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# Maintenance of Maryland's Public School Buildings

State of Maryland

Interagency Commission on School Construction

FY 2021 Annual Report

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IAC
Interagency Commission on School Construction

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

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The LEA Maintenance-Effectiveness Assessment Results reports provide an overview of maintenance assessments conducted at selected schools in each Maryland public school system. Each report provides general information about the school system, a listing of the schools 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 update 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 22, 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 facility assessor will assign a category a **"major deficiency"** if he/she 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 facility assessor will assign a category a **"minor deficiency"** if he/she 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%.

"**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 if 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.

In June of 1971, the Board of Public Works (BPW) established the Interagency Committee on School Construction (IAC), 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 Department of General Services (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 Local Education Agency (LEA) submit a Comprehensive Maintenance Plan (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 Capital Debt Affordability Committee (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 fiscal year (FY) 2007 and hired two full-time maintenance inspectors with experience in the fields of building maintenance, operations, and construction to conduct approximately 220 to 230 school assessments in the 24 school systems per year, as well as reassessments of schools assessed in a prior fiscal year that received ratings of *Not Adequate* or *Poor*.[1]

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

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

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

- Continued to strengthen the alignment between the maintenance-assessment program and the annual Public School Construction 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 facility condition index (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 HB 1783 in 2018, the IAC began developing and testing with LEA input a new Maintenance-Effectiveness Assessment (MEA) that was implemented for FY 2021 to replace the maintenance inspections. The new MEA is based upon a more stringent rubric that greatly reduces the subjectivity of the assessments. See page 10 below for a description of the new MEA.

Facilities are not set-and-forget assets. Every facility requires maintenance on a virtually 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 (formerly the Association of Physical Plant Administrators) 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 full-time equivalents (FTE):

| | |
|---|---|
| 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 |

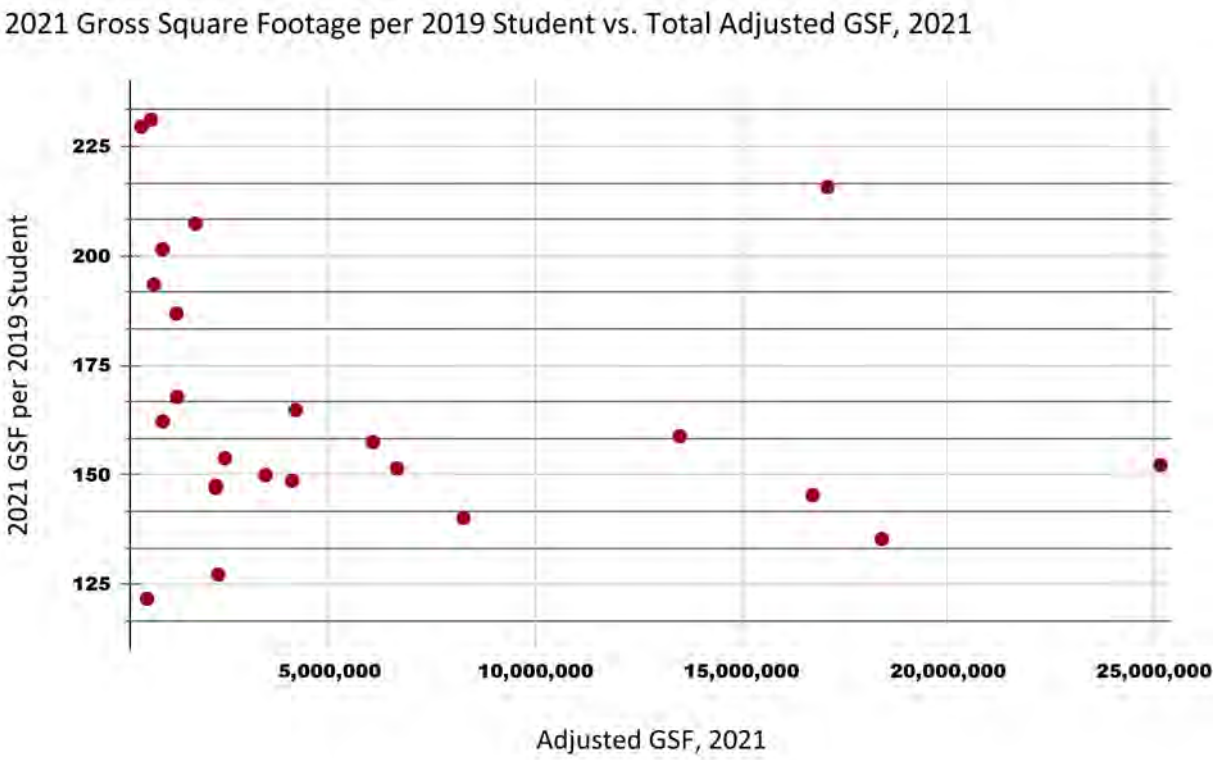
In addition to general staffing, however, there are many preventive and reactive maintenance activities that must be performed to keep building systems in good condition, and these often involve significant staffing, parts, materials, and/or contracted labor. For this reason, operations, maintenance, and capital maintenance budgets must accommodate far more than only the costs of general staffing. Industry standards supported by APPA, the International Facilities Management Association (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 current facility replacement value (CRV) |
| Capital Maintenance (system renewal) | 2% of current facility replacement value (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.

Maryland does not yet have robust and statewide comparable data on the condition and educational sufficiency of its PK-12 school facilities, although this will be resolved when the statewide facilities assessment is completed in late 2021 based upon the IAC's Educational Facilities Sufficiency Standards. The Standards provide a measuring stick for the uniform assessment of existing public school facilities with regard to capacity, physical attributes, and educational suitability. This assessment should provide valuable insight into the understanding of the physical needs of Maryland school facilities 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 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 2021, Maryland's LEAs operated more than 141 million gross square feet of educational space to serve about 909,000 PK-12 students,[2] for a statewide average of about 156 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 156.




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.

2 To exclude the effects of the COVID-19 pandemic, this figure draws from the audited PK-12 enrollment figures from September 2019 as compiled by the Maryland State Department of Education.

Because funding for capital maintenance is limited, it is important that the local board's Educational Facilities Master Plan (EFMP), CMP, and annual Capital Improvement Program (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 computerized maintenance management systems (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. However, there remains a growing need for the State to leverage its resources to support the LEAs with facilities-management tools such as a cloud-based CMMS, comparable facilities-condition indexes, adequate facilities-ownership cost accounting, provision of post-occupancy evaluations, performance benchmarks, direct technical support, and the sharing of best practices.

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 Maintenance-Effectiveness Assessment (MEA) and implemented it for FY 2021. The new MEA differs significantly from the old MEA in that it:

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

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

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

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

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

In the course of the FY 2021 implementation of the new 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 new MEA to deliver much greater value to those LEAs than the IAC's previous maintenance assessments. The IAC looks forward to a continuing feedback loop that will carry additional LEA ideas and suggestions back to the IAC for evaluation and consideration as part of the IAC's adherence to the principle of continuous improvement.

**The Assessment Rubric**

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

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

The Rubric also includes the following 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. As an example, the following are the criteria for the rating levels within the category of Plumbing Fixtures and Equipment:

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

After the assessor walks the facility and examines the grounds, the structure, and the spaces and building components within them, the assessor uses his or her trained professional judgment and the rubric to assign a rating to each category.[3] Each rating has a factor as follows:

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

The IAC's software[4] 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.[5]

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

3 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.

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

5 For more detail about the school-selection process, see Overview of FY 2021 Assessment Results on page 16.

During FY 2021, the Assessment & Maintenance (A&M) Group of the IAC's Field Operations Division included a team of three full-time maintenance-effectiveness assessors under the leadership of the A&M Group Manager and supported by a team administrative support professional. In conducting a total of 268 maintenance-effectiveness assessments between July 2020 and May 2021, 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 schools 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 Computerized Maintenance Management System (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 preventive-maintenance (PM) tasks based upon 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 a member of the school staff. The assessor examined the components and systems of the buildings, listed above on page 11. Based upon his or her 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 his or her comments and ratings on the IAC's web-based assessment form and attached photos taken during the assessment.

The IAC's assessors 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 high score.

**After the Site Visit**

Once the assessor completed the site visit, he or she reviewed his notes and documentation as needed, completed the Preliminary Assessment Report, and submitted it to the A&M Group Manager for review. The Group Manager reviewed the report, coordinated with the assessor as needed to refine or adjust the report contents, and approved the report. The 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 Report, the LEA had 15 calendar days in which to provide responses on any issues that the assessor marked for a required response. Such issues could include building-system categories that received a rating of Poor or Not Adequate as well as any Major or Minor Deficiencies. The LEA had the option of requesting the removal of score penalties for any Major or Minor Deficiencies assessed in the report. If the A&M Group Manager found that the LEA had timely provided sufficient evidence under the IAC's guidelines that the deficiency had been remediated or was in the process of being remediated, the IAC could reduce or remove the negative score impact of that deficiency.

As described in the section below on the results of the FY 2021 MEAs, the LEAs accrued a total of 974 minor deficiencies — an average of 3.6 per assessed school — and 5 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 facilities needs.

The staff of the IAC continues to evolve as the agency augments its capacity to provide technical assistance to LEAs pursuant to HB 1783 which passed in 2018. At the end of FY 2021, a Lead Facility Assessor was added to the A&M Group, which will permit the IAC to provide additional support to LEAs through the MEA process.

The Interagency Commission on School Construction (IAC) is reporting on 268 Maintenance-Effectiveness Assessments (MEAs) performed in FY 2021 representing 19% of Maryland's PK-12 public school facilities.[6] In selecting facilities to assess during FY 2021, the IAC first prioritized the school facilities scheduled for assessment in FY 2020 but that were not assessed due to restrictions on access imposed from March through June 2020 due to the COVID-19 pandemic. Next, the IAC prioritized those 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 at least two facilities in each LEA.

Table A below provides a summary of the maintenance-effectiveness results for each LEA from FY 2021. Specifically, the table shows the average overall rating from the facilities assessed along with the corresponding rating level and the total numbers of major and minor deficiencies found and not remediated by the LEA.

***IMPORTANT NOTE FOR FY 2021:*** The assessment implemented in FY 2021 differs significantly from that of past years. Prior to FY 2021, the rating scale (Poor, Not Adequate, Adequate, Good, and Superior) was not tied to outcome levels in terms of building-system or facility longevity. As a result, an assessor's assignment of a rating level to a given facility was overly subjective and not easily comparable or logically relative to other facilities. In FY 2021, the new rating levels in the MEA were established with Adequate being calibrated to reflect maintenance effectiveness that should be sufficient to maintain the expected functionality of the facility for educational purposes and achieve the expected lifespans for the major building systems and the facility overall. Under this calibration, the minimum acceptable rating is that which achieves the needed facility functionality and longevity, and therefore the minimum desired rating is Adequate. In addition, the new MEA included Minor and Major Deficiencies that were not included in the previous assessments.

Because of these significant changes, the ratings resulting from the FY 2021 MEA are not comparable to those earned by LEAs in past years. On average, many facilities that received a rating of Good under the previous assessments will receive a rating of Adequate under the new MEA. This should not be generally interpreted as reflecting a decline in maintenance effectiveness. LEAs' average overall ratings under the FY 2021 MEA were an average of 10.9% lower than those in FY 2020 under the previous assessment.

***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 2020, every LEA's average overall rating in FY 2021 decreased, with an average downward shift of 11%.[7] The FY 2021 data shows the following:

- The statewide average maintenance-effectiveness rating by facility was 73.88%, which falls within the Adequate range under the IAC's rating system.
- 21 of 24 — or 88% — of LEAs earned an average overall maintenance-effectiveness rating of Adequate or better. Four LEAs earned a rating of Good, which indicates maintenance effectiveness that is likely to extend the lifespans of building systems beyond the expected lifespans.
- 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 five 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.

6 Individual school reports are available upon request.

7 In FY 2021, for the 268 facilities assessed, the average LEA overall facility score was 74.14% with a standard deviation of 4.252 versus 85.08% with a standard deviation of 4.125 for the 260 facilities assessed in FY 2020 .

## Table 1: Summary of Maintenance-Effectiveness Assessment Results

| | LEA Characteristics in FY21 | | | FY21 Maintenance Assessment Results | | | | |
|---|---|---|---|---|---|---|---|---|
| LEA | Total # of School Facilities | Total Square Footage | Average Adjusted Age of Schools | # of Schools Assessed | LEA Average Rating | | # of Deficiencies Major | # of Deficiencies Minor |
| TOTALS | 1377 | 141,918,669 | 30 | 268 | 73.88% | Adequate | 5 | 974 |
| Allegany | 22 | 1,749,398 | 34.3 | 4 | 72.17% | Adequate | 0 | 19 |
| Anne Arundel | 121 | 13,847,996 | 28.2 | 4 | 79.81% | Good | 0 | 1 |
| Baltimore City | 149 | 16,885,420 | 37.0 | 43 | 69.15% | Not Adequate | 1 | 290 |
| Baltimore Co | 165 | 16,846,193 | 31.9 | 5 | 72.85% | Adequate | 0 | 25 |
| Calvert | 26 | 2,463,800 | 23.4 | 7 | 73.74% | Adequate | 0 | 17 |
| Caroline | 10 | 952,622 | 23.4 | 2 | 72.99% | Adequate | 0 | 5 |
| Carroll | 40 | 4,176,741 | 30.3 | 12 | 70.59% | Adequate | 0 | 54 |
| Cecil | 29 | 2,242,569 | 29.0 | 12 | 75.44% | Adequate | 0 | 17 |
| Charles | 39 | 4,091,386 | 28.6 | 13 | 73.35% | Adequate | 0 | 37 |
| Dorchester | 14 | 949,120 | 33.5 | 3 | 81.72% | Good | 0 | 4 |
| Frederick | 68 | 6,814,336 | 27.1 | 40 | 82.72% | Good | 0 | 14 |
| Garrett | 13 | 741,671 | 33.0 | 3 | 71.24% | Adequate | 0 | 10 |
| Harford | 53 | 6,137,963 | 30.1 | 12 | 77.56% | Adequate | 0 | 12 |
| Howard | 76 | 8,250,880 | 19.6 | 15 | 76.41% | Adequate | 0 | 21 |
| Kent | 5 | 440,226 | 42.8 | 2 | 72.57% | Adequate | 0 | 1 |
| Montgomery | 209 | 25,107,150 | 24.1 | 7 | 75.31% | Adequate | 0 | 24 |
| Prince George's | 196 | 18,399,159 | 38.3 | 42 | 66.49% | Not Adequate | 4 | 306 |
| Queen Anne's | 14 | 1,302,733 | 20.0 | 5 | 68.20% | Not Adequate | 0 | 40 |
| St. Mary's | 27 | 2,300,101 | 24.6 | 4 | 71.15% | Adequate | 0 | 25 |
| Somerset | 10 | 671,356 | 20.3 | 3 | 69.62% | Adequate | 0 | 17 |
| Talbot | 7 | 572,216 | 19.5 | 2 | 72.39% | Adequate | 0 | 5 |
| Washington | 46 | 3,447,181 | 34.0 | 16 | 78.26% | Adequate | 0 | 7 |
| Wicomico | 24 | 2,242,600 | 28.4 | 9 | 79.59% | Good | 0 | 9 |
| Worcester | 14 | 1,285,852 | 25.6 | 3 | 76.09% | Adequate | 0 | 14 |

**INTERAGENCY COMMISSION ON SCHOOL CONSTRUCTION**
**LEA MAINTENANCE EFFECTIVENESS REPORT**

Updated 8/27/21

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

- Of the five unremediated Major Deficiencies, three were in the area of site and two pertained to roofs. The former related primarily to life/safety issues, such as damaged play equipment that could injure users and site flooding due to clogged drains. The latter represented roof deficiencies that posed a threat to the condition of other building systems and to the longevity of the building.
- Of the Minor Deficiencies assessed, 31.3% pertained to Site; 30.5% pertained to Building Equipment & Systems; 20% pertained to Building Interiors; and 17.1% pertained to Building Exteriors. 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 2: Major and Minor Deficiencies by Category**

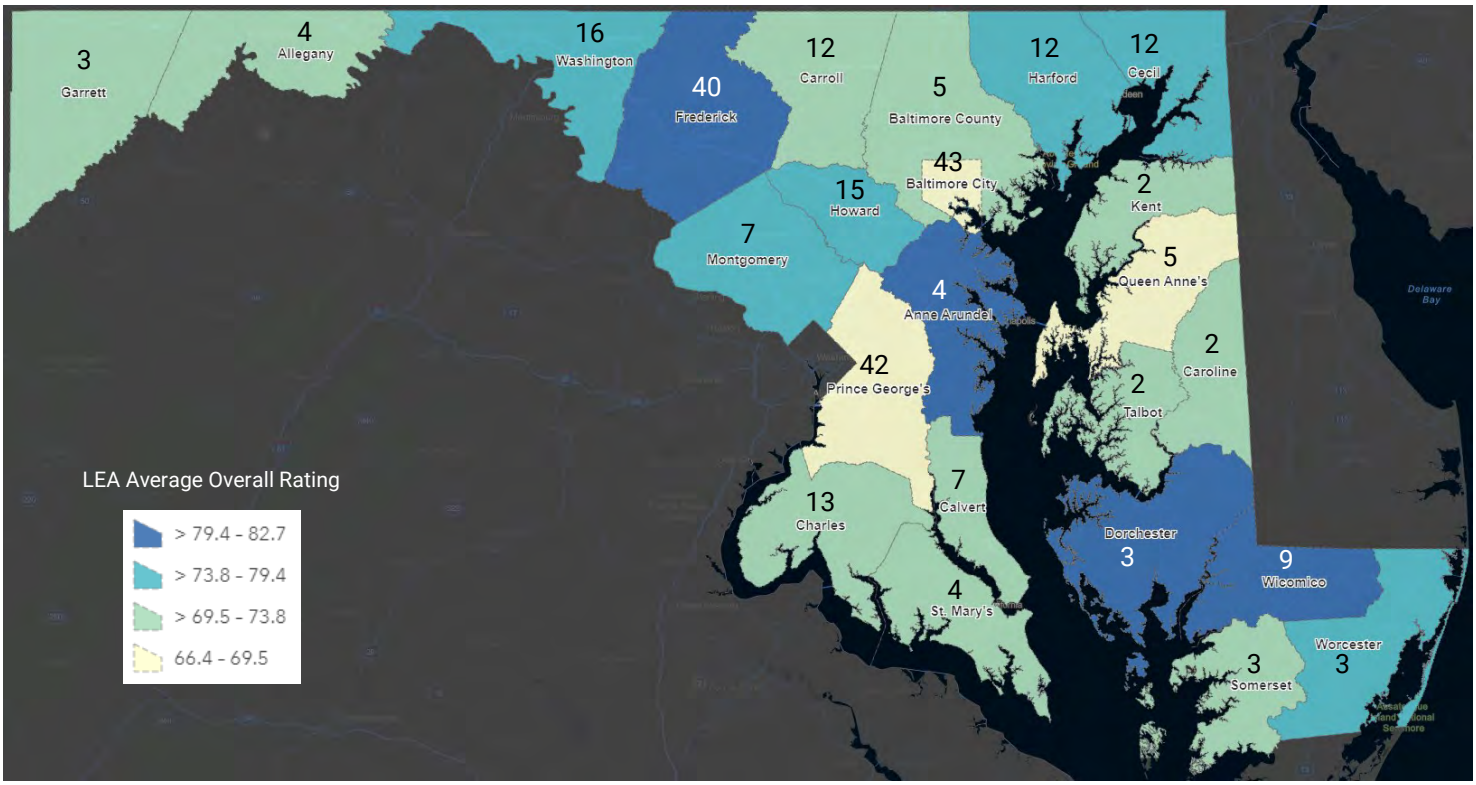
| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 113 |
| | Grounds | 1 | 50 |
| | Positive Site Drainage Away from Structure(s) | 0 | 46 |
| | Playgrounds, Equipment, & Fields | 2 | 63 |
| | Relocatables & Additional Structures | 0 | 33 |
| | ***Site Subtotals*** | ***3*** | ***305*** |
| Building Exterior | Exterior Structure & Finishes | 0 | 60 |
| | Roof Drains, Gutters, & Downspouts | 1 | 16 |
| | Windows, Caulking, & Skylights | 0 | 28 |
| | Entryways & Exterior Doors | 0 | 24 |
| | Roofs, Flashing, and Gravel Stops | 1 | 39 |
| | ***Building Exterior Subtotals*** | ***2*** | ***167*** |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 43 |
| | Floors | 0 | 22 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 40 |
| | Ceilings | 0 | 53 |
| | Interior Lighting | 0 | 37 |
| | ***Building Interior Subtotals*** | ***0*** | ***195*** |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 72 |
| | Electrical Distribution & Service Equipment | 0 | 37 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 40 |
| | Plumbing Fixtures and Equipment | 0 | 49 |
| | Fire and Safety Systems & Utility Controls | 0 | 65 |
| | Conveyances | 0 | 35 |
| | ***Building Equipment & Systems Subtotals*** | ***0*** | ***298*** |
| Maintenance Management | Preventive Maintenance (PM) Plan | 0 | 1 |
| | Computerized Maint. Mgmt. System (incl. Equip. Data) | 0 | 1 |
| | Pest Management | 0 | 5 |
| | Custodial Scope of Work (SoW) | 0 | 2 |
| | ***Maintenance Management Subtotals*** | ***0*** | ***9*** |
| | **Total** | **5** | **974** |

The specific ratings of schools assessed in each school district are shown on the FY 2021 Results: Summary of School Ratings pages in the district-by-district overview section starting on page 22. Of the 268 schools rated in FY 2021,

- 2 schools (0.7%) were rated Superior;
- 61 schools (22.7%) were rated Good;
- 131 schools (48.9%) were rated Adequate;
- 72 schools (26.9%) were rated Not Adequate; and
- 2 schools (0.7%) 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 2021 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, four LEAs (in dark blue) received overall ratings of Good. Seventeen LEAs received overall ratings of Adequate, six of which (in light blue) are above the Statewide average and eleven of which (in green) are below. Three LEAs (in yellow) received overall ratings of Not Adequate.

# FISCAL YEAR 2021: Statewide Summary

**1,377 schools**

In FY 2021, the State of Maryland had 1,377 active schools.

**- 3 schools since FY20.**

**30 years old**

The average adjusted age of all 1,377 schools is 30 years old.

**No change since FY20.**

**~ 142 M GSF**

Maryland maintains 141,918,669 square feet throughout its 24 LEAs.

**+ 1,858,112 SF since FY20.**

**> $60 B**

The current replacement value for all of Maryland's ~142M GSF, at the IAC's current replacement cost/SF, is more than $60B.

**+ $7.6B since FY20.**

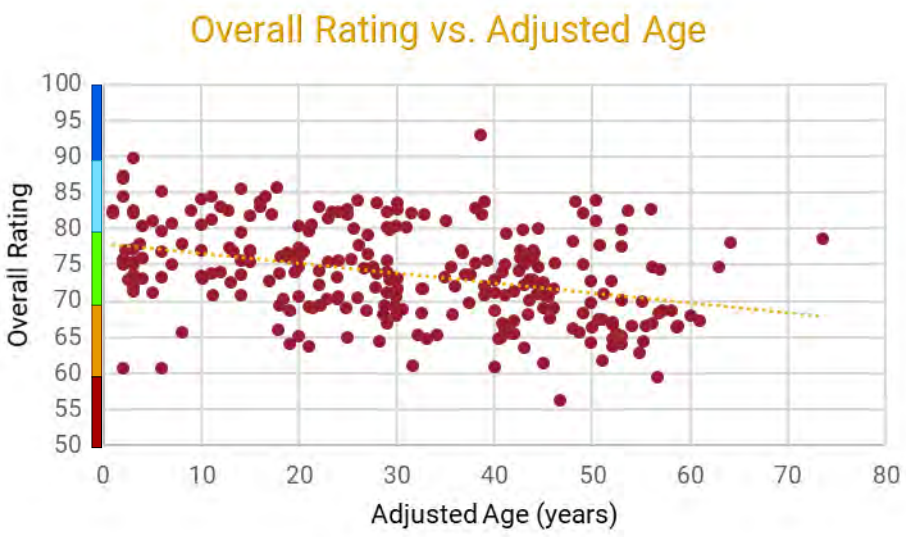
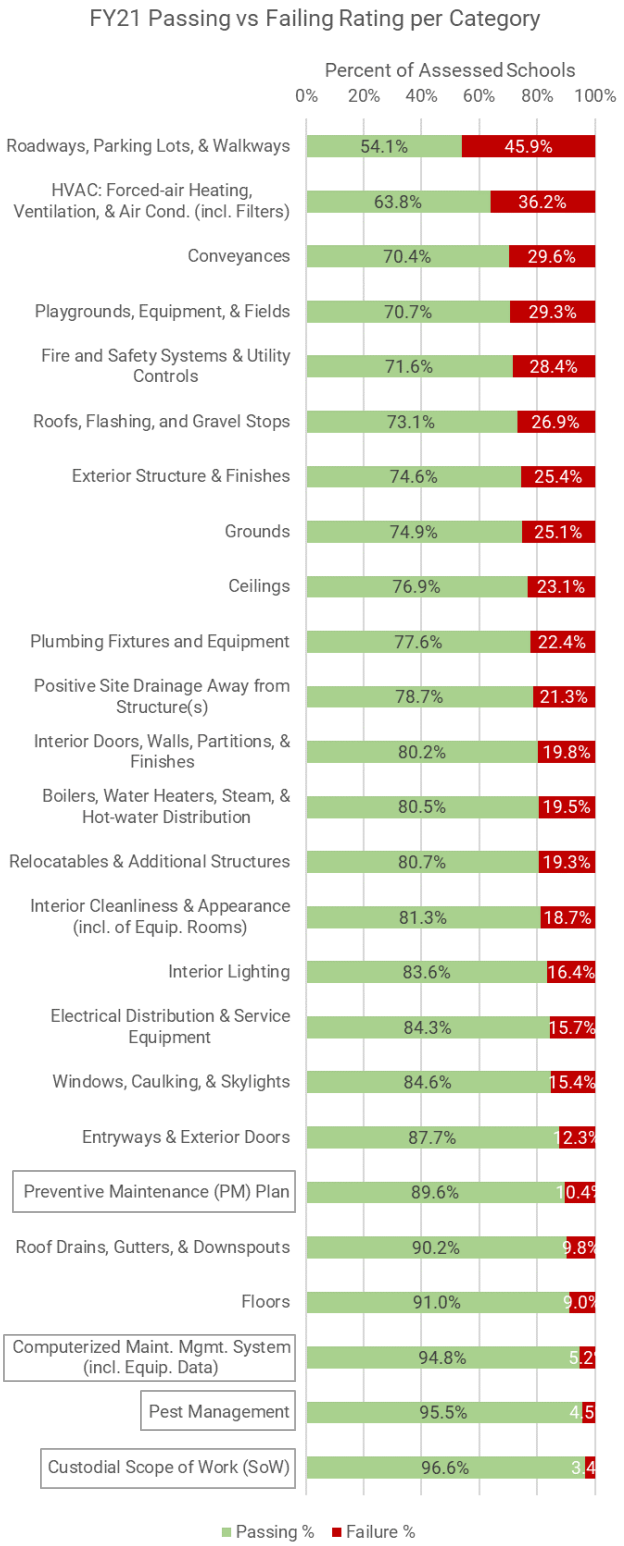



**Figure 2: Overall Rating vs. Adjusted Age**

The scatterplot above 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 within each adjusted age range, with overall ratings commonly varying by as much as 20-30 percentage points for a given adjusted age range.

The following chart shows by building-system category the percentage of assessed schools that achieved passing ratings of Adequate or better and the percentage that achieved failing ratings of Not Adequate or Poor. Schools 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.




## Strengths

- Interior Lighting: It appears that, as schools transition to LED fixtures, the interior lighting becomes easier to maintain. Nineteen schools earned a Superior rating in Interior Lighting, the most Superiors of any category. 83.6% of schools received a passing rating.
- Floors: Only two schools received a Not Adequate rating in Floors and no schools were rated Poor. Outside of the Maintenance Management categories, Floors has the highest passing rate with 91% of schools earning a passing rating.
- Roof Drains, Gutters, & Downspouts: While roofs appear to be difficult for many LEAs to maintain, the roof drains, gutters, and downspouts appear to be one of the most consistently maintained areas of schools. 90.2% of schools received a passing rating for this category in FY 2021.

## Weaknesses

- CMMS Usage: Although most LEAs received high overall ratings in the area of Maintenance Management, assessors found that most of the LEAs are not making full use of key functionalities of their computerized maintenance management systems (CMMS) to ensure that needed maintenance activities are performed and that asset-repair costs are tracked and repair histories are maintained.
- Roadways, Parking Lots, & Walkways: These assets appear to be the least consistently maintained within the LEAs, with 45.9% of schools receiving a failing rating for this category.
- HVAC Systems: The second-highest percentage of failing ratings occurred in the critical area of HVAC systems. Due to the relatively high cost of HVAC systems, the deferral of HVAC system maintenance can result in costly premature replacements.
- Playgrounds, Equipment, & Fields: It is notable that, despite the widespread use by communities of the playgrounds and fields of PK-12 schools, nearly a third of schools received a failing rating for this category.

**Figure 3: FY 2021 Passing vs. Failing Rating per Category**

Across the body of 268 schools assessed, 22.4% of the building-system categories received a failing rating. This result shows that, within the schools assessed during FY 2021, nearly a quarter 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 3.65 Deficiencies per school assessed.

# ALLEGANY COUNTY

**Total Schools Assessed in FY 2021: 4**


Center For Career & Technical Education

## FISCAL YEAR 2021: KEY FACTS

**22 schools**

Allegany County has 22 active schools.

**+ 1 school since FY20.**

**34.3 years old**

The average adjusted age of all 22 schools is 34.3 years old.

**- 1.8 years since FY20.**

**> 1.7 M GSF**

Allegany County maintains 1,749,398 square feet throughout its 22 schools. It is the 16th largest LEA in Maryland.

**+ 145,442 SF since FY20.**

**> $0.7 B**

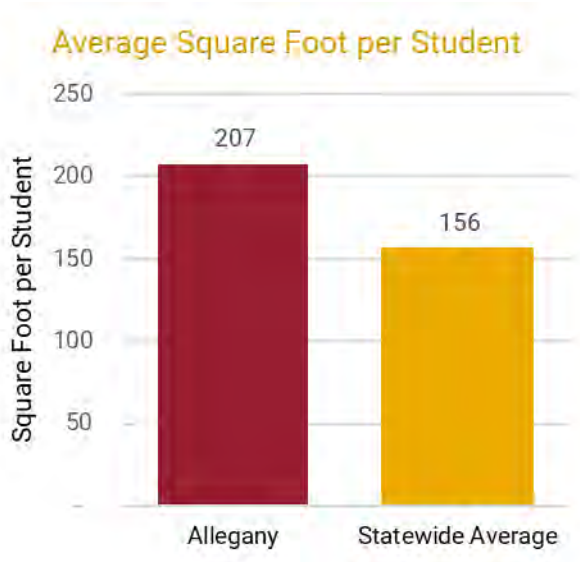
The current replacement value for Allegany County's >1.7M GSF, at the IAC's current replacement cost/SF, is more than $0.7B.

**+ $140M since FY20.**

**72.17 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Alternate | Elementary | Middle | High | Career Tech | |
|---|---|---|---|---|---|---|
| **Superior** | | | | | | |
| **Good** | | | | | | |
| **Adequate** | 1 | 1 | | 1 | | 3 |
| **Not Adequate** | | | | | 1 | 1 |
| **Poor** | | | | | | |
| Totals | 1 | 1 | | 1 | 1 | **4** |

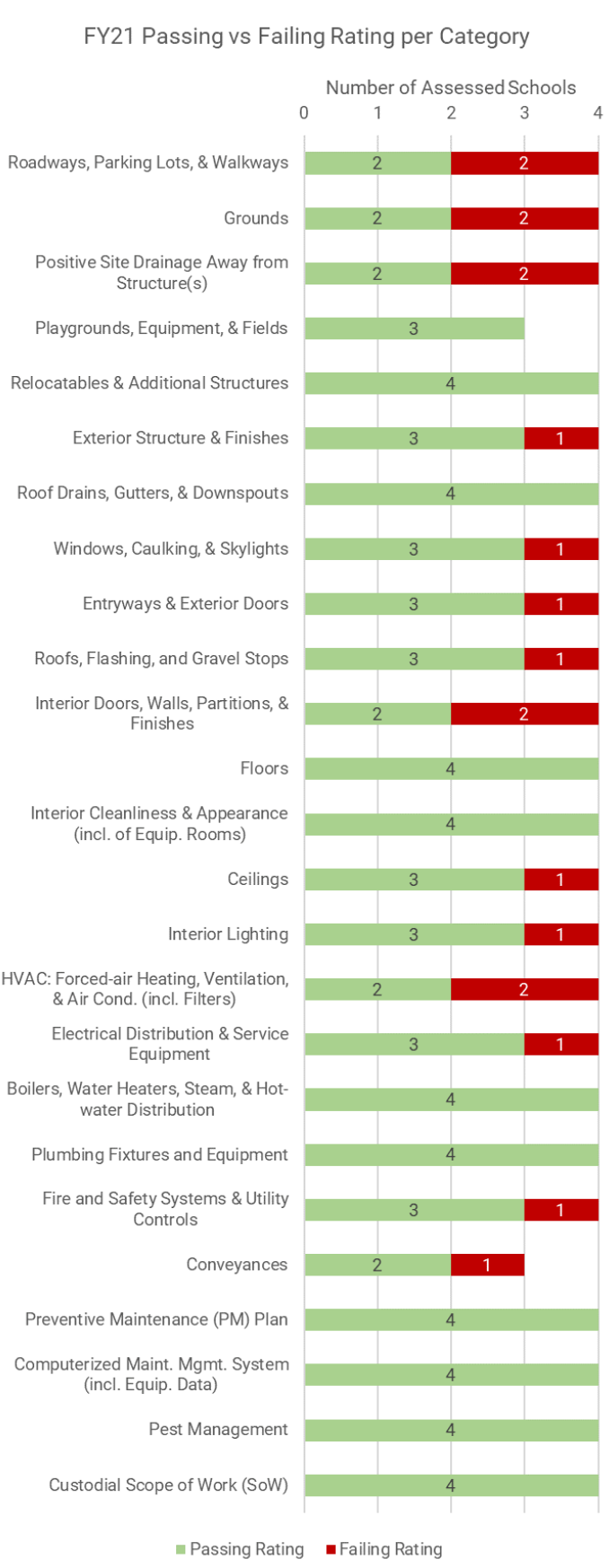


# ALLEGANY COUNTY

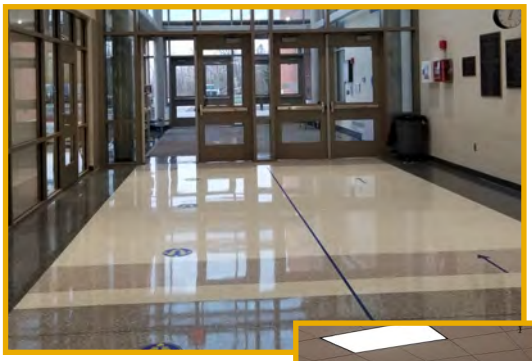
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Eckhart Alternative (01.013) | Alternate | 26,048 | 46 | Adequate | 0 | 3 | 21 | 0 | 0 |
| 2. Westernport Elementary (01.024) | Elementary | 47,091 | 29 | Adequate | 0 | 4 | 21 | 0 | 0 |
| 3. Center For Career & Technical Education (01.027) | Career Tech | 141,195 | 49 | Not Adequate | 0 | 1 | 23 | 0 | 0 |
| 4. New Allegany High (01.038) | High | 145,442 | 3 | Adequate | 0 | 14 | 11 | 0 | 0 |
| Totals | | | | | 0 | 22 | 76 | 0 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 22% | 78% | 0% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths



The flooring appeared well maintained.

