represented by small red circles. Most points are clustered between ages 10 and 50 and ratings 68 and 78. There is one notable outlier at approximately (50, 62.5).

- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as roof leaks and issues with HVAC and fire safety systems.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.
- All PM tasks identified in the PM plan and the custodial checklists should have auto-populating PM work orders created in the CMMS.
- 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.
- 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.



# PRINCE GEORGE'S COUNTY

Total School Facilities Assessed in FY 2022: 36



Owens (Howard B.) Science Center

## Fiscal Year 2022: Key Facts

197  
facilities

Prince George's County has 197 active school facilities.  
**+ 1 facility since FY 2021.**

39.0  
years old

The average adjusted age of all 197 school facilities is 39.0 years old.  
**+ 0.7 years since FY 2021.**

> 18.6 M  
GSF

Prince George's County maintains 18,652,099 SF throughout its 197 school facilities. It has the 2nd greatest amount of SF of LEAs in MD.

**+ 252,940 SF since FY 2021.**

> \$8.0 B

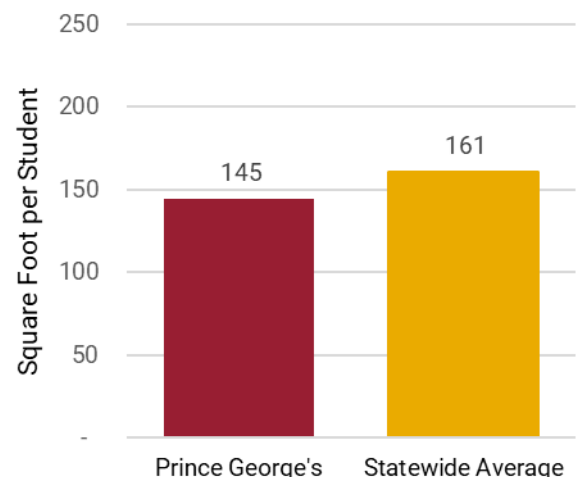
The current replacement value for Prince George's County's GSF, at the IAC's current replacement cost/SF, is greater than \$8.0 B.

**66.12% (Not Adequate) = Average Overall Rating for FY 2022**  
**- 0.37% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Special Education	Elementary	Elementary/Middle	PreK-8	Middle	High	Science	
Superior								
Good								
Adequate		3			1			4
Not Adequate	3	13	2	3	2	7	1	31
Poor				1				1
Totals	3	16	2	4	3	7	1	36

### Average Square Foot per Student





# PRINCE GEORGE'S COUNTY

## FY 2022 Results: Summary of School Ratings - Part 1 of 2

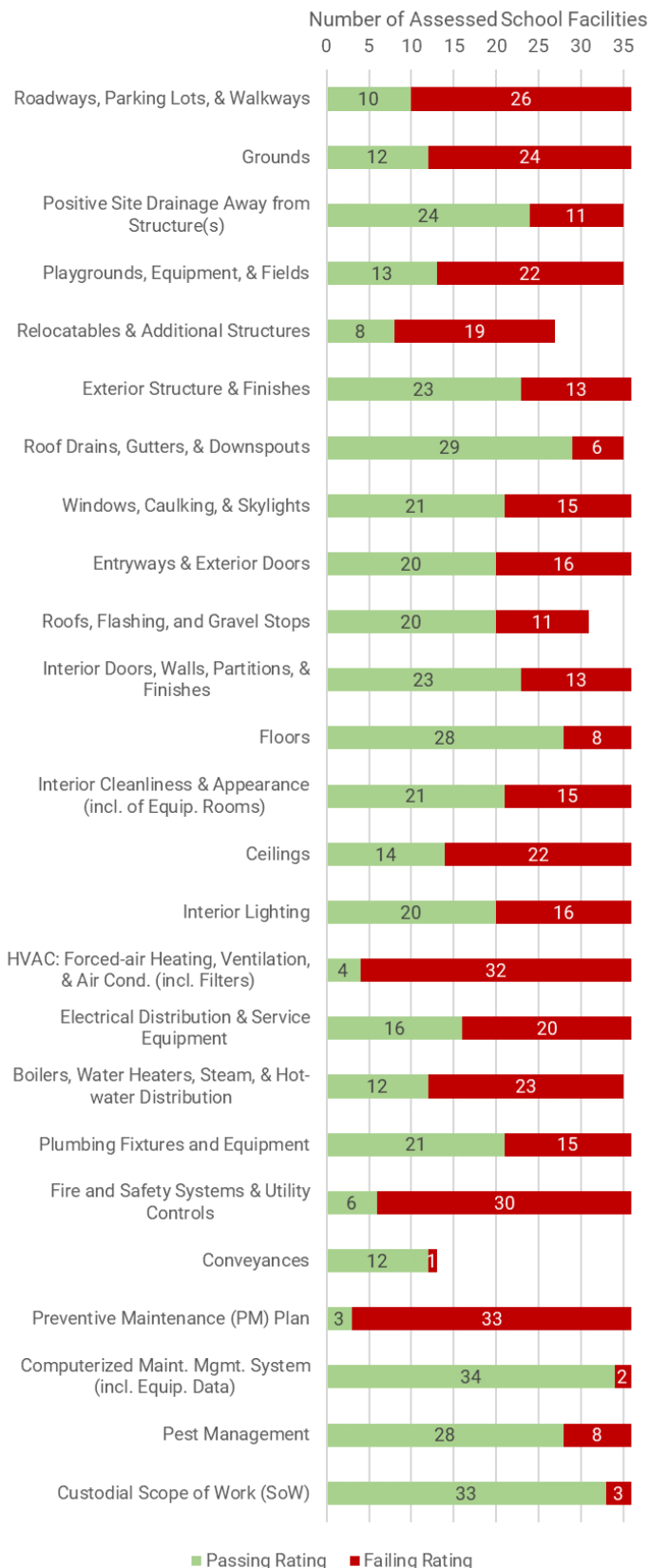
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Gwynn Park High (16.001)	High	194,845	44	Not Adequate	0	2	15	7	1	0	5
2. Eisenhower (Dwight D.) Middle (16.008)	Middle	139,951	52	Not Adequate	0	2	15	5	0	0	6
3. Laurel Elementary (16.009)	Elementary	59,444	48	Not Adequate	0	1	16	7	0	0	6
4. Laurel High (16.014)	High	379,024	40	Not Adequate	0	2	11	10	2	0	6
5. Tayac Elementary (16.023)	Elementary	47,858	55	Not Adequate	0	2	17	4	0	0	6
6. Meadowbrook Elementary (Swing Space) (16.027)	Elementary	47,835	56	Not Adequate	0	1	6	11	4	0	3
7. Owens (Howard B.) Science Center (16.034)	Science	27,400	41	Not Adequate	0	0	18	5	0	0	3
8. Rieg (Elizabeth C.) Regional School (16.041)	Special Ed.	45,132	43	Not Adequate	0	7	12	3	2	1	3
9. Duckworth (James E.) Regional School (16.042)	Special Ed.	41,480	44	Not Adequate	0	3	10	11	0	0	4
10. Friendly High (16.046)	High	236,861	45	Not Adequate	0	0	18	7	0	0	8
11. Clinton Grove Elementary (16.053)	Elementary	44,379	56	Not Adequate	0	0	16	7	0	0	8
12. Apple Grove Elementary (16.057)	Elementary	51,842	51	Not Adequate	0	0	19	3	0	0	7
13. Northwestern High (16.072)	High	355,000	23	Not Adequate	0	0	18	7	0	0	8
14. Arrowhead Elementary (16.074)	Elementary	59,923	53	Not Adequate	0	1	11	12	0	0	5
15. University Park Elementary (16.081)	Elementary	56,264	25	Not Adequate	0	1	18	5	0	0	7
16. Oxon Hill High (16.082)	High	287,008	10	Not Adequate	0	4	13	8	0	0	6
17. Randall (James Ryder) Early Childhood Center (16.084)	Elementary	70,891	42	Not Adequate	0	0	15	8	1	1	7
18. Brandywine Elementary (16.088)	Elementary	58,155	43	Not Adequate	0	3	13	8	0	0	9
19. Chillum Elementary (16.090)	Elementary	44,946	44	Adequate	0	4	14	7	0	0	1
20. Buck Lodge Middle (16.094)	Middle	122,497	30	Not Adequate	1	2	14	5	2	0	6
21. Fuchs (Frances R.) Early Childhood Center (16.101)	Special Ed.	46,633	38	Not Adequate	1	7	11	4	1	0	6
22. Tall Oaks High (16.102)	High	39,361	38	Not Adequate	0	1	13	10	0	0	7
23. Surrattsville High (16.103)	High	167,322	33	Not Adequate	0	1	16	6	1	0	9
24. Forest Heights Elementary (16.120)	Elementary	35,971	67	Not Adequate	0	3	13	7	1	0	7
25. Pullen (Thomas G.) Creative and Performing Arts Academy (16.122)	Elementary/Middle	110,422	53	Not Adequate	0	0	13	9	1	0	10

## FY 2022 Results: Summary of School Ratings - Part 2 of 2

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
26. Hanson (John) Montessori (16.128)	PreK-8	110,413	62	Poor	0	0	6	14	3	0	10
27. Angelou (Maya) French Immersion (16.136)	Elementary/ Middle	100,018	56	Not Adequate	0	4	13	6	0	0	8
28. Middleton Valley Academy (16.139)	PreK-8	45,123	59	Not Adequate	0	3	15	6	0	0	5
29. Decatur (Stephen) Middle (16.143)	Middle	120,070	46	Adequate	0	5	15	5	0	0	3
30. Carole Highlands Elementary (16.153)	Elementary	54,125	27	Adequate	0	1	19	3	0	0	4
31. Templeton Elementary (16.155)	Elementary	63,432	51	Not Adequate	0	1	13	11	0	0	10
32. Rose Valley Elementary (16.157)	Elementary	56,252	53	Adequate	1	7	11	5	0	0	2
33. Goddard (Robert) Montessori (16.181)	PreK-8	133,631	58	Not Adequate	0	3	16	5	0	0	4
34. Jackson (Andrew) Academy (16.197)	PreK-8	151,163	51	Not Adequate	0	0	9	14	1	0	8
35. Samuel Chase Elementary (16.221)	Elementary	42,624	57	Not Adequate	0	2	18	4	0	0	4
36. Evans (Francis T.) Elementary (16.238)	Elementary	57,742	38	Not Adequate	2	3	13	5	1	0	6
Totals					5	76	503	254	21	2	217
Percentage of Total Ratings for System					1%	9%	59%	30%	2%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

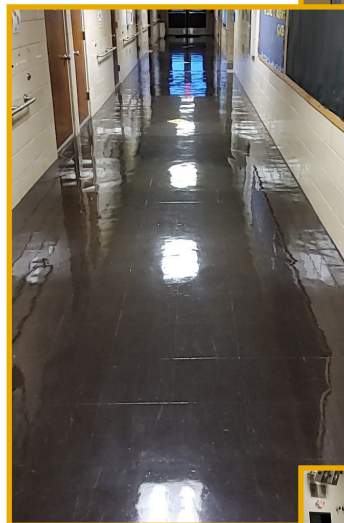


### Strengths



The majority of roof drains appeared to be well maintained. Two facilities earned a Superior rating for Roof Drains, Gutters, & Downspouts.

12 out of 13 facilities with conveyance systems received a passing rating. Elevators and chairlifts were observed maintained in safe and operable order with clean interiors.



The floors were observed to be polished throughout most facilities. Seven facilities earned a Good rating for Floors.

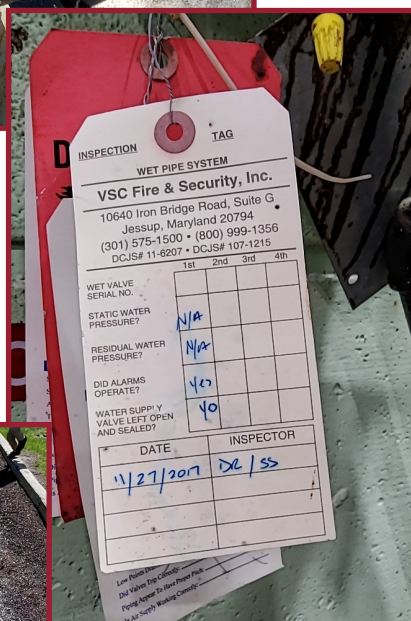
33 facilities received a passing rating for Custodial Scope of Work. The scope was observed to have been implemented effectively at these locations.





### Weaknesses

The PM plans included only a few assets with only a few auto-populating work orders. Many of those work orders were open in either a new request or pending status for extended periods of time. DLLR-regulated equipment did not appear to be included in any facility's PM plan or auto-populating work orders.



26 facilities were noted having expired or missing inspection tags for fire safety equipment. Emergency lights were inoperable or not working properly at 18 facilities. Overall, 12 facilities received a Not Adequate rating and two facilities earned a Poor rating.

The grounds or surface materials in play areas were damaged and/or contained vegetation at 21 facilities.



The protective rubberized material on the playgrounds was damaged or missing at 13 facilities.



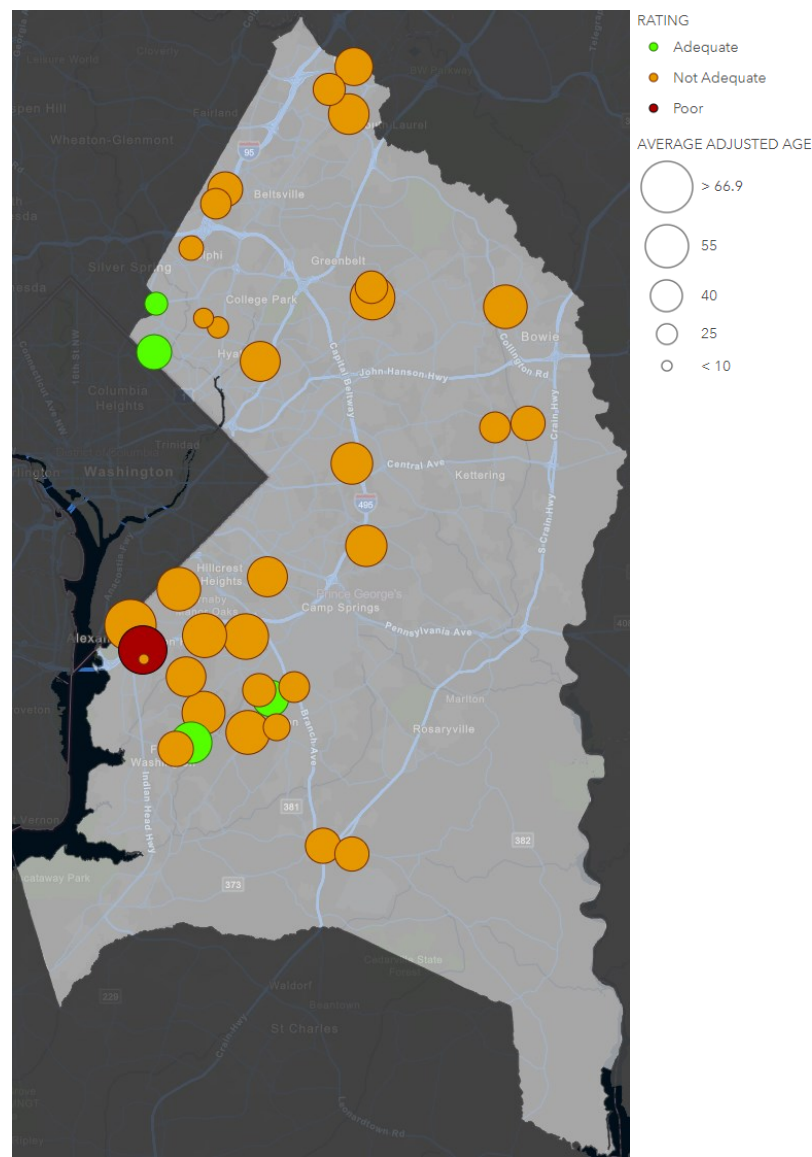
20 facilities received a Not Adequate rating and four facilities earned a Poor rating for HVAC. Some common issues included dirty or clogged filters and coils, cracked drive belts, and non-functional or improperly functioning exhaust fans.

## FY 2022 Results: Summary of Deficiencies by Category

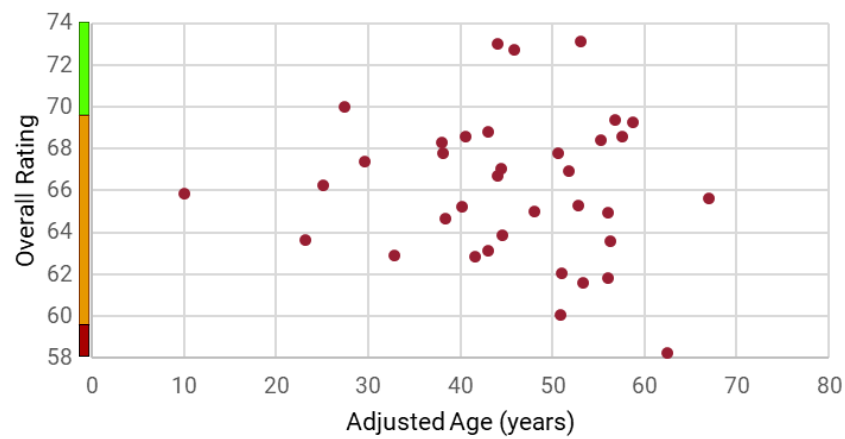
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	20
	Grounds	0	14
	Positive Site Drainage Away from Structure(s)	0	3
	Playgrounds, Equipment, & Fields	1	12
	Relocatables & Additional Structures	0	11
Building Exterior	Exterior Structure & Finishes	0	5
	Roof Drains, Gutters, & Downspouts	0	3
	Windows, Caulking, & Skylights	0	4
	Entryways & Exterior Doors	0	5
	Roofs, Flashing, and Gravel Stops	0	4
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	11
	Floors	0	7
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	11
	Ceilings	0	9
	Interior Lighting	0	14
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	15
	Electrical Distribution & Service Equipment	1	15
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	15
	Plumbing Fixtures and Equipment	0	14
	Fire and Safety Systems & Utility Controls	0	25
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		2	217



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



## FY 2022 Results: Recommendations

- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements listed in the CMP.
- PM tasks identified in the CMP and the custodial checklists should have auto-populating PM work orders created in the CMMS.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as damaged playground equipment, non-functional HVAC equipment, and issues with fire and safety systems.
- Playground inspections should be added to the PM schedule. Deficiencies noted during the PM checks should be entered and tracked using the CMMS.
- All equipment and building parts should be tagged with an asset tag. 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.

# QUEEN ANNE'S COUNTY

Total School Facilities Assessed in FY 2022: 3

Bayside Elementary

## Fiscal Year 2022: Key Facts

14  
facilities

Queen Anne's County has 14 active school facilities.  
**No change since FY 2021.**

21.0  
years old

The average adjusted age of all 14 school facilities is 21.0 years old.  
**+ 1 year since FY 2021.**

~ 1.3 M  
GSF

Queen Anne's County maintains 1,302,658 SF throughout its 14 school facilities. It has the 17th greatest amount of SF of LEAs in MD.

**- 75 SF since FY 2021.**

> \$0.5 B

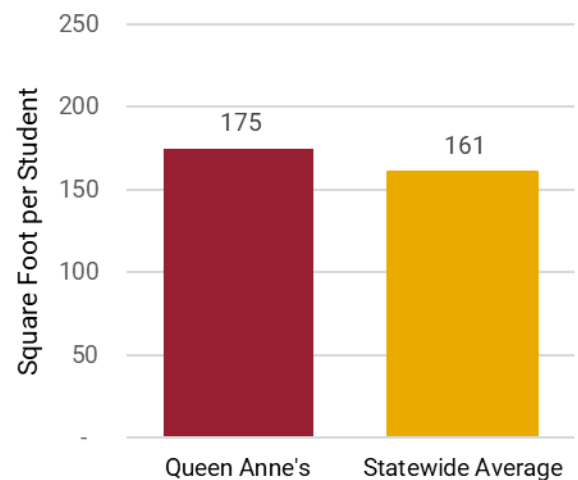
The current replacement value for Queen Anne's County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.5 B.

**67.28% (Not Adequate) = Average Overall Rating for FY 2022**  
**- 0.92% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student

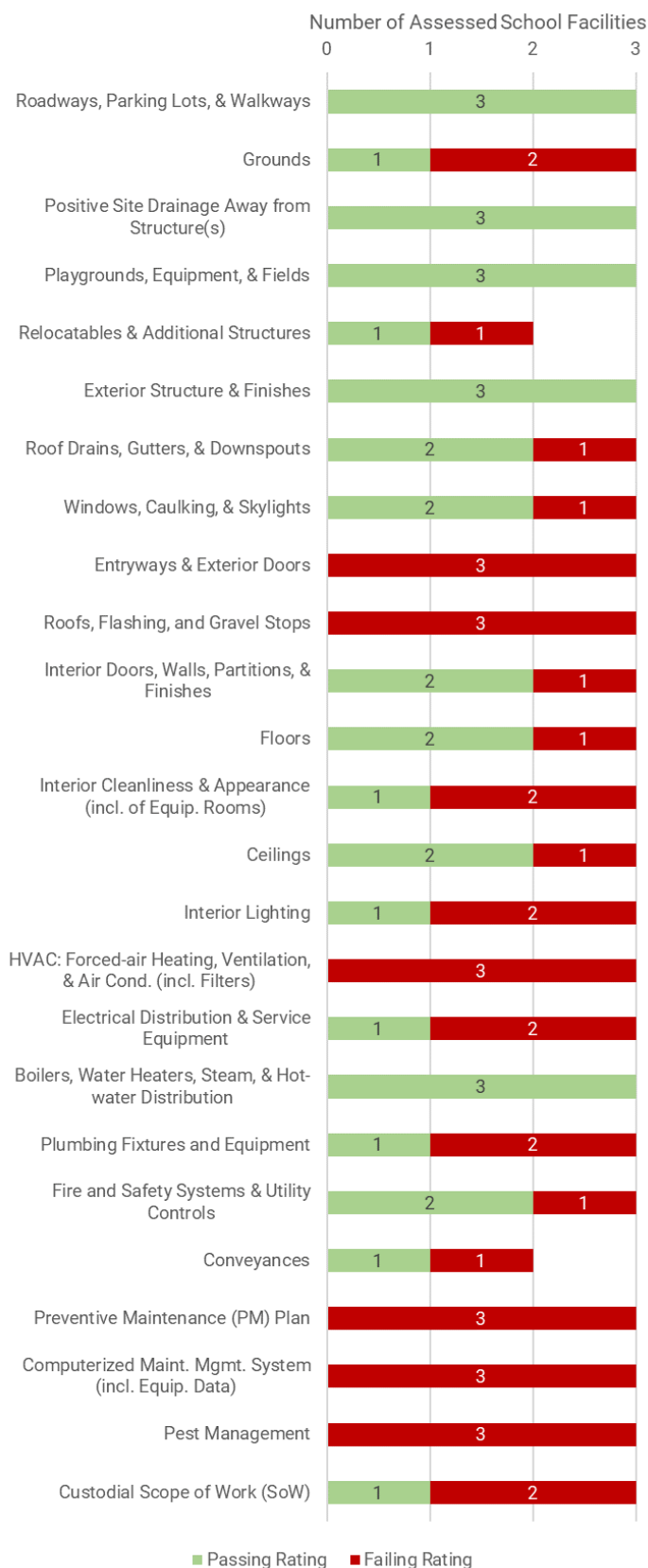


## FY 2022 Results: Summary of School Ratings

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. Kent Island High (17.023)	High	91,229	23	Not Adequate	0	2	10	10	3	0	9
2. Church Hill Elementary (17.013)	Elementary	55,711	23	Adequate	0	5	13	7	0	0	4
3. Bayside Elementary (17.021)	Elementary	249,609	30	Adequate	0	0	14	9	0	0	1
Totals					0	7	37	26	3	0	14
Percentage of Total Ratings for System					0%	10%	51%	36%	4%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

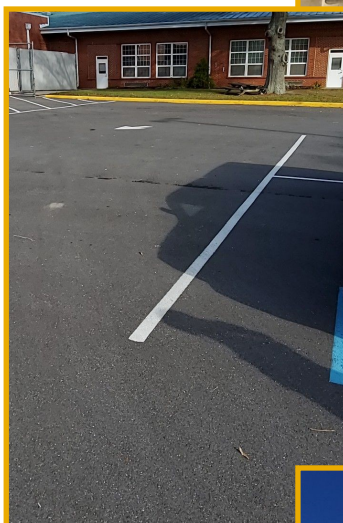


### Strengths



Contracted services appear to inspect playground equipment and bleachers annually. All playground equipment appeared to be adequately maintained.

The DLLR certificates observed were all up to date. Every outlet checked had hot water.



All facilities received a passing rating for Roadways, Parking Lots, & Walkways.

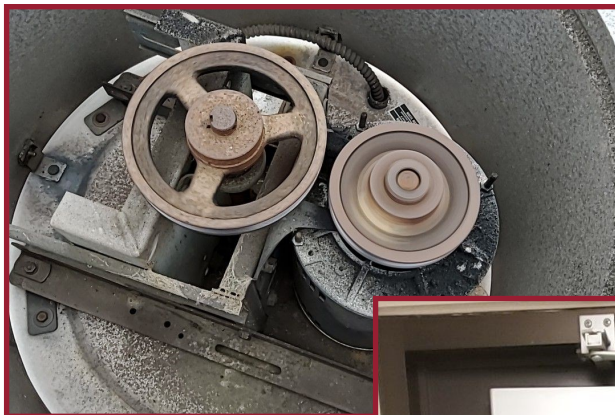
All three facilities received an Adequate rating for Exterior Structure & Finishes. Normal weathering and wear were observed.





### Weaknesses

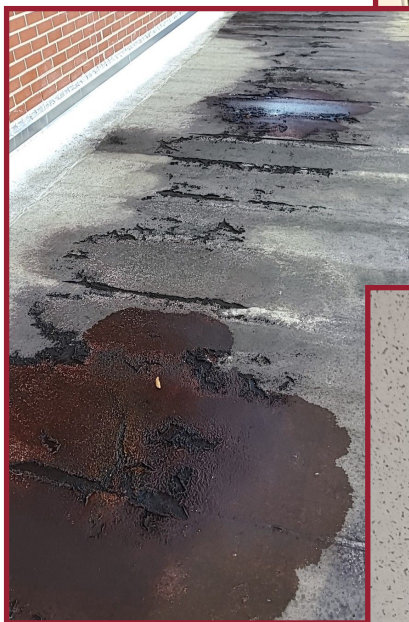
Two facilities received a Not Adequate rating for HVAC and were observed with dirt and debris on the HVAC coils, cracked and loose drive belts on exhaust fans, and ice accumulation on piping.



Two facilities were observed with exterior doors that slammed shut and had an oily substance leaking from the door hardware.



All three facilities received a Not Adequate rating for Roofs, Flashing, and Gravel Stops. The roofing material at two facilities had cracks, damage, and dark stains. The other facility had thin ballast, holes in the expansion joint seams, and vegetation on its roofing system.