All schools appeared to have competent or above-standard custodial maintenance practices.

The lighting appeared to be maintained on a regular basis. Two schools demonstrated above-average custodial and maintenance efforts.

Regular good custodial and maintenance procedures were found on the relocatables and additional structures.

## Weaknesses

Three schools had wall cracks. One building had a crack visible from both the interior and exterior. A different building had water leaking from the interior walls in the boiler room.

Two schools had cracked or damaged belts or inoperable exhaust fans.

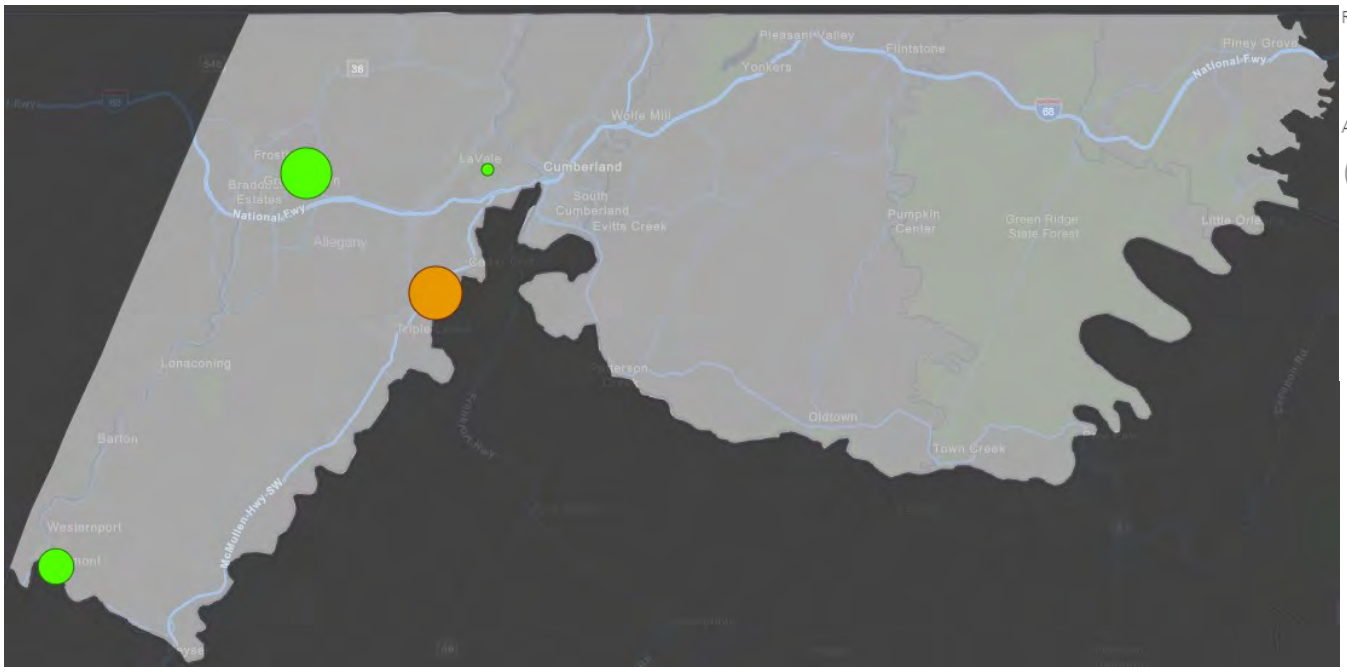
Loose roofing material or flashing were identified at every school.

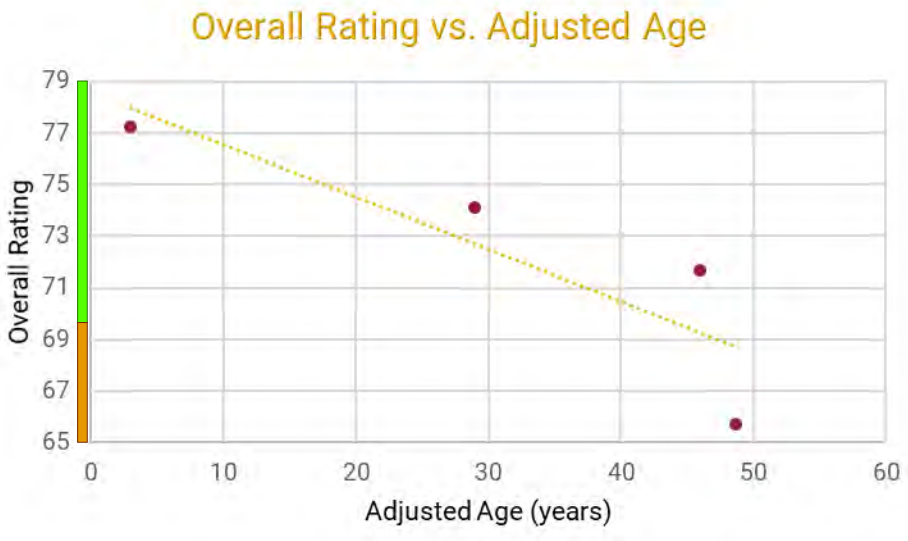
Cracking and deterioration was observed in the parking lots and/or walkways at three schools.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 2 |
| | Grounds | 0 | 2 |
| | Positive Site Drainage Away from Structure(s) | 0 | 2 |
| | Playgrounds, Equipment, & Fields | 0 | 0 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 1 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 1 |
| | Entryways & Exterior Doors | 0 | 1 |
| | 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 | 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 | 1 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 0 |
| | Plumbing Fixtures and Equipment | 0 | 0 |
| | Fire and Safety Systems & Utility Controls | 0 | 1 |
| | Conveyances | 0 | 1 |
| 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** | **19** |

# Overall Rating vs Adjusted Building Age



- Wall cracks should be identified during routine inspections and the computerized maintenance management system (CMMS) utilized to document and track repairs.
- The exhaust fans should be incorporated into the preventive maintenance (PM) plan and work orders should auto-populate in the CMMS.
- Roadways, parking lots, and walkways should receive routine inspections. The CMMS should be utilized for auto-populating PM work orders and follow-up corrective maintenance.
- Plumbing fixtures and equipment should be inspected on a regular basis. The CMMS should be used to manage all reactive-maintenance activities.
- The CMMS should be utilized for tracking inspections and reactive maintenance for the roofs.

# ANNE ARUNDEL COUNTY

**Total Schools Assessed in FY 2021: 4**


Arnold Elementary

## FISCAL YEAR 2021: KEY FACTS

**121 schools**

Anne Arundel County has 121 active schools.

**+ 1 school since FY20.**

**28.2 years old**

The average adjusted age of all 121 schools is 28.2 years old.

**- 2.3 years since FY20.**

**> 13.8 M GSF**

Anne Arundel County maintains 13,847,996 square feet throughout its 121 schools. It is the 5th largest LEA in Maryland.

**+ 526,077 SF since FY20.**

**> $5.9 B**

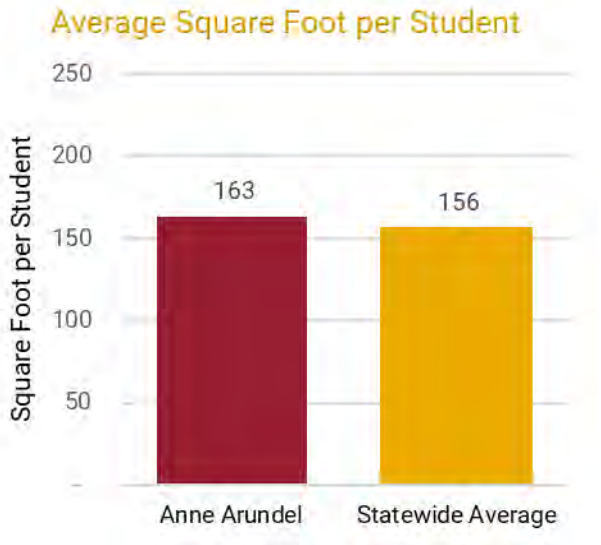
The current replacement value for Anne Arundel County's >13.8M GSF, at the IAC's current replacement cost/SF, is more than $5.9B.

**+ $877M since FY20.**

**79.81 (Good) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

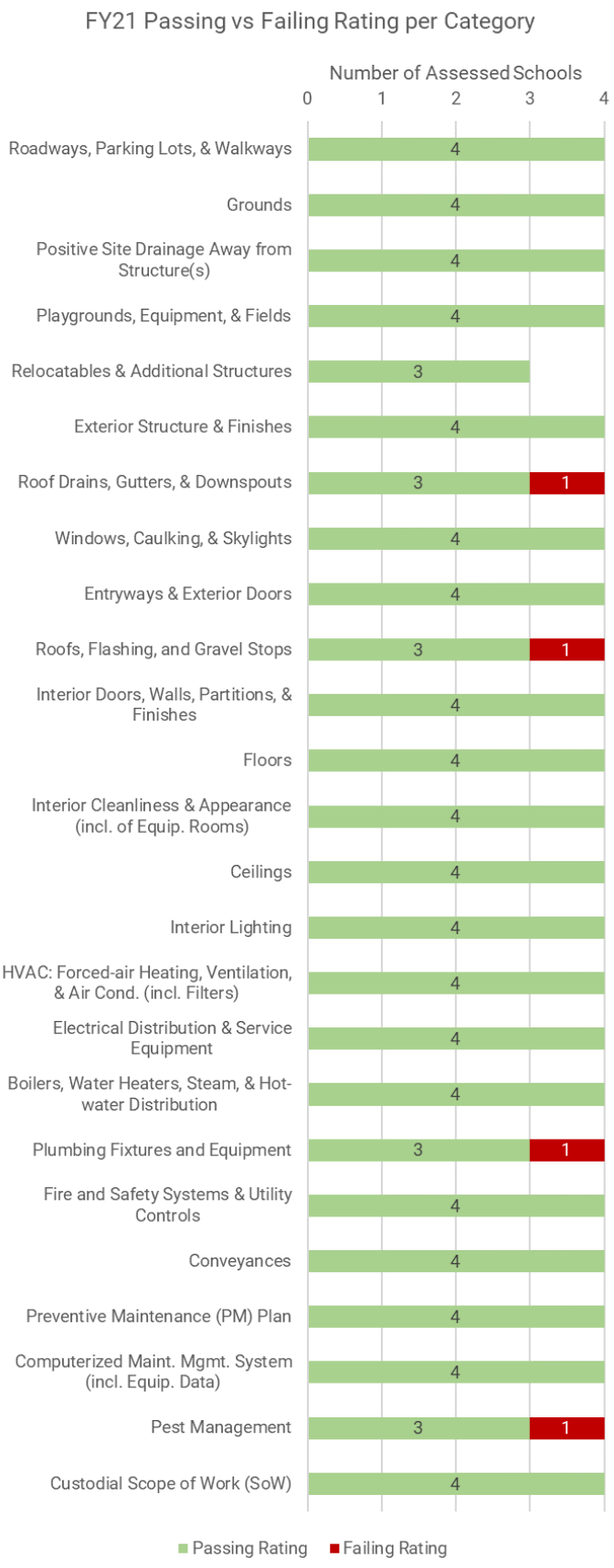
| | Elementary | Middle | High | |
|---|---|---|---|---|
| **Superior** | | | | |
| **Good** | 2 | | | 2 |
| **Adequate** | 2 | | | 2 |
| **Not Adequate** | | | | |
| **Poor** | | | | |
| Totals | 4 | | | **4** |



## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Lothian Elementary (02.024) | Elementary | 84,588 | 5 | Good | 0 | 16 | 9 | 0 | 0 |
| 2. Glen Burnie Park Elementary (02.073) | Elementary | 70,633 | 37 | Adequate | 0 | 8 | 16 | 1 | 0 |
| 3. Arnold Elementary (02.106) | Elementary | 89,253 | 1 | Good | 2 | 15 | 7 | 0 | 0 |
| 4. Crofton Woods Elementary (02.115) | Elementary | 86,758 | 27 | Adequate | 0 | 16 | 7 | 2 | 0 |
| Totals | | | | | 2 | 55 | 39 | 3 | 0 |
| Percentage of Total Ratings for System | | | | | 2% | 56% | 39% | 3% | 0% |

## FY 2021 Results: Assessment Findings by Category



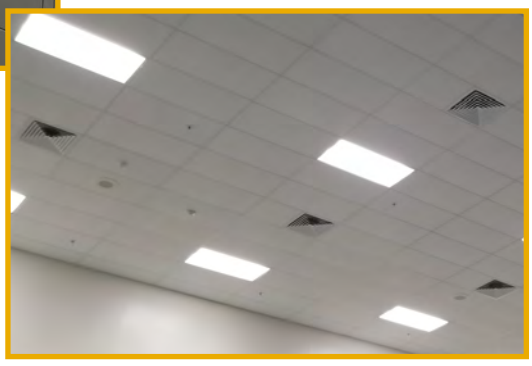

## Strengths

Windows were in good working condition and appeared to be well maintained.

All schools appeared to have bright and clean floors as well as clean and well-maintained carpeted areas. One school earned a Superior rating for Floors.

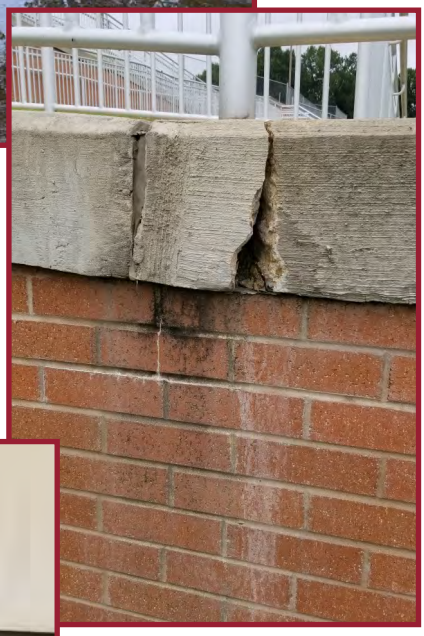

The majority of schools appeared to have well-maintained electrical equipment that was properly labeled and locked. Access to the equipment was unobstructed.

The majority of ceilings were stain-free and well maintained.



## Weaknesses

One school assessed had improper grading along the front and rear of the building, preventing water from draining correctly. Damaged sealant between walking surfaces and buildings was also identified in several locations.



Exterior structure cracks and/or degraded mortar joints were identified in at every facility. Damaged sealant and stained exterior walls were also identified.

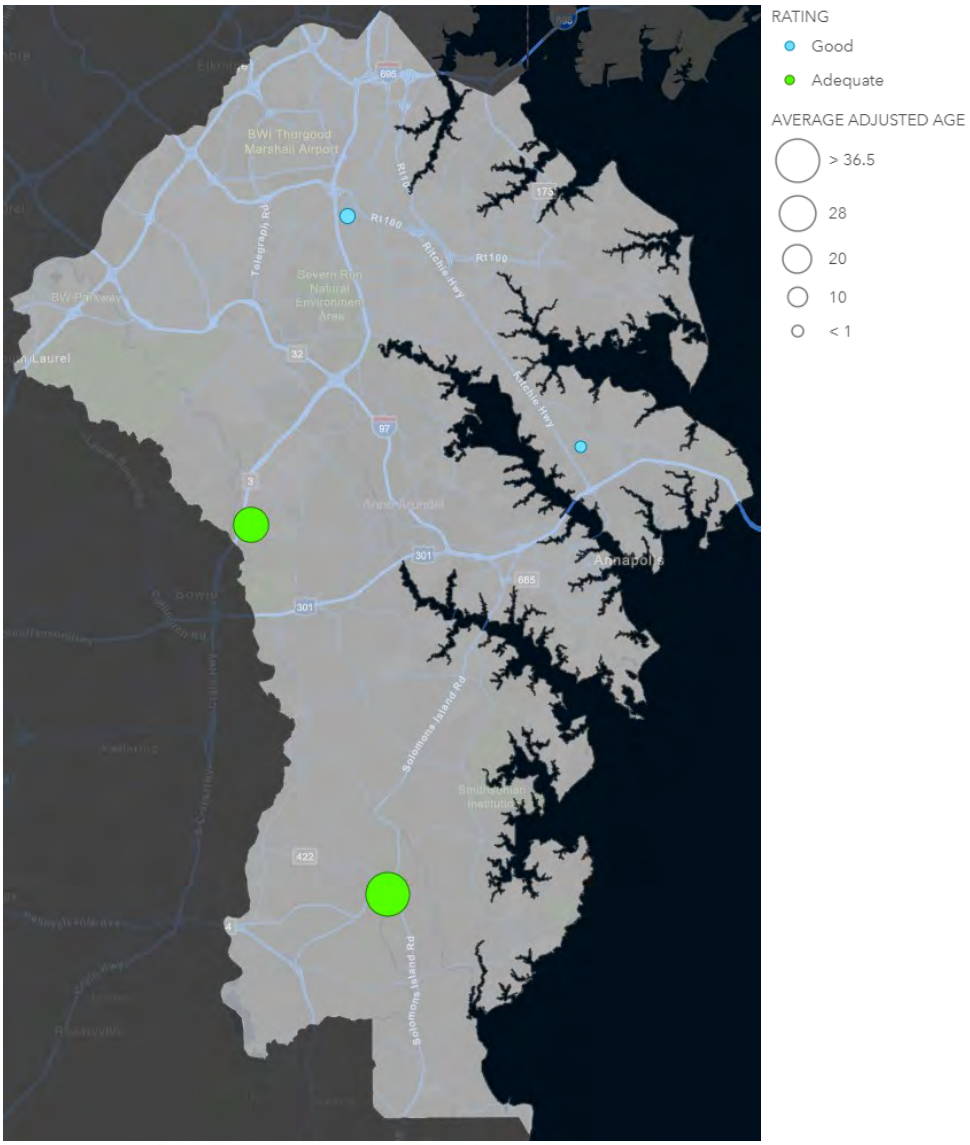
One school did not have any pest management inspections within the last 12 months.

The roofs at one school had blistering, deteriorating membrane, and excessive gravel buildup.

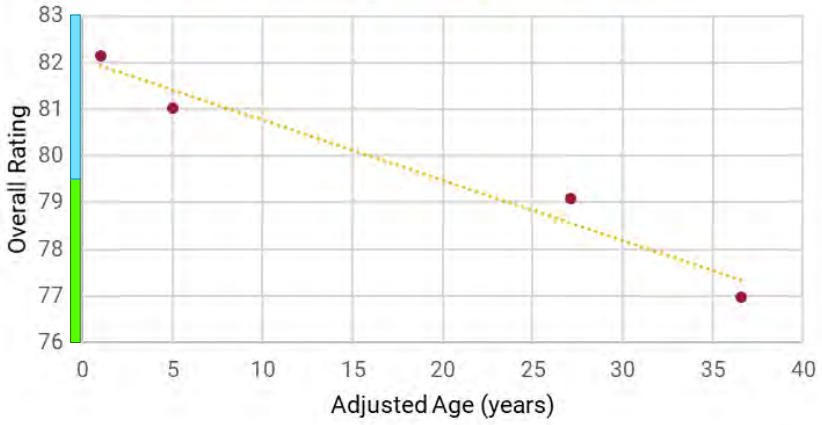
## FY 2021 Results: Summary of Deficiencies by Category

| | 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 | 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 |
| | **Total** | **0** | **1** |

# Overall Rating vs Adjusted Building Age




## Overall Rating vs. Adjusted Age



- Exterior wall cracking and damaged sealant should be repaired to prevent further deterioration. Crack monitors should be considered for tracking the growth and further expansion of cracks.
- Site drainage should be evaluated on a regular basis to ensure that water is being diverted away from buildings and walking surfaces.
- Additional information populated into the computerized maintenance management system (CMMS) may help prevent recurring work orders for roof leaks in specific areas.
- Industry best practices are to use the CMMS for scheduling, tracking, and storing inspection reports related to pest management.
- Additional training for on-site staff on utilizing the CMMS to enter and track work orders may be needed to ensure deficiencies found during inspections are documented.

# BALTIMORE COUNTY

**Total Schools Assessed in FY 2021: 5**


Westowne Elementary

## FISCAL YEAR 2021: KEY FACTS

**165 schools**

Baltimore County has 165 active schools.

**+ 1 school since FY20.**

**31.9 years old**

The average adjusted age of all 165 schools is 31.9 years old.

**- 1.5 years since FY20.**

**> 16.8 M GSF**

Baltimore County maintains 16,846,193 square feet throughout its 165 schools. It is the 4th largest LEA in Maryland.

**+ 254,435 SF since FY20.**

**> $7.1 B**

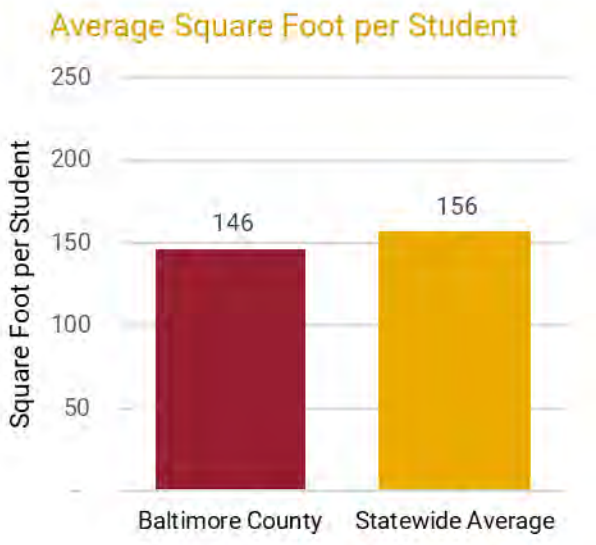
The current replacement value for Baltimore County's >16.8M GSF, at the IAC's current replacement cost/SF, is more than $7.1B.

**+ $921M since FY20.**

**72.85 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

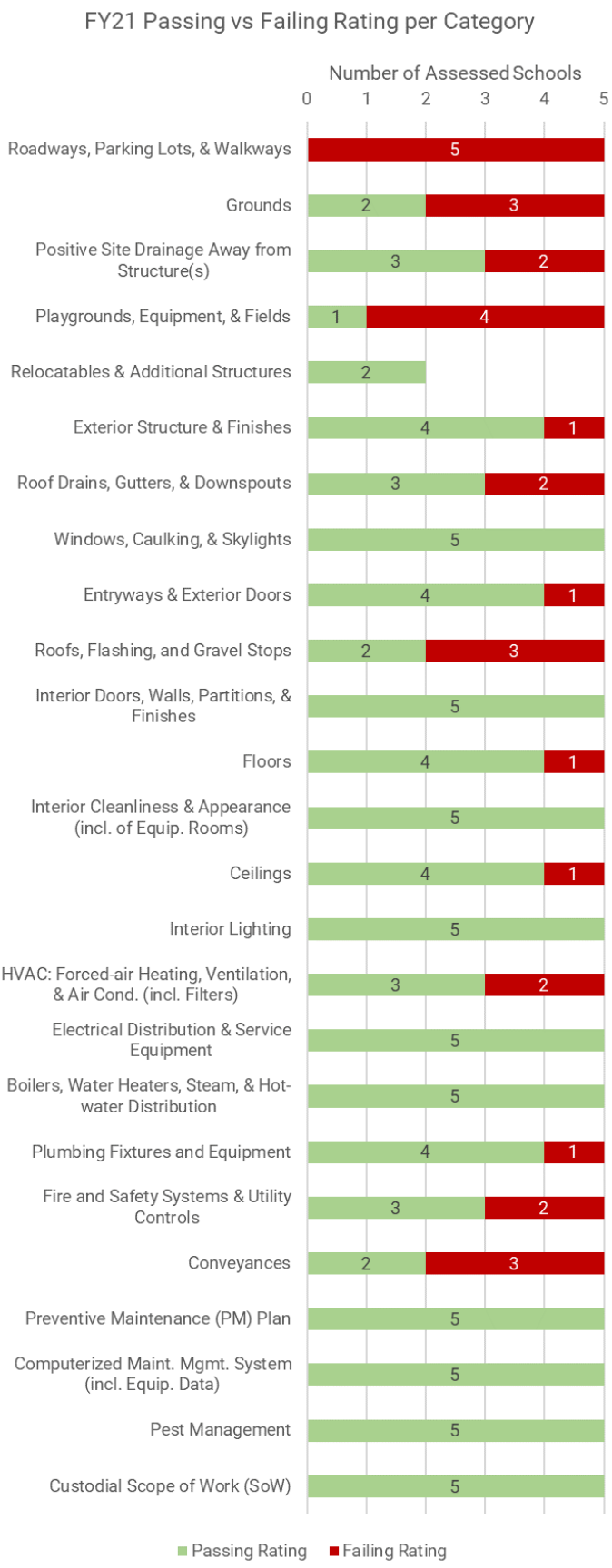
| | Elementary | Middle | High | |
|---|---|---|---|---|
| **Superior** | | | | |
| **Good** | | | | |
| **Adequate** | 4 | | 1 | 5 |
| **Not Adequate** | | | | |
| **Poor** | | | | |
| Totals | 4 | | 1 | **5** |



## FY 2021 Results: Summary of School Ratings

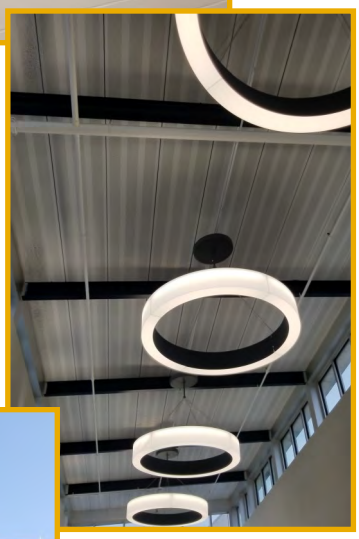
| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Relay Elementary (03.132) | Elementary | 90,040 | 2 | Adequate | 0 | 17 | 6 | 1 | 0 |
| 2. Patapsco High & Center for Arts (03.145) | High | 201,133 | 28 | Adequate | 0 | 9 | 15 | 1 | 0 |
| 3. Westowne Elementary (03.159) | Elementary | 92,853 | 3 | Adequate | 0 | 8 | 14 | 2 | 0 |
| 4. Lyons Mill Elementary (03.216) | Elementary | 92,854 | 4 | Adequate | 0 | 12 | 13 | 0 | 0 |
| 5. Catonsville Elementary (03.217) | Elementary | 103,603 | 3 | Adequate | 0 | 7 | 15 | 2 | 0 |
| Totals | | | | | 0 | 53 | 63 | 6 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 43% | 52% | 5% | 0% |

## FY 2021 Results: Assessment Findings by Category



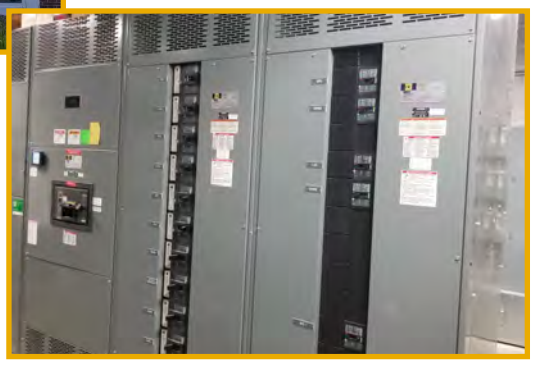

## Strengths

Good custodial care was evident. Baltimore County Public Schools (BCPS) provided a detailed scope of work for interior cleanliness.



The interior lighting was well maintained and functioned properly.

The windows were all operable and well maintained.



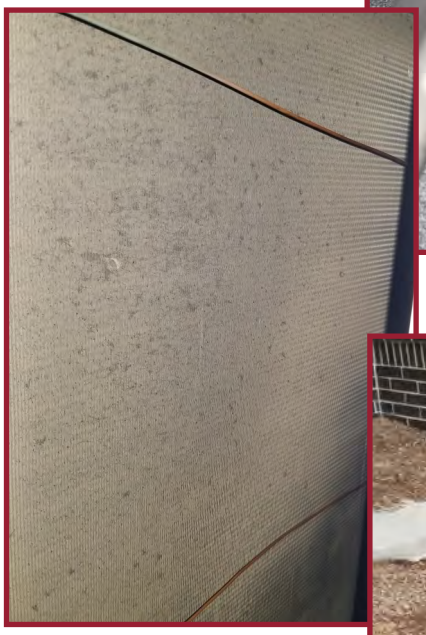
The electrical equipment appeared to be well maintained with clear access to all of the equipment. BCPS participates in the infrared testing program provided through the Maryland Association of Boards of Education.

## Weaknesses

Grounds maintenance was identified as insufficient at three schools. Stormwater retention ponds were observed to be overgrown at four schools.

Multiple issues identified during the LEA's roofing inspections remained active issues at the time of the maintenance-effectiveness assessments.

HVAC problems were present throughout three schools. These problems included incorrect-sized air filters, HVAC units in alarm, and inconsistent room temperatures.

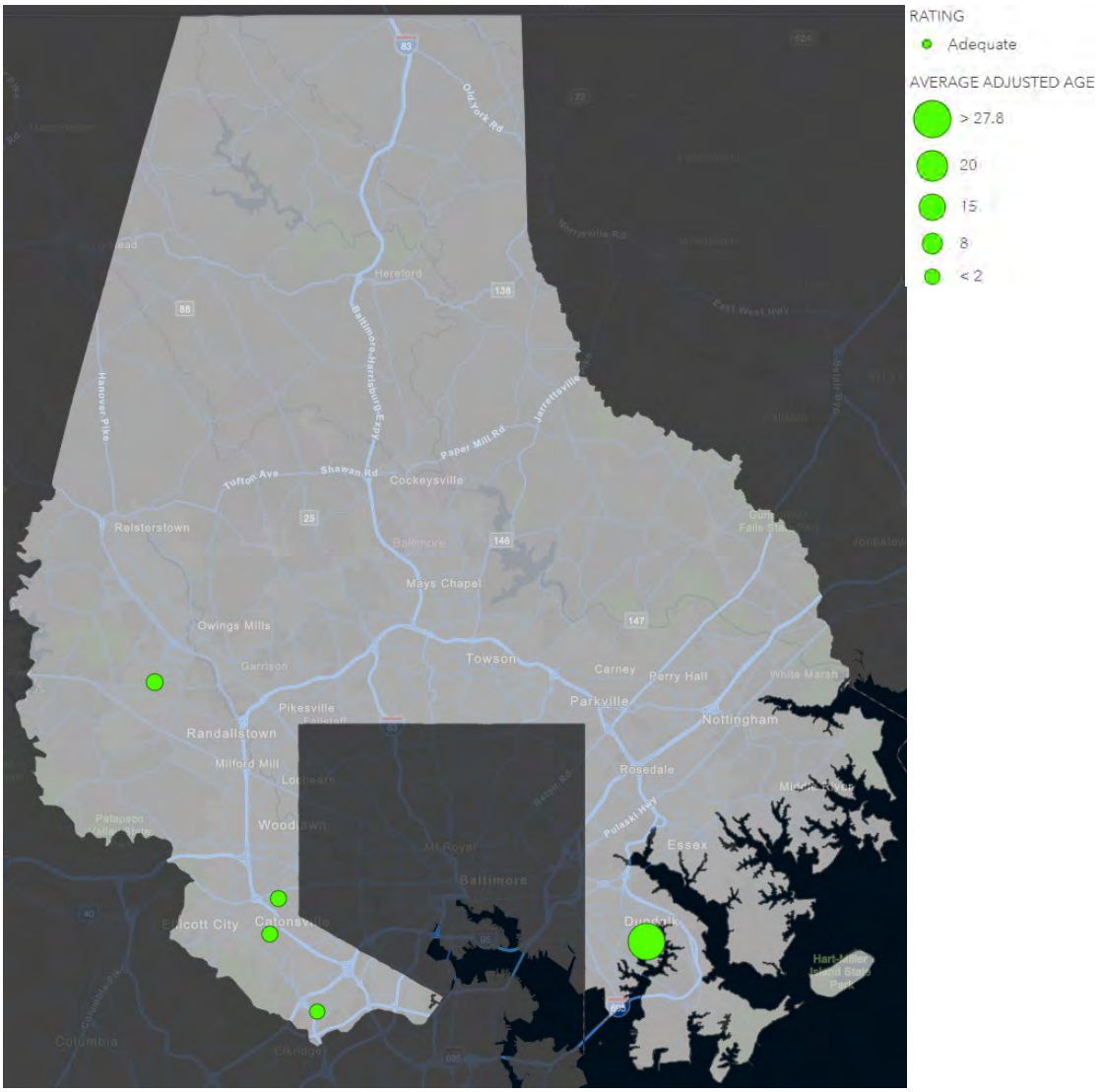


Playground surfaces were cracked with vegetation growth in multiple locations. Ponding water and missing mulch were also identified.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 5 |
| | Grounds | 0 | 2 |
| | Positive Site Drainage Away from Structure(s) | 0 | 2 |
| | Playgrounds, Equipment, & Fields | 0 | 3 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 1 |
| | Roof Drains, Gutters, & Downspouts | 0 | 2 |
| | Windows, Caulking, & Skylights | 0 | 0 |
| | Entryways & Exterior Doors | 0 | 1 |
| | Roofs, Flashing, and Gravel Stops | 0 | 1 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 0 |
| | Floors | 0 | 1 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 0 |
| | Ceilings | 0 | 1 |
| | Interior Lighting | 0 | 0 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 0 |
| | Electrical Distribution & Service Equipment | 0 | 0 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 0 |
| | Plumbing Fixtures and Equipment | 0 | 1 |
| | Fire and Safety Systems & Utility Controls | 0 | 2 |
| | Conveyances | 0 | 3 |
| 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** | **25** |

# Overall Rating vs Adjusted Building Age




- Detailed preventive-maintenance (PM) checks for HVAC equipment should be considered in order to ensure that the equipment is being serviced properly and on a regular basis. HVAC units in alarm or not functioning properly should have work orders entered into the computerized maintenance management system (CMMS).

- School property landscaping, including playgrounds, should be evaluated on a regular basis. Regularly scheduled site services and overgrowth should be tracked using the CMMS to ensure timely correction of issues.

- Deficiencies that are identified during roofing inspections should be tracked using the CMMS. Leaks and other issues identified outside of the roofing inspections should be tracked using the CMMS.

- PM work orders should be issued automatically in the CMMS for each asset tag, rather than a grouping of asset tags, so that issues may be tracked for each individual piece of equipment.

# CALVERT COUNTY

**Total Schools Assessed in FY 2021: 7**


New Calvert Middle

## FISCAL YEAR 2021: KEY FACTS

**26 schools**

Calvert County has 26 active schools.

**No change since FY20.**

**23.4 years old**

The average adjusted age of all 26 schools is 23.4 years old.

**+ 0.8 years since FY20.**

**> 2.4 M GSF**

Calvert County maintains 2,463,800 square feet throughout its 26 schools. It is the 12th largest LEA in Maryland.

**+ 17,717 SF since FY20.**

**> $1 B**

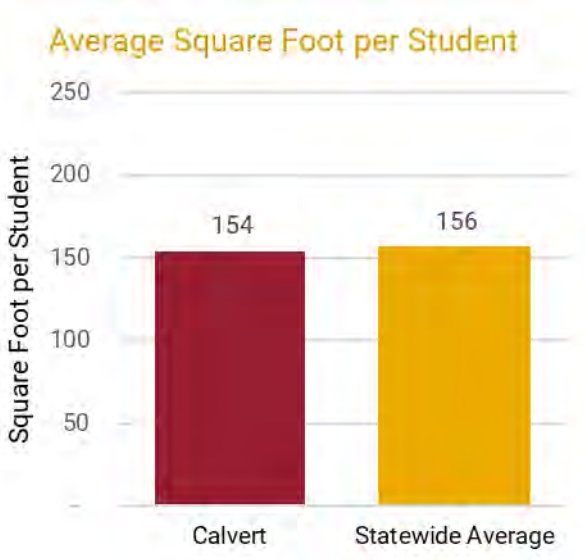
The current replacement value for Calvert County's >2.4M GSF, at the IAC's current replacement cost/SF, is more than $1B.

**+ $127M since FY20**

**73.74 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Special Ed. | Elementary | Middle | High | |
|---|---|---|---|---|---|
| **Superior** | | | | | |
| **Good** | | | | | |
| **Adequate** | 1 | 4 | 1 | 1 | 7 |
| **Not Adequate** | | | | | |
| **Poor** | | | | | |
| Totals | 1 | 4 | 1 | 1 | **7** |

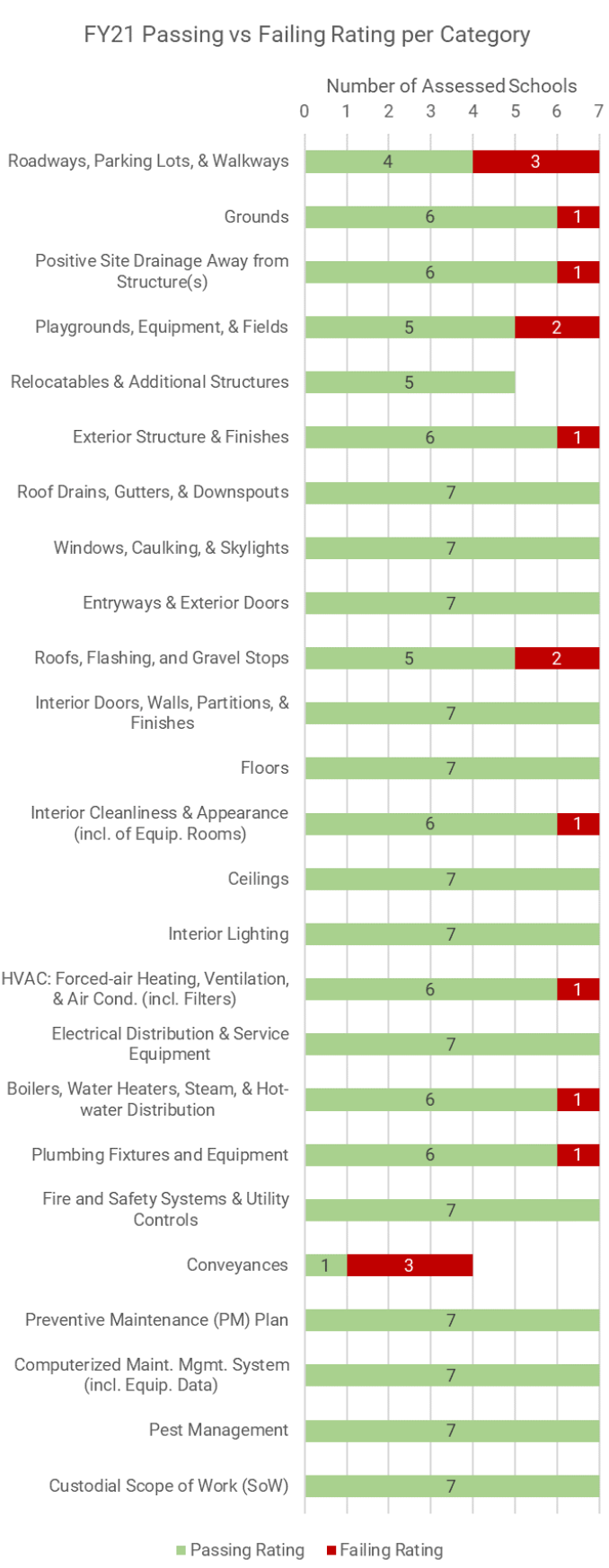


# CALVERT COUNTY

## FY 2021 Results: Summary of School Ratings

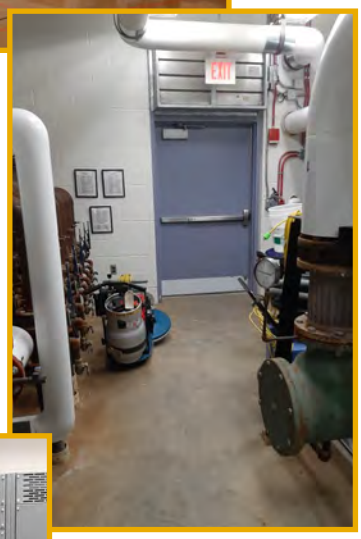
| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Mt. Harmony Elementary (04.007) | Elementary | 53,069 | 44 | Adequate | 0 | 5 | 20 | 0 | 0 |
| 2. Huntingtown Elementary (04.010) | Elementary | 62,070 | 43 | Adequate | 0 | 3 | 20 | 0 | 0 |
| 3. Beach Elementary (04.011) | Elementary | 55,341 | 43 | Adequate | 0 | 4 | 19 | 1 | 0 |
| 4. Calvert Country (04.012) | Special Ed. | 33,148 | 38 | Adequate | 0 | 4 | 20 | 0 | 0 |
| 5. Huntingtown High (04.026) | High | 206,248 | 17 | Adequate | 0 | 2 | 22 | 1 | 0 |
| 6. Barstow Elementary (04.028) | Elementary | 74,865 | 13 | Adequate | 0 | 3 | 22 | 0 | 0 |
| 7. New Calvert Middle (04.029) | Middle | 104,005 | 11 | Adequate | 0 | 3 | 21 | 0 | 0 |
| Totals | | | | | 0 | 24 | 144 | 2 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 14% | 85% | 1% | 0% |

## FY 2021 Results: Assessment Findings by Category



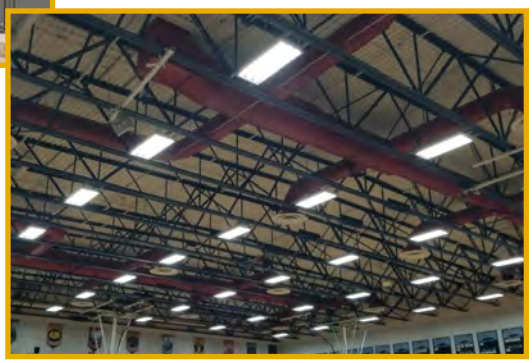

## Strengths

There appeared to be a strong custodial scope of work that the building service managers understood and followed.



Most of the equipment rooms were clean and clear, with few or no obstructions.

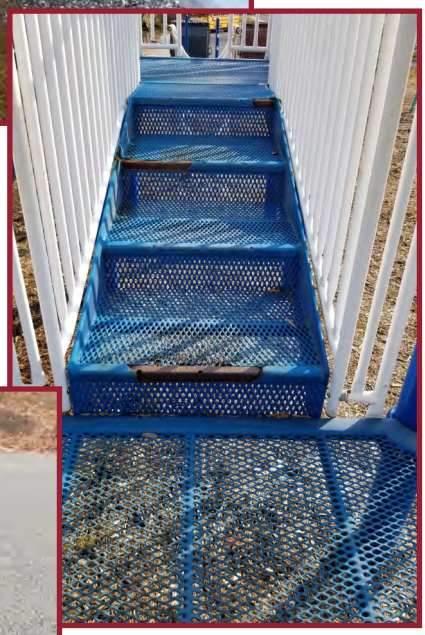
Electrical panels and main switchgears were labeled well. Calvert County Public Schools is also a participant in the infrared testing program provided through the Maryland Association of Boards of Education (MABE).



Most of the classrooms, restrooms, hallways, and common spaces appeared to be brightly lit.

## Weaknesses

Four schools had cracked and open wall seams on the roofs and most did not have work orders in their CMMS to report or track the issues. The roofs were observed with vegetation growth at three schools.



The rubberized protective coating on the playground equipment was identified as being deteriorated or damaged at four schools.

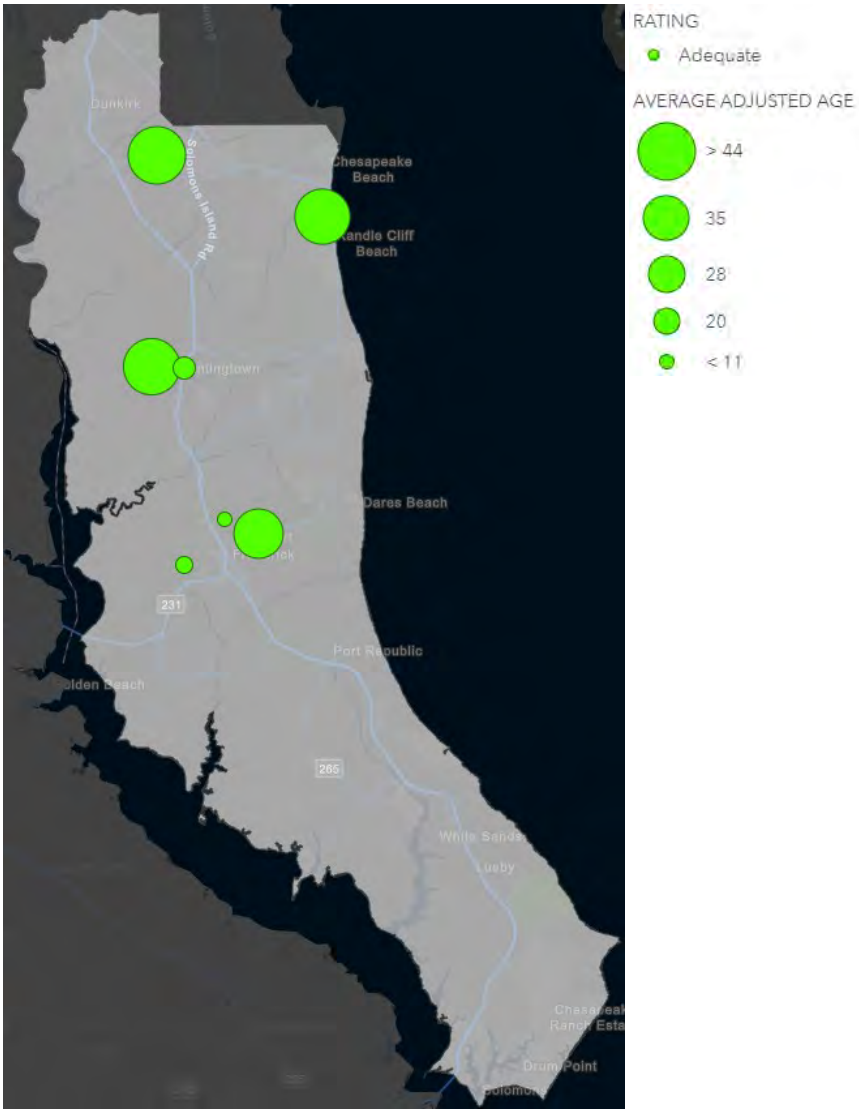
Issues, from minor cracking to major deterioration and settlement, were noted at the walkways of every school. The driveways were found to have cracked sections and deterioration at four schools.

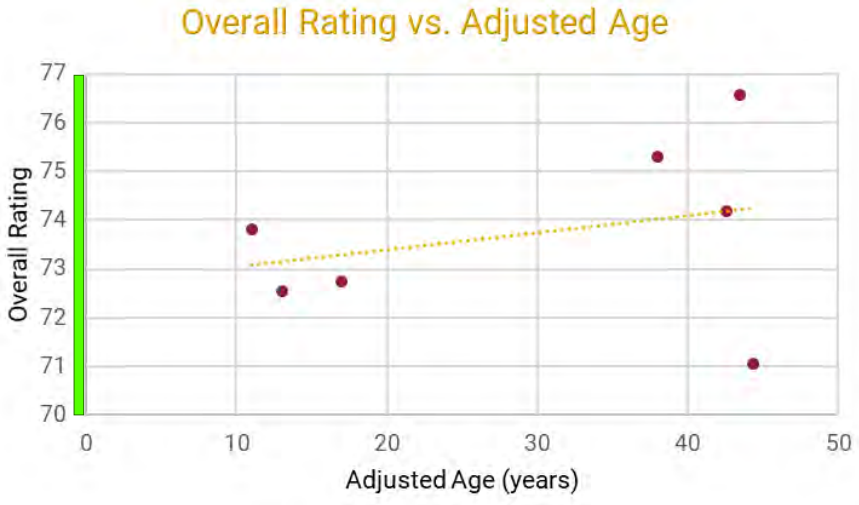

The Department of Labor, Licensing and Regulation (DLLR) certificates were expired at several schools.

## FY 2021 Results: Summary of Deficiencies by Category

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

# Overall Rating vs Adjusted Building Age



- Auto-generated preventive maintenance (PM) work orders should be created to track certification expirations. Work orders should be generated prior to the certificate expiration.
- PM checks should include all aspects of the roofing systems. The computerized maintenance management system (CMMS) should be used to track the repair of any issues identified during the inspections.
- Regularly scheduled playground inspections should be conducted and documented. Any problems with the playground equipment should be documented in the CMMS.
- The use of the CMMS is recommended for planned PM work and corrective work orders. Complete asset identification is helpful to ensure that all assets are receiving the required maintenance.

# CAROLINE COUNTY

**Total Schools Assessed in FY 2021: 2**


Denton Elementary

## FISCAL YEAR 2021: KEY FACTS

**10 schools**

Caroline County has 10 active schools.

**No change since FY20.**

**23.4 years old**

The average adjusted age of all 10 schools is 23.4 years old.

**- 1.6 years since FY20.**

**> 0.9 M GSF**

Caroline County maintains 952,622 square feet throughout its 10 schools. It is the 19th largest LEA in Maryland.

**+ 98,855 SF since FY20.**

**> $0.4 B**

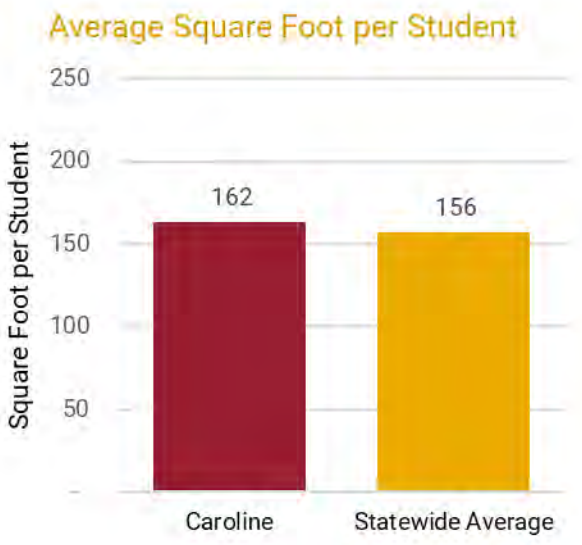
The current replacement value for Caroline County's >0.9M GSF, at the IAC's current replacement cost/SF, is more than $0.4B.

**+ $84M since FY20.**

**72.99 (Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

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



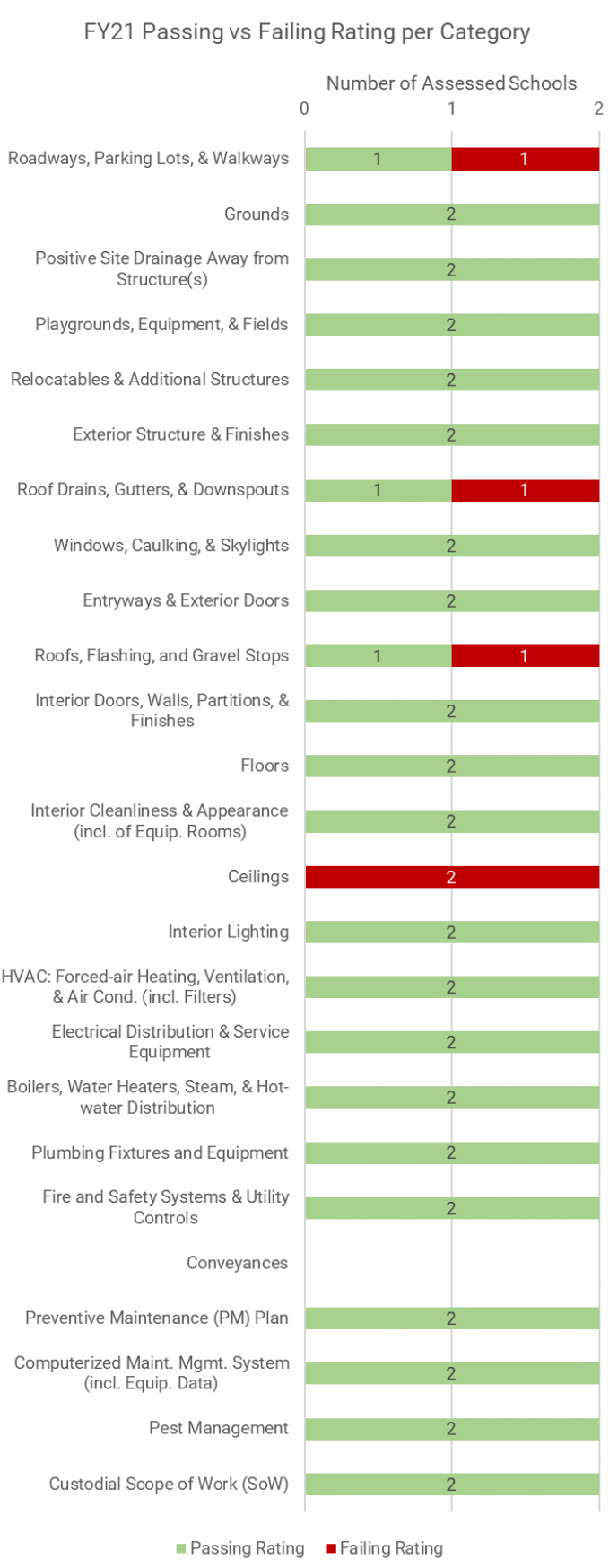
# CAROLINE COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Denton Elementary (05.003) | Elementary | 82,010 | 45 | Adequate | 0 | 0 | 24 | 0 | 0 |
| 2. Col. Richardson Middle (05.010) | Middle | 66,600 | 14 | Adequate | 0 | 2 | 22 | 0 | 0 |
| Totals | | | | | 0 | 2 | 46 | 0 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 4% | 96% | 0% | 0% |

# CAROLINE COUNTY

## FY 2021 Results: Assessment Findings by Category

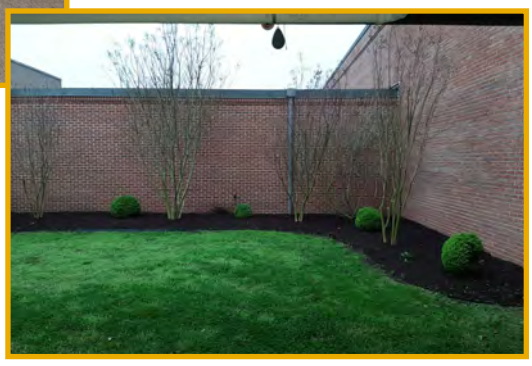



### Strengths

The playgrounds and athletic fields appeared to have received the care required to ensure safety and cleanliness. Little to no issues were identified.


The maintenance on the boilers and water heaters appeared to be adequate and no issues were identified.

Both schools appeared to have clean floors that received sufficient care.



The grounds were adequately maintained.

## Weaknesses

Both schools were observed with stained ceiling tiles. Damaged ceilings and missing ceiling grids were also noted.

Both schools were missing splash blocks on some downspouts on the roofs. Ponding water was noted on the roof of one school.

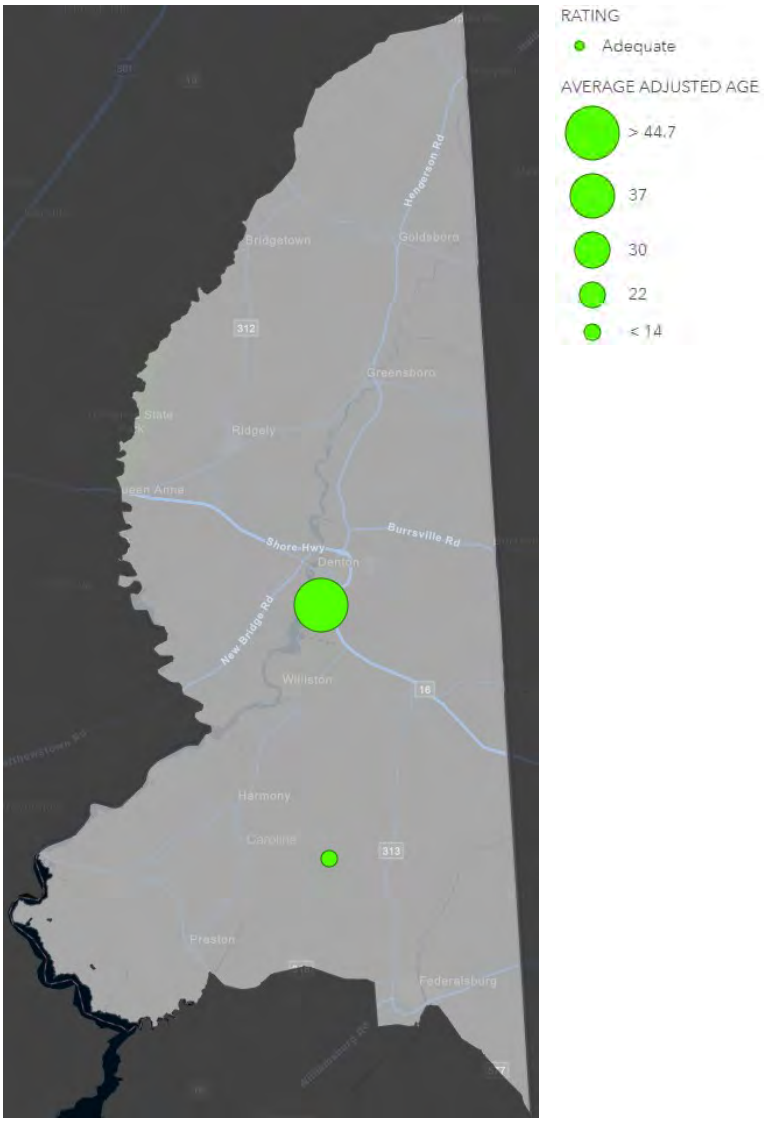
The roadways, parking lots and walkways were observed cracked and deteriorated in a few sections.

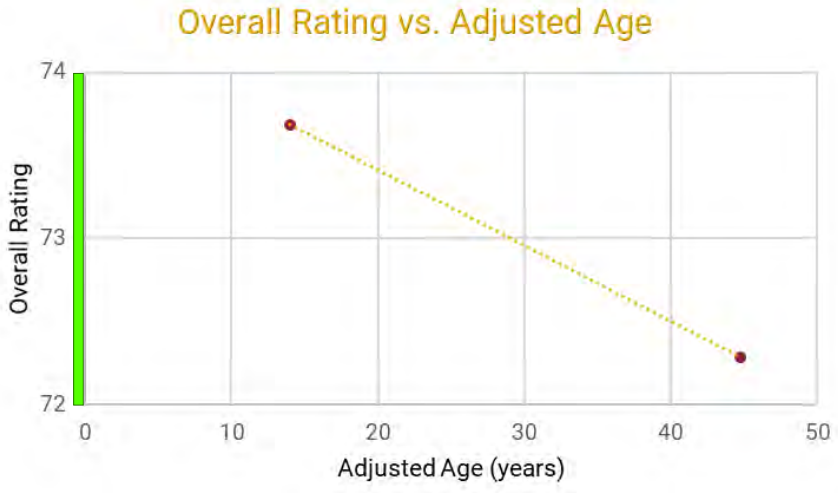
The roof membrane at both schools was exposed and deteriorated. The wall and flashing seams were also cracked and deteriorated.

## FY 2021 Results: Summary of Deficiencies by Category

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



- Issues that are identified during the preventive maintenance (PM) roofing inspections should be put into the computerized maintenance management system (CMMS) to track until completion. Best practice is to use the CMMS to help identify recurring problems in specific areas of the roofing systems.

- Regular inspections should be conducted of parking lot and walkway surfaces. Any issues identified during the inspections should be entered into the CMMS. Vegetation growth and cracking should be included as part of the inspection program.

- The root cause of the stained ceiling tiles should be identified and repaired prior to replacing tiles. The CMMS program could help to identify recurring problems and locations.

- Unique asset identification should be considered for identifying required PM needed for each asset. Equipment that is labeled in the field and the CMMS program will help to ensure that all equipment is serviced.

# CARROLL COUNTY

**Total Schools Assessed in FY 2021: 12**


Sykesville Middle

## FISCAL YEAR 2021: KEY FACTS

**40 schools**

Carroll County has 40 active schools.

**No change since FY20.**

**30.3 years old**

The average adjusted age of all 40 schools is 30.3 years old.

**+ 0.9 years since FY20.**

**> 4.1 M GSF**

Carroll County maintains 4,176,741 square feet throughout its 40 schools. It is the 9th largest LEA in Maryland.

**No change since FY20.**

**> $1.7 B**

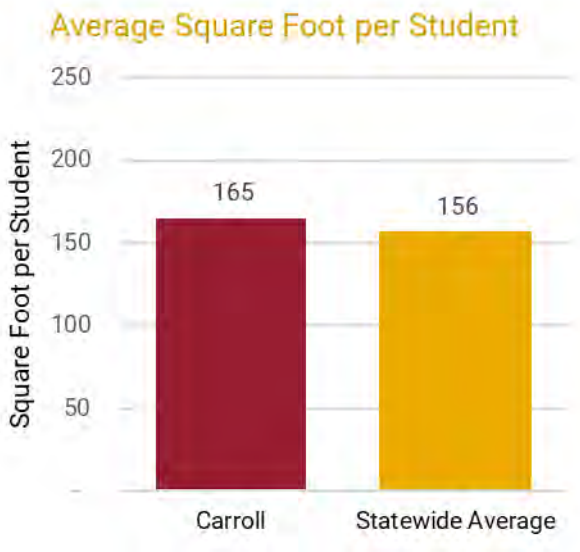
The current replacement value for Carroll County's >4.1M GSF, at the IAC's current replacement cost/SF, is more than $1.7B.

**+ $204M since FY20.**

**70.59 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Alternate | Special Ed. | Elementary | Middle | High | |
|---|---|---|---|---|---|---|
| **Superior** | | | | | | |
| **Good** | | | | | | |
| **Adequate** | 1 | 1 | 4 | | 1 | 7 |
| **Not Adequate** | | | 1 | 2 | 2 | 5 |
| **Poor** | | | | | | |
| Totals | 1 | 1 | 5 | 2 | 3 | **12** |



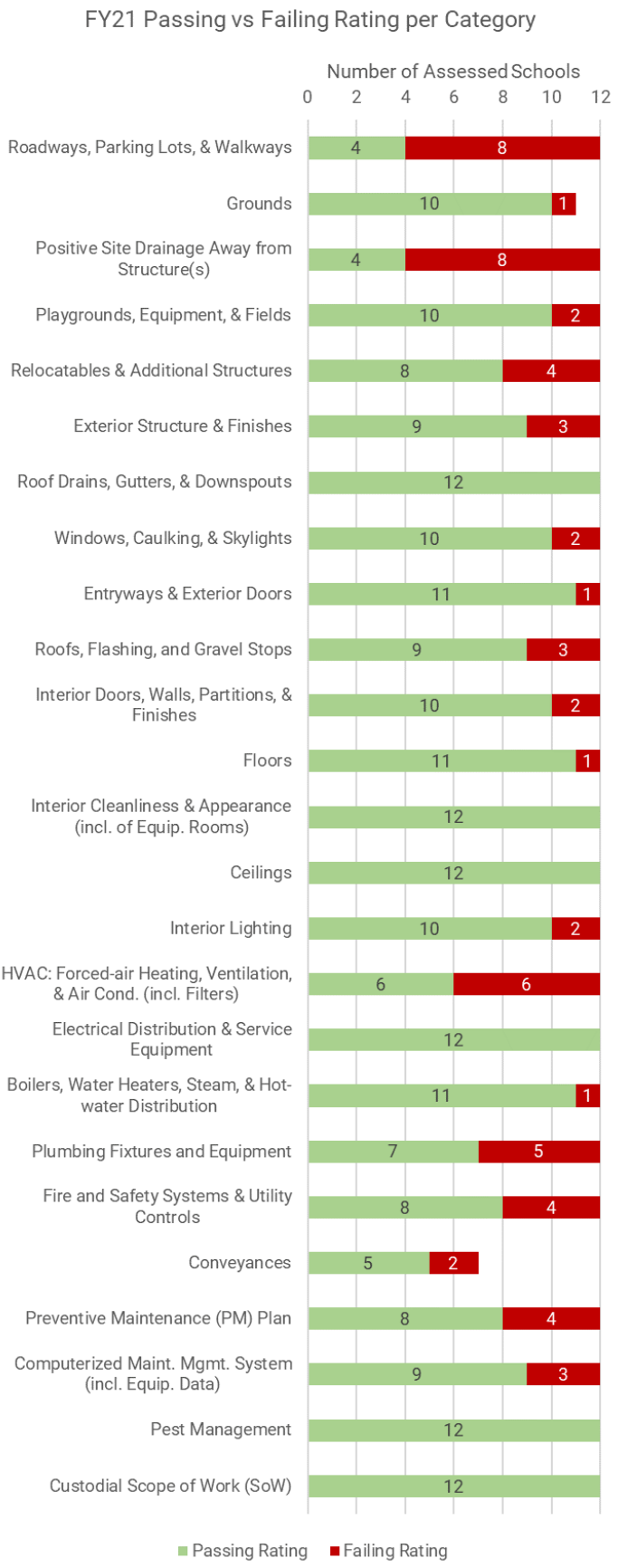
# CARROLL COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Wm. Winchester Elementary (06.025) | Elementary | 63,708 | 50 | Adequate | 0 | 3 | 22 | 0 | 0 |
| 2. Carroll Springs Special Education (06.027) | Special Ed. | 31,420 | 40 | Adequate | 0 | 5 | 19 | 0 | 0 |
| 3. Sykesville Middle (06.029) | Middle | 100,899 | 36 | Not Adequate | 0 | 0 | 25 | 0 | 0 |
| 4. Manchester Elementary (06.033) | Elementary | 75,416 | 30 | Adequate | 0 | 4 | 19 | 2 | 0 |
| 5. Spring Garden Elementary (06.037) | Elementary | 62,429 | 29 | Not Adequate | 0 | 6 | 17 | 0 | 0 |
| 6. Friendship Valley Elementary (06.038) | Elementary | 57,200 | 29 | Adequate | 0 | 2 | 20 | 2 | 0 |
| 7. Piney Ridge Elementary (06.040) | Elementary | 65,137 | 29 | Adequate | 0 | 4 | 21 | 0 | 0 |
| 8. Century High (06.048) | High | 217,945 | 20 | Not Adequate | 0 | 6 | 19 | 0 | 0 |
| 9. Gateway (06.050) | Alternate | 27,048 | 18 | Adequate | 0 | 6 | 17 | 1 | 0 |
| 10. Winters Mill High (06.052) | High | 213,650 | 19 | Not Adequate | 0 | 1 | 23 | 1 | 0 |
| 11. Shiloh Middle School (06.054) | Middle | 108,640 | 21 | Not Adequate | 0 | 3 | 19 | 2 | 0 |
| 12. Manchester Valley High (06.057) | High | 217,500 | 12 | Adequate | 0 | 4 | 21 | 0 | 0 |
| Totals | | | | | 0 | 44 | 242 | 8 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 15% | 82% | 3% | 0% |

# CARROLL COUNTY

## FY 2021 Results: Assessment Findings by Category

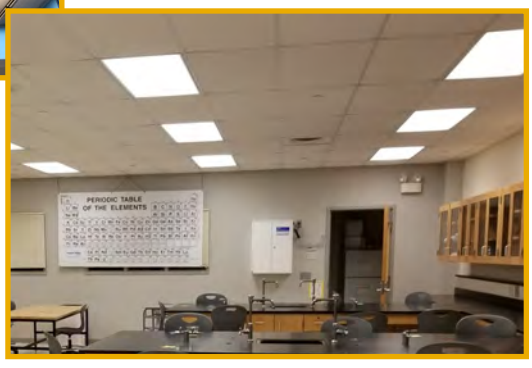



### Strengths

All of the schools assessed received passing ratings for interior cleanliness and appearance. Six schools appeared to have above-standard cleaning efforts.