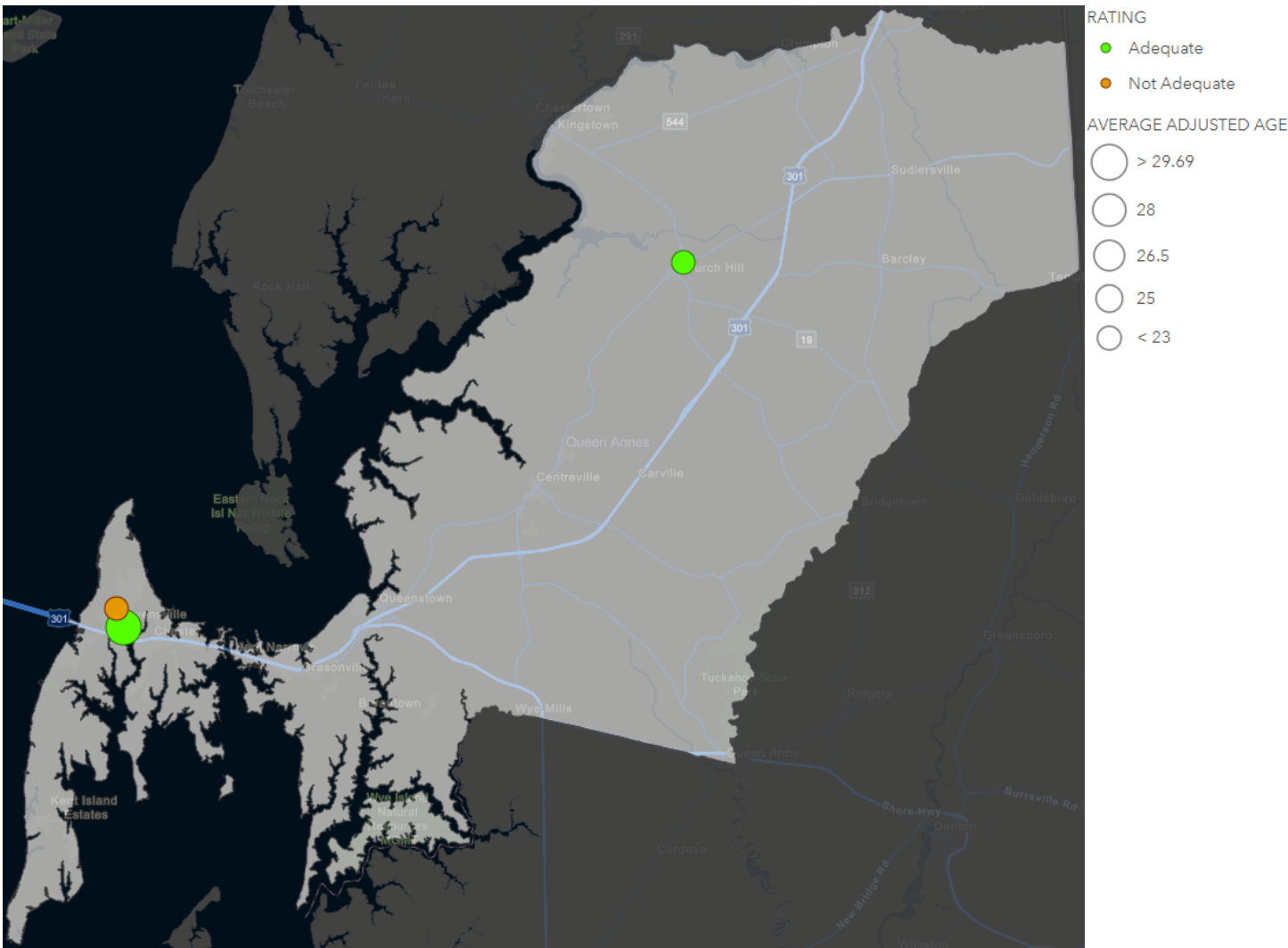


All three facilities had stained ceiling tiles, which were darkly stained at two facilities. The drop ceilings had missing ceiling tiles at two facilities.

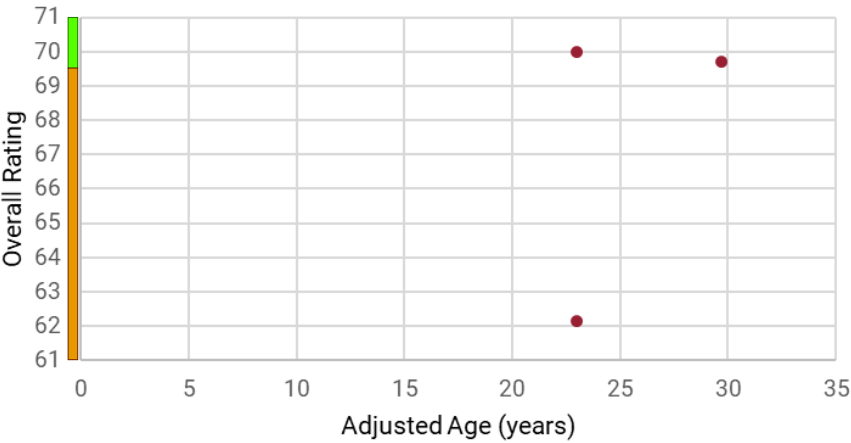
## FY 2022 Results: Summary of Deficiencies by Category

	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	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	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	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	1
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	2
	Custodial Scope of Work (SoW)	0	0
Total		0	14

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- It is recommended that work orders be submitted following all roof inspections for issues that could not be repaired while the roof was being inspected. These work orders should be followed up in a timely manner.
- More checks are recommended to ensure that the HVAC systems are receiving the proper amount of PM work required and that the work is being performed correctly with new filters to keep the air fresh and flowing correctly, as well as ensuring that all of the exhaust fans drive belts are not cracked and that they are properly operating.
- A more aggressive ceiling tile replacement program is recommended to eliminate stained, damaged, and/or missing ceiling tiles. Once a leak has been identified, work orders for repair should be submitted, and once the repair has been performed and the leak repaired, the tiles should be replaced to eliminate the possibility of mold and other harmful growth.
- It is recommended that on-site custodians and building workers receive additional training to ensure that playground areas and equipment are inspected, cleaned, and repaired effectively for the safety of students and staff.

# ST. MARY'S COUNTY

Total School Facilities Assessed in FY 2022: 5

TOWN CREEK ELEMENTARY SCHOOL

Town Creek Elementary

## Fiscal Year 2022: Key Facts

27  
facilities

St. Mary's County has 27 active school facilities.  
**No change since FY 2021.**

25.6  
years old

The average adjusted age of all 27 school facilities is 25.6 years old.  
**+ 1 year since FY 2021.**

~ 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 2021.**

~ \$1.0 B

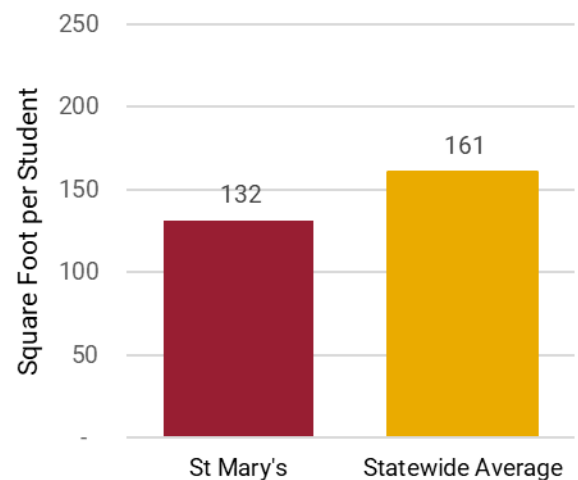
The current replacement value for St. Mary's County's GSF, at the IAC's current replacement cost/SF, is nearly \$1.0 B.

**73.94% (Adequate)** = Average Overall Rating for FY 2022  
**+ 2.79% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student



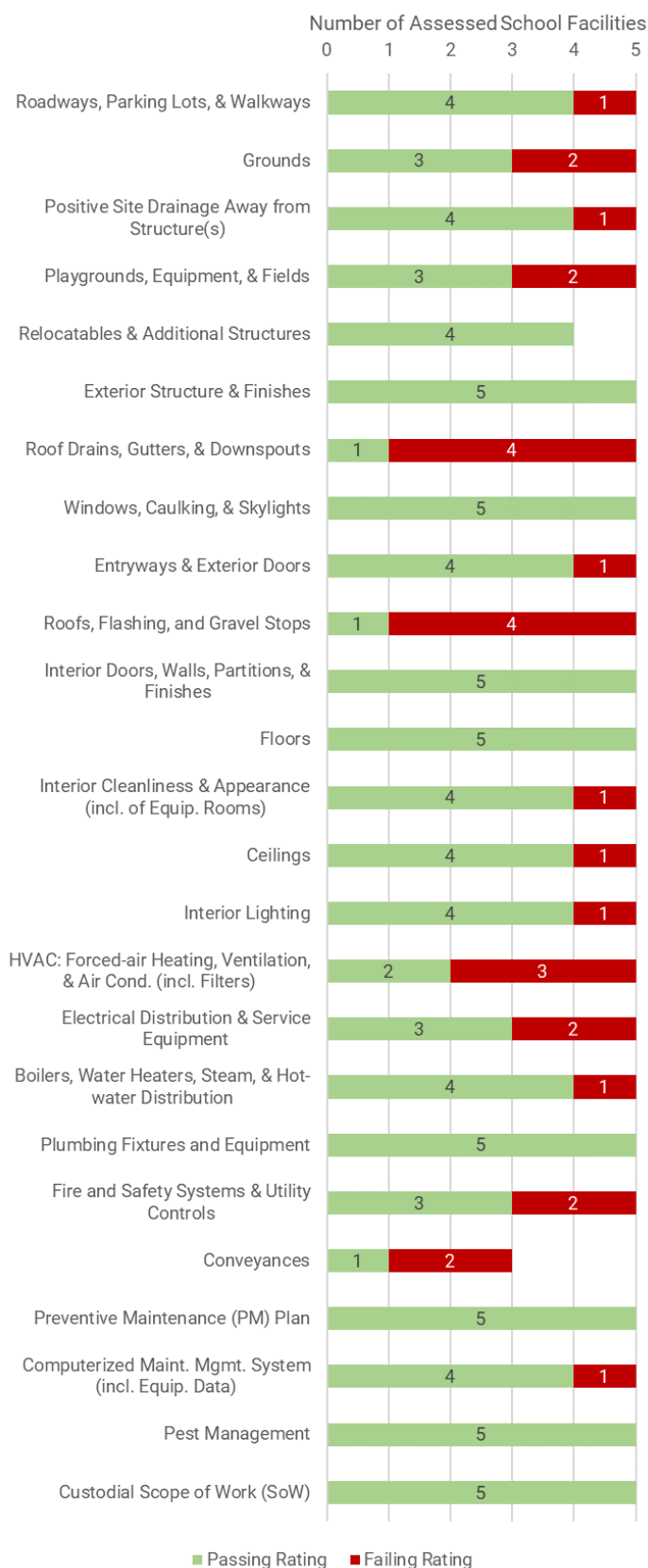


## FY 2022 Results: Summary of School Ratings

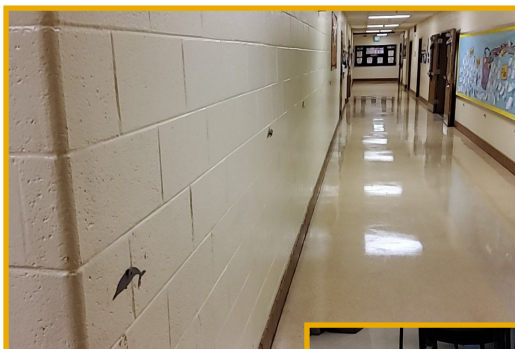
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Spring Ridge Middle (18.002)	Middle	109,837	25	Adequate	2	6	11	5	1	0	0
2. Oakville Elementary (18.011)	Elementary	48,072	48	Adequate	0	6	15	4	0	0	0
3. Town Creek Elementary (18.015)	Elementary	35,498	49	Adequate	1	8	12	4	0	0	1
4. Lettie Marshall Dent Elementary (18.017)	Elementary	57,820	38	Adequate	0	3	18	3	0	0	0
5. Green Holly Elementary (18.022)	Elementary	104,375	39	Not Adequate	0	1	12	10	0	0	7
Totals					3	24	68	26	1	0	8
Percentage of Total Ratings for System					2%	20%	56%	21%	1%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

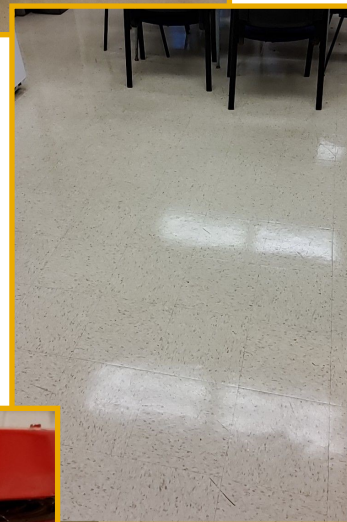


### Strengths



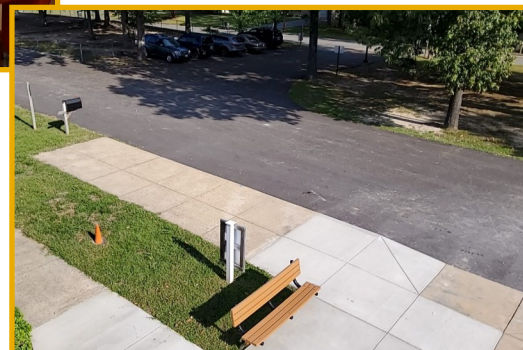
Interior Doors, Walls, Partitions, & Finishes were adequately maintained at all five facilities. No significant issues were noted.

No significant flooring issues were observed. All five facilities received an Adequate rating for Floors.



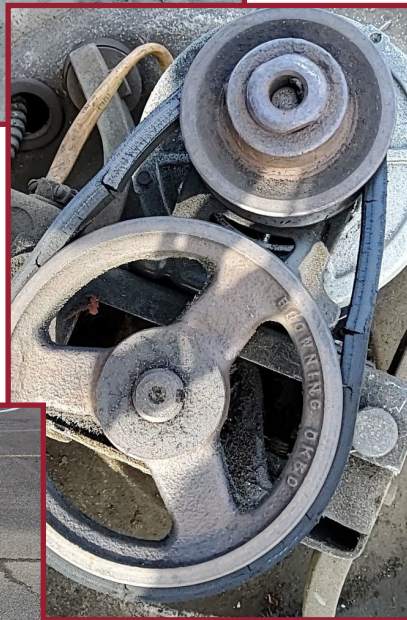
Many of the buildings' essential and non-essential assets are identified in the PM plan and tracked using the work order system.

Parking lot, sidewalks and curbing, and pavement marking inspections are conducted annually. This PM work is tracked through work orders.



### Weaknesses

The roofs at two facilities were marked to indicate active leaks and evidence of leaks was noted in one of these facilities. Two other facilities were observed with active leaks during the assessment in student-occupied areas.



Some HVAC filters were observed clogged, dirty, or damaged at four facilities. One or more exhaust fans were not working properly at four facilities. Belts were observed loose, cracked, or missing at three facilities.

Two facilities received a Not Adequate rating for Playgrounds, Equipment, & Fields. Four facilities had varying degrees of damaged play surfaces, and vegetation growth was coming from or encroaching on play areas at three facilities.