The floors appeared well cared for in all of the assessed schools. On-site staff have checklists identifying their responsibilities.

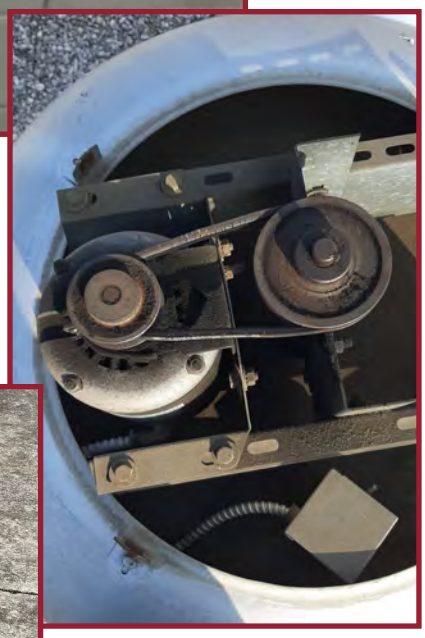
The ceilings appeared maintained. Every school received a passing rating of either Good or Adequate.



The lighting appeared to receive regular to above-standard maintenance at every school.

## Weaknesses

Ten schools were identified with leaking plumbing fixtures.



The ventilation equipment had loose belts or was inoperable at four schools. Damaged or missing line set insulation or duct insulation was identified at six schools. The preventive maintenance for the exhaust fans did not appear to be tracked in the CMMS.

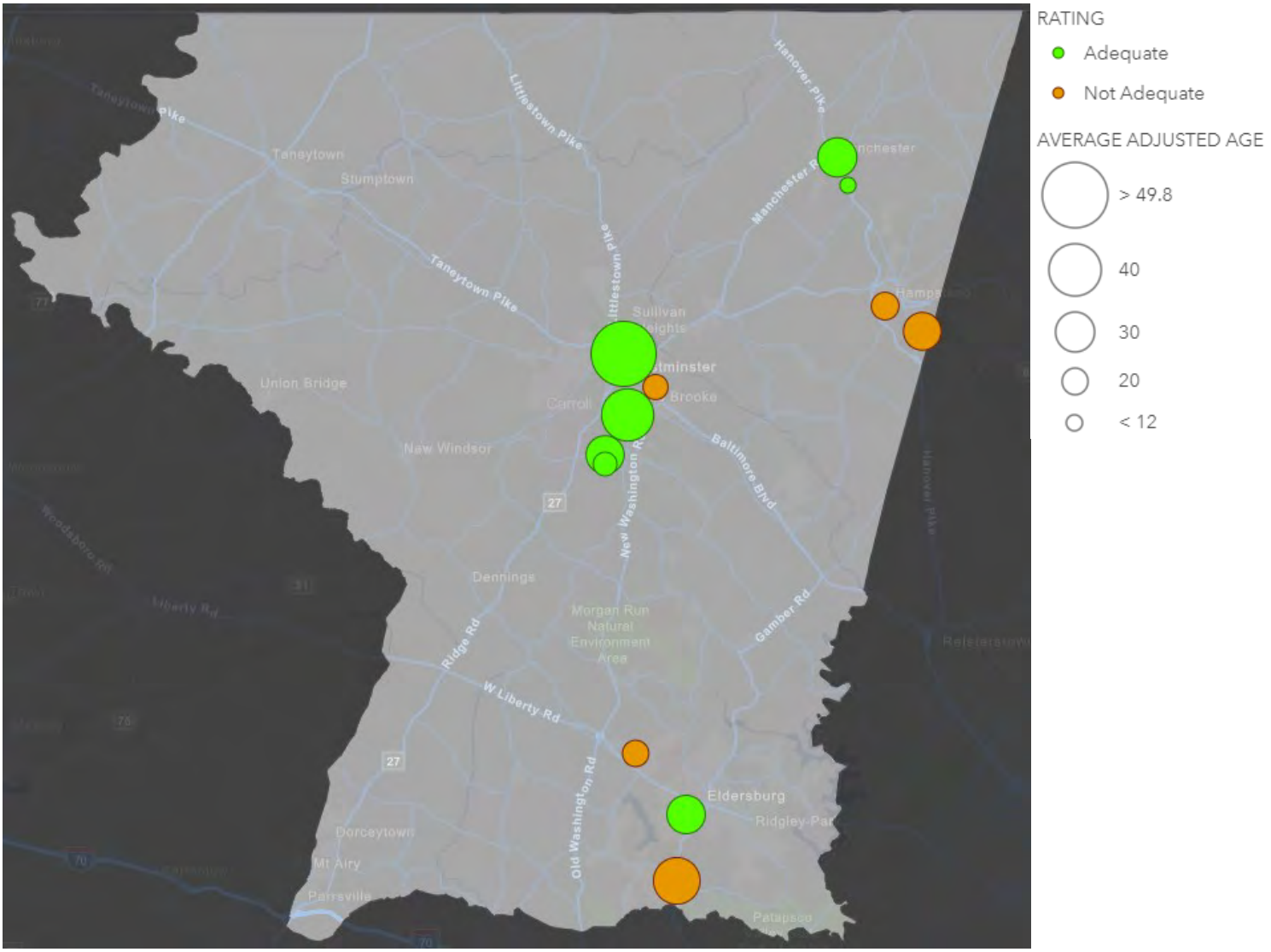
Nine schools had deteriorated foundation sealants. Erosion was present at four schools around the foundations, downspouts, and exterior buildings.

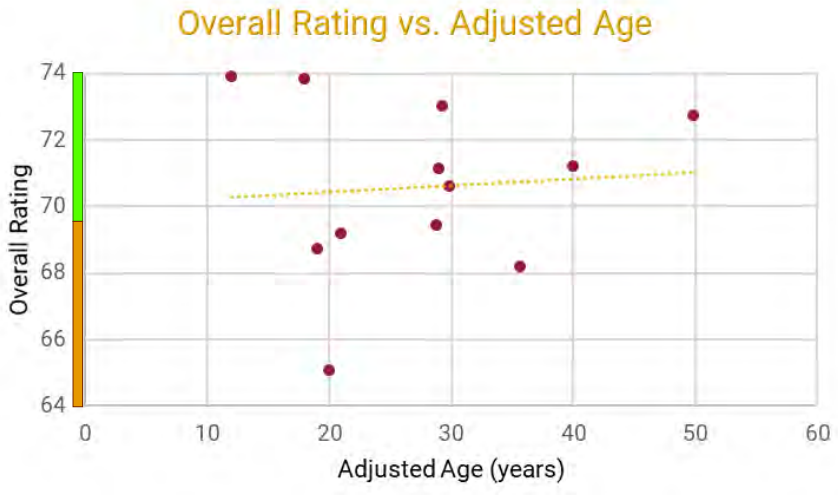
Uneven walkways created trip hazards at seven schools. Walkways did not appear to be included in the preventive maintenance checklist.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 8 |
| | Grounds | 0 | 1 |
| | Positive Site Drainage Away from Structure(s) | 0 | 8 |
| | Playgrounds, Equipment, & Fields | 0 | 2 |
| | Relocatables & Additional Structures | 0 | 4 |
| Building Exterior | Exterior Structure & Finishes | 0 | 3 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 1 |
| | Entryways & Exterior Doors | 0 | 1 |
| | Roofs, Flashing, and Gravel Stops | 0 | 3 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 2 |
| | Floors | 0 | 1 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 0 |
| | Ceilings | 0 | 0 |
| | Interior Lighting | 0 | 2 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 6 |
| | Electrical Distribution & Service Equipment | 0 | 0 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 1 |
| | Plumbing Fixtures and Equipment | 0 | 5 |
| | Fire and Safety Systems & Utility Controls | 0 | 4 |
| | 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 |
| | **Total** | **0** | **54** |

# Overall Rating vs Adjusted Building Age



- Work orders should identify deficiencies that are found on the daily checks outlined in the comprehensive maintenance plan (CMP).
- Exhaust fans should be incorporated into the preventive maintenance program to ensure that they are operating as designed. Best practice is to use unique identifiers to ensure that all equipment is being serviced.
- Routine inspections of the walkways should be scheduled and completed. The computerized maintenance management system (CMMS) needs to be used to track issues identified during the inspections.
- A regular inspection program should be used to identify and repair damaged or failing sealants around the facilities' foundations.
- Restroom fittings should be inspected on a regular basis to identify leaks or loose fixtures. The CMMS program should be used to track issues that are identified.

# CECIL COUNTY

**Total Schools Assessed in FY 2021: 12**

Bainbridge Elementary

## FISCAL YEAR 2021: KEY FACTS

**29 schools**

Cecil County has 29 active schools.

**No change since FY20.**

**29.0 years old**

The average adjusted age of all 29 schools is 29.0 years old.

**+ 1 year since FY20.**

**> 2.2 M GSF**

Cecil County maintains 2,242,569 square feet throughout its 29 schools. It is the 15th largest LEA in Maryland.

**No change since FY20.**

**> $0.9 B**

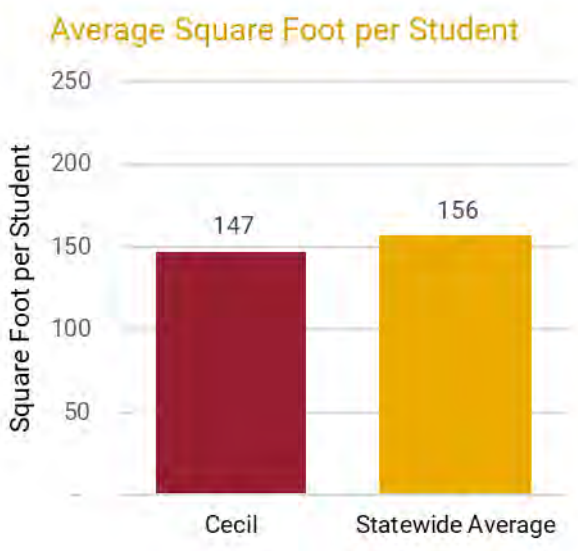
The current replacement value for Cecil County's >2.2M GSF, at the IAC's current replacement cost/SF, is more than $0.9B.

**+ $109M since FY20.**

**75.44 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Alternate | Elementary | Middle | High | Career Tech | |
|---|---|---|---|---|---|---|
| **Superior** | | | | | | |
| **Good** | | 1 | | | | 1 |
| **Adequate** | 1 | 6 | 2 | 1 | 1 | 11 |
| **Not Adequate** | | | | | | |
| **Poor** | | | | | | |
| Totals | 1 | 7 | 2 | 1 | 1 | **12** |

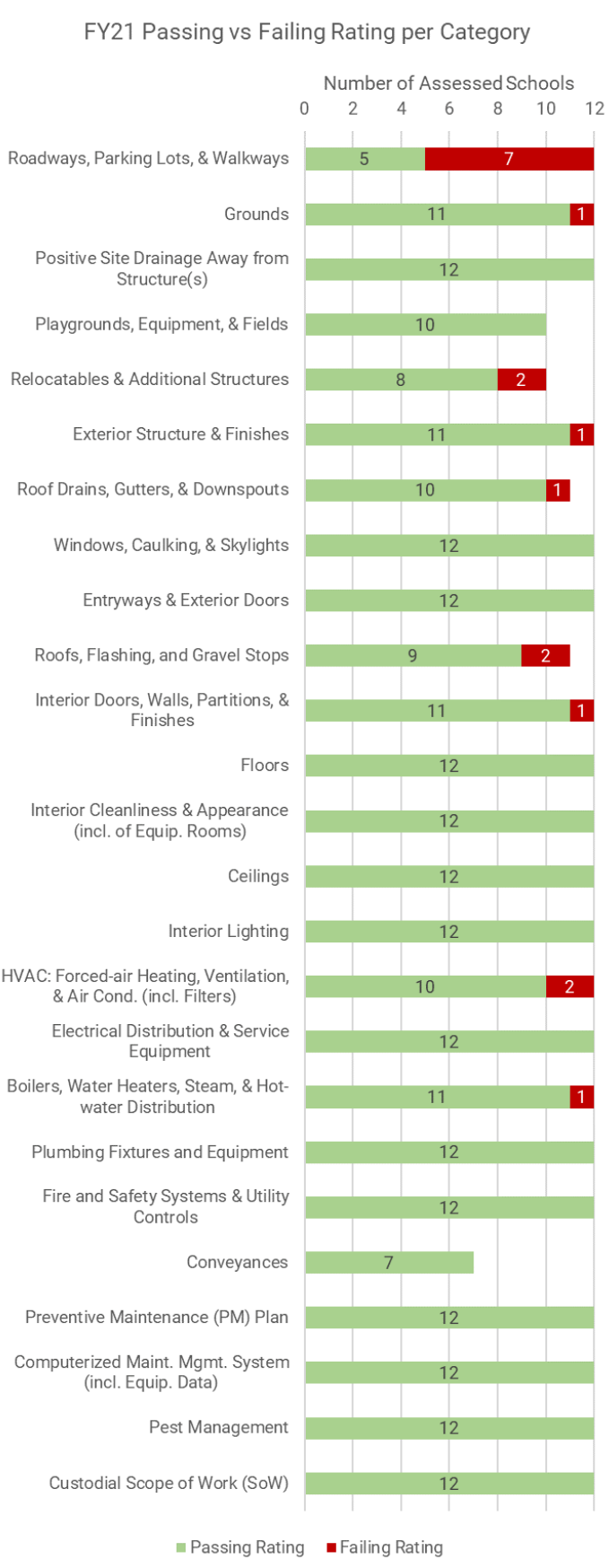


# CECIL COUNTY

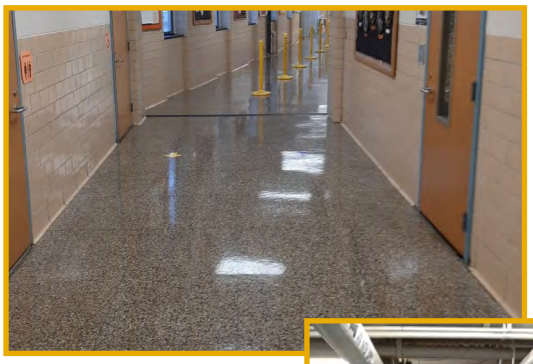
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Thomson Estates Elementary (07.011) | Elementary | 70,130 | 43 | Adequate | 0 | 5 | 17 | 0 | 0 |
| 2. Gilpin Manor Elementary (07.016) | Elementary | 65,837 | 3 | Good | 0 | 20 | 4 | 0 | 0 |
| 3. Conowingo Elementary (07.019) | Elementary | 44,696 | 28 | Adequate | 0 | 6 | 19 | 0 | 0 |
| 4. Kenmore Elementary (07.021) | Elementary | 35,225 | 35 | Adequate | 0 | 4 | 20 | 0 | 0 |
| 5. Rising Sun High (07.022) | High | 114,400 | 30 | Adequate | 0 | 1 | 24 | 0 | 0 |
| 6. Rising Sun Middle (07.023) | Middle | 104,765 | 22 | Adequate | 0 | 4 | 20 | 1 | 0 |
| 7. Elk Neck Elementary (07.024) | Elementary | 50,156 | 30 | Adequate | 0 | 1 | 23 | 0 | 0 |
| 8. Elkton Middle (07.029) | Middle | 72,600 | 39 | Adequate | 0 | 2 | 22 | 1 | 0 |
| 9. Providence Special (07.033) | Alternate | 16,645 | 27 | Adequate | 0 | 3 | 20 | 0 | 0 |
| 10. Bainbridge Elementary (07.034) | Elementary | 51,818 | 20 | Adequate | 0 | 7 | 17 | 0 | 0 |
| 11. Charlestown Elementary (07.038) | Elementary | 42,522 | 18 | Adequate | 0 | 7 | 17 | 0 | 0 |
| 12. New Cecil School of Technology (07.042) | Career Tech | 167,571 | 6 | Adequate | 0 | 5 | 19 | 0 | 0 |
| Totals | | | | | 0 | 65 | 222 | 2 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 22% | 77% | 1% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths



The tile and carpeted floors were well maintained throughout.

CCPS incorporated a cleaning schedule in their custodial scope of work. It appeared to be effective as common areas and storage rooms were observed to be clean and well organized.

Every school had well-maintained exterior doors that were outfitted with weatherstripping. The majority of the doors latched correctly without slamming.

Lighting was well maintained. CCPS is proactively replacing burned out fluorescent light tubes with LED tubes that do not require changes to the fixtures.

## Weaknesses

Ten schools were observed with cracked or deteriorated walkways. Ten schools were observed with cracked or deteriorated parking lots. Trip hazards were noted at six schools.

Many schools had issues with their exhaust fans. Inoperable exhaust fans, dirty filters, and damaged belts were observed.

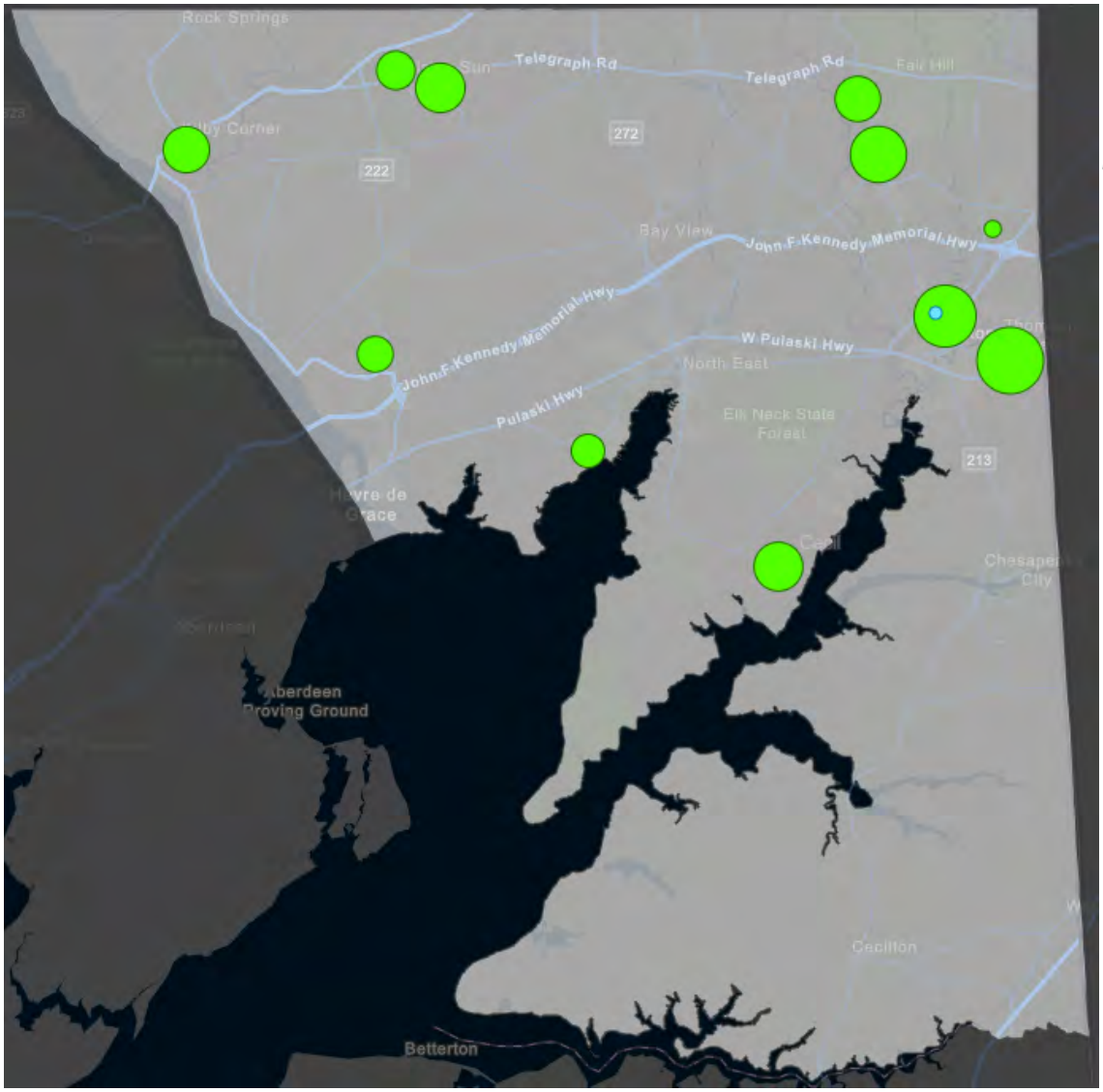
The relocatables and additional structures had notable issues with lighting, ceilings, and site drainage.

The majority of schools had walls cracks and their possible progression did not appear to be tracked.

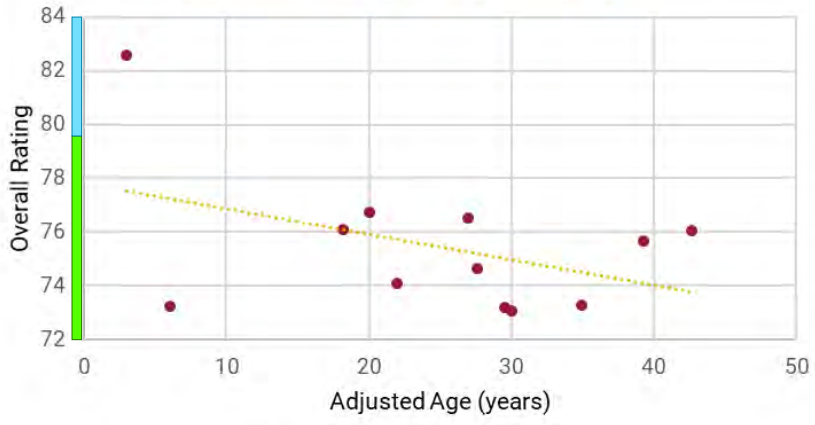
## FY 2021 Results: Summary of Deficiencies by Category

| | 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 | 0 |
| | Playgrounds, Equipment, & Fields | 0 | 0 |
| | Relocatables & Additional Structures | 0 | 2 |
| 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 | 2 |
| 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 | 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** | **17** |

# Overall Rating vs Adjusted Building Age




## Overall Rating vs. Adjusted Age



- Roadways, parking lots, and walkways should be added to the preventive maintenance (PM) schedule. Deficiencies noted during the PM checks should be entered and tracked using the computerized maintenance management system (CMMS).
- 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.
- Regular assessments of the exterior buildings should be conducted to identify and correct deficiencies that could reduce the life span of the buildings.
- The functionality of the CMMS should be utilized to manage and track deficiencies that are noted during inspections and PMs to ensure they are repaired in a timely manner.

# CHARLES COUNTY

**Total Schools Assessed in FY 2021: 13**


St. Charles High School

## FISCAL YEAR 2021: KEY FACTS

**39 schools**

Charles County has 39 active schools.

**No change since FY20.**

**28.6 years old**

The average adjusted age of all 39 schools is 28.6 years old.

**+ 0.2 years since FY20.**

**> 4.0 M GSF**

Charles County maintains 4,091,386 square feet throughout its 39 schools. It is the 10th largest LEA in Maryland.

**+ 38,116 SF since FY20.**

**> $1.7 B**

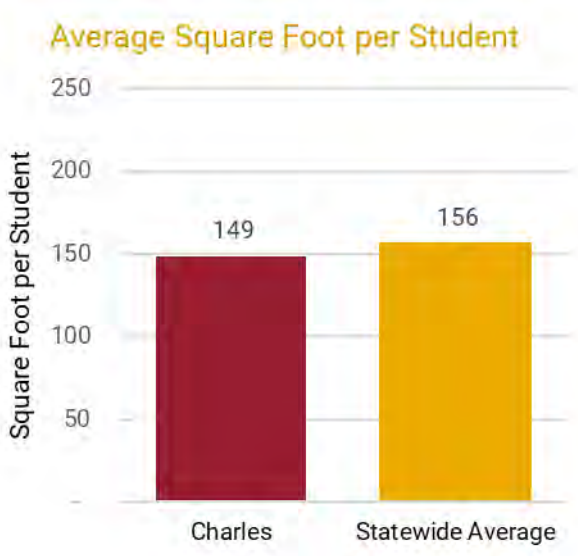
The current replacement value for Charles County's >4M GSF, at the IAC's current replacement cost/SF, is more than $1.7B.

**+ $214M since FY20.**

**73.35 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Alternate | Elementary | Middle | Middle/High | High | |
|---|---|---|---|---|---|---|
| **Superior** | | | | | | |
| **Good** | | | | | | |
| **Adequate** | 1 | 4 | 5 | 1 | 2 | 13 |
| **Not Adequate** | | | | | | |
| **Poor** | | | | | | |
| Totals | 1 | 4 | 5 | 1 | 2 | **13** |

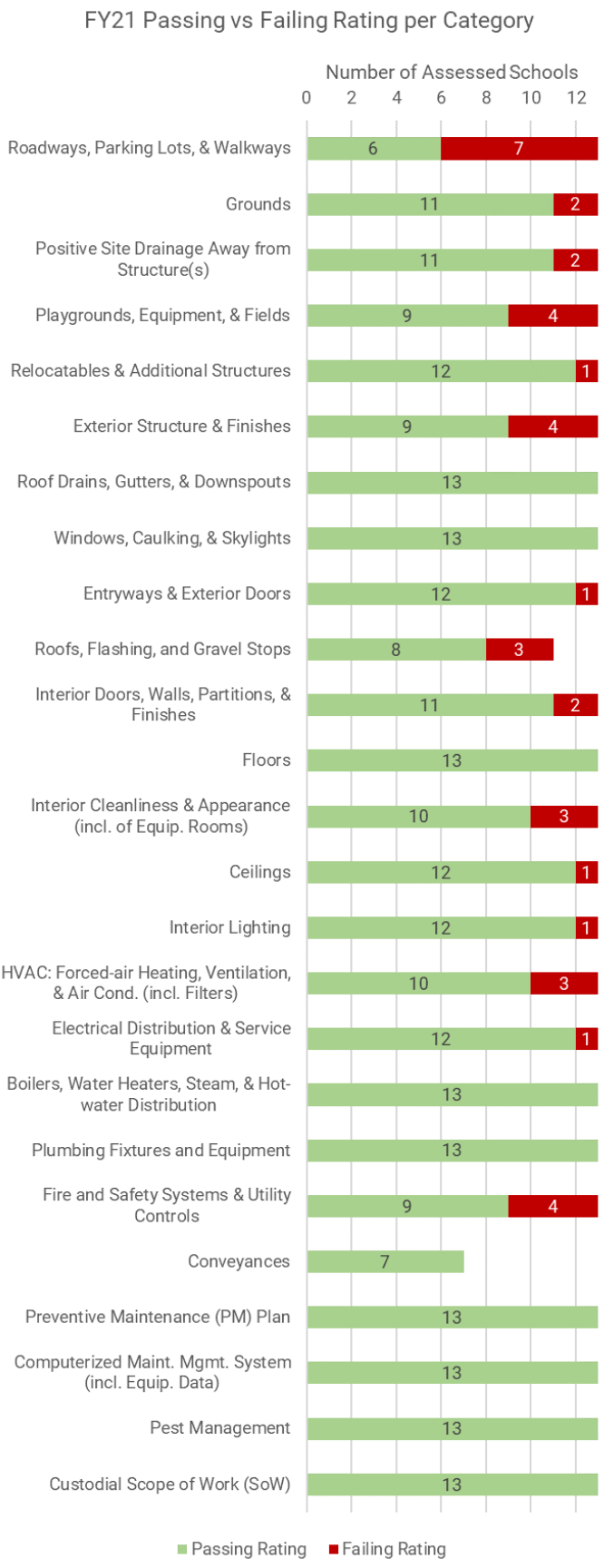


# CHARLES COUNTY

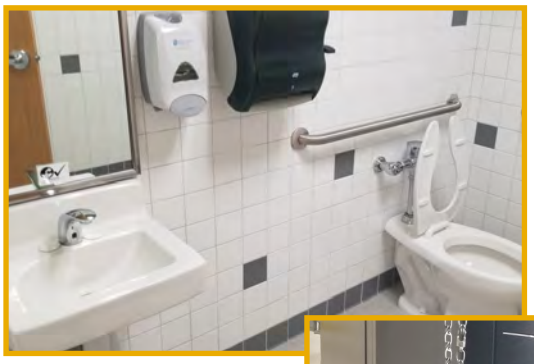
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. John Hanson Middle (08.003) | Middle | 121,224 | 49 | Adequate | 0 | 4 | 19 | 1 | 0 |
| 2. Matthew Henson Middle (08.016) | Middle | 89,125 | 39 | Adequate | 0 | 1 | 23 | 0 | 0 |
| 3. Robert D. Stethem Educational Center (08.018) | Alternate | 74,106 | 50 | Adequate | 0 | 4 | 20 | 0 | 0 |
| 4. Milton Somers Middle (08.021) | Middle | 106,711 | 40 | Adequate | 0 | 2 | 23 | 0 | 0 |
| 5. Thomas Stone High (08.022) | High | 225,957 | 24 | Adequate | 0 | 2 | 23 | 0 | 0 |
| 6. J.C. Parks Elementary (08.030) | Elementary | 75,692 | 24 | Adequate | 0 | 1 | 22 | 0 | 0 |
| 7. Mattawoman Middle (08.035) | Middle | 120,300 | 26 | Adequate | 0 | 1 | 24 | 0 | 0 |
| 8. Dr. Samuel A. Mudd Elementary (08.037) | Elementary | 76,819 | 2 | Adequate | 0 | 15 | 9 | 0 | 0 |
| 9. J.P. Ryon Elementary (08.038) | Elementary | 73,748 | 20 | Adequate | 0 | 4 | 20 | 0 | 0 |
| 10. Henry E. Lackey High (08.039) | High | 228,195 | 20 | Adequate | 0 | 1 | 23 | 1 | 0 |
| 11. Theodore G. Davis Middle School (08.044) | Middle | 134,542 | 14 | Adequate | 0 | 6 | 19 | 0 | 0 |
| 12. St. Charles High School (08.046) | Middle/High | 288,283 | 7 | Adequate | 0 | 13 | 12 | 0 | 0 |
| 13. William A. Diggs Elementary School (08.047) | Elementary | 87,100 | 15 | Adequate | 0 | 6 | 18 | 0 | 0 |
| Totals | | | | | 0 | 60 | 255 | 2 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 19% | 80% | 1% | 0% |

## FY 2021 Results: Assessment Findings by Category

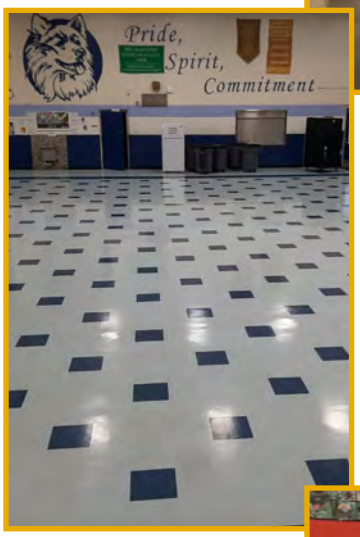



## Strengths



The plumbing fixtures appeared to be adequately maintained.


The boilers and water heaters appeared to be maintained. Most certifications were present and up to date.




The floors appeared to receive good custodial care. Ten schools had no notable issues.

Most rooms were clean, clear, and well kept. Eleven schools received a Good rating for the maintenance of their Interior Cleanliness and Appearance.

## Weaknesses

Seven schools had issues with vegetation growth on their roofs. Four schools were observed with damaged or deteriorated seams.

Four schools were observed with damaged or cracked hard play surfaces, some with vegetation growth.

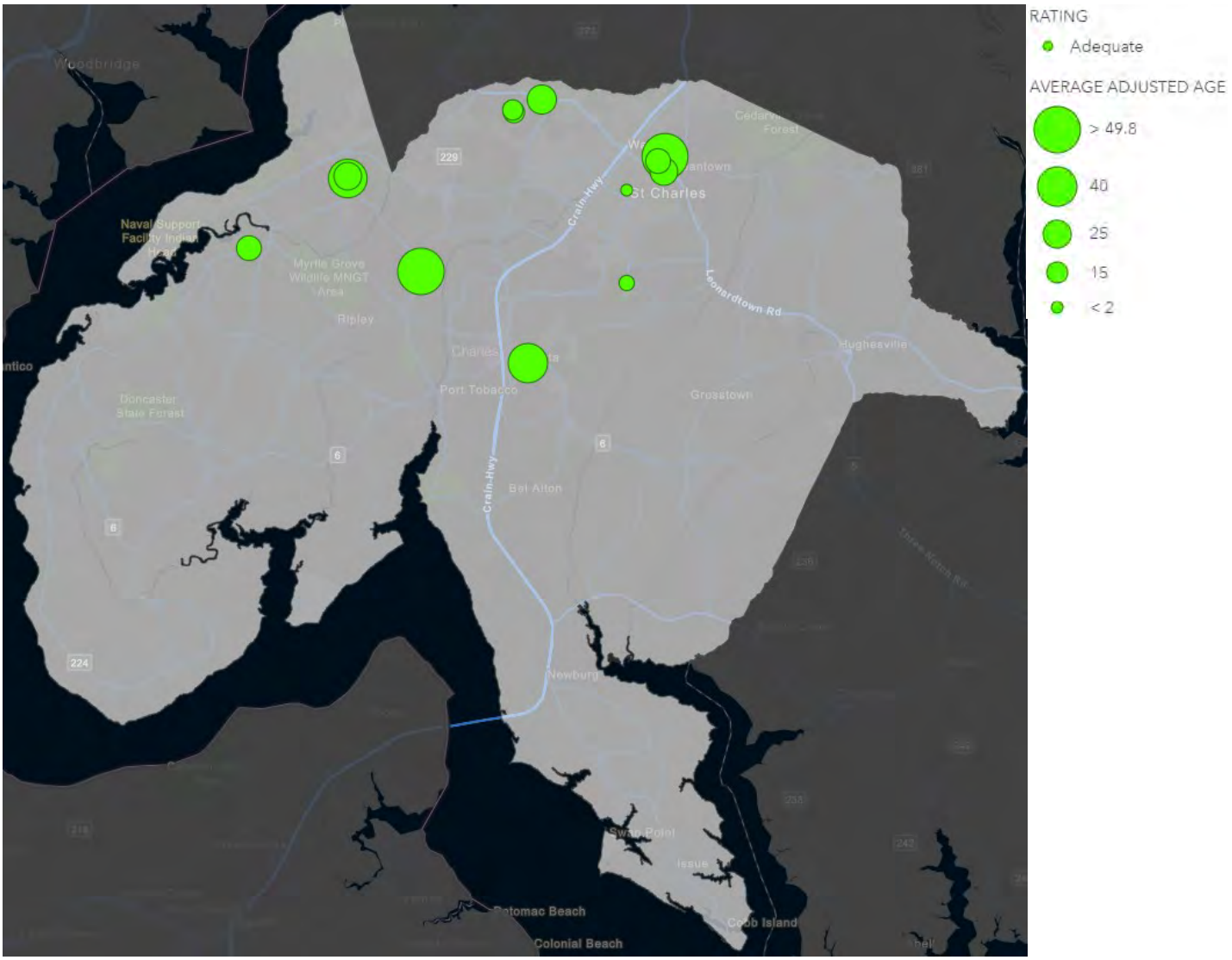
Cracked and/or damaged walkways were observed at eleven schools. Trip hazards were noted at eight schools. Seven schools' parking lots were observed damaged or deteriorated.

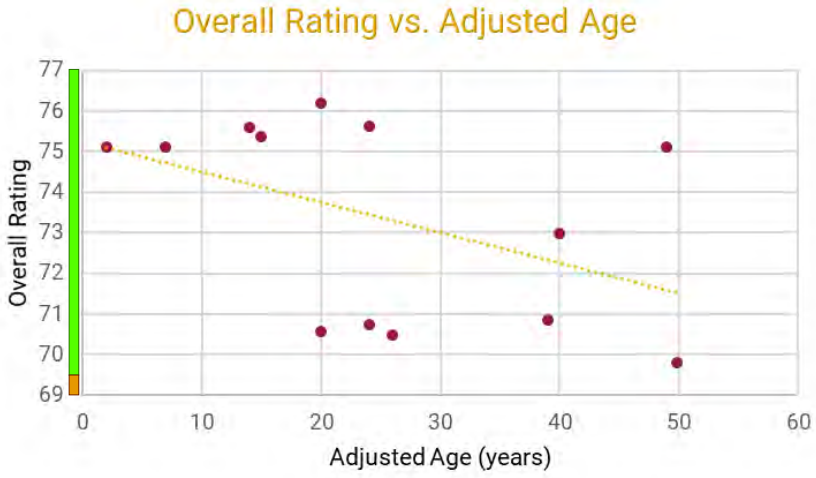
Missing, cracked, damaged and/or shifted bricks were noted at six facilities. Failing or missing sealants were present at seven schools.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 6 |
| | Grounds | 0 | 2 |
| | Positive Site Drainage Away from Structure(s) | 0 | 2 |
| | Playgrounds, Equipment, & Fields | 0 | 4 |
| | Relocatables & Additional Structures | 0 | 1 |
| Building Exterior | Exterior Structure & Finishes | 0 | 4 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 0 |
| | Entryways & Exterior Doors | 0 | 1 |
| | Roofs, Flashing, and Gravel Stops | 0 | 2 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 2 |
| | Floors | 0 | 0 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 3 |
| | 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 | 1 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 0 |
| | Plumbing Fixtures and Equipment | 0 | 0 |
| | 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 |
| | **Total** | **0** | **37** |

# Overall Rating vs Adjusted Building Age



- Hard surfaces at parking lots, walkways, and playgrounds should be inspected regularly using auto-generated preventive maintenance (PM) work orders and the computerized maintenance management system (CMMS). Deficiencies identified during the inspections should have work orders created in the CMMS to track the repairs.

- Exterior building components should be inspected on a regular basis to identify cracking, missing sealants, and damaged bricks or mortar joints. Regular PM checks should be auto-generated using the CMMS.

- Regular fire system PMs should be conducted to verify that the system is operating as designed. Work orders should be generated for any deficiencies that are identified during the PMs and tracked using the CMMS.

- Following all roof inspections, work orders should be created for any deficiencies found that could not be immediately corrected. These work orders should be followed up on in a timely manner in order to eliminate the conditions found.

# DORCHESTER COUNTY

**Total Schools Assessed in FY 2021: 3**


North Dorchester High

## FISCAL YEAR 2021: KEY FACTS

**14 schools**

Dorchester County has 14 active schools.

**No change since FY20.**

**33.5 years old**

The average adjusted age of all 14 schools is 33.5 years old.

**+ 1 year since FY20.**

**> 0.9 M GSF**

Dorchester County maintains 949,120 square feet throughout its 14 schools. It is the 20th largest LEA in Maryland.

**No change since FY20.**

**> $0.4 B**

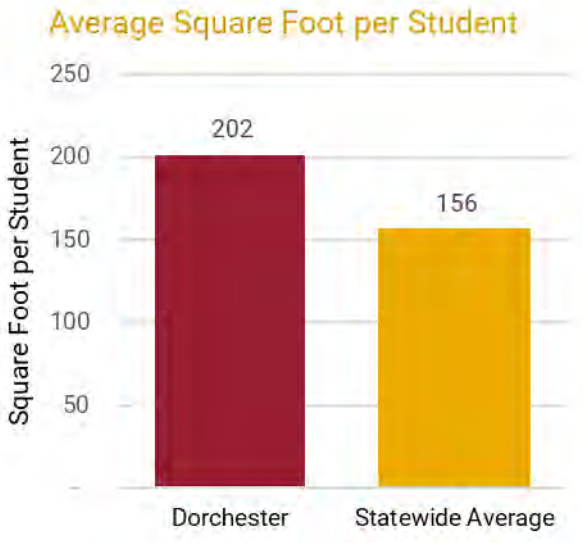
The current replacement value for Dorchester County's >0.9M GSF, at the IAC's current replacement cost/SF, is more than $0.4B.

**+ $46M since FY20.**

**81.72 (Good) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

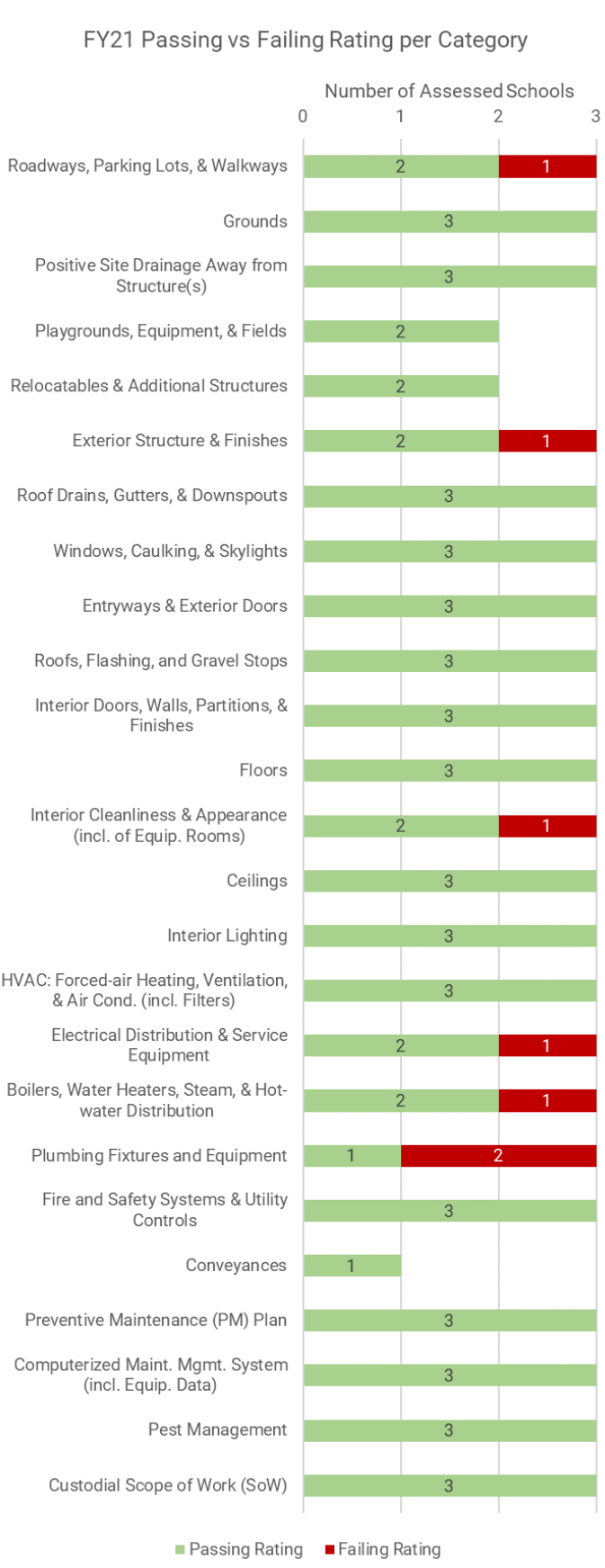
| | Alternate | Elementary | Middle | High | |
|---|---|---|---|---|---|
| **Superior** | | | | 1 | 1 |
| **Good** | 1 | | | | 1 |
| **Adequate** | | 1 | | | 1 |
| **Not Adequate** | | | | | |
| **Poor** | | | | | |
| Totals | 1 | 1 | | 1 | **3** |



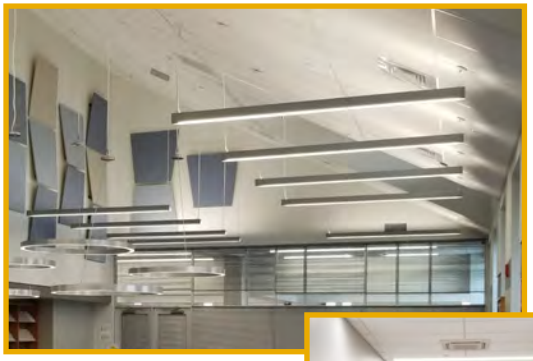
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Dorchester Student Services Center (09.008) | Alternate | 51,300 | 44 | Good | 3 | 7 | 12 | 0 | 0 |
| 2. North Dorchester High (09.013) | High | 95,000 | 39 | Superior | 17 | 5 | 3 | 0 | 0 |
| 3. Hurlock Elementary (09.014) | Elementary | 50,634 | 36 | Adequate | 1 | 2 | 18 | 3 | 0 |
| Totals | | | | | 21 | 14 | 33 | 3 | 0 |
| Percentage of Total Ratings for System | | | | | 30% | 20% | 46% | 4% | 0% |

## FY 2021 Results: Assessment Findings by Category



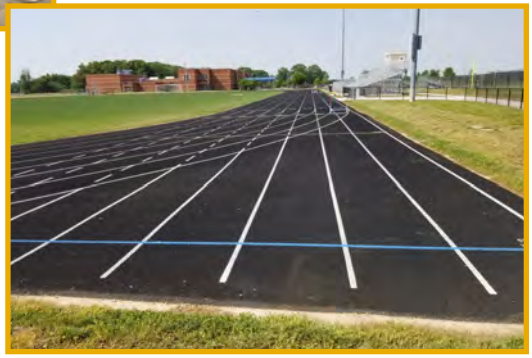

## Strengths



No issues or concerns with the interior lighting were observed. All rooms appeared to be well lit. Every school received a Superior rating in Interior Lighting.

Above-standard custodial and maintenance efforts were observed at two schools, who both earned a Superior rating for Interior Doors, Walls, Partitions, & Finishes.

The boilers and hot-water distribution were well maintained. One school received a Superior rating.



The playgrounds, equipment, and fields appeared well cared for. The playgrounds appeared to be inspected monthly by the on-site staff. One school received a Superior rating.

## Weaknesses

Deterioration, settlement, and potential trip hazards on the walkways were identified at two schools.


At one school, the switchgear was not operational. At another school, the generator had been out of service for unknown amount of time. At the third school, two emergency light switch stations indicated a fault.

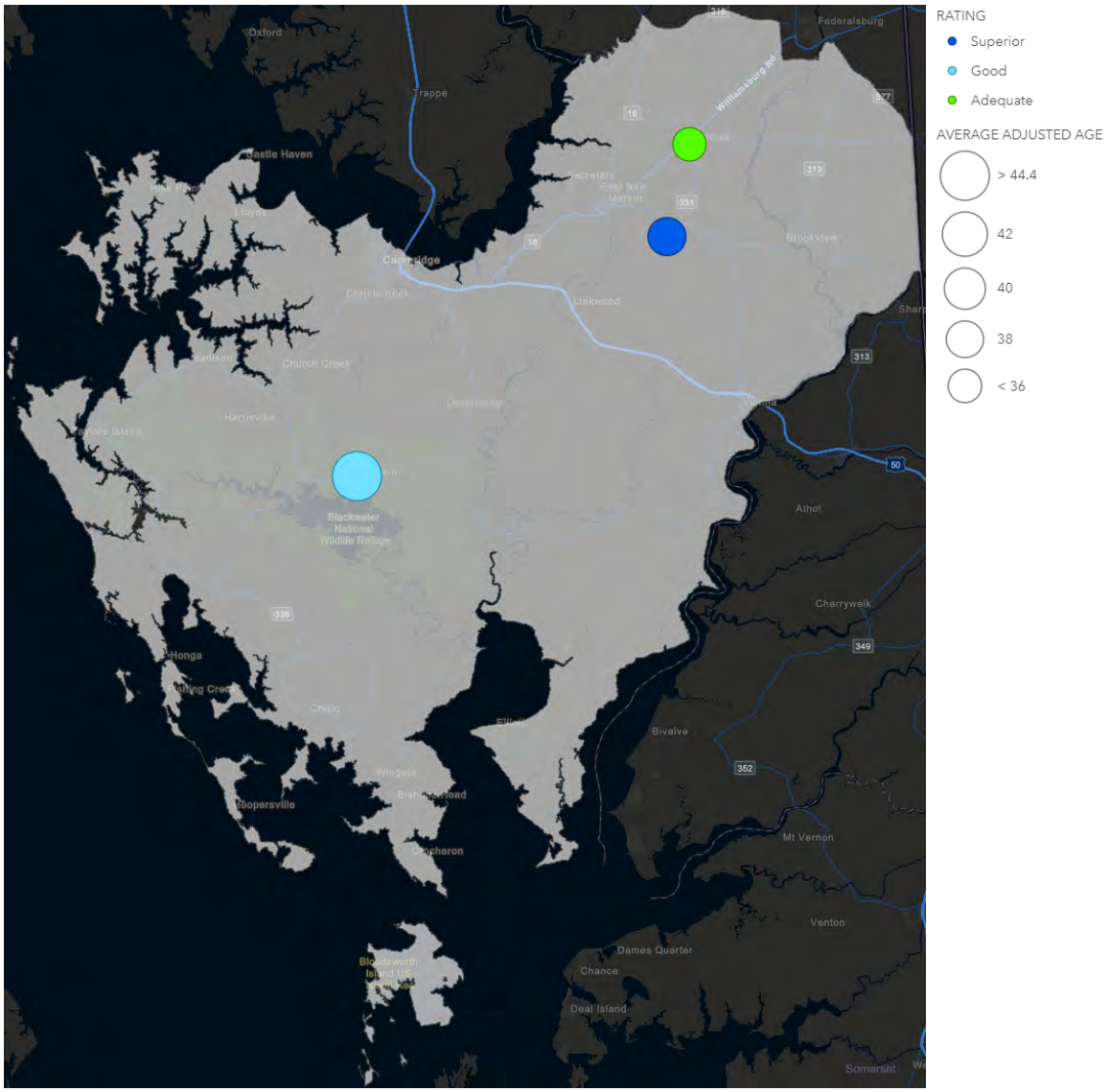
There were inoperable exhaust fans at two schools. No work orders were identified for preventive or reactive maintenance in the CMMS documentation.

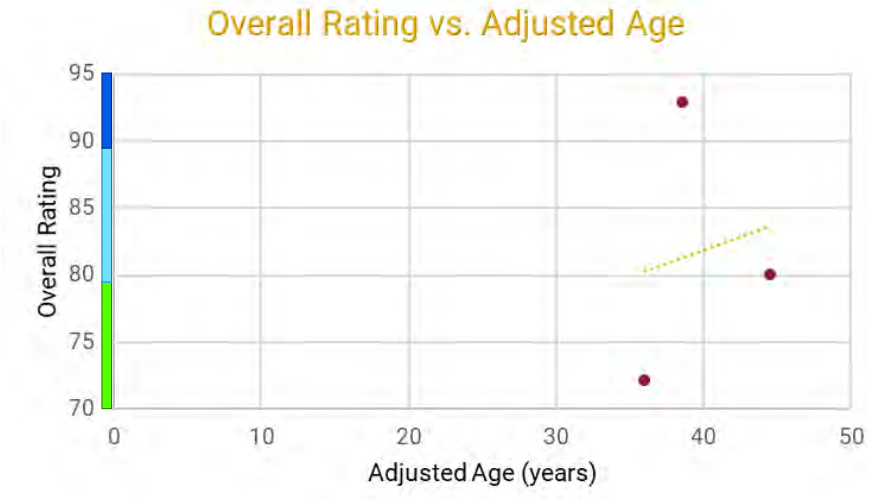
One school did not have any hot water in the building. Leaking plumbing fixtures were identified at two schools.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 1 |
| | Grounds | 0 | 0 |
| | Positive Site Drainage Away from Structure(s) | 0 | 0 |
| | Playgrounds, Equipment, & Fields | 0 | 0 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 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 | 0 |
| | Ceilings | 0 | 0 |
| | Interior Lighting | 0 | 0 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 0 |
| | Electrical Distribution & Service Equipment | 0 | 0 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 1 |
| | Plumbing Fixtures and Equipment | 0 | 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 |
| | **Total** | **0** | **4** |

# Overall Rating vs Adjusted Building Age



- The results of predictive and preventive maintenance inspections for the electrical systems should be tracked using the computerized maintenance management system (CMMS).
- Exhaust fans should be included in the preventive maintenance (PM) program and serviced on a regular basis. Asset identification could help to ensure that all assets are receiving the required maintenance.
- Regular inspections and operational checks should be conducted to ensure that all plumbing fixtures are leak free and operating as designed. Any issues noted during the checks should be documented using the CMMS to ensure that they are repaired.
- The CMMS should be used to generate auto-populating PM work orders for roadways and walkways. Deficiencies discovered during the inspections should have corrective maintenance work orders created.

# FREDERICK COUNTY

**Total Schools Assessed in FY 2021: 40**


Earth and Space Science Lab (ESSL)

## FISCAL YEAR 2021: KEY FACTS

**68 schools**

Frederick County has 68 active schools.

**+ 2 schools since FY20.**

**27.1 years old**

The average adjusted age of all 68 schools is 27.1 years old.

**- 0.4 years since FY20.**

**> 6.8 M GSF**

Frederick County maintains 6,814,336 square feet throughout its 68 schools. It is the 7th largest LEA in Maryland.

**+ 353,684 SF since FY20.**

**> $2.9 B**

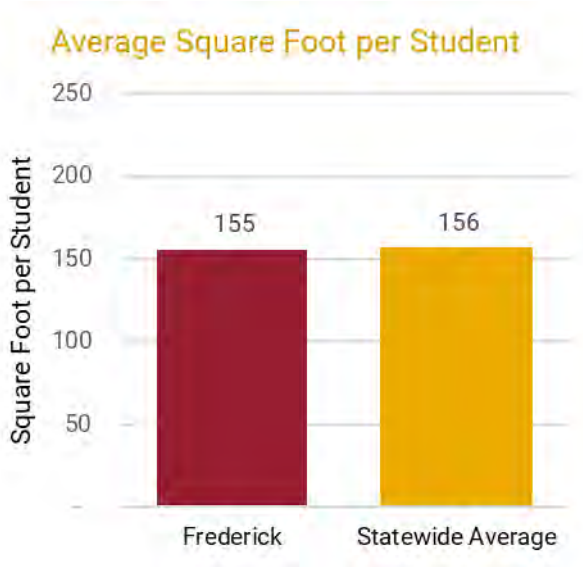
The current replacement value for Frederick County's >6.8M GSF, at the IAC's current replacement cost/SF, is more than $2.9B.

**+ $467M since FY20.**

**82.72 (Good) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

| | Alternate | Elementary | Middle | High | Science | |
|---|---|---|---|---|---|---|
| **Superior** | | | | | | |
| **Good** | 1 | 24 | 6 | 6 | 1 | 38 |
| **Adequate** | | 1 | | 1 | | 2 |
| **Not Adequate** | | | | | | |
| **Poor** | | | | | | |
| Totals | 1 | 25 | 6 | 7 | 1 | **40** |



# FREDERICK COUNTY

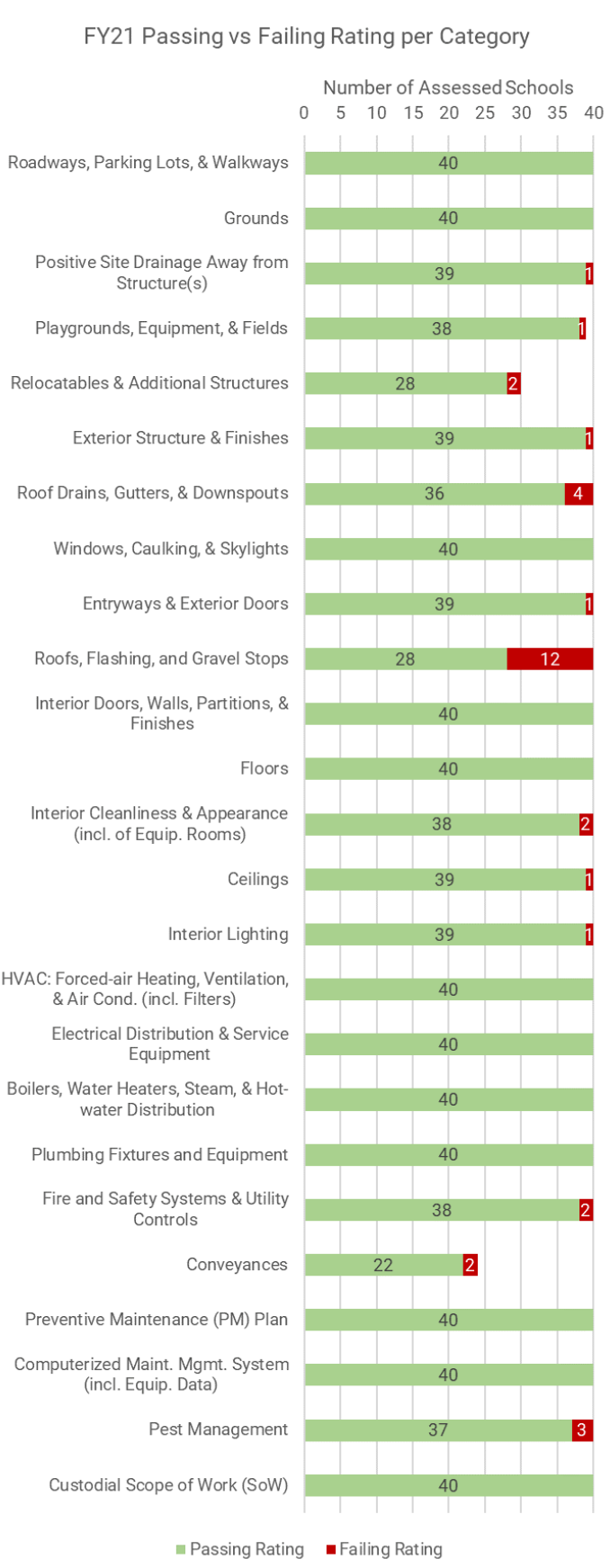
## FY 2021 Results: Summary of School Ratings - Part 1 of 2

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Lincoln Elementary (10.004) | Elementary | 98,463 | 8 | Adequate | 0 | 13 | 11 | 0 | 0 |
| 2. Yellow Springs Elementary (10.007) | Elementary | 52,600 | 54 | Good | 1 | 18 | 5 | 0 | 0 |
| 3. Walkersville High (10.012) | High | 181,416 | 39 | Good | 1 | 16 | 7 | 1 | 0 |
| 4. Linganore High (10.017) | High | 253,565 | 10 | Good | 1 | 20 | 4 | 0 | 0 |
| 5. Valley Elementary (10.018) | Elementary | 59,989 | 50 | Good | 0 | 23 | 2 | 0 | 0 |
| 6. N. Frederick Elementary (10.021) | Elementary | 95,613 | 6 | Good | 1 | 22 | 1 | 0 | 0 |
| 7. Parkway Elementary (10.023) | Elementary | 32,223 | 38 | Good | 0 | 19 | 5 | 0 | 0 |
| 8. New Market Elementary (10.030) | Elementary | 88,983 | 31 | Good | 0 | 21 | 4 | 0 | 0 |
| 9. Monocacy Middle (10.034) | Middle | 114,445 | 39 | Good | 1 | 21 | 1 | 1 | 0 |
| 10. Brunswick High (10.036) | High | 166,066 | 51 | Adequate | 0 | 15 | 10 | 0 | 0 |
| 11. W. Frederick Middle (10.037) | Middle | 166,439 | 10 | Good | 0 | 17 | 5 | 3 | 0 |
| 12. New Midway Elementary (10.038) | Elementary | 21,894 | 48 | Good | 0 | 23 | 1 | 0 | 0 |
| 13. Hillcrest Elementary (10.039) | Elementary | 62,305 | 30 | Good | 0 | 21 | 3 | 0 | 0 |
| 14. Monocacy Elementary (10.040) | Elementary | 57,900 | 31 | Good | 1 | 11 | 9 | 2 | 0 |
| 15. Ballenger Creek Middle (10.041) | Middle | 113,850 | 30 | Good | 0 | 17 | 6 | 0 | 0 |
| 16. Green Valley Elementary (10.042) | Elementary | 51,888 | 49 | Good | 0 | 21 | 3 | 0 | 0 |
| 17. Ballenger Creek Elementary (10.043) | Elementary | 64,187 | 29 | Good | 0 | 17 | 6 | 0 | 0 |
| 18. Twin Ridge Elementary (10.044) | Elementary | 68,900 | 28 | Good | 0 | 21 | 3 | 0 | 0 |
| 19. Windsor Knolls Middle (10.046) | Middle | 116,644 | 26 | Good | 0 | 22 | 3 | 0 | 0 |
| 20. Sabillasville Elementary (10.047) | Elementary | 27,000 | 56 | Good | 0 | 18 | 6 | 0 | 0 |
| 21. Urbana High (10.048) | High | 249,609 | 23 | Good | 0 | 20 | 5 | 0 | 0 |
| 22. Glade Elementary (10.050) | Elementary | 66,500 | 25 | Good | 1 | 17 | 6 | 0 | 0 |
| 23. Catoctin High (10.051) | High | 179,045 | 33 | Good | 0 | 21 | 3 | 1 | 0 |
| 24. Orchard Grove Elementary (10.052) | Elementary | 70,142 | 24 | Good | 0 | 23 | 2 | 0 | 0 |
| 25. Deer Crossing Elementary (10.053) | Elementary | 77,966 | 23 | Good | 0 | 17 | 6 | 1 | 0 |
| 26. Whittier Elementary (10.054) | Elementary | 81,244 | 22 | Good | 0 | 21 | 4 | 0 | 0 |
| 27. Waverley Elementary (10.058) | Elementary | 54,178 | 50 | Good | 0 | 17 | 6 | 2 | 0 |
| 28. Myersville Elementary (10.061) | Elementary | 54,889 | 43 | Good | 0 | 13 | 10 | 1 | 0 |
| 29. Thurmont Primary (10.064) | Elementary | 66,334 | 17 | Good | 0 | 19 | 3 | 1 | 0 |
| 30. Heather Ridge (10.065) | Alternate | 31,553 | 30 | Good | 0 | 18 | 3 | 4 | 0 |
| 31. Tuscarora High (10.068) | High | 257,062 | 16 | Good | 0 | 24 | 1 | 0 | 0 |
| 32. Crestwood Middle (10.069) | Middle | 107,212 | 16 | Good | 1 | 21 | 1 | 2 | 0 |
| 33. Tuscarora Elementary (10.070) | Elementary | 86,938 | 16 | Good | 0 | 22 | 3 | 0 | 0 |

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 34. Centerville Elementary (10.071) | Elementary | 87,175 | 15 | Good | 0 | 21 | 3 | 0 | 0 |
| 35. Middletown Primary (10.072) | Elementary | 70,288 | 14 | Good | 1 | 23 | 0 | 0 | 0 |
| 36. Oakdale High (10.073) | High | 241,061 | 12 | Good | 0 | 20 | 5 | 0 | 0 |
| 37. Earth and Space Sciences Lab (ESSL) (10.074) | Science | 10,624 | 11 | Good | 0 | 21 | 1 | 0 | 0 |
| 38. Urbana Middle (10.076) | Middle | 145,135 | 13 | Good | 0 | 18 | 7 | 0 | 0 |
| 39. Sugarloaf Elementary (10.078) | Elementary | 97,869 | 2 | Good | 6 | 17 | 1 | 0 | 0 |
| 40. Butterfly Ridge Elementary School (10.079) | Elementary | 105,515 | 2 | Good | 8 | 16 | 1 | 0 | 0 |
| Totals | | | | | 23 | 765 | 166 | 19 | 0 |
| Percentage of Total Ratings for System | | | | | 2% | 79% | 17% | 2% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths

The grounds, including landscaping and lawn care, appeared to be well maintained and cared for.

The plumbing fixtures were clean and maintained. Most issues that were identified had work orders in the CMMS for tracking.

The HVAC systems were well maintained. Preventive maintenance work orders appeared to auto-populate in the CMMS.

The boilers were well maintained. The majority of schools received a Good rating, and one school earned a Superior rating.

## Weaknesses

Nine schools were observed with open or damaged seams on the roofs. Seven schools were noted with ponding water on their roofs and/or roof leaks.

Draining problems with the roof drains and/or gutters due to debris, damage, or other issues were observed at 22 schools.

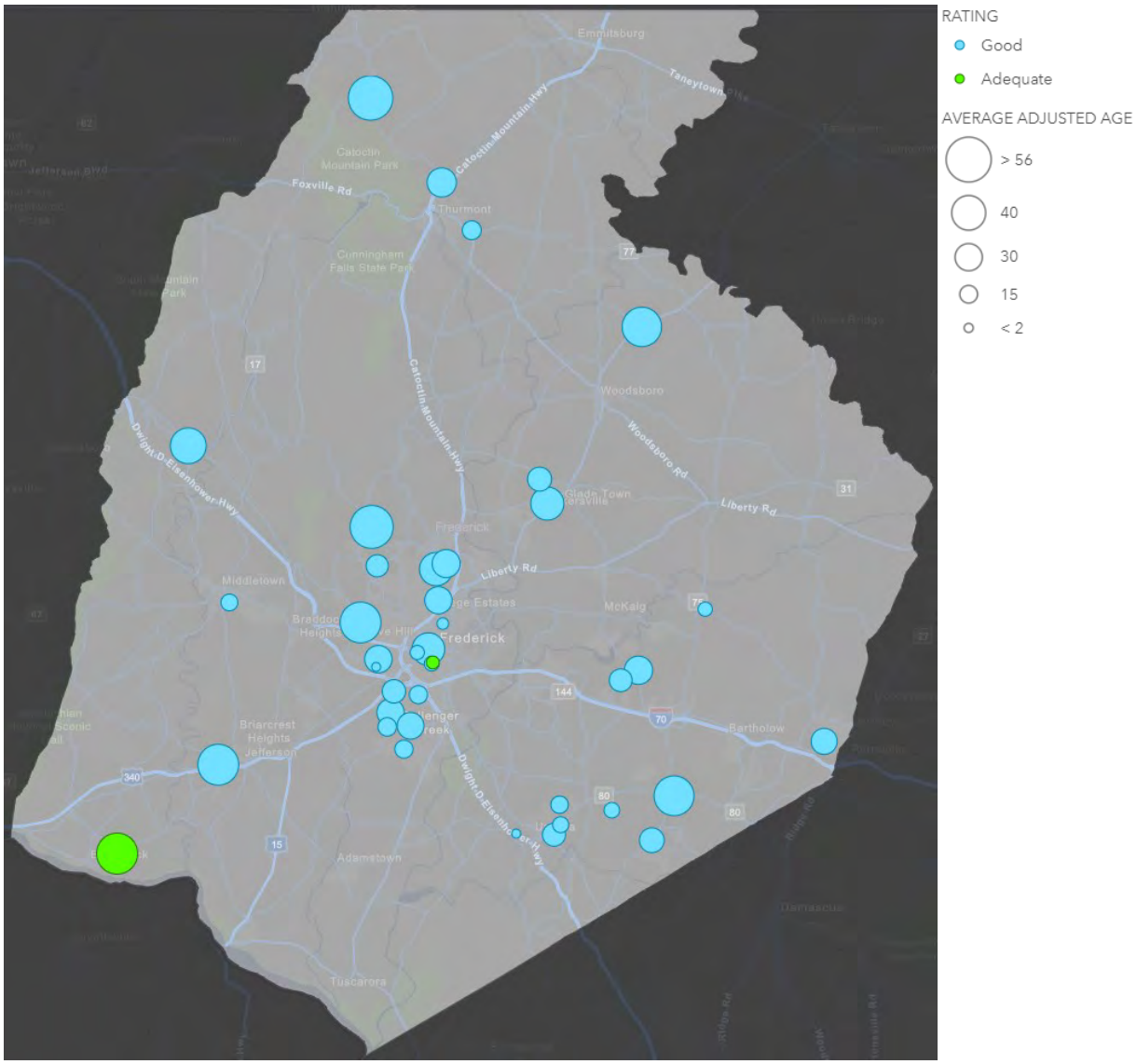
Ten schools received a Not Adequate rating for roofing. Deficiencies noted during the LEA's roofing inspections were not being repaired or tracked using the CMMS.