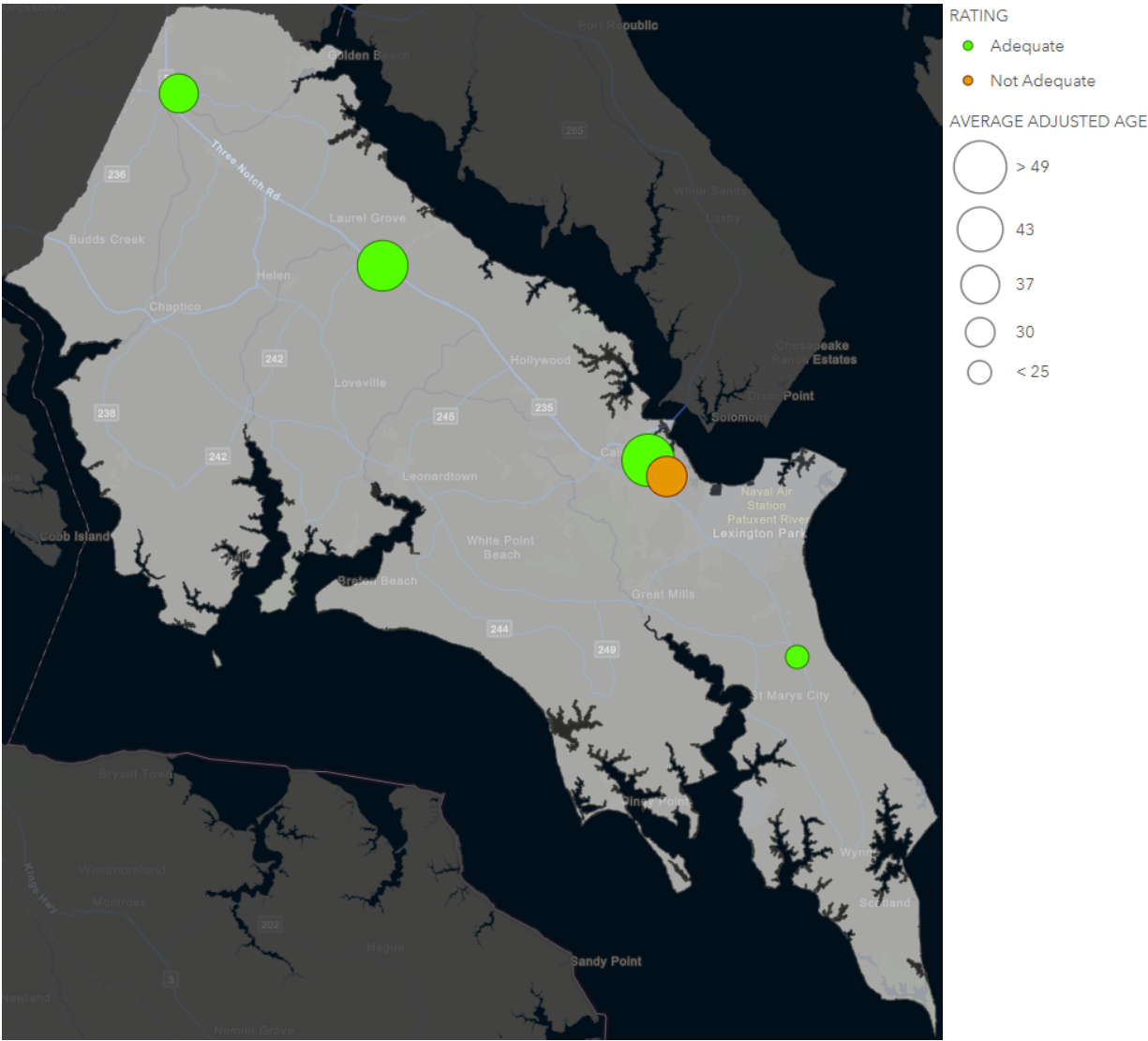
Four facilities received a Not Adequate rating for Roof Drains, Gutters, & Downspouts. Drain strainers were observed damaged, unsecured, or missing at four facilities. Standing water was noted around roof drains at three facilities.



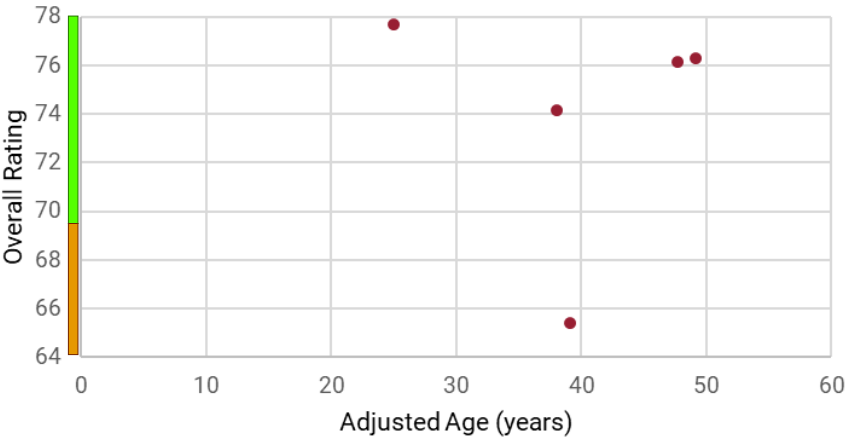
## FY 2022 Results: Summary of Deficiencies by Category

	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	1
	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	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	1
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>8</b>

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.
- Implementing quality control procedures is recommended to ensure preventive and corrective maintenance work orders are being completed effectively and the actions taken to complete the work are recorded accurately.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as plumbing and roof leaks and exhaust fan issues.
- 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.

# SOMERSET COUNTY

Total School Facilities Assessed in FY 2022: 3



Somerset County Technical High School

## Fiscal Year 2022: Key Facts

10  
facilities

Somerset County has 10 active school facilities.  
**No change since FY 2021.**

21.3  
years old

The average adjusted age of all 10 school facilities is 21.3 years old.  
**+ 1 year since FY 2021.**

> 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 2021.**

~ \$0.3 B

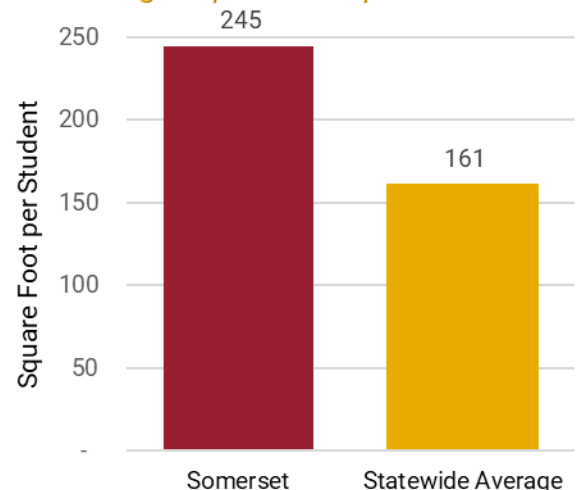
The current replacement value for Somerset County's GSF, at the IAC's current replacement cost/SF, is nearly \$0.3 B.

**68.14% (Not Adequate) = Average Overall Rating for FY 2022**  
**- 1.48% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Middle	Middle/High	Career Tech	
Superior				
Good				
Adequate			1	1
Not Adequate	1	1		2
Poor				
Totals	1	1	1	3

### Average Square Foot per Student



## FY 2022 Results: Summary of School Ratings

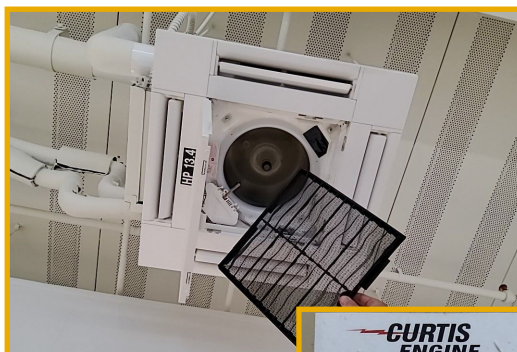
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Washington Academy & High School (19.002)	Middle/High	130,000	11	Not Adequate	0	8	10	6	1	0	8
2. Somerset Intermediate School (19.016)	Middle	77,652	14	Not Adequate	0	2	17	5	0	0	5
3. Somerset County Technical High School (19.017)	Career Tech	103,846	3	Adequate	0	9	7	6	2	0	1
Totals					0	19	34	17	3	0	14
Percentage of Total Ratings for System					0%	26%	47%	23%	4%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

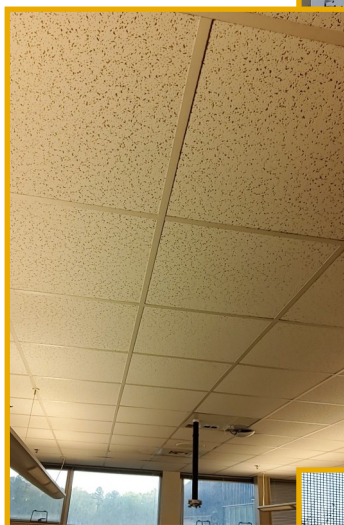
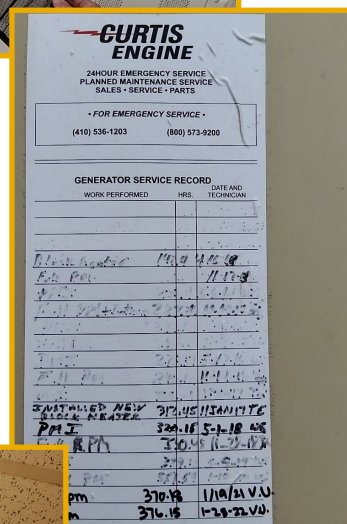


### Strengths



The majority of filters were clean or recently serviced and all HVAC equipment appeared to be functional.

No issues or concerns were identified with the electrical equipment or generator at two facilities. Infrared assessments were recently completed at two facilities.



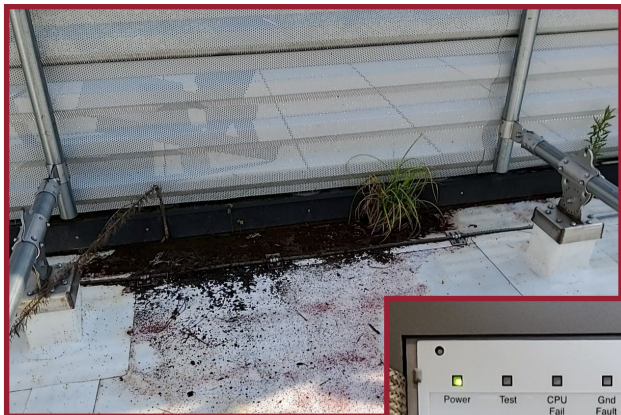
Two facilities earned a Good rating for Ceilings. One of those facilities had no issues or concerns and the other only had one stained tile.

All windows were operational with sealants intact. Two facilities earned a Good rating for Windows, Caulking, & Skylights.

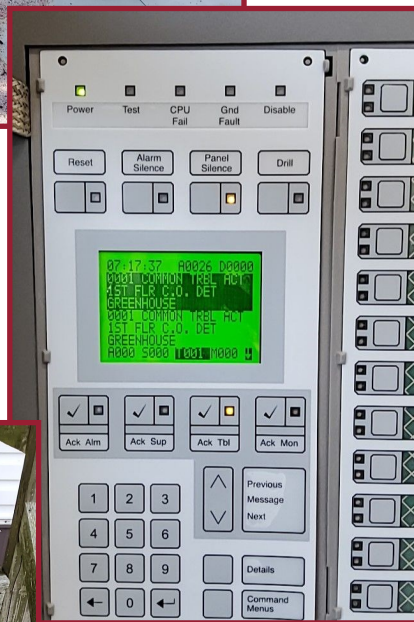




The CMP identifies service maintenance contracts and/or agreements for routine roof inspections. No roof inspections were provided in the required pre-MEA documentation and no PM work orders were identified for roofs.



Of the two facilities with relocatables and additional structures, one received a Poor rating due to uncorrected safety and health concerns that were previously identified on the IAC maintenance assessment conducted three years prior as well as additional issues concerning the suitability of the relocatable and press box for occupancy.



System trouble was identified on the fire alarm panels at two facilities. The monthly fire extinguisher inspections did not appear to be occurring at two facilities, and they were inconsistent at one facility. Two facilities received a Not Adequate rating and one facility earned a Poor rating for Fire and Safety Systems & Utility Controls.



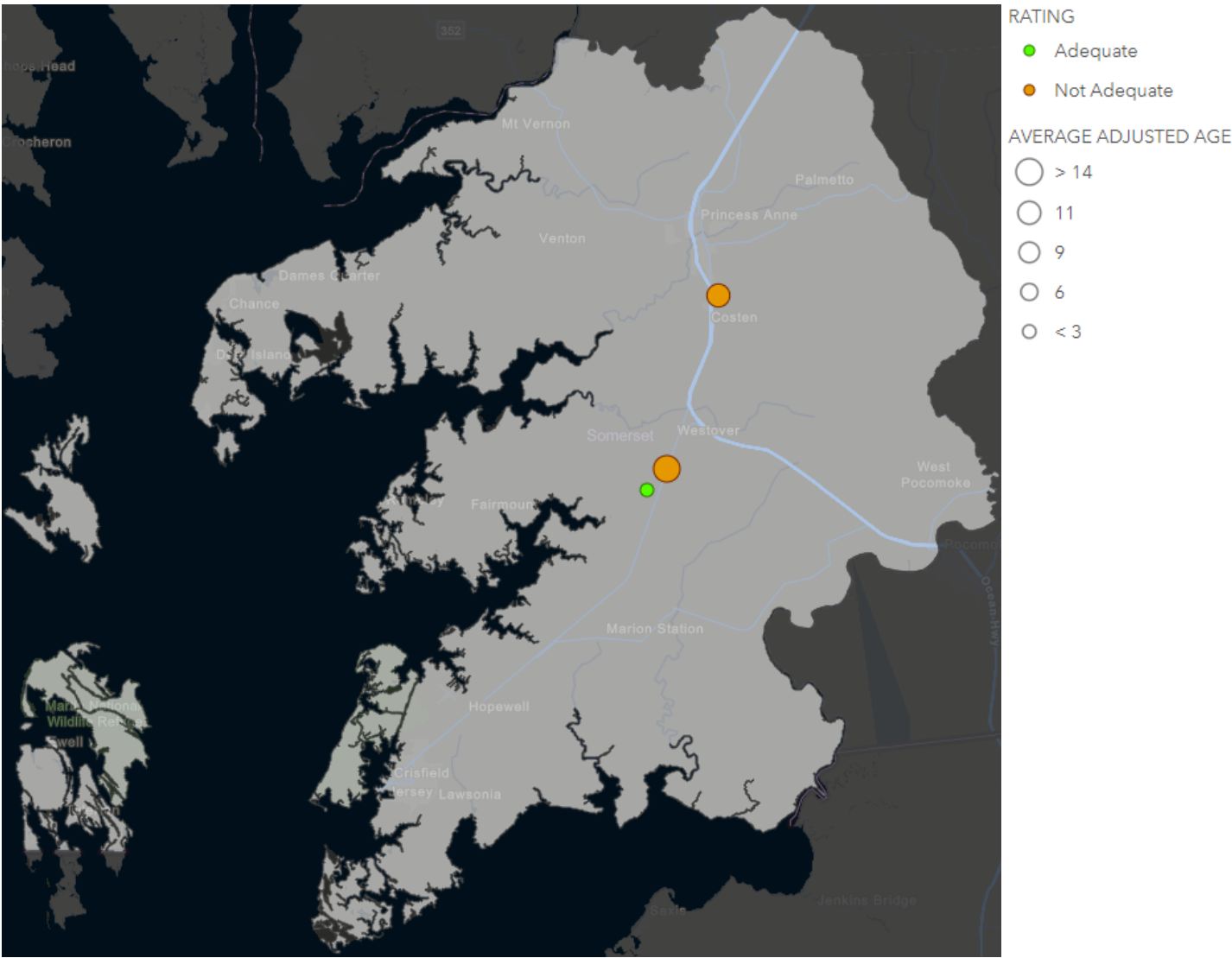
Two facilities were identified with uneven walkway surfaces. No PM work orders were identified for roadways, parking lots, or walkways.



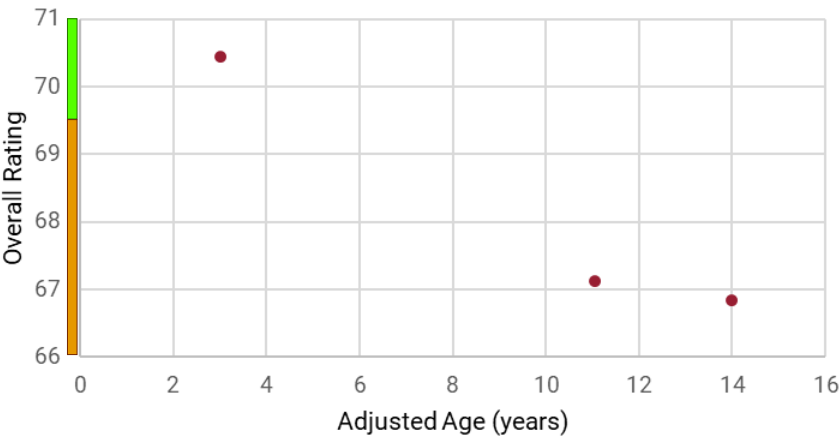
## FY 2022 Results: Summary of Deficiencies by Category

	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	1
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	1
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	1
	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	1
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	3
	Conveyances	0	1
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>14</b>

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



## FY 2022 Results: Recommendations

- PM tasks identified in the CMP and the custodial checklists should have auto-populating PM work orders created in the CMMS.
- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements.
- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively, in a timely manner, and the actions taken to complete the work are recorded accurately.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as fire and safety system issues.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.

# TALBOT COUNTY

Total School Facilities Assessed in FY 2022: 3



St. Michaels Middle/High

## Fiscal Year 2022: Key Facts

8  
facilities

Talbot County has  
8 active school facilities.  
**+ 1 facility since FY 2021.**

17.1  
years old

The average adjusted age of  
all 8 school facilities  
is 17.1 years old.  
**- 2.4 years since FY 2021.**

~ 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.  
**+ 128,755 SF since FY 2021.**

~ \$0.3 B

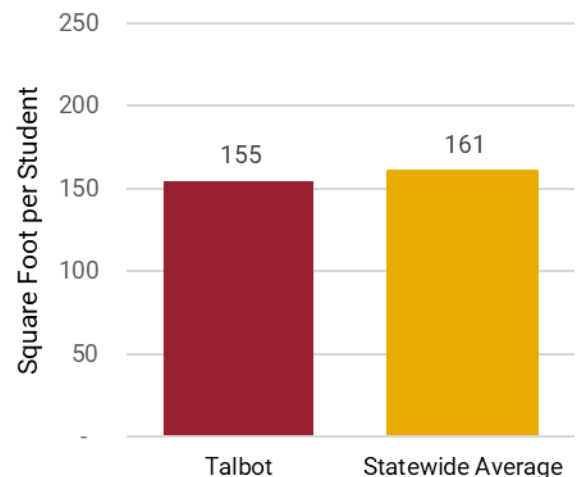
The current replacement value  
for Talbot County's GSF,  
at the IAC's current  
replacement cost/SF,  
is approximately \$0.3 B.

**70.83% (Adequate)** = Average Overall Rating for FY 2022  
**- 1.56% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student



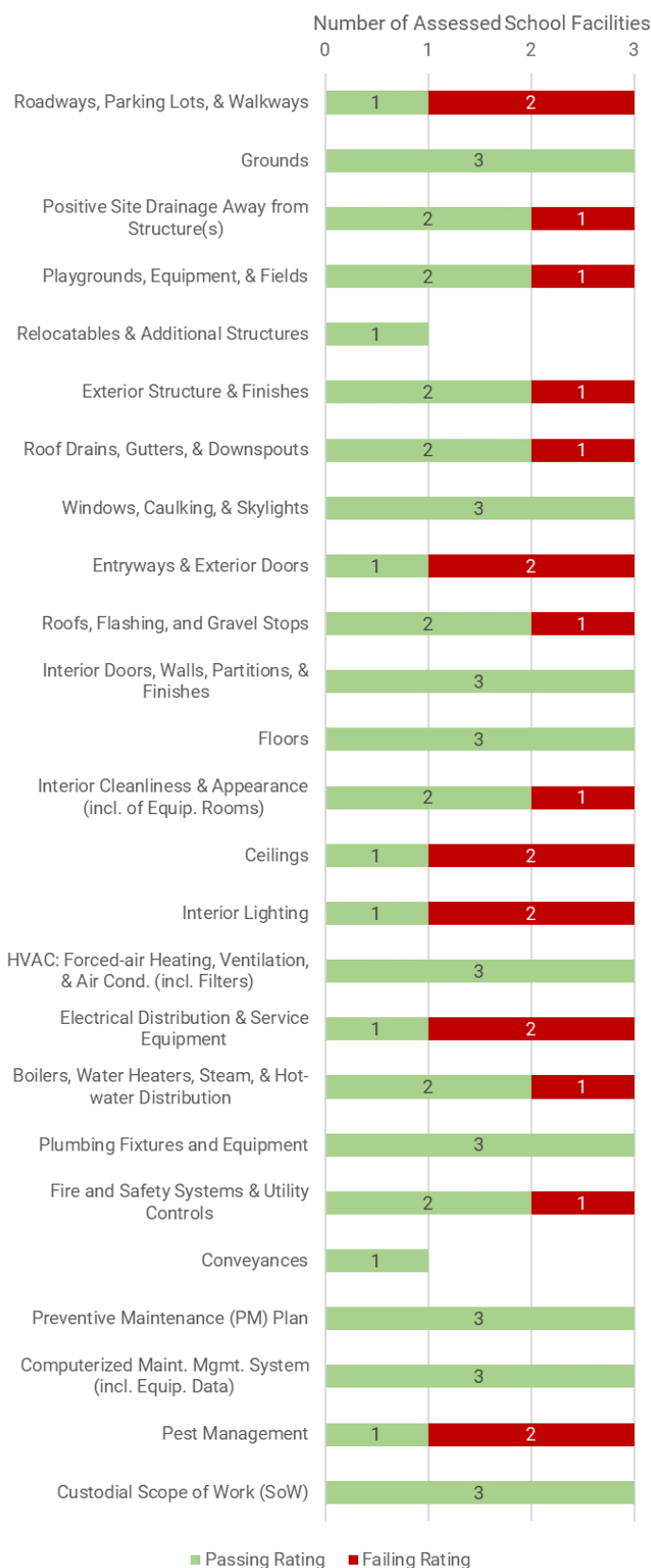
## FY 2022 Results: Summary of School Ratings

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. Easton Middle (20.004)	Middle	106,985	19	Adequate	0	1	16	7	0	0	2
2. White Marsh Elementary (20.007)	Elementary	43,465	25	Adequate	0	1	19	3	0	0	3
3. St. Michaels Middle/High (20.008)	Middle/High	79,602	13	Adequate	0	4	16	4	0	0	5
Totals					0	6	51	14	0	0	10
Percentage of Total Ratings for System					0%	8%	72%	20%	0%		



## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

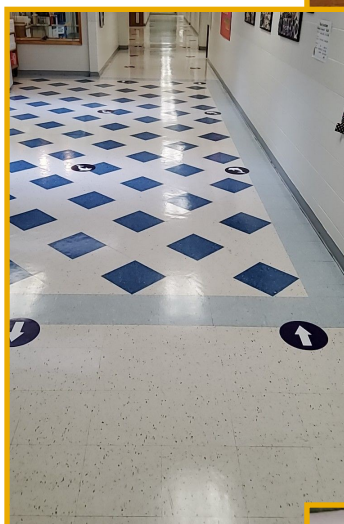
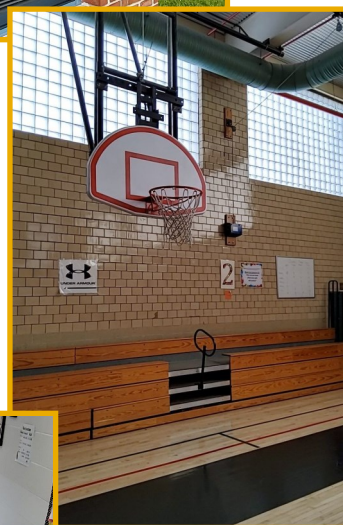


### Strengths



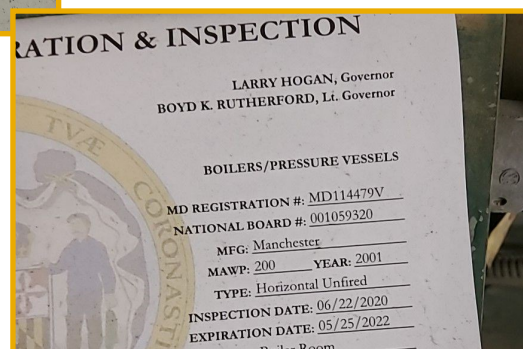
The CMP identifies annual cleaning of exterior windows and that custodial personnel clean the interior of the exterior windows on a weekly basis.

Two facilities received a Good rating for Playgrounds, Equipment, & Fields. According to the CMP, the bleachers are inspected and repaired annually by a licensed specialist.



Floor finishing and carpet cleaning and repair are identified in the CMP. No significant issues were observed with the floors at any facility.

The PM plan included some essential assets for the facilities, such as roofs, sprinkler systems, and HVAC equipment.



### Weaknesses

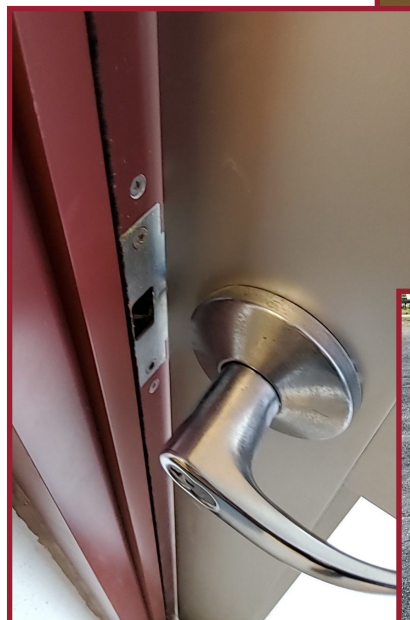
Emergency lights failed to illuminate and exit signs were broken or non-functioning at two facilities. One facility had issues with rusty water coming from eyewash stations.



Multiple non-functional fluorescent light tubes were identified at all three facilities. Interior lighting does not have a specific PM work order. Per the CMP, replacing light bulbs is completed by custodial personnel.



There are monthly auto-populated PM work orders for exterior door operations in the CMMS. However, doors were observed closing too hard or not closing on their own at two facilities. Corrosion on doorframes was noted at two facilities.

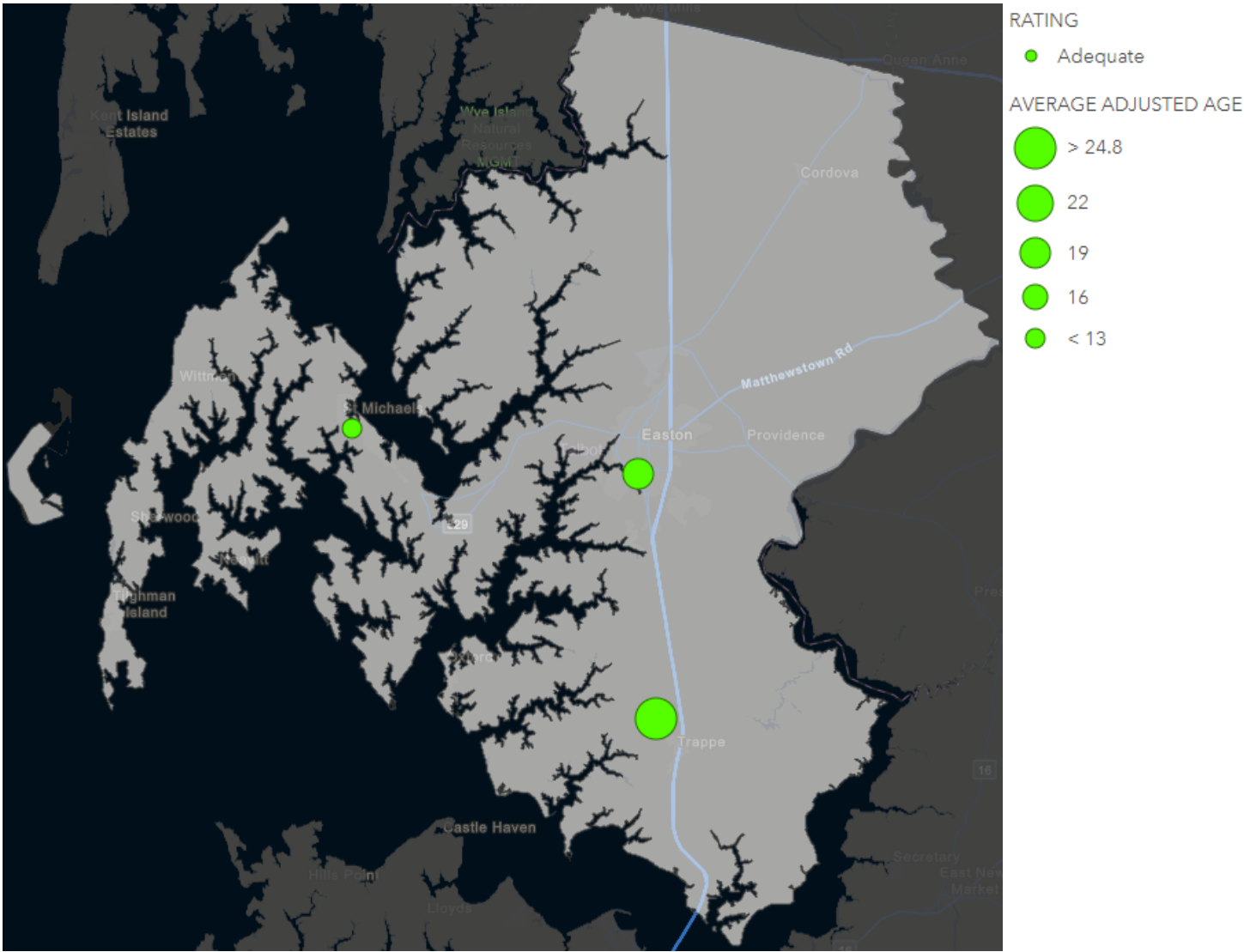


The asphalt surfaces were observed cracked at all three facilities. Vegetation was growing through cracks or joints at two facilities.