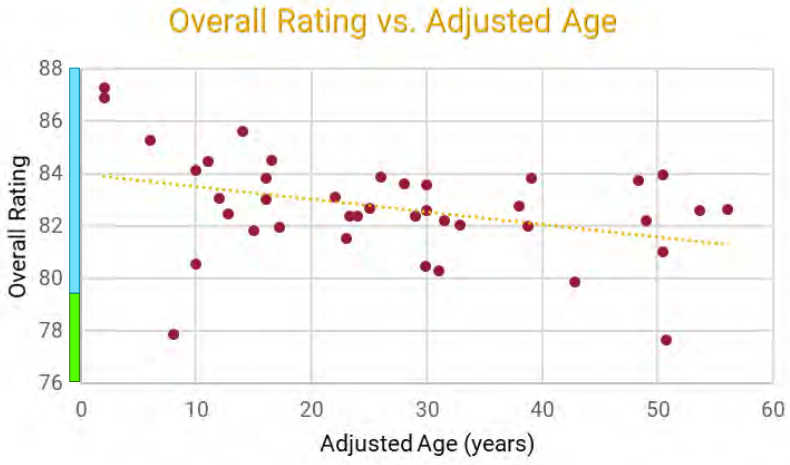
There were ten schools with active beehives and ten schools with rodent activity noted.

## FY 2021 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 | 1 |
| | Playgrounds, Equipment, & Fields | 0 | 1 |
| | Relocatables & Additional Structures | 0 | 2 |
| 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 | 2 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 0 |
| | Floors | 0 | 0 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 1 |
| | Ceilings | 0 | 0 |
| | Interior Lighting | 0 | 1 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 0 |
| | Electrical Distribution & Service Equipment | 0 | 0 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 0 |
| | Plumbing Fixtures and Equipment | 0 | 0 |
| | Fire and Safety Systems & Utility Controls | 0 | 2 |
| | Conveyances | 0 | 2 |
| 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



- Upon the completion of a roof inspection survey, work orders should be created to address any concerns identified during the roof inspection.
- Routine inspections of the building and building components should be conducted and tracked using the computerized maintenance management system (CMMS). Updating the status of the repairs and completions in the CMMS could help to resolve problems sooner.
- A more aggressive pest control program needs to be implemented. Industry best practice is to use the CMMS to schedule and track pest control programs.
- The CMMS should be used to track inspections and required renewal dates for the Department of Labor, Licensing and Regulation (DLLR) certifications.

# GARRETT COUNTY

**Total Schools Assessed in FY 2021: 3**


Grantsville Elementary

## FISCAL YEAR 2021: KEY FACTS

**13 schools**

Garrett County has 13 active schools.

**No change since FY20.**

**33.0 years old**

The average adjusted age of all 13 schools is 33.0 years old.

**+ 1 year since FY20.**

**> 0.7 M GSF**

Garrett County maintains 741,671 square feet throughout its 13 schools. It is the 21st largest LEA in Maryland.

**No change since FY20.**

**> $0.3 B**

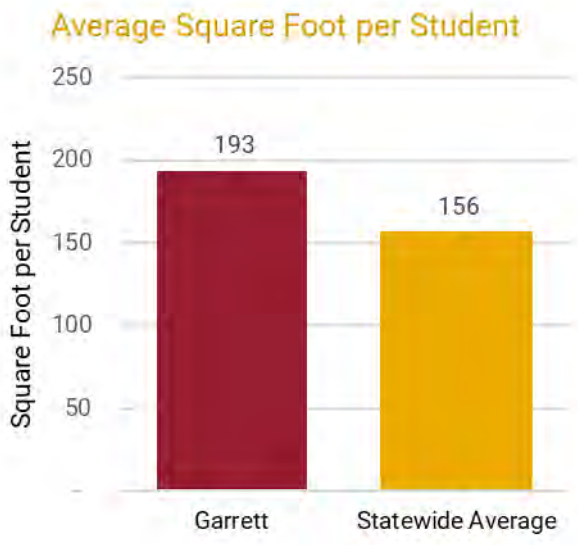
The current replacement value for Garrett County's >0.7M GSF, at the IAC's current replacement cost/SF, is more than $0.3B.

**+ $36M since FY20.**

**71.24 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

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

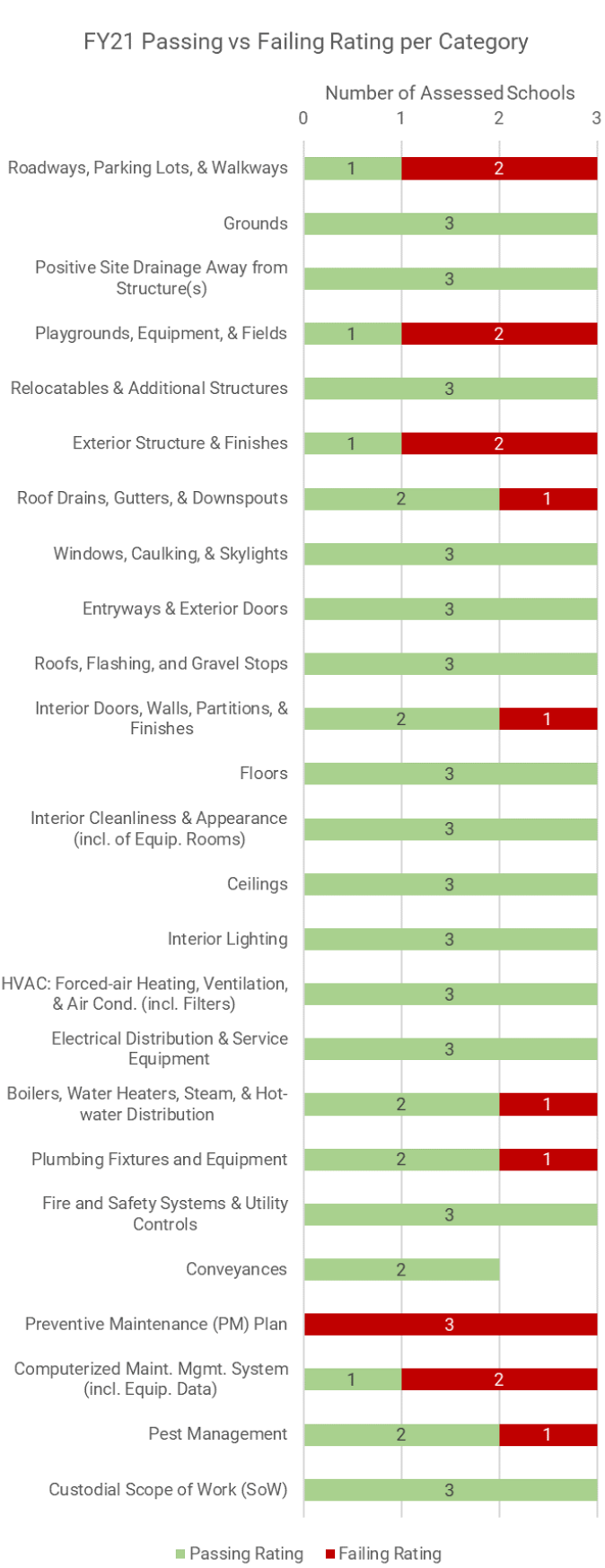


# GARRETT COUNTY

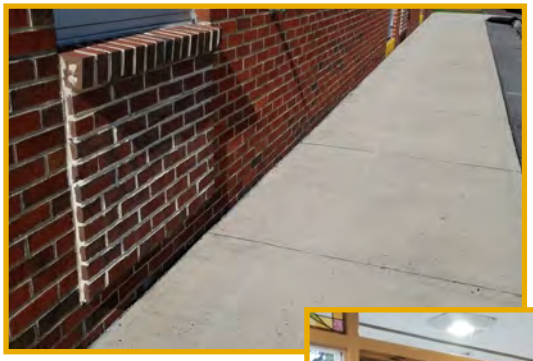
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Friendsville Elementary (11.002) | Elementary | 31,388 | 45 | Adequate | 0 | 1 | 22 | 2 | 0 |
| 2. Grantsville Elementary (11.004) | Elementary | 49,862 | 33 | Adequate | 0 | 1 | 21 | 2 | 0 |
| 3. Route 40 Elementary (11.011) | Elementary | 25,530 | 18 | Not Adequate | 0 | 2 | 21 | 2 | 0 |
| Totals | | | | | 0 | 4 | 64 | 6 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 5% | 86% | 8% | 0% |

## FY 2021 Results: Assessment Findings by Category

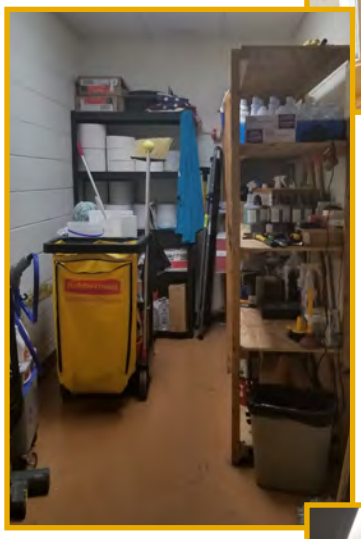



## Strengths

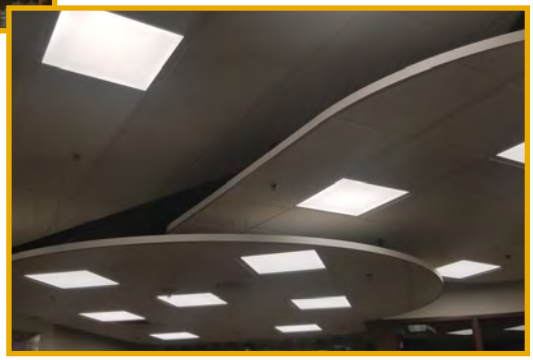


The exterior sealants appeared to have been routinely maintained to prevent water infiltration.

The majority of exterior doors were secure, weatherproof, watertight, and functioned as intended.



The interior of the facilities were well kept and organized. No egress or equipment obstructions were observed.



The interior lighting appeared well maintained and every building received a passing rating.

## Weaknesses

Walkways were observed with cracking, settlement, and damaged or missing sealant.

Moss growth was noted on the roofs at all three schools. At two schools, the aluminum coating was observed cracked in some areas.

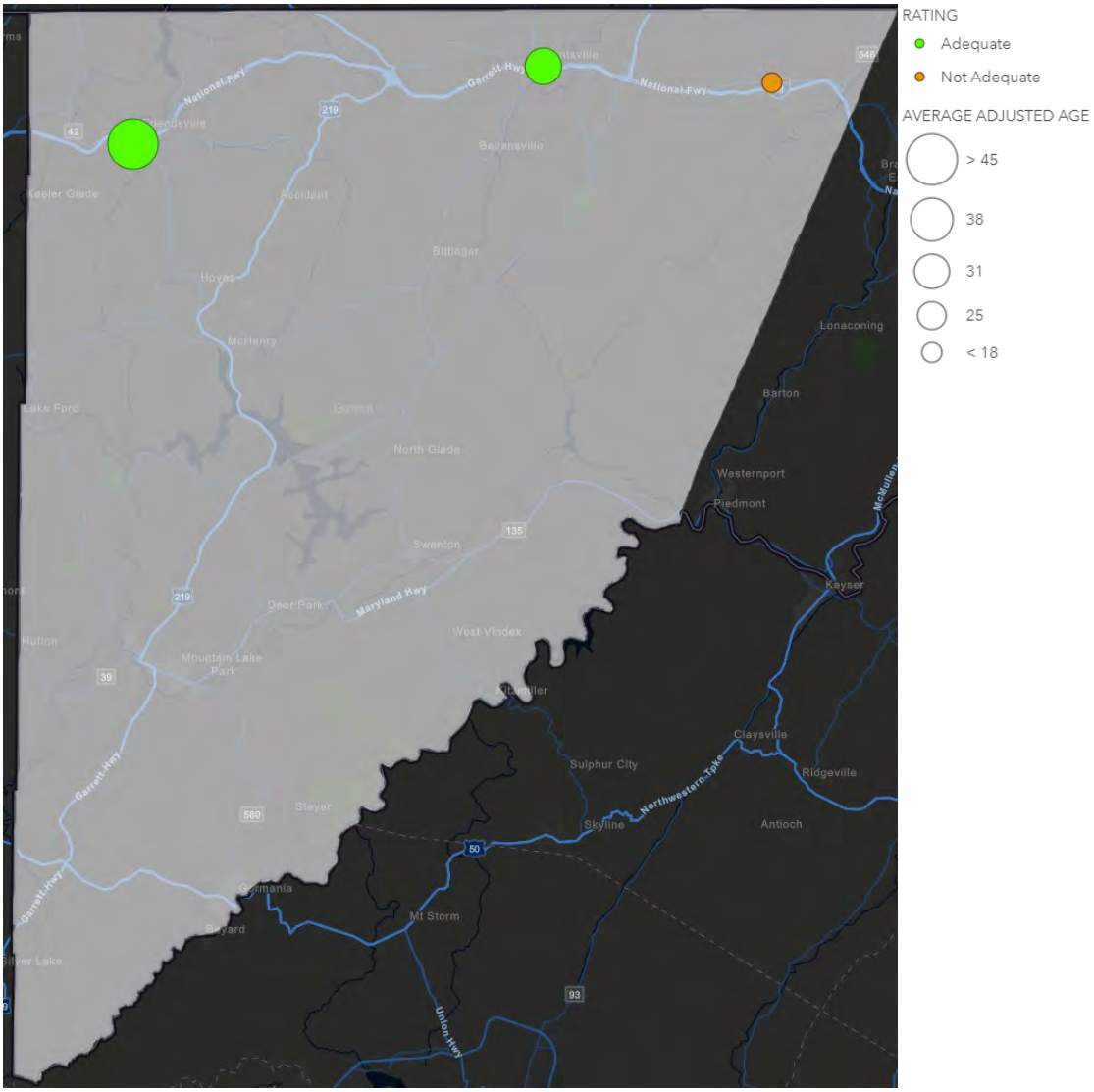
Two schools had issues with cracked brick walls near the kitchen and loading dock area, and no work orders were identified in the CMMS for repairs.

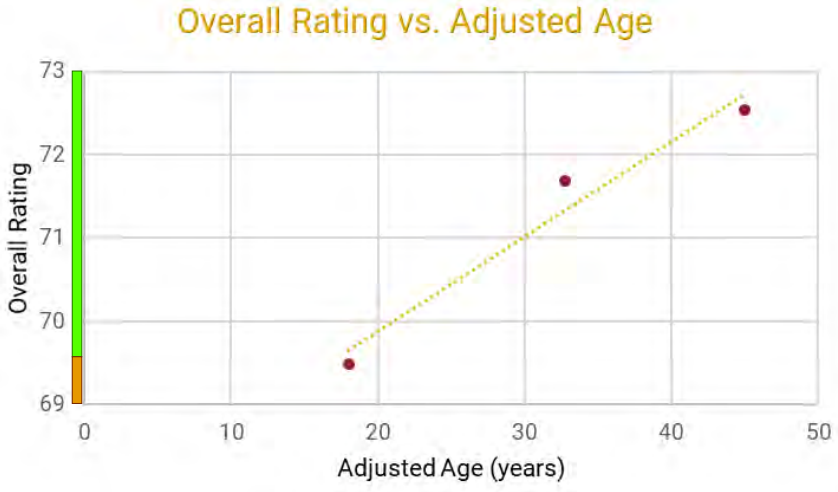
Safety hazards such as a displaced decorative border and deteriorated rubberized coating were observed at the playground equipment at two schools.

## FY 2021 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 | 2 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 2 |
| | 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 | 1 |
| | Floors | 0 | 0 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 0 |
| | Ceilings | 0 | 0 |
| | Interior Lighting | 0 | 0 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 0 |
| | Electrical Distribution & Service Equipment | 0 | 0 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 1 |
| | Plumbing Fixtures and Equipment | 0 | 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 |
| | **Total** | **0** | **10** |

# Overall Rating vs Adjusted Building Age



- Playgrounds and field equipment should be inspected on a regular basis. Best practice is to use the computerized maintenance management system (CMMS) to track preventive and corrective work orders for the play equipment.

- Roofing inspections should include all areas of the roof. Vegetation growth and debris will cause long-term issues with overall roof conditions and lifespan. Roof inspections and deficiencies should be tracked using the CMMS.

- Regular inspections of roadways and parking lots can help to identify and correct small problems early on. Identified issues should be tracked using the CMMS to ensure they are addressed.

- Preventive maintenance needs to be implemented and tracked in the CMMS. Its importance should be emphasized with all levels of staff and management.

# HARFORD COUNTY

**Total Schools Assessed in FY 2021: 12**


North Bend Elementary

## FISCAL YEAR 2021: KEY FACTS

**53 schools**

Harford County has 53 active schools.

**No change since FY20.**

**30.1 years old**

The average adjusted age of all 53 schools is 30.1 years old.

**- 0.7 years since FY20.**

**> 6.1 M GSF**

Harford County maintains 6,137,963 square feet throughout its 53 schools. It is the 8th largest LEA in Maryland.

**+ 86,961 SF since FY20.**

**> $2.6 B**

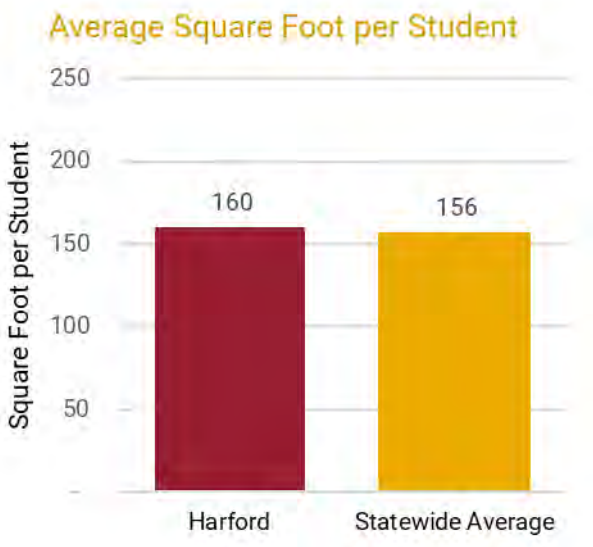
The current replacement value for Harford County's >6.1M GSF, at the IAC's current replacement cost/SF, is more than $2.6B.

**+ $333M since FY20.**

**77.56 (Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

| | Special Ed. | Elementary | Middle | High | |
|---|---|---|---|---|---|
| **Superior** | | | | | |
| **Good** | | 5 | | | 5 |
| **Adequate** | 1 | 6 | | | 7 |
| **Not Adequate** | | | | | |
| **Poor** | | | | | |
| Totals | 1 | 11 | | | **12** |

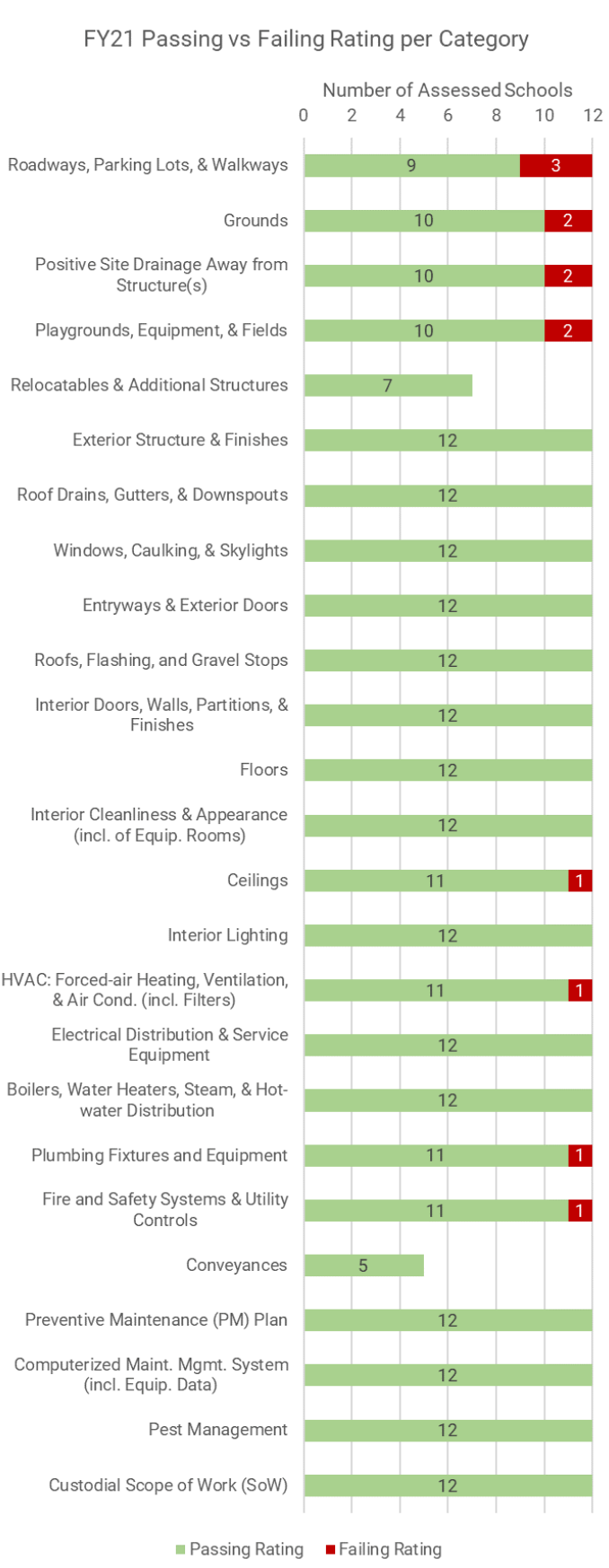


# HARFORD COUNTY

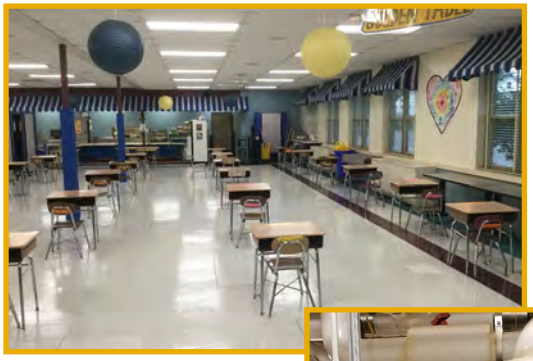
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Magnolia Elementary (12.002) | Elementary | 59,900 | 44 | Adequate | 0 | 3 | 21 | 0 | 0 |
| 2. William S. James Elementary (12.013) | Elementary | 58,500 | 44 | Adequate | 0 | 4 | 19 | 0 | 0 |
| 3. Homestead/Wakefield Elementary (12.022) | Elementary | 115,458 | 56 | Adequate | 0 | 1 | 22 | 1 | 0 |
| 4. Bel Air Elementary (12.024) | Elementary | 49,748 | 36 | Adequate | 2 | 3 | 20 | 0 | 0 |
| 5. John Archer Special Education (12.025) | Special Ed. | 63,984 | 46 | Adequate | 0 | 4 | 20 | 0 | 0 |
| 6. North Bend Elementary (12.031) | Elementary | 60,221 | 29 | Adequate | 0 | 7 | 17 | 0 | 0 |
| 7. Halls Cross Roads Elementary (12.036) | Elementary | 63,082 | 26 | Good | 0 | 13 | 12 | 0 | 0 |
| 8. Joppatowne Elementary (12.040) | Elementary | 89,985 | 11 | Good | 0 | 15 | 9 | 0 | 0 |
| 9. Forest Hill Elementary (12.043) | Elementary | 64,722 | 20 | Good | 0 | 17 | 8 | 0 | 0 |
| 10. Bakerfield Elementary (12.044) | Elementary | 65,691 | 21 | Good | 0 | 15 | 9 | 0 | 0 |
| 11. Norrisville Elementary (12.055) | Elementary | 37,417 | 44 | Adequate | 0 | 5 | 18 | 0 | 0 |
| 12. Darlington Elementary (12.056) | Elementary | 24,237 | 25 | Good | 0 | 16 | 7 | 0 | 0 |
| Totals | | | | | 2 | 103 | 182 | 1 | 0 |
| Percentage of Total Ratings for System | | | | | 1% | 36% | 63% | 0% | 0% |

## FY 2021 Results: Assessment Findings by Category



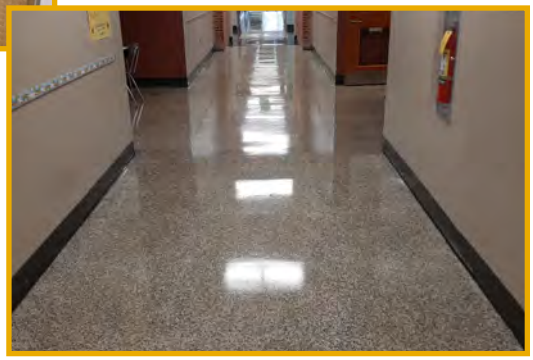

### Strengths



Most facilities appeared clean and well kept with little to no egress obstructions.

Most of the boilers, water heaters, steam, and hot-water distribution systems appeared to be well maintained and functioning properly.

It appeared that all five schools with conveyance systems had up-to-date certifications and were well maintained. One school received a Superior rating.



Most of the hard surface floors were observed bright and clean and appeared well maintained.

## Weaknesses

A few schools had cracked and deteriorated roadways, parking lots, and walkways. Settlement and missing sealant were also identified in the walkway areas.

Sealant was missing between the walkways and building foundations at six schools. Two schools were identified with grading sloped incorrectly towards the buildings.

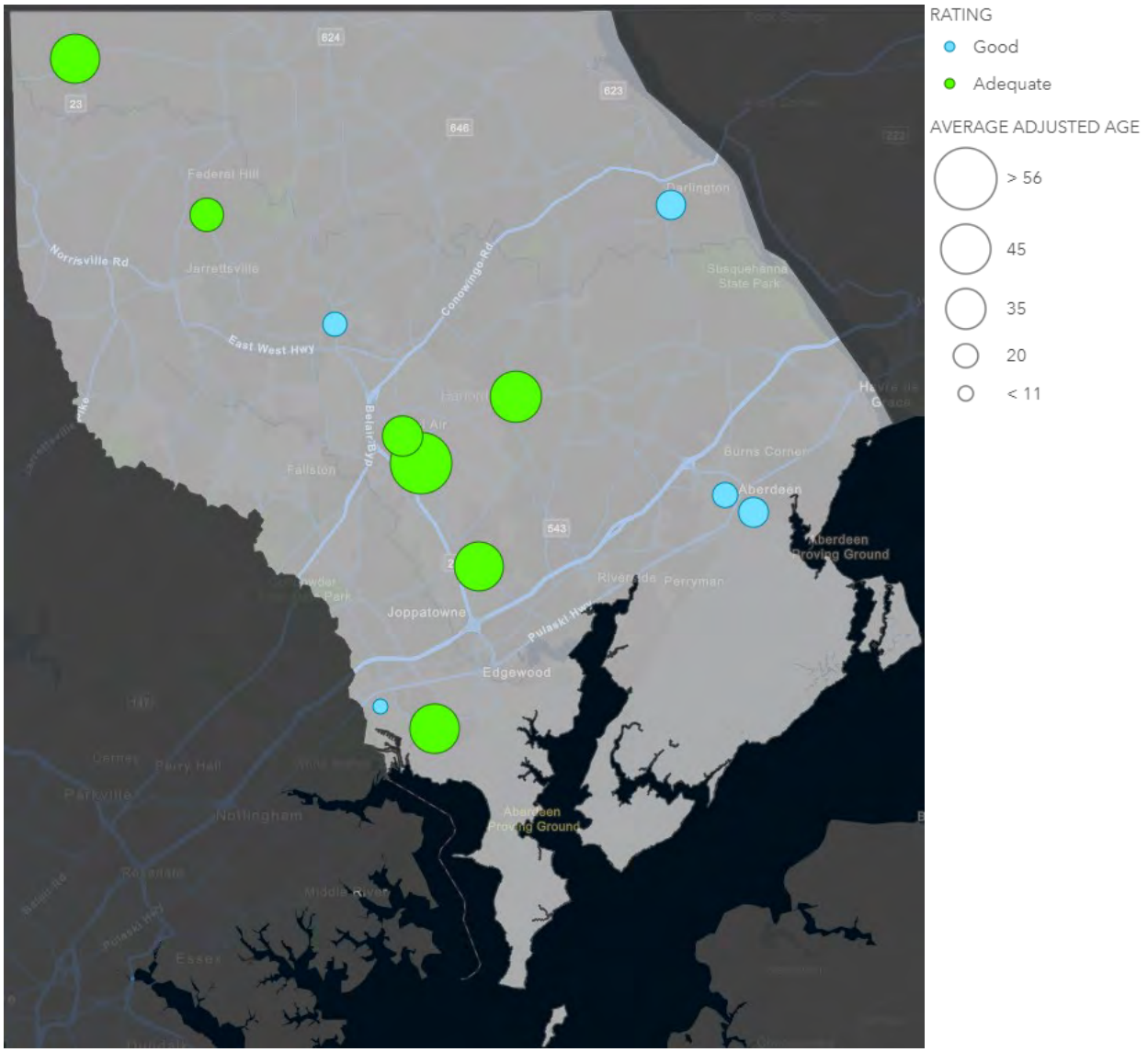
Six schools had deteriorated coatings on their playground equipment. Cracked hard play surfaces with vegetation growth were observed at three schools.

Overgrown vegetation was observed at eleven schools, some of which was in contact with buildings and/or play areas.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 3 |
| | Grounds | 0 | 2 |
| | Positive Site Drainage Away from Structure(s) | 0 | 2 |
| | 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 | 1 |
| | Interior Lighting | 0 | 0 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 0 |
| | Electrical Distribution & Service Equipment | 0 | 0 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 0 |
| | Plumbing Fixtures and Equipment | 0 | 1 |
| | Fire and Safety Systems & Utility Controls | 0 | 1 |
| | Conveyances | 0 | 0 |
| 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** | **12** |

# Overall Rating vs Adjusted Building Age



- The schools assessed are not identified in the comprehensive maintenance plan for parking lot repairs. Routine preventive maintenance inspections and repairs could prolong the useful life of the hard surfaces.

- Regular site grounds inspections should be conducted and include identifying overgrown landscaping and trees. Work orders should be created in the computerized maintenance management system (CMMS) to track any deficiencies that are identified during the inspections.

- Results of monthly playground inspections should be documented in the CMMS with work orders for any issues found requiring repair. Playground protective coatings should be included in the inspection process.

- Routine inspections of parking lots and walkways should include the areas where hard surfaces meet building structures. Sealant in those locations should be checked and repaired on a regular basis.

# HOWARD COUNTY

**Total Schools Assessed in FY 2021: 15**


Pointers Run Elementary

## FISCAL YEAR 2021: KEY FACTS

**76 schools**

Howard County has 76 active schools.

**+ 1 school since FY20.**

**19.6 years old**

The average adjusted age of all 76 schools is 19.6 years old.

**+ 0.8 years since FY20.**

**> 8.2 M GSF**

Howard County maintains 8,250,880 square feet throughout its 76 schools. It is the 6th largest LEA in Maryland.

**+ 119,445 SF since FY20.**

**> $3.5 B**

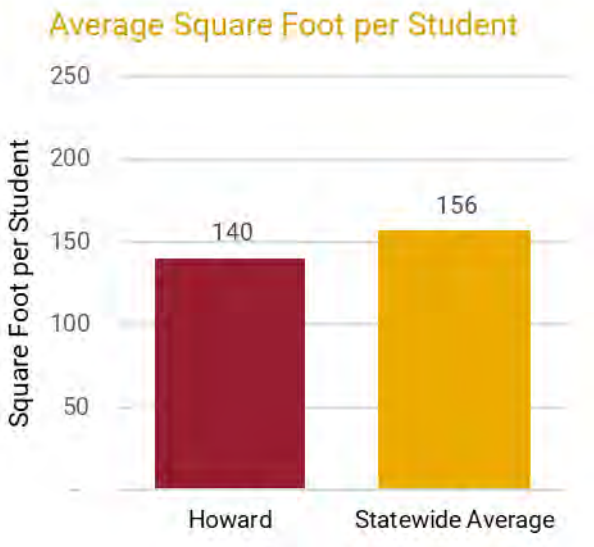
The current replacement value for Howard County's >8.2M GSF, at the IAC's current replacement cost/SF, is more than $3.5B.