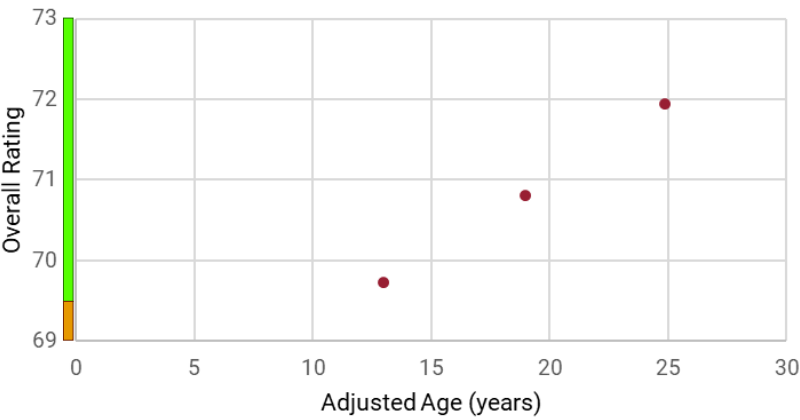
## FY 2022 Results: Summary of Deficiencies by Category

	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	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	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	2
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	2
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	1
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>10</b>

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





- Eyewash stations and emergency shower fixtures should be tested and flushed monthly to remove rust and any possible microbiological concerns to prevent exacerbating any injury in the event they are needed in an emergency.
- Interior lighting, emergency lighting, roadways, parking lots, and walkways should be added to the PM schedule. Deficiencies noted during the PM checks should be entered and tracked using the CMMS.
- The PM schedule should be expanded for each facility to encompass all assets, systems, and structural elements listed in the CMP.
- Protective tube sleeves should be installed where glass fluorescent tubes are subject to mechanical damage, especially in student-occupied areas.
- Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.



# WASHINGTON COUNTY

Total School Facilities Assessed in FY 2022: 9

Potomac Heights Elementary

## Fiscal Year 2022: Key Facts

46  
facilities

Washington County has 46 active school facilities.  
**No change since FY 2021.**

34.8  
years old

The average adjusted age of all 46 school facilities is 34.8 years old.  
**+ 0.8 years since FY 2021.**

> 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.  
**+ 29,441 SF since FY 2021.**

~ \$1.5 B

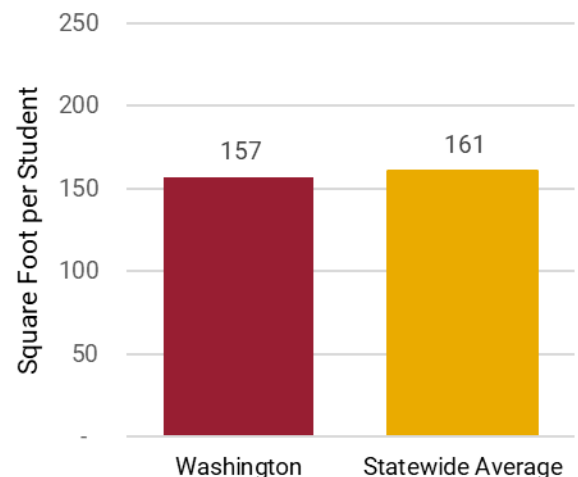
The current replacement value for Washington County's GSF, at the IAC's current replacement cost/SF, is approximately \$1.5 B.

**73.25% (Adequate)** = Average Overall Rating for FY 2022  
**- 5.01% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	6	1	2	9
Not Adequate				
Poor				
Totals	6	1	2	9

### Average Square Foot per Student

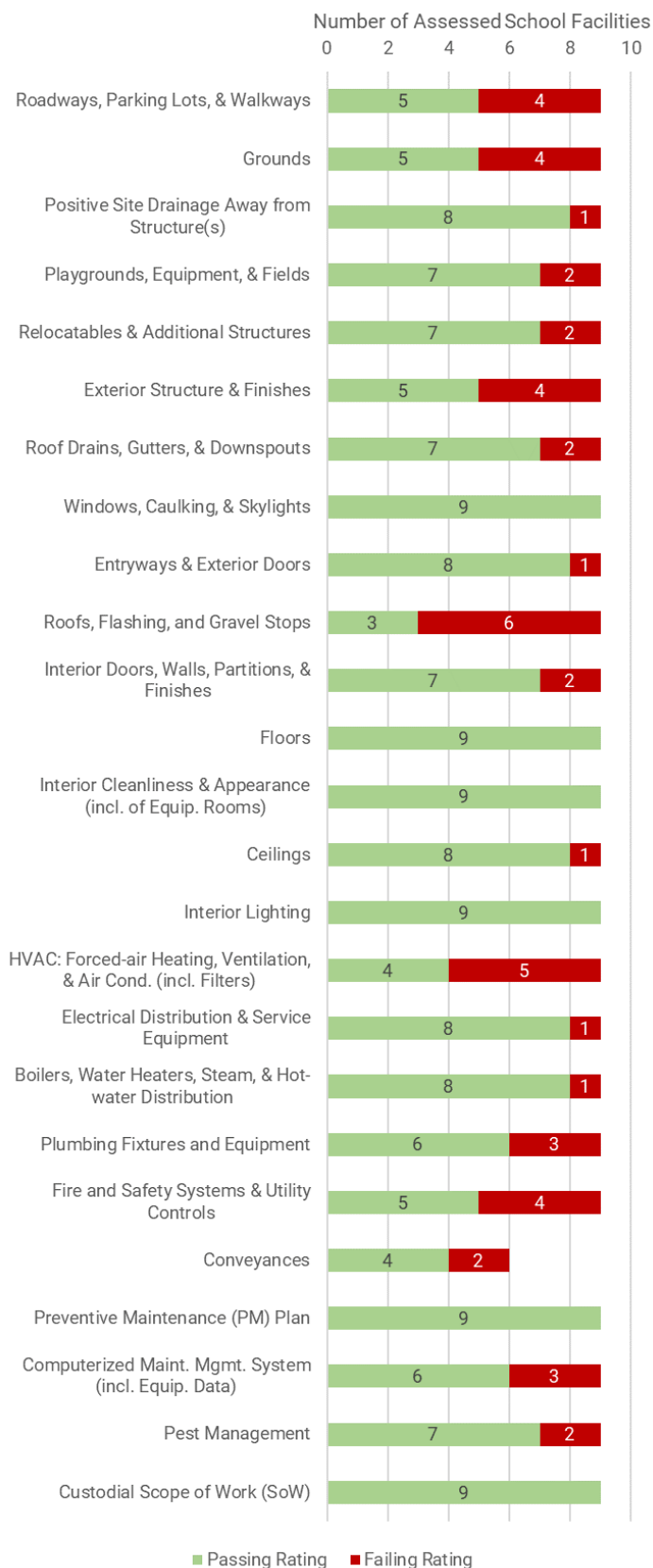


## FY 2022 Results: Summary of School Ratings

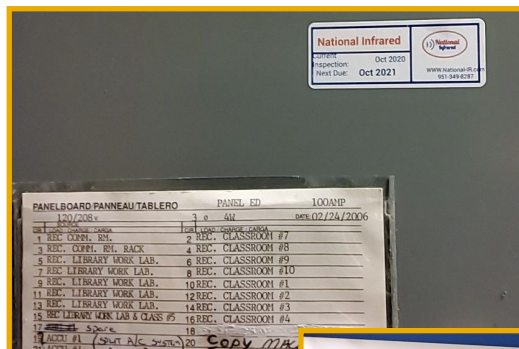
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Western Heights Middle (21.003)	Middle	127,315	36	Adequate	0	5	18	2	0	0	1
2. North Hagerstown High (21.024)	High	168,750	29	Adequate	0	2	16	6	1	0	1
3. Williamsport High (21.031)	High	153,846	49	Adequate	0	7	13	5	0	0	3
4. Emma K. Doub Elementary (21.032)	Elementary	35,476	52	Adequate	0	9	12	4	0	0	4
5. Old Forge Elementary (21.035)	Elementary	40,777	48	Adequate	0	6	15	3	0	0	1
6. Fountain Rock Elementary (21.043)	Elementary	35,318	45	Adequate	0	1	17	6	0	0	1
7. Potomac Heights Elementary (21.044)	Elementary	37,347	51	Adequate	0	7	14	3	0	0	1
8. Fountaindale Elementary (21.046)	Elementary	53,406	66	Adequate	0	4	19	2	0	0	2
9. Rockland Woods Elementary (21.050)	Elementary	85,277	14	Adequate	0	6	14	5	0	0	2
Totals					0	47	138	36	1	0	16
Percentage of Total Ratings for System					0%	21%	62%	16%	0%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category



### Strengths



All nine facilities had auto-populating PM work orders for electrical inspections. Infrared risk assessments were completed at six facilities.

Five facilities received a Good rating for Windows, Caulking, & Skylights. No issues or concerns were identified with the windows at four facilities.



The vinyl composition tile (VCT) flooring was observed clean and polished at six facilities. Floor maintenance is identified in the custodial handbook and overseen by the head custodian.

Five facilities received a Good rating for Interior Lighting. Light fixture maintenance is identified in the custodial handbook and overseen by the head custodian.





### Weaknesses

At the five facilities where deficiencies were noted on fire alarm and/or sprinkler system inspection reports, corrective work orders were either not present in the work order history or open work orders were present but were created five months or more after the inspection occurred.

**SPRINKLER INSPECTION REPORT**

General Inspection Notes

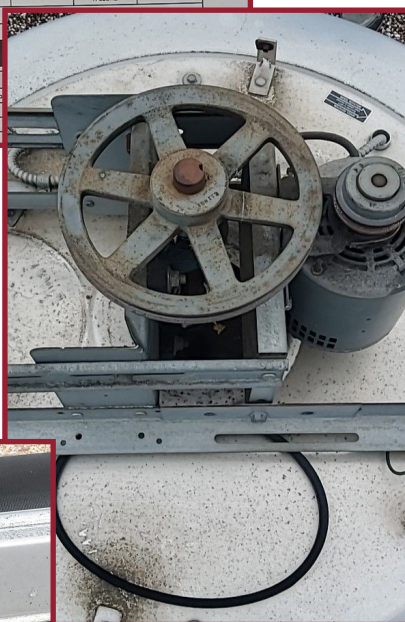
1. This report is for June 2021 Annual Sprinkler Inspection  
Tamper switches tested during this inspection flow switches due during next inspection

LOCATION	DESCRIPTION	ADDRESS	DEVICE	MAKE	MODEL	BARCODE	DATE OF TEST	TYPE	IMAGES
—	Back Loading Dock	—	Fire Dept. Connection	—	—	—	06/24/2021	FUNCTIONAL FAILURE	DEFICIENCY IMAGES APPENDIX 3.1
FAILURE REASON: 5 year hydrostatic testing required									
—	Rear Loading	—	Water Motor Gong	—	—	—	06/24/2021	FUNCTIONAL FAILURE	—
FAILURE REASON: Water motor gong closed upon arrival									

**General**

To be Answered with the Owner

- Have there been any changes in the occupancy classification, machinery or operations since the last inspection?
- Have there been any changes or repairs to the fire protection systems since the last inspection?
- Have you had an internal pipe inspection performed in the last 5 years?



Washington County Public Schools (WCPS) creates PM work orders for exhaust fans. Each of the nine WCPS facilities assessed provided their work order history for the past year. There were a combined total of 241 exhaust fan PM work orders; however, only 41 work orders were completed or closed.

Debris or vegetation growth were identified on the roofs at eight facilities. Deteriorated or failing sealants were observed at six facilities. Semi-annual roofing inspections are included in the generic PM schedule, but are not included as PM work orders in the facilities' work order history documentation.



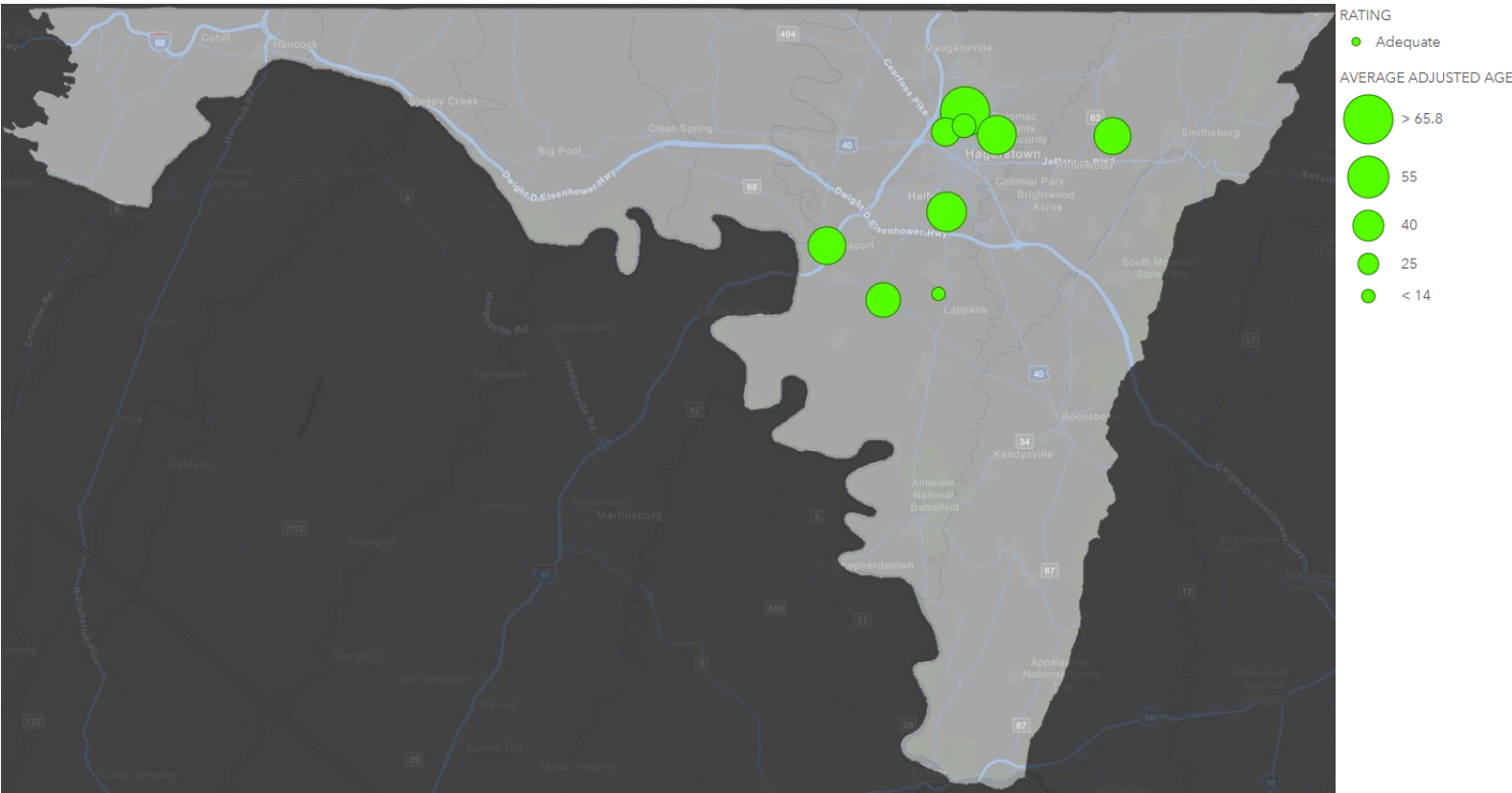
Damaged masonry and/or mortar was identified at six facilities. Three facilities had issues with retaining walls.