**+ $449M since FY20.**

**76.41 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Special Ed. | Elementary | Middle | High | |
|---|---|---|---|---|---|
| **Superior** | | | | | |
| **Good** | | 2 | | | 2 |
| **Adequate** | 1 | 7 | 2 | 3 | 13 |
| **Not Adequate** | | | | | |
| **Poor** | | | | | |
| Totals | 1 | 9 | 2 | 3 | **15** |

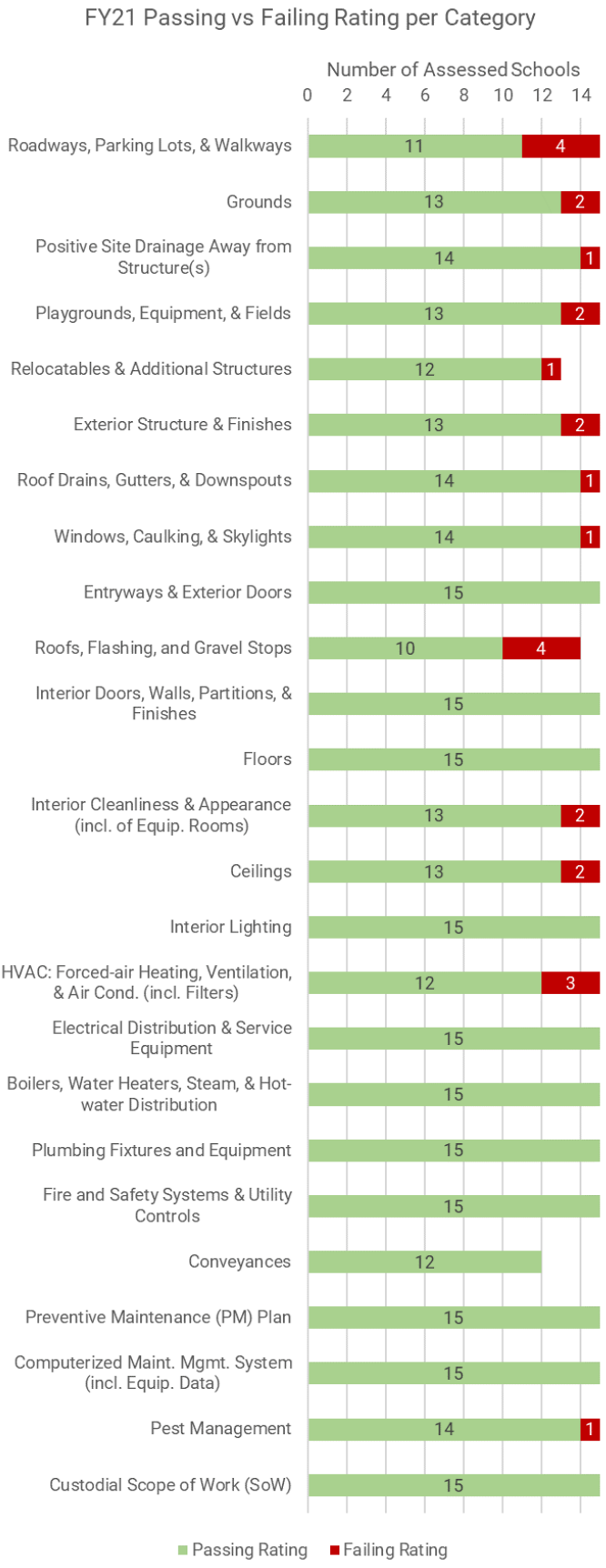


# HOWARD COUNTY

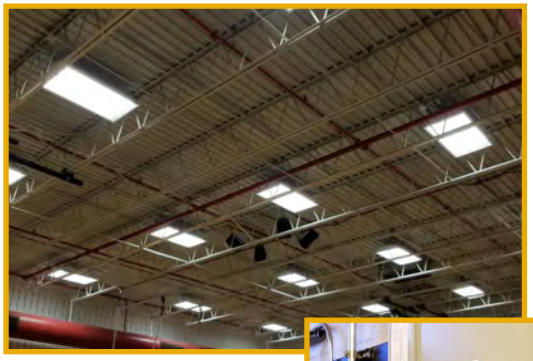
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Worthington Elementary (13.010) | Elementary | 60,999 | 13 | Adequate | 0 | 11 | 14 | 0 | 0 |
| 2. Mt. Hebron High (13.019) | High | 212,370 | 10 | Adequate | 0 | 5 | 20 | 0 | 0 |
| 3. Swansfield Elementary (13.023) | Elementary | 80,982 | 4 | Adequate | 0 | 3 | 21 | 0 | 0 |
| 4. Ellicott Mills Middle (13.026) | Middle | 97,567 | 19 | Adequate | 0 | 7 | 17 | 1 | 0 |
| 5. St. Johns Lane Elementary (13.028) | Elementary | 65,580 | 20 | Adequate | 0 | 6 | 18 | 0 | 0 |
| 6. Guilford Elementary (13.033) | Elementary | 51,306 | 14 | Good | 0 | 16 | 8 | 1 | 0 |
| 7. Clarksville Elementary (13.037) | Elementary | 63,375 | 41 | Adequate | 0 | 7 | 18 | 0 | 0 |
| 8. Waverly Elementary (13.043) | Elementary | 115,822 | 3 | Adequate | 0 | 1 | 23 | 0 | 0 |
| 9. Pointers Run Elementary (13.044) | Elementary | 88,201 | 28 | Adequate | 0 | 6 | 18 | 0 | 0 |
| 10. Patapsco Middle (13.051) | Middle | 90,859 | 44 | Adequate | 0 | 3 | 21 | 0 | 0 |
| 11. Glenelg High (13.061) | High | 211,415 | 25 | Adequate | 0 | 8 | 17 | 0 | 0 |
| 12. Waterloo Elementary (13.062) | Elementary | 74,313 | 13 | Adequate | 0 | 7 | 18 | 0 | 0 |
| 13. Marriotts Ridge High (13.082) | High | 251,645 | 15 | Adequate | 0 | 12 | 13 | 0 | 0 |
| 14. Cedar Lane School (13.088) | Special Ed. | 99,850 | 15 | Adequate | 0 | 9 | 13 | 3 | 0 |
| 15. Hanover Hills Elementary (13.089) | Elementary | 116,633 | 2 | Good | 0 | 23 | 1 | 0 | 0 |
| Totals | | | | | 0 | 124 | 240 | 5 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 34% | 65% | 1% | 0% |

## FY 2021 Results: Assessment Findings by Category



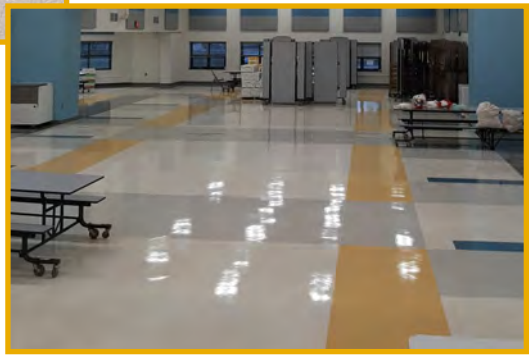

## Strengths



Lighting appeared to be well maintained with the majority of lighting fixtures operating as designed.

Howard County Public Schools is a participant in the infrared testing program provided through the Maryland Association of Boards of Education (MABE). Electrical equipment was locked to prevent unauthorized access.


The elevators and lifts were in working order. Work orders were identified in the CMMS for preventive maintenance and inspections.



The floors appeared to receive good custodial care and preventive maintenance. Eleven schools earned a Good rating for their floors.

## Weaknesses

14 schools were observed with stained ceiling tiles and the majority did not have work orders in the CMMS. Missing ceiling tiles and damaged ceiling grids were also noted at a few schools.

The relocatables at four schools were observed with damaged handrails and/or ramps. Inoperable lighting and damaged ceiling tiles were noted in few other relocatables.

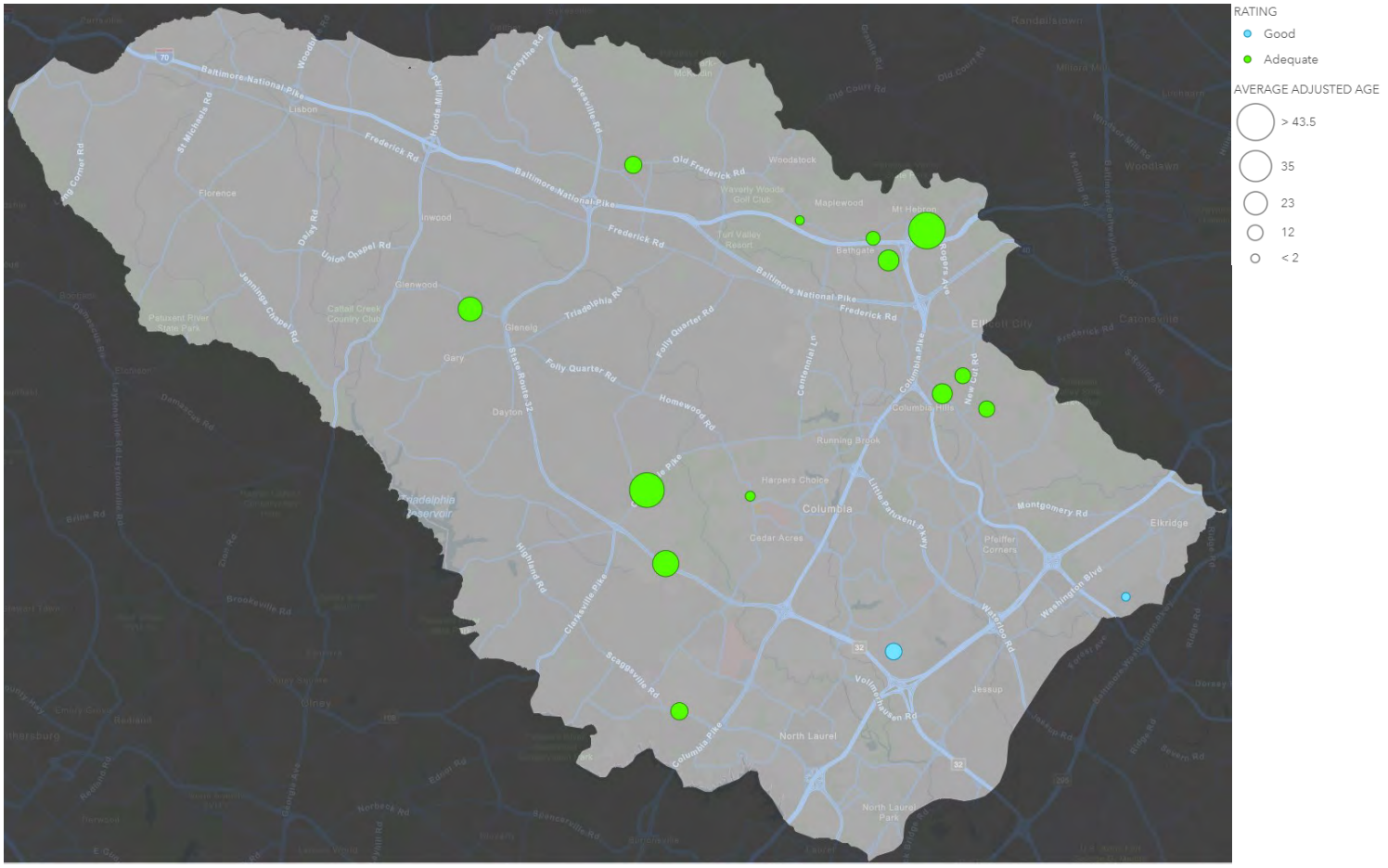
Blisters were observed on the roofs at ten schools. Nine schools had cracked seams. Signs of ponding were noted at six schools.

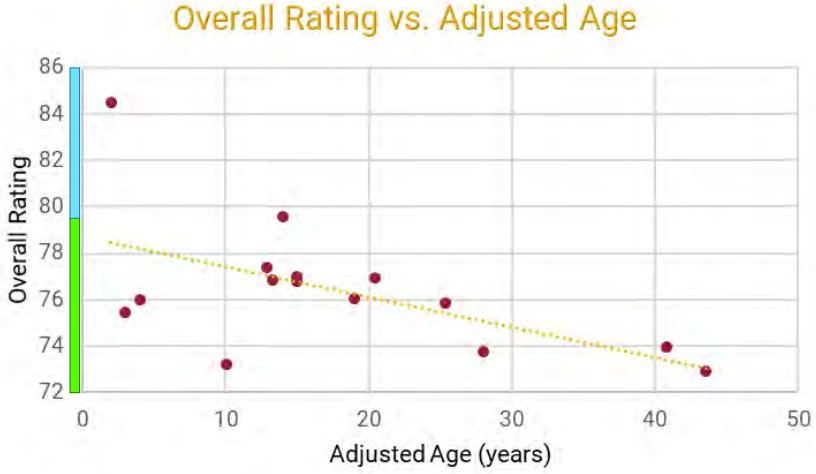
14 schools were observed with damaged or deteriorated walkways. Seven schools were noted with settlement in their walkways. Seven schools had missing sealants from the walkway joints.

## FY 2021 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 | 2 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 2 |
| | Roof Drains, Gutters, & Downspouts | 0 | 1 |
| | Windows, Caulking, & Skylights | 0 | 1 |
| | Entryways & Exterior Doors | 0 | 0 |
| | Roofs, Flashing, and Gravel Stops | 0 | 1 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 0 |
| | Floors | 0 | 0 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 2 |
| | Ceilings | 0 | 2 |
| | Interior Lighting | 0 | 0 |
| 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 | 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** | **21** |

# Overall Rating vs Adjusted Building Age



- Corrective work orders should be entered following any assessment or inspection that identifies a problem. Having a work order history for assets could help to evaluate the remaining useful life of an asset.

- Routine inspections and preventive maintenance (PM) should include relocatables and other structures outside of the main building. PM checks and the equipment list should be checked to ensure that all items such as fire extinguishers and emergency lights are being inspected as appropriate.

- Damage to ceiling tiles and grids should be tracked using the computerized maintenance management system (CMMS). This could help to identify root causes of problems and ensure that identified problems are corrected.

- Walkways and parking lots should be inspected on a regular basis to identify settlement and cracking of the surfaces. The comprehensive maintenance plan currently identifies this as an annual task; conducting these assessments on a semi-annual basis could be beneficial.

# KENT COUNTY

**Total Schools Assessed in FY 2021: 2**


Rock Hall Elementary

## FISCAL YEAR 2021: KEY FACTS

**5 schools**

Kent County has 5 active schools.

**No change since FY20.**

**42.8 years old**

The average adjusted age of all 5 schools is 42.8 years old.

**+ 1 year since FY20.**

**> 0.4 M GSF**

Kent County maintains 440,226 square feet throughout its 5 schools. It is the smallest LEA in Maryland.

**No change since FY20.**

**> $0.1 B**

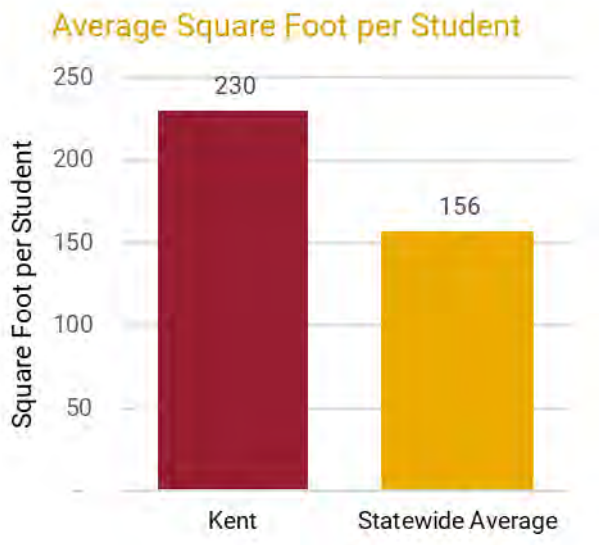
The current replacement value for Kent County's >0.4M GSF, at the IAC's current replacement cost/SF, is more than $0.1B.

**+ $21M since FY20.**

**72.57 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

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



# KENT COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Kent County Middle (14.003) | Middle | 78,785 | 45 | Adequate | 0 | 0 | 19 | 5 | 0 |
| 2. Rock Hall Elementary (14.004) | Elementary | 54,521 | 57 | Adequate | 0 | 2 | 18 | 3 | 0 |
| Totals | | | | | 0 | 2 | 37 | 8 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 4% | 79% | 17% | 0% |

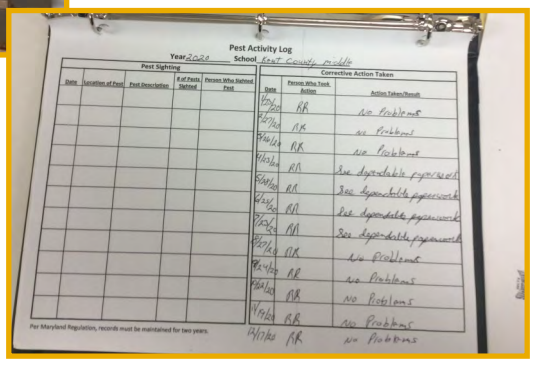
## FY 2021 Results: Assessment Findings by Category


## Strengths

The majority of the grounds, including playground equipment, appeared to be well maintained.

Drains were clear and water runoff was directed away from the facilities. Rain gutters and splash blocks were present and appeared maintained.

The electrical equipment was labeled and locked to prevent unauthorized access. Electrical rooms were clean.



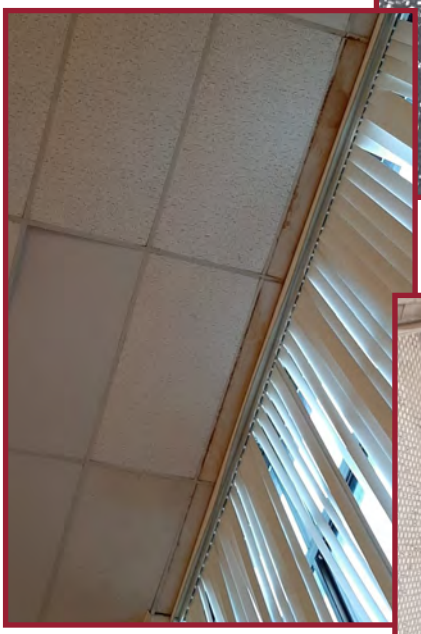

Pest management appeared to be effective with documentation stored in the main office for updates and reviews.

## Weaknesses

Both schools had emergency lights that did not work when the test button was depressed.


At one school, the roof drains were clogged with debris on the roof. No work orders were identified in the CMMS to track the deficiencies to ensure that problems are corrected.

The ceiling tiles were stained, cracked, damaged, missing, and/or contained holes in multiple locations at each school. Both schools received a Not Adequate rating for Ceilings.

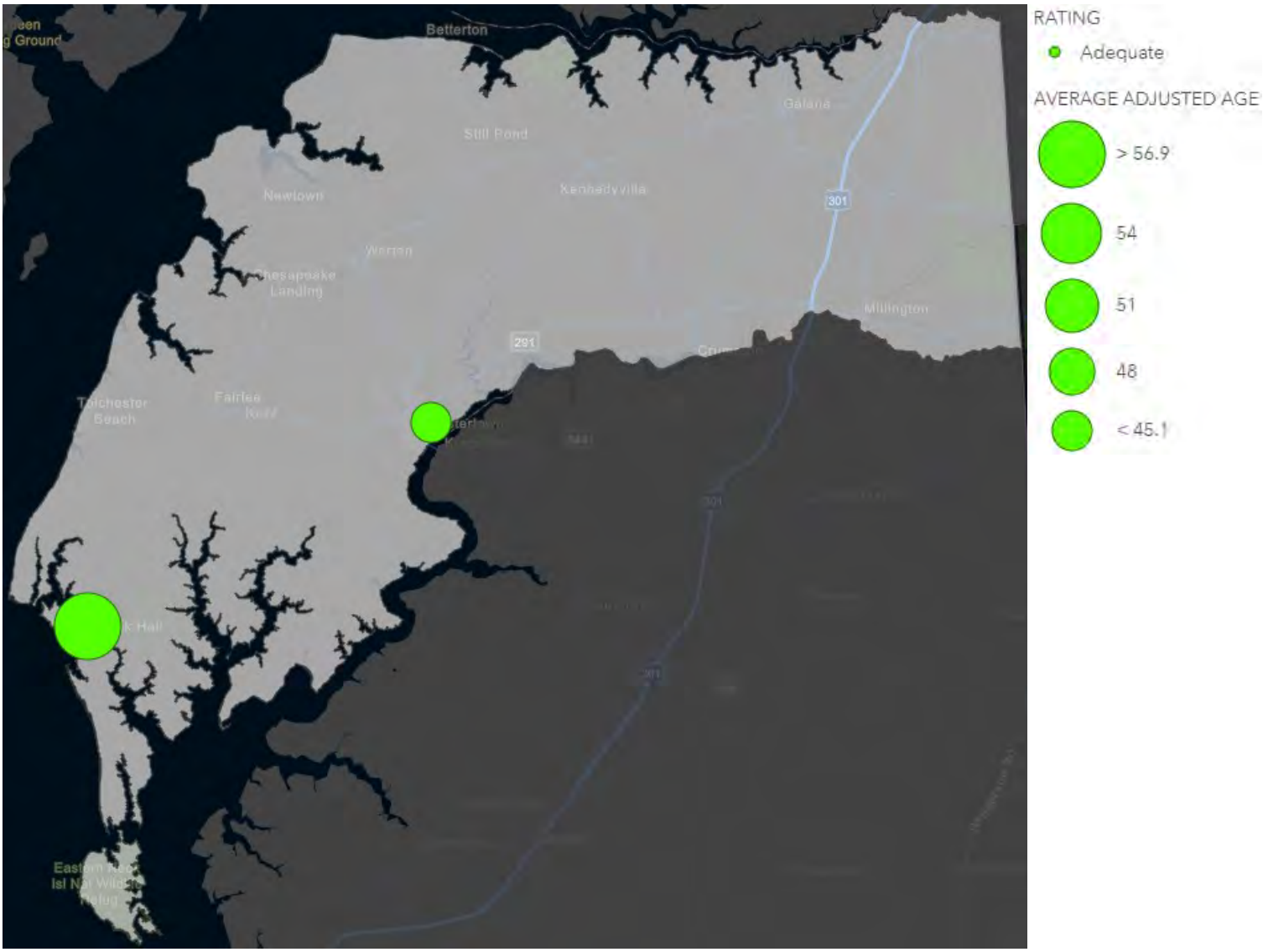


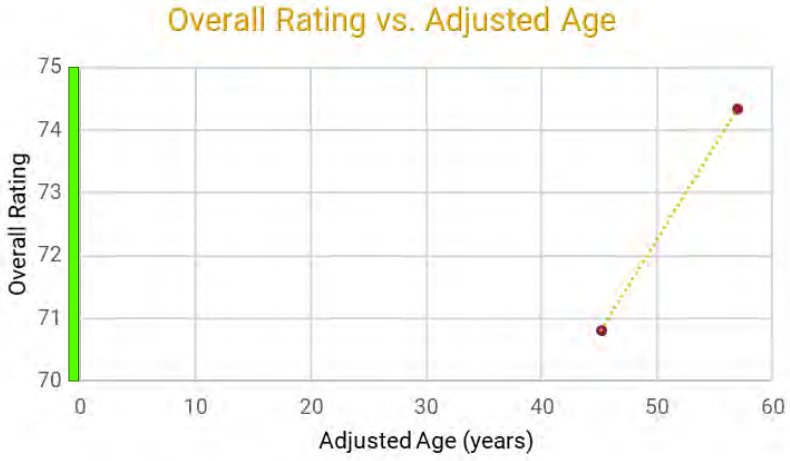
Exhaust fans were observed not working and there were dirty filters in the HVAC systems. Both schools received a Not Adequate rating for HVAC.

## FY 2021 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 | 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** | **1** |

# Overall Rating vs Adjusted Building Age



- Issues identified during inspections need work orders entered into the computerized maintenance management system (CMMS) to ensure the problems are tracked and remediated in a timely manner.

- 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.

- Fire extinguishers and emergency lights should be checked on a regular basis using auto-populated preventive maintenance (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 Schools Assessed in FY 2021: 7**

Wells (Hallie) Middle

## FISCAL YEAR 2021: KEY FACTS

**209 schools**

Montgomery County has 209 active schools.

**- 1 school since FY20.**

**24.1 years old**

The average adjusted age of all 209 schools is 24.1 years old.

**- 0.5 years since FY20.**

**> 25.1 M GSF**

Montgomery County maintains 25,107,150 square feet throughout its 209 schools. It is the largest LEA in Maryland.

**+ 596,778 SF since FY20.**

**> $10.7 B**

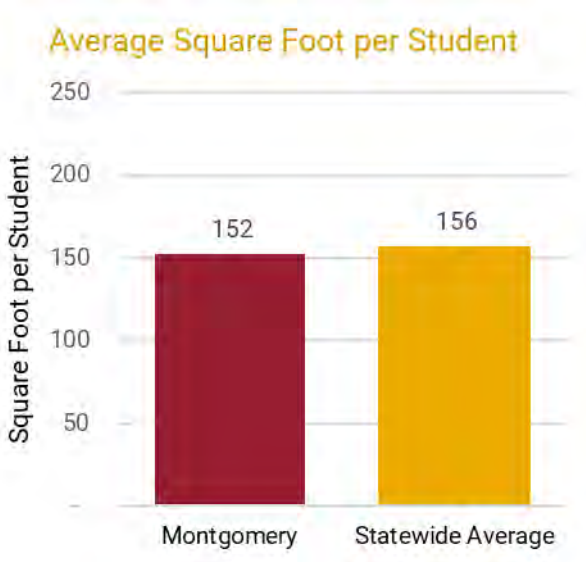
The current replacement value for Montgomery County's >25.1M GSF, at the IAC's current replacement cost/SF, is more than $10.7B.

**+ $1.4B since FY20.**

**75.31 (Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

| | Elementary | Middle | High | Career Tech | |
|---|---|---|---|---|---|
| **Superior** | | | | | |
| **Good** | 2 | | | | 2 |
| **Adequate** | 2 | 1 | | 1 | 4 |
| **Not Adequate** | | 1 | | | 1 |
| **Poor** | | | | | |
| Totals | 4 | 2 | | 1 | **7** |

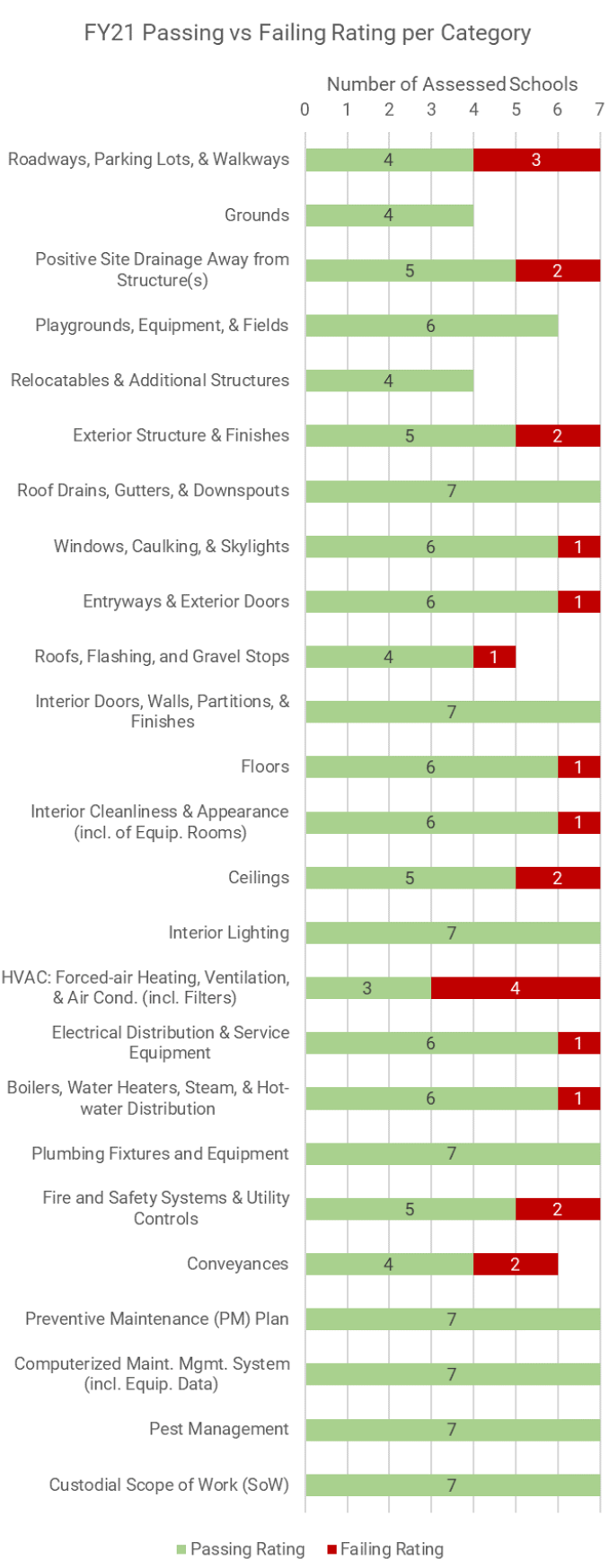


# MONTGOMERY COUNTY

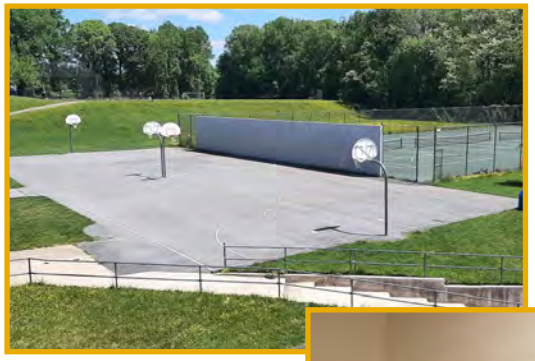
## FY 2021 Results: Summary of School Ratings

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Bayard Rustin Elementary (15.014) | Elementary | 97,397 | 3 | Good | 0 | 18 | 6 | 0 | 0 |
| 2. Bethesda Elementary (15.015) | Elementary | 75,421 | 19 | Adequate | 0 | 8 | 17 | 0 | 0 |
| 3. Viers Mill Elementary (15.092) | Elementary | 120,572 | 24 | Adequate | 0 | 8 | 15 | 1 | 0 |
| 4. Edison (Thomas) High (15.142) | Career Tech | 171,526 | 3 | Adequate | 0 | 17 | 6 | 0 | 0 |
| 5. Sligo Middle (15.235) | Middle | 149,527 | 30 | Not Adequate | 0 | 4 | 20 | 0 | 0 |
| 6. Wilson Wims Elementary (15.274) | Elementary | 91,931 | 7 | Good | 0 | 14 | 8 | 0 | 0 |
| 7. Wells (Hallie) Middle (15.276) | Middle | 150,089 | 5 | Adequate | 0 | 16 | 7 | 0 | 0 |
| Totals | | | | | 0 | 85 | 79 | 1 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 52% | 48% | 1% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths

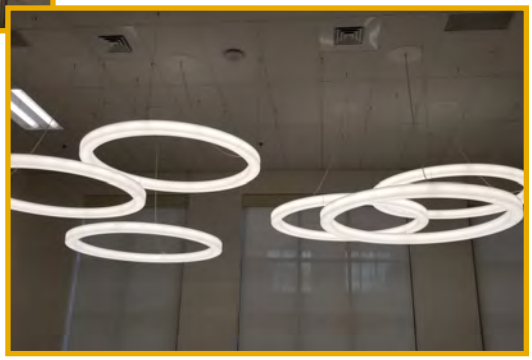


The playground equipment was well maintained. Preventive maintenance and inspections appeared to be effective.

Most of the electrical systems appeared to be well maintained.

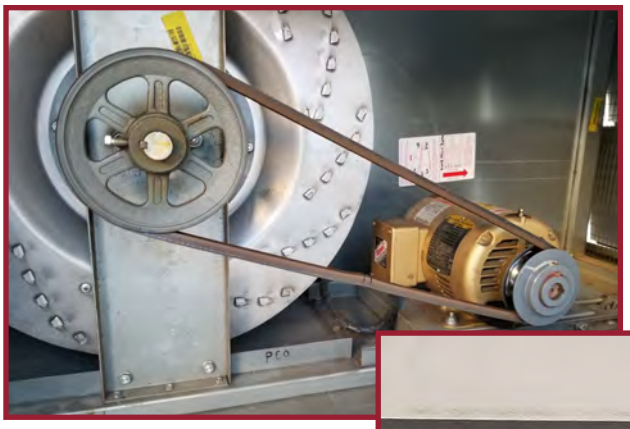
The interior cleanliness and appearance at a majority of the facilities appeared to be above average. Six schools received a Good rating in this category.

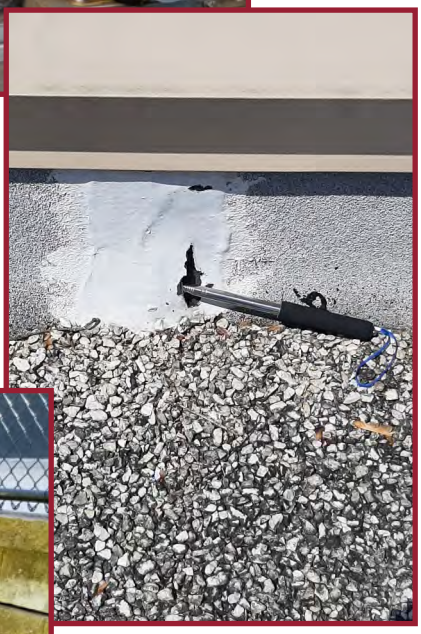
The interior lighting appeared well maintained and every school received a passing rating.



## Weaknesses

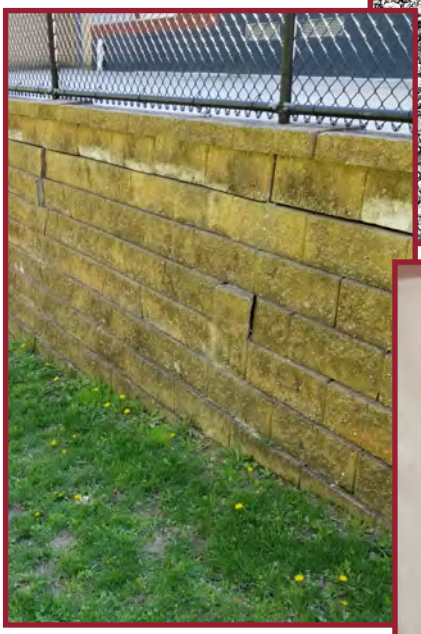
Leaks were identified coming from the HVAC systems at two schools. Non-operational exhaust fans were also observed at three schools.