## FY 2022 Results: Summary of Deficiencies by Category

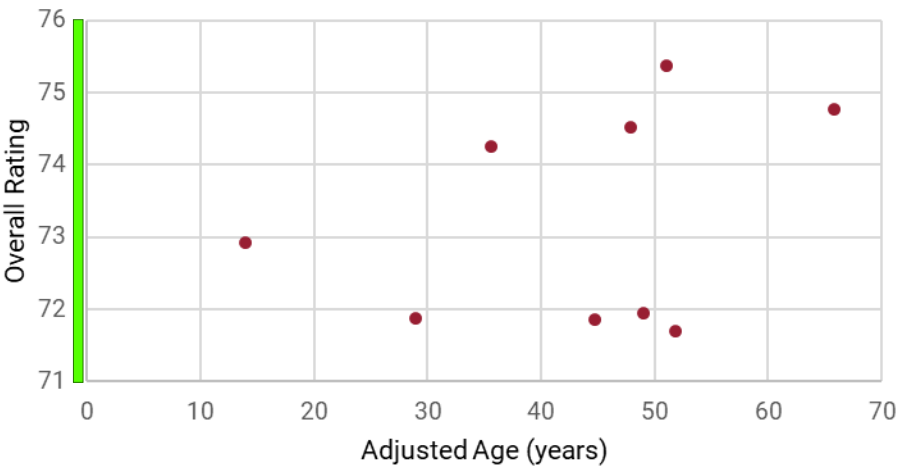
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	4
	Grounds	0	3
	Positive Site Drainage Away from Structure(s)	0	1
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	2
	Roof 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	2
	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	0
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
	<b>Total</b>	<b>0</b>	<b>16</b>



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- 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.
- The CMMS does not appear to be utilized to track maintenance and inspections for regulated equipment. Any equipment that needs a DLLR certificate should be added to the CMMS and have auto-populating PM work orders created.
- Routine inspections of the building envelope are recommended to ensure a weathertight facility. The CMMS should be utilized to initiate inspections, document deficiencies observed during the inspections, and ensure the deficiencies are corrected in a timely manner.

# WICOMICO COUNTY

Total School Facilities Assessed in FY 2022: 4

Delmar Elementary

## Fiscal Year 2022: Key Facts

24  
facilities

Wicomico County has 24 active school facilities.  
**No change since FY 2021.**

29.4  
years old

The average adjusted age of all 24 school facilities is 29.4 years old.  
**+ 1 year since FY 2021.**

> 2.2 M  
GSF

Wicomico County maintains 2,244,318 SF throughout its 24 school facilities. It has the 14th greatest amount of SF of LEAs in MD.

**+ 1,718 SF since FY 2021.**

> \$0.9 B

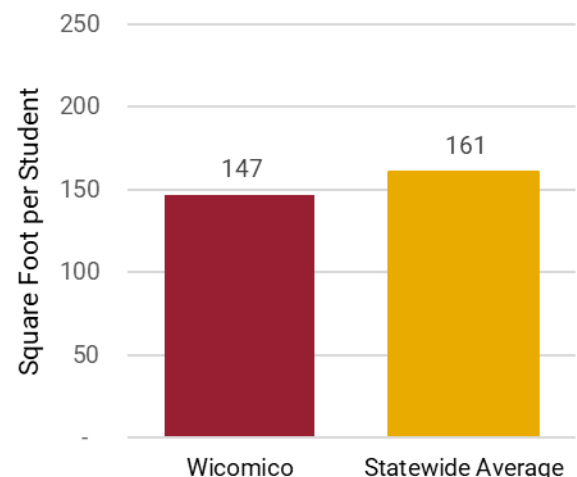
The current replacement value for Wicomico County's GSF, at the IAC's current replacement cost/SF, is greater than \$0.9 B.

**78.83% (Adequate)** = Average Overall Rating for FY 2022  
**- 0.76% since FY 21**

### FY 2022 Overall Rating Results by School Type

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

### Average Square Foot per Student

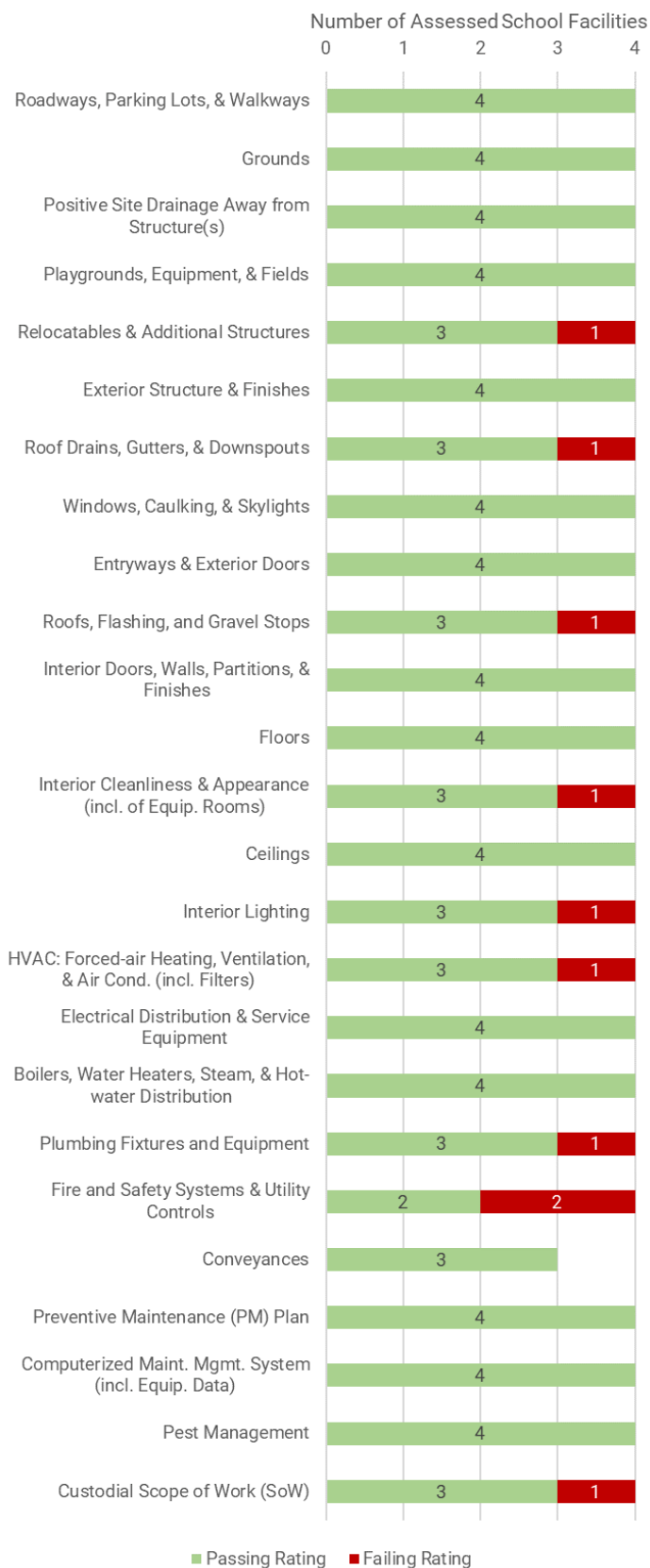


## FY 2022 Results: Summary of School Ratings

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. Pinehurst Elementary (22.002)	Elementary	76,224	36	Adequate	0	7	14	4	0	0	0
2. Delmar Elementary (22.007)	Elementary	76,645	43	Adequate	3	9	12	1	0	0	1
3. Glen Avenue Elementary (22.010)	Elementary	55,068	52	Good	2	7	14	1	0	0	0
4. Fruitland Intermediate (22.017)	Elementary	43,712	31	Good	2	10	10	2	1	0	0
Totals					7	33	50	8	1	0	1
Percentage of Total Ratings for System					7%	33%	51%	8%	1%		

## FY 2022 Results: Assessment Findings by Category

FY22 Passing vs Failing Rating per Category

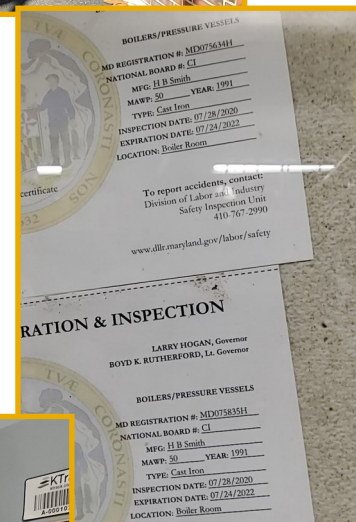


### Strengths



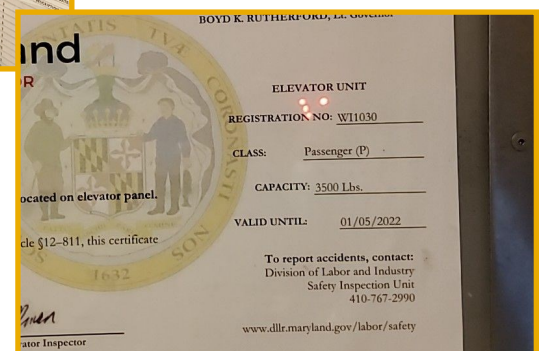
No issues or concerns were identified with the exterior doors at two facilities, which both received a Superior rating for Entryways & Exterior Doors. Annual exterior door inspections are included in the PM schedule.

No issues were observed with the boilers or hot water heaters at any facility. All DLLR certificates were up to date.



No issues or concerns were identified with the electrical equipment at two facilities, which both received a Good rating for Electrical Distribution & Service Equipment.

Two facilities received a Superior rating for Conveyances. All conveyance systems had current DLLR certificates. Annual elevator inspections are included in the PM schedule.





### Weaknesses

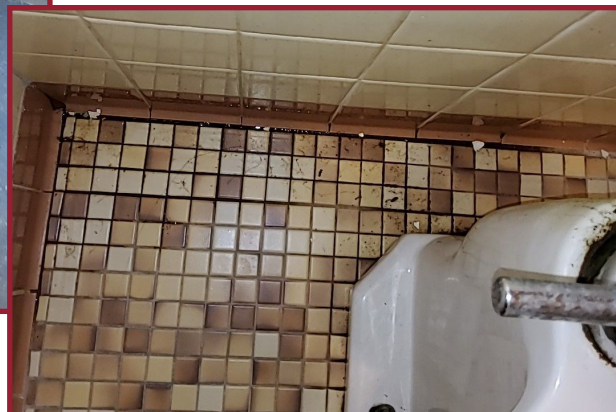
The floors in the relocatables were dirty and/or damaged at all four facilities.

There was a non-functional emergency light in a relocatable at two facilities.



The Building Service Manager's scope of work indicates that filters should be changed or cleaned quarterly. However, three facilities were observed with dirty filters.

All four facilities were observed with dirty floors, walls, and/or fixtures in classrooms and restrooms. Daily duties for custodial staff include cleaning floors, windows and horizontal surfaces in classrooms and restrooms.

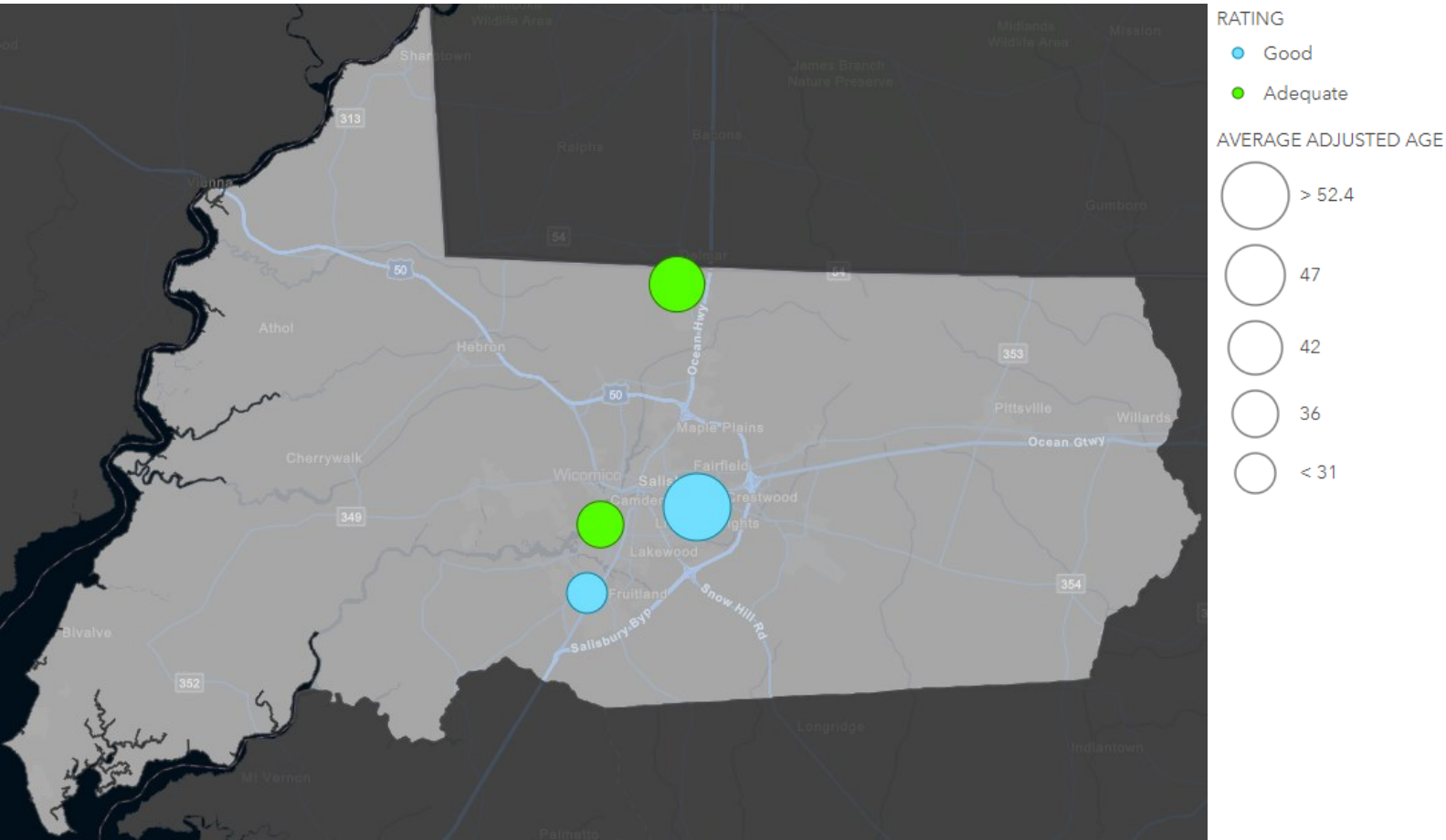


Two facilities were observed with black water leaks in restrooms. Each facility was noted with leaking, damaged and/or non-functional plumbing fixtures.

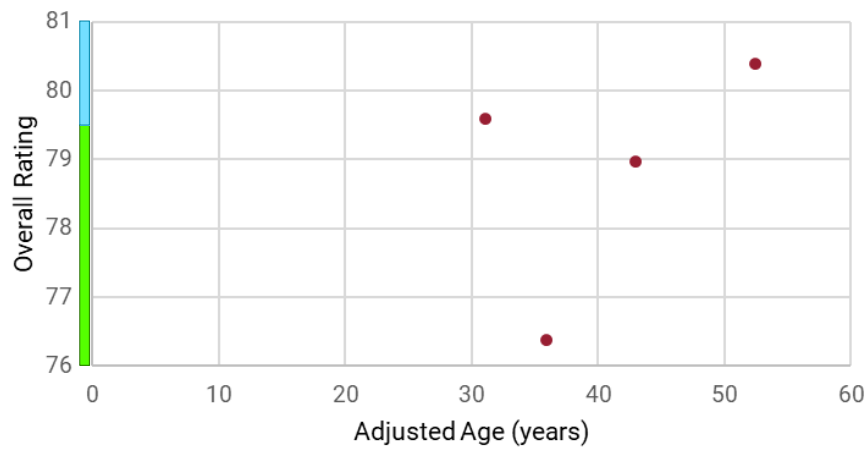
## FY 2022 Results: Summary of Deficiencies by Category

	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	1
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	1

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



## FY 2022 Results: Recommendations

- Emergency lights maintenance should be tracked using the CMMS. Regularly scheduled PM should generate work orders for the assets that need to be inspected.
- Implementing quality control procedures is recommended to ensure PM work orders and PM custodial checklists are being completed effectively and the actions taken to complete the work are recorded accurately.
- Additional training or PM checks are recommended to prevent or quickly remediate issues that may cause health or safety concerns, such as black water leaks and non-functional emergency lights.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.

# WORCESTER COUNTY

Total School Facilities Assessed in FY 2022: 3



Stephen Decatur Middle

## Fiscal Year 2022: Key Facts

14  
facilities

Worcester County has 14 active school facilities.  
**No change since FY 2021.**

26.6  
years old

The average adjusted age of all 14 school facilities is 26.6 years old.  
**+ 1 year since FY 2021.**

> 1.2 M  
GSF

Worcester County maintains 1,285,852 SF throughout its 14 school facilities. It has the 18th greatest amount of SF of LEAs in MD.

**No change since FY 2021.**

> \$0.5 B

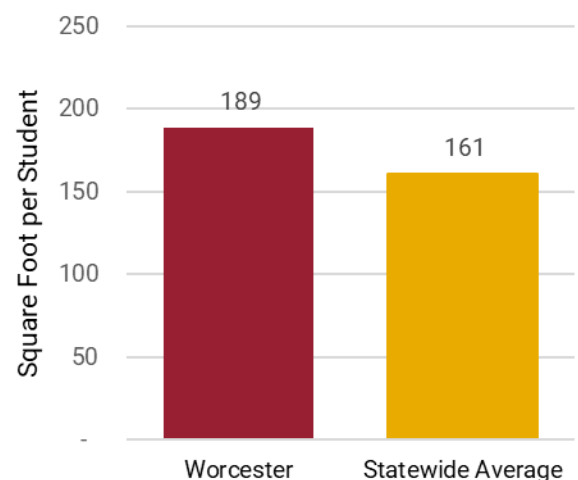
The current replacement value for Worcester County's GSF, at the IAC's current replacement cost/SF, is more than \$0.5 B.

**73.17% (Adequate)** = Average Overall Rating for FY 2022  
**- 2.92% since FY 21**

### FY 2022 Overall Rating Results by School Type

	Elementary	Elementary/ Middle	Middle	
Superior				
Good				
Adequate	1	1	1	3
Not Adequate				
Poor				
Totals	1	1	1	3

### Average Square Foot per Student





## FY 2022 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. Berlin Intermediate (23.012)	Elementary/ Middle	101,000	51	Adequate	0	8	11	5	0	0	3
2. Stephen Decatur Middle (23.014)	Middle	79,500	24	Adequate	0	9	9	6	0	0	3
3. Snow Hill Elementary (23.008)	Elementary	40,500	42	Adequate	0	8	13	4	0	0	1
Totals					0	25	33	15	0	0	7
Percentage of Total Ratings for System					0%	34%	45%	21%	0%		

## FY 2022 Results: Assessment Findings by Category

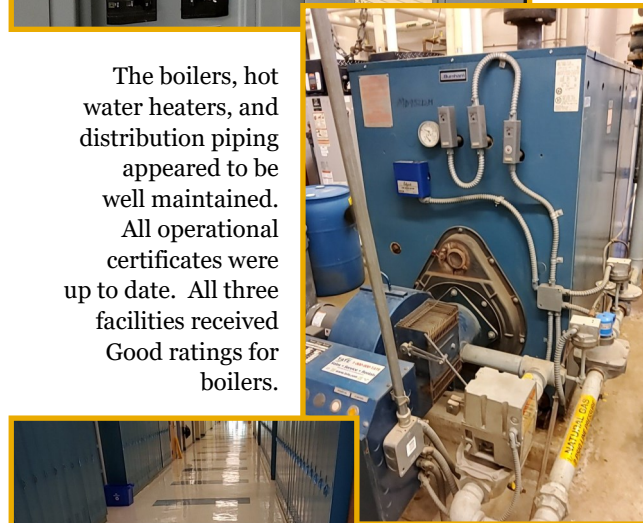
FY22 Passing vs Failing Rating per Category



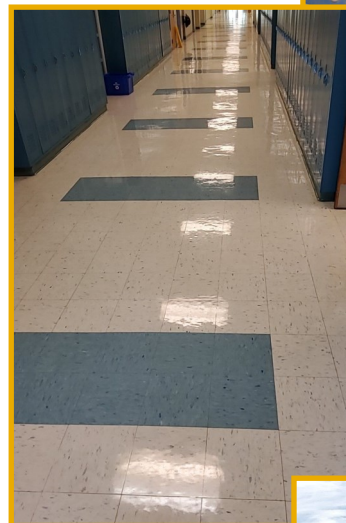
### Strengths



The electrical distribution system at all three facilities appeared to be well maintained. Electrical equipment was labeled well and had complete panel schedules.



The boilers, hot water heaters, and distribution piping appeared to be well maintained. All operational certificates were up to date. All three facilities received Good ratings for boilers.



The floors at all three facilities appeared to be well maintained with a polished finish.



Two facilities received Good ratings for Grounds. The grounds appeared to be well kept, including garden areas and trees.

### Weaknesses

One facility had damaged playground equipment. Playground inspections and bleacher inspections were not provided for the facilities with this equipment.



Inoperable exhaust fans were identified at all three facilities. One facility had dirty air filters and deteriorated coils on fan coil units.



Missing or loose lighting covers and non-functional light tubes were identified at all three facilities.



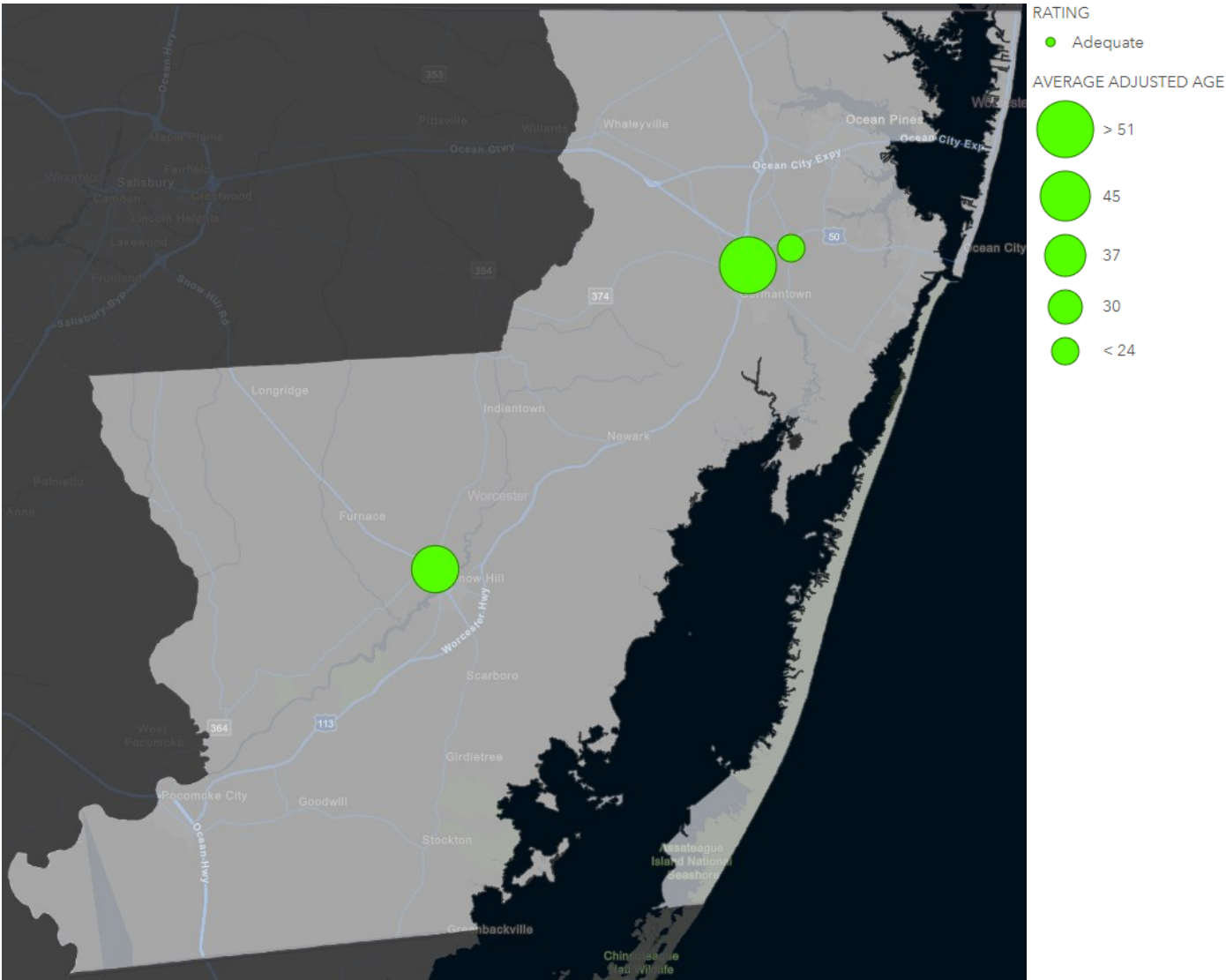
Stained ceiling tiles were identified at all three facilities.

## FY 2022 Results: Summary of School Ratings

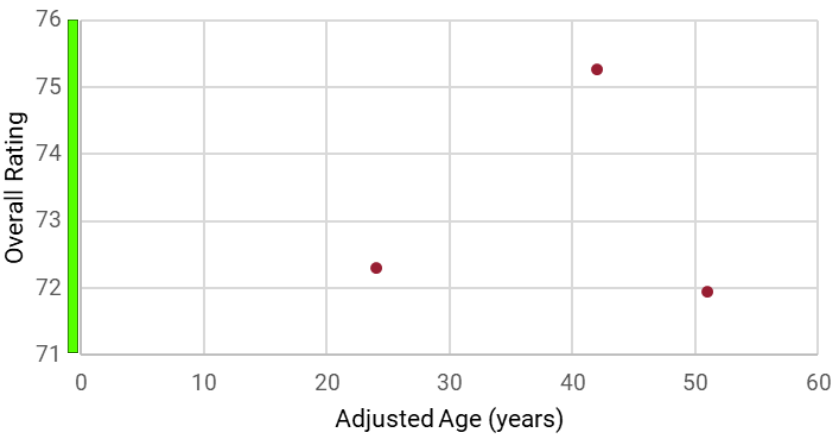
	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	0
	Roof 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	1
	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	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
Maintenance Management	Preventive Maintenance (PM) Plan	0	0
	Computerized Maint. Mgmt. System (incl. Equip. Data)	0	0
	Pest Management	0	0
	Custodial Scope of Work (SoW)	0	0
Total		0	7



Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age





- Development of a detailed PM plan using the CMMS should be considered. Facility essential assets should be included in the PM plan as well as auto-populating work orders that ensure PM is conducted according to recommendations or requirements set by code and the original equipment manufacturer.
- Playground and bleacher inspections should be conducted on a regular basis to ensure that the equipment is safe and operable. Inspections should be tracked using the CMMS to ensure completion of these inspections at regular intervals. CMMS work orders should be used to track any deficiencies that are identified during the inspections.
- Periodic inspections of building lighting systems should be conducted to ensure that lights are safe and operating as designed. Best practice includes periodic inspections of lighting systems and the use of asset lists to ensure that all assets are inspected on a regular basis.
- The facility exhaust fans should be included in the asset list and PM plans. Regularly scheduled PM will increase the reliability of the equipment and help the equipment meet or exceed its expected lifespan.