Four schools were observed with deteriorated coatings and sealant at wall seams and equipment curbs on the roofs.

At two schools, the retaining walls were cracked and shifted. No preventive maintenance or inspections could be identified in the CMMS or other documentation provided by Montgomery County Public Schools.

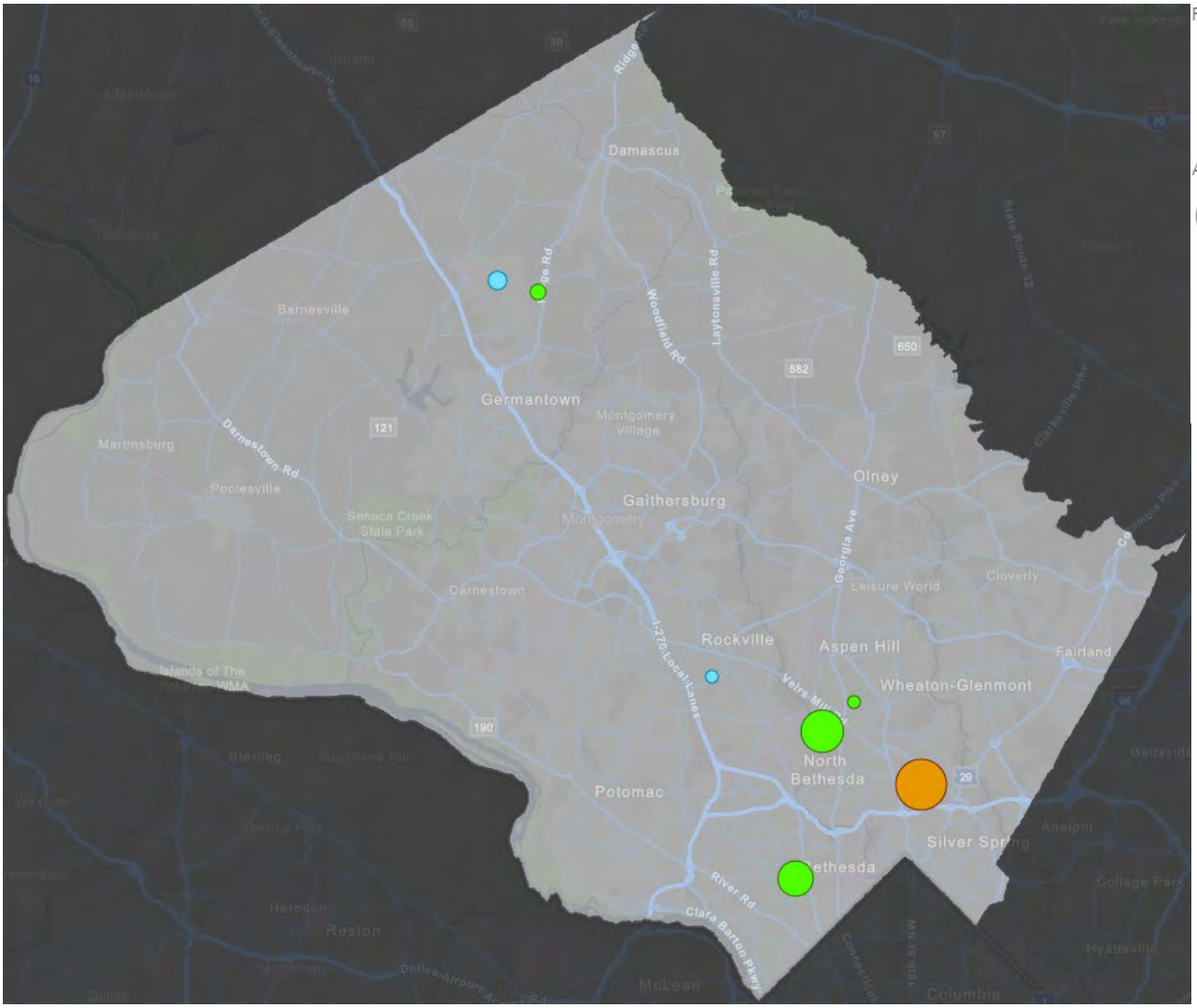


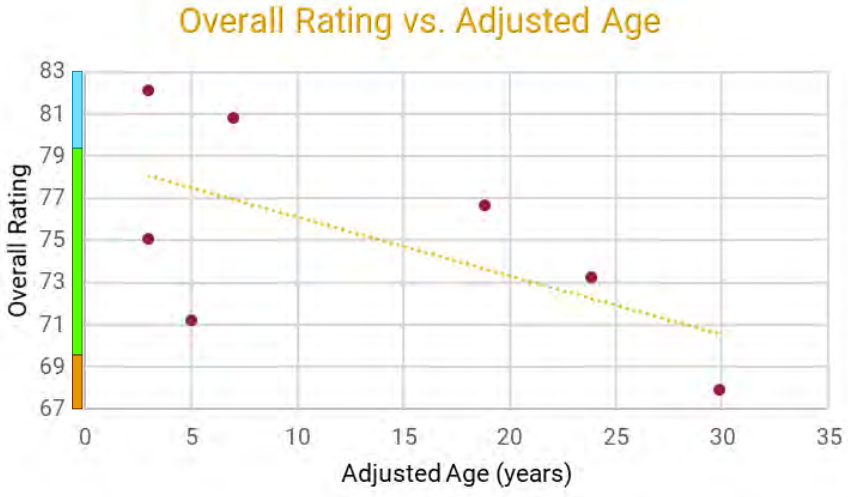

Expired or missing certificates were identified at every school. No preventive maintenance schedules were identified in the CMMS or comprehensive maintenance plan.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 3 |
| | Grounds | 0 | 0 |
| | Positive Site Drainage Away from Structure(s) | 0 | 2 |
| | Playgrounds, Equipment, & Fields | 0 | 0 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 2 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 1 |
| | Entryways & Exterior Doors | 0 | 1 |
| | Roofs, Flashing, and Gravel Stops | 0 | 1 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 0 |
| | Floors | 0 | 1 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 1 |
| | Ceilings | 0 | 2 |
| | Interior Lighting | 0 | 0 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 4 |
| | 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 | 2 |
| | 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 |
| | **Total** | **0** | **24** |

# Overall Rating vs Adjusted Building Age



- Regular inspections of the HVAC system should be performed to ensure optimal performance. Inspections and maintenance should be scheduled and tracked using the computerized maintenance management system (CMMS). Issues that are identified during preventive maintenance (PM) should have corrective work orders.

- The use of the CMMS auto-populating PM checks could help to ensure that inspections are scheduled and completed prior to the expiration of the Department of Labor, Licensing and Regulation (DLLR) certificates.

- Exterior structures, including building walls and retaining walls, should be inspected on a regular basis to identify problems early. Cracking or shifting of structures should be documented in the CMMS and evaluated for structural integrity and development of repair plans.

- Results from roofing inspections should be entered into the CMMS and tracked until completion. Use of the CMMS could help ensure that issues identified during the inspections are repaired in a timely manner. The CMMS tracking history could also be beneficial for identification of repeat problems in specific areas.

# PRINCE GEORGE'S COUNTY

**Total Schools Assessed in FY 2021: 42**


Tulip Grove Elementary

## FISCAL YEAR 2021: KEY FACTS

**196 schools**

Prince George's County has 196 active schools.

**No change since FY20.**

**38.3 years old**

The average adjusted age of all 196 schools is 37.4 years old.

**+ 0.3 years since FY20.**

**> 18.3 M GSF**

Prince George's County maintains 18,399,159 square feet throughout its 196 schools. It is the 2nd largest LEA in Maryland.

**+ 107,540 SF since FY20.**

**> $7.8 B**

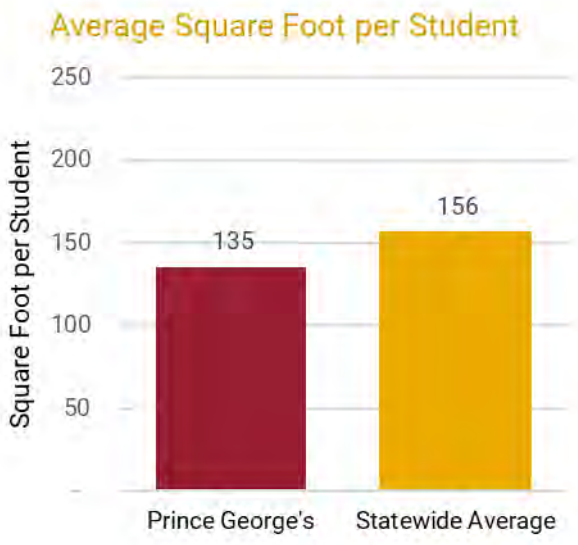
The current replacement value for Prince George's County's >18.3M GSF, at the IAC's current replacement cost/SF, is more than $7.8B.

**+ $0.9B since FY20.**

**66.49 (Not Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

| | Alternate | Special Ed. | Elementary | Elementary/ Middle | Middle | High | |
|---|---|---|---|---|---|---|---|
| **Superior** | | | | | | | |
| **Good** | | | | | | | |
| **Adequate** | | | 5 | | 1 | 1 | 7 |
| **Not Adequate** | 1 | 1 | 22 | 2 | 6 | 2 | 34 |
| **Poor** | | | 1 | | | | 1 |
| Totals | 1 | 1 | 28 | 2 | 7 | 3 | **42** |



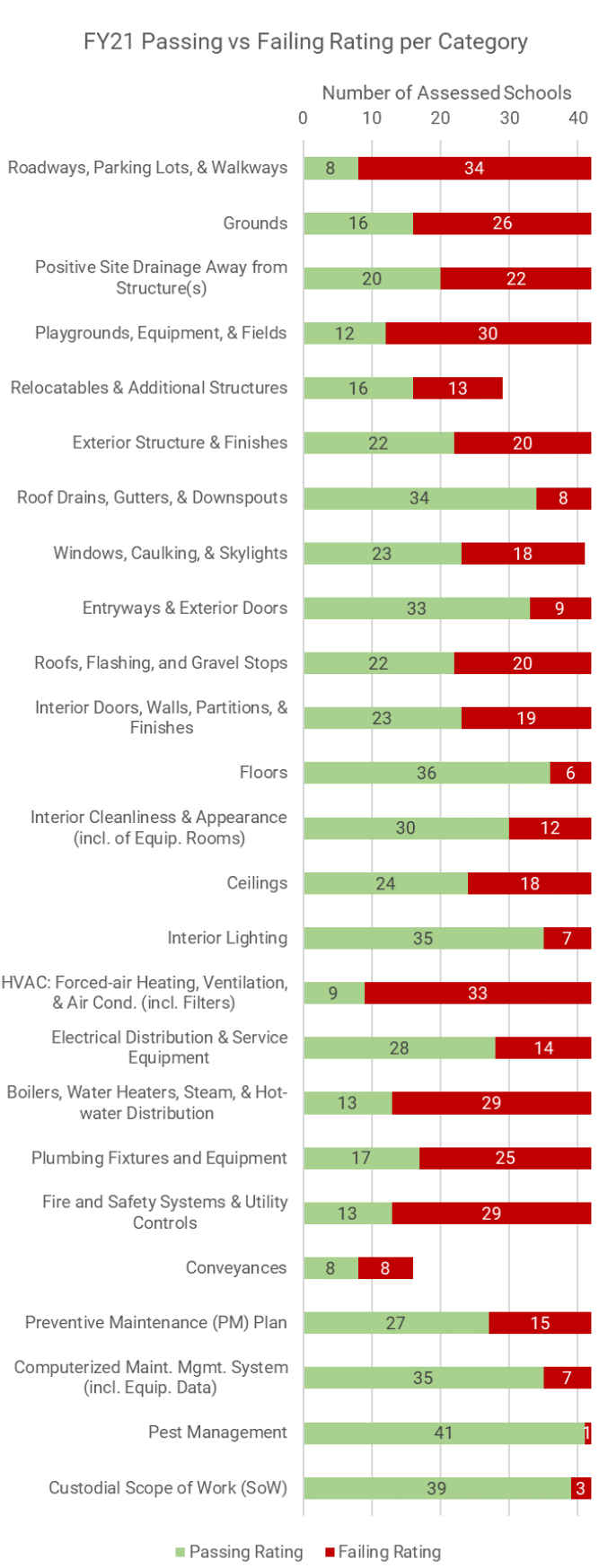
## FY 2021 Results: Summary of School Ratings - Part 1 of 2

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Marlton Elementary (16.004) | Elementary | 60,270 | 40 | Not Adequate | 0 | 2 | 16 | 6 | 0 |
| 2. Deerfield Run Elementary (16.030) | Elementary | 72,390 | 32 | Not Adequate | 0 | 1 | 16 | 7 | 0 |
| 3. Oxon Hill Elementary (16.031) | Elementary | 63,729 | 33 | Adequate | 0 | 2 | 18 | 3 | 0 |
| 4. Mount Rainier Elementary (16.039) | Elementary | 41,242 | 43 | Not Adequate | 0 | 2 | 21 | 2 | 0 |
| 5. Flintstone Elementary (16.048) | Elementary | 47,010 | 40 | Not Adequate | 0 | 0 | 25 | 0 | 0 |
| 6. Indian Queen Elementary (16.055) | Elementary | 60,507 | 30 | Not Adequate | 0 | 4 | 17 | 3 | 0 |
| 7. High Bridge Elementary (16.058) | Elementary | 54,643 | 55 | Not Adequate | 1 | 4 | 19 | 0 | 0 |
| 8. Langley Park-McCormick Elementary (16.071) | Elementary | 64,194 | 41 | Not Adequate | 0 | 5 | 11 | 9 | 0 |
| 9. Hyattsville Elementary (16.080) | Elementary | 50,345 | 33 | Not Adequate | 0 | 2 | 23 | 0 | 0 |
| 10. Suitland High (16.087) | High | 344,875 | 32 | Not Adequate | 0 | 1 | 18 | 6 | 0 |
| 11. Bowie High (16.089) | High | 281,306 | 51 | Not Adequate | 0 | 1 | 18 | 6 | 0 |
| 12. Carroll (Charles) Middle (16.110) | Middle | 114,778 | 50 | Not Adequate | 0 | 0 | 19 | 6 | 0 |
| 13. Robert Frost Elementary (16.112) | Elementary | 48,852 | 53 | Not Adequate | 0 | 2 | 21 | 1 | 0 |
| 14. Nicholas Orem Middle (16.124) | Middle | 105,697 | 55 | Adequate | 0 | 3 | 15 | 5 | 0 |
| 15. Tulip Grove Elementary (16.137) | Elementary | 94,305 | 26 | Adequate | 0 | 14 | 8 | 1 | 0 |
| 16. Green Valley Academy (16.140) | Alternate | 45,401 | 43 | Not Adequate | 0 | 1 | 18 | 5 | 0 |
| 17. North Forestville Elementary (16.145) | Elementary | 57,949 | 58 | Not Adequate | 2 | 5 | 17 | 0 | 0 |
| 18. Imagine Foundations at Morningside Public Charter (16.149) | Elementary/ Middle | 40,308 | 59 | Not Adequate | 0 | 1 | 16 | 7 | 0 |
| 19. Stoddert (Benjamin) Middle (16.152) | Middle | 101,862 | 25 | Not Adequate | 0 | 1 | 19 | 4 | 0 |
| 20. Marshall (Thurgood) Middle (16.156) | Middle | 120,192 | 59 | Not Adequate | 0 | 2 | 21 | 0 | 0 |
| 21. Oxon Hill Middle (16.162) | Middle | 106,801 | 48 | Not Adequate | 0 | 0 | 14 | 11 | 0 |
| 22. Dent (J. Frank) Elementary (16.165) | Elementary | 39,236 | 33 | Not Adequate | 0 | 3 | 15 | 5 | 0 |
| 23. Carmody Hills Elementary (16.166) | Elementary | 52,366 | 18 | Adequate | 0 | 2 | 21 | 1 | 0 |
| 24. Melwood Elementary (16.168) | Elementary | 68,142 | 41 | Not Adequate | 0 | 5 | 15 | 4 | 0 |
| 25. Ridgecrest Elementary (16.170) | Elementary | 68,546 | 42 | Not Adequate | 0 | 1 | 16 | 8 | 0 |
| 26. Waldon Woods Elementary (16.187) | Elementary | 56,829 | 28 | Not Adequate | 0 | 0 | 24 | 0 | 0 |
| 27. Kenilworth Elementary (16.195) | Elementary | 58,323 | 57 | Poor | 0 | 0 | 22 | 1 | 0 |

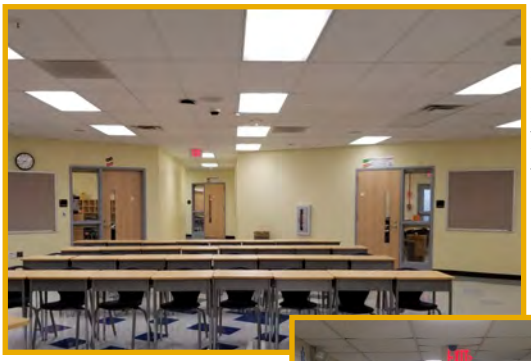
## FY 2021 Results: Summary of School Ratings - Part 2 of 2

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 28. Samuel Ogle Middle (16.201) | Middle | 133,631 | 53 | Not Adequate | 0 | 2 | 20 | 2 | 0 |
| 29. Patuxent Elementary (16.209) | Elementary | 58,579 | 34 | Not Adequate | 0 | 2 | 20 | 1 | 0 |
| 30. Fort Foote Elementary (16.214) | Elementary | 46,559 | 57 | Not Adequate | 0 | 3 | 15 | 5 | 0 |
| 31. Chapel Forge Early Childhood Center (16.223) | Special Ed. | 50,373 | 51 | Not Adequate | 0 | 0 | 18 | 6 | 0 |
| 32. Brooks (Doswell E.) Elementary (16.224) | Elementary | 56,948 | 8 | Not Adequate | 0 | 1 | 20 | 3 | 0 |
| 33. Baden Elementary (16.228) | Elementary | 56,625 | 52 | Not Adequate | 0 | 0 | 23 | 1 | 0 |
| 34. Thomas Johnson Middle (16.229) | Middle | 133,631 | 52 | Not Adequate | 0 | 2 | 17 | 6 | 0 |
| 35. Concord Elementary (16.237) | Elementary | 43,984 | 52 | Not Adequate | 0 | 1 | 19 | 4 | 0 |
| 36. Glenarden Woods Elementary (16.239) | Elementary | 76,740 | 39 | Adequate | 0 | 11 | 9 | 3 | 0 |
| 37. Longfields Elementary (16.242) | Elementary | 52,565 | 52 | Not Adequate | 0 | 4 | 18 | 1 | 0 |
| 38. Mattaponi Elementary (16.244) | Elementary | 48,912 | 55 | Not Adequate | 0 | 4 | 20 | 0 | 0 |
| 39. EXCEL Academy Public Charter (16.245) | Elementary/ Middle | 57,857 | 51 | Not Adequate | 0 | 0 | 18 | 4 | 2 |
| 40. Yorktown Elementary (16.248) | Elementary | 47,855 | 53 | Adequate | 0 | 3 | 17 | 4 | 0 |
| 41. Felegy (Edward M.) Elementary (16.259) | Elementary | 92,391 | 6 | Not Adequate | 0 | 0 | 16 | 7 | 2 |
| 42. Fairmont Heights High (16.260) | High | 191,391 | 3 | Adequate | 1 | 12 | 11 | 1 | 0 |
| Totals | | | | | 4 | 109 | 744 | 149 | 4 |
| Percentage of Total Ratings for System | | | | | 0% | 11% | 74% | 15% | 0% |

## FY 2021 Results: Assessment Findings by Category



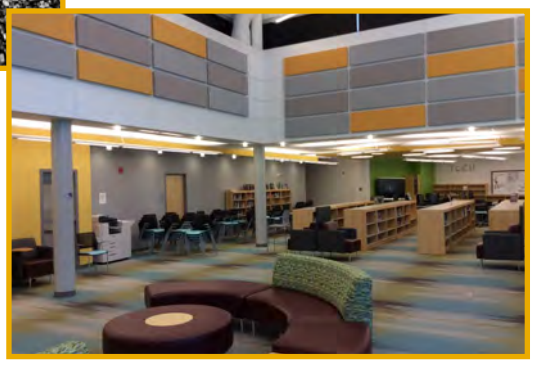

### Strengths



35 out of 42 facilities received a passing rating for interior lighting. Two of those schools earned a Superior rating.

The majority of the floors appeared clean and hard surfaces had been treated with a protective wax coating.

The majority of roof drains and gutters appeared to be adequately maintained and clear of debris.



The custodial scope of work appeared to be effective for identifying cleaning needs. The majority of schools received a passing rating for interior cleanliness and appearance.

## Weaknesses

Many facilities were observed with deteriorated play surfaces, vegetation growth in play areas, and damaged playground equipment.

Deteriorated asphalt surfaces were identified at several schools. The asphalt and concrete walkways were also observed cracked or had uneven surfaces.

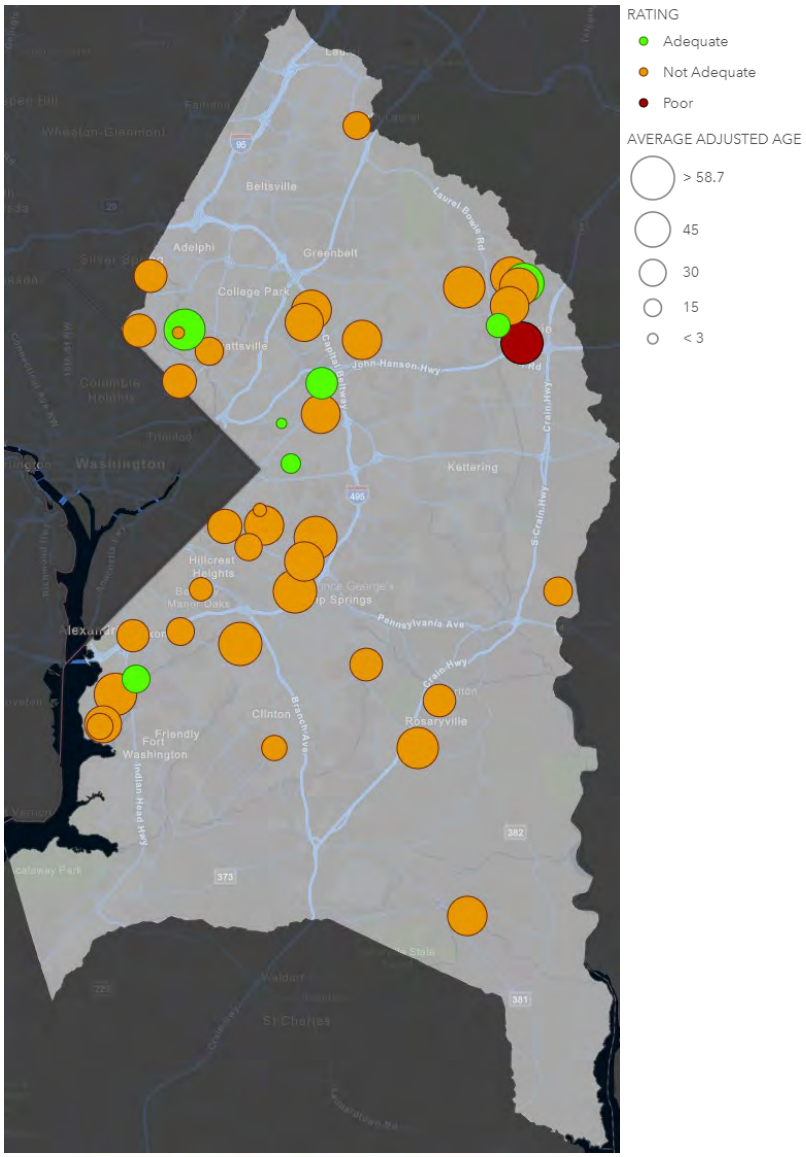
12 schools had issues with emergency lighting not working when tested.

33 facilities did not earn a passing rating for HVAC systems. Non-operational exhaust fans, leaks, and missing or incorrect-sized filters were observed.

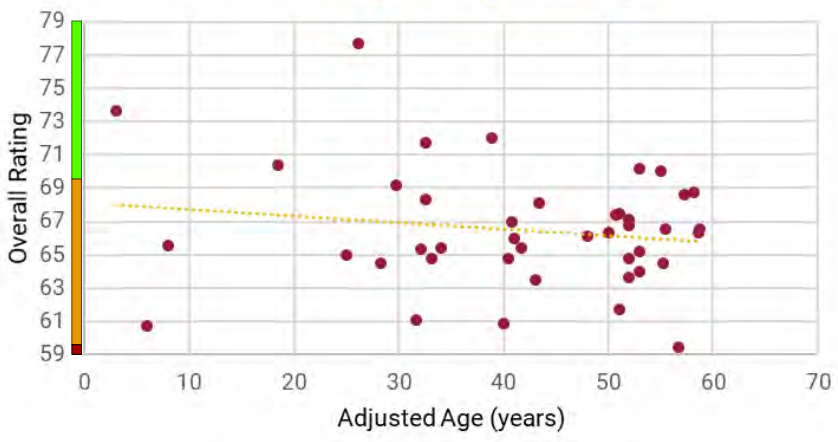
## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 29 |
| | Grounds | 1 | 18 |
| | Positive Site Drainage Away from Structure(s) | 0 | 14 |
| | Playgrounds, Equipment, & Fields | 1 | 23 |
| | Relocatables & Additional Structures | 0 | 11 |
| Building Exterior | Exterior Structure & Finishes | 0 | 18 |
| | Roof Drains, Gutters, & Downspouts | 1 | 5 |
| | Windows, Caulking, & Skylights | 0 | 10 |
| | Entryways & Exterior Doors | 0 | 5 |
| | Roofs, Flashing, and Gravel Stops | 1 | 12 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 17 |
| | Floors | 0 | 6 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 10 |
| | Ceilings | 0 | 15 |
| | Interior Lighting | 0 | 6 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 25 |
| | Electrical Distribution & Service Equipment | 0 | 13 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 22 |
| | Plumbing Fixtures and Equipment | 0 | 19 |
| | Fire and Safety Systems & Utility Controls | 0 | 22 |
| | Conveyances | 0 | 5 |
| 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** | **4** | **306** |

# Overall Rating vs Adjusted Building Age




## Overall Rating vs. Adjusted Age



- Regularly scheduled inspections of parking lots and walkways are recommended to catch and repair issues before they worsen. Inspection results should be tracked using the computerized maintenance management system (CMMS) with work orders to ensure that issues are corrected.

- Preventive and corrective maintenance for the HVAC systems should be tracked using work orders and CMMS. Regularly scheduled preventive maintenance checks will help to keep equipment running and in optimal condition. Assets should be assigned unique identifiers that are tied to the preventive maintenance (PM) checks to ensure that all assets are being serviced.

- Playground and field inspections should be conducted on a regular basis. Issues that are identified during the inspections should be tracked using the CMMS.

- Emergency lights should be tested on a regular basis according to the manufacturer's recommendations for periodicity and length of test. Any lights that do not pass the regular inspection should be repaired or replaced and tracked with a CMMS work order. Work orders could help to identify lights that have recurring failures and might need to be replaced.

# QUEEN ANNE'S COUNTY

**Total Schools Assessed in FY 2021: 5**


Queen Anne's County High

## FISCAL YEAR 2021: KEY FACTS

**14 schools**

Queen Anne's County has 14 active schools.

**No change since FY20.**

**20.0 years old**

The average adjusted age of all 14 schools is 20.0 years old.

**+ 1 year since FY20.**

**> 1.3 M GSF**

Queen Anne's County maintains 1,302,733 square feet throughout its 14 schools. It is the 17th largest LEA in Maryland.

**No change since FY20.**

**> $0.5 B**

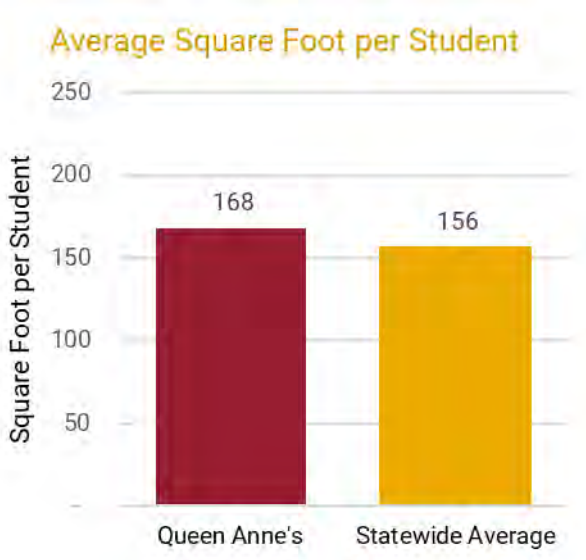
The current replacement value for Queen Anne's County's >1.3M GSF, at the IAC's current replacement cost/SF, is more than $0.5B.

**+ $63M since FY20.**

**68.2 (Not Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

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

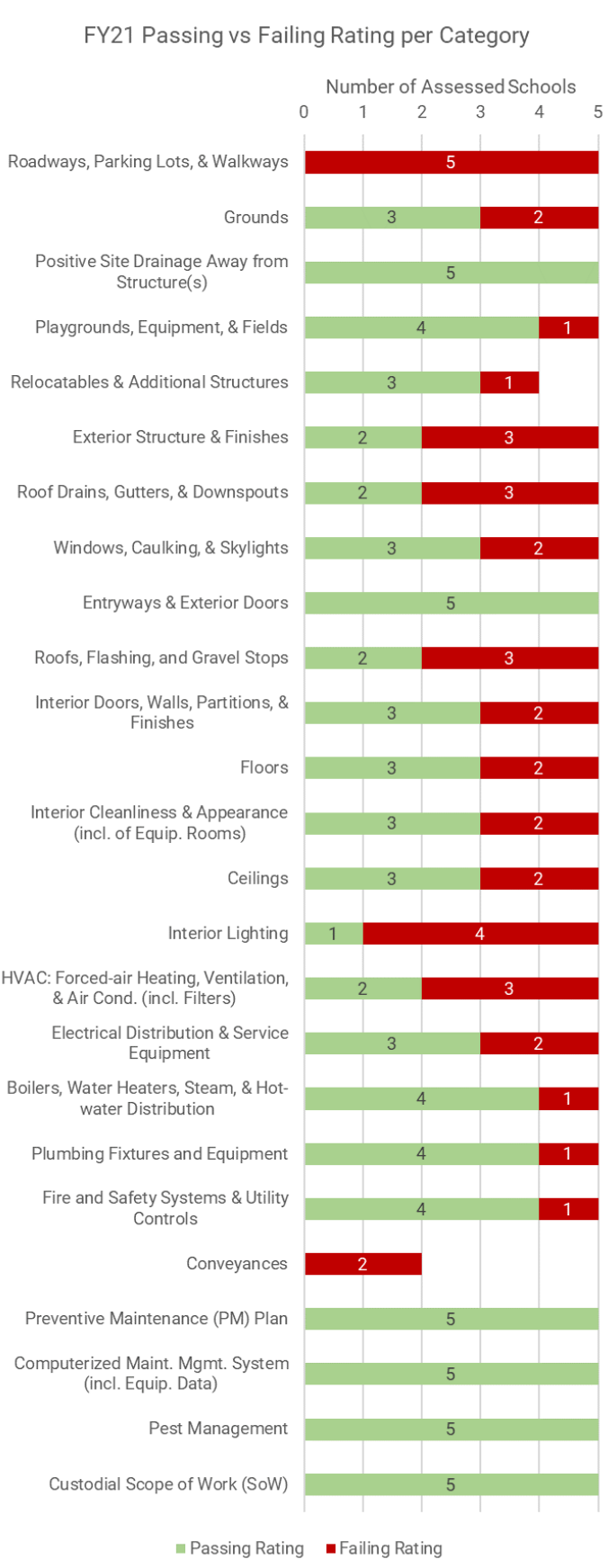


# QUEEN ANNE'S COUNTY

## FY 2021 Results: Summary of School Ratings

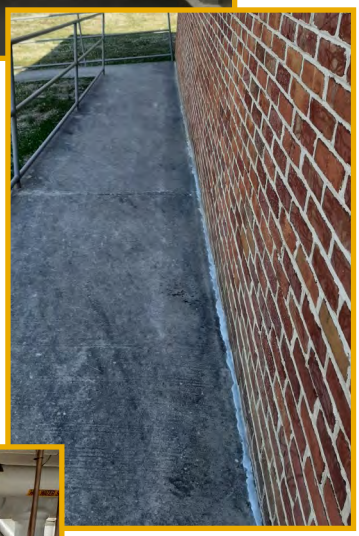
| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Queen Anne's County High (17.001) | High | 211,577 | 19 | Not Adequate | 0 | 2 | 21 | 2 | 0 |
| 2. Centreville Middle (17.004) | Middle | 86,230 | 42 | Adequate | 0 | 2 | 22 | 0 | 0 |
| 3. Centreville Elementary (17.005) | Elementary | 62,355 | 18 | Not Adequate | 0 | 3 | 18 | 2 | 0 |
| 4. Grasonville Elementary (17.009) | Elementary | 66,452 | 23 | Adequate | 0 | 5 | 18 | 1 | 0 |
| 5. Sudlersville Elementary (17.014) | Elementary | 55,110 | 22 | Not Adequate | 0 | 5 | 19 | 1 | 0 |
| Totals | | | | | 0 | 17 | 98 | 6 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 14% | 81% | 5% | 0% |

## FY 2021 Results: Assessment Findings by Category




### Strengths

The majority of exterior doors were operational, secure, and appeared to be maintained.



All five schools received a passing rating for site drainage and appeared adequately maintained.

The majority of the boilers and water heaters appeared well maintained with up-to-date certifications.

The floors appeared well cared for and maintained in a majority of the facilities.

## Weaknesses

All five schools received a failing rating for the maintenance of their roadways and walkways due to areas of cracking and deterioration creating trip hazards.

Four schools were identified with various issues with their roof drains, including clogged drains and dark stains, blistering, and cracking around the drains. Two facilities had clogged downspouts and gutters.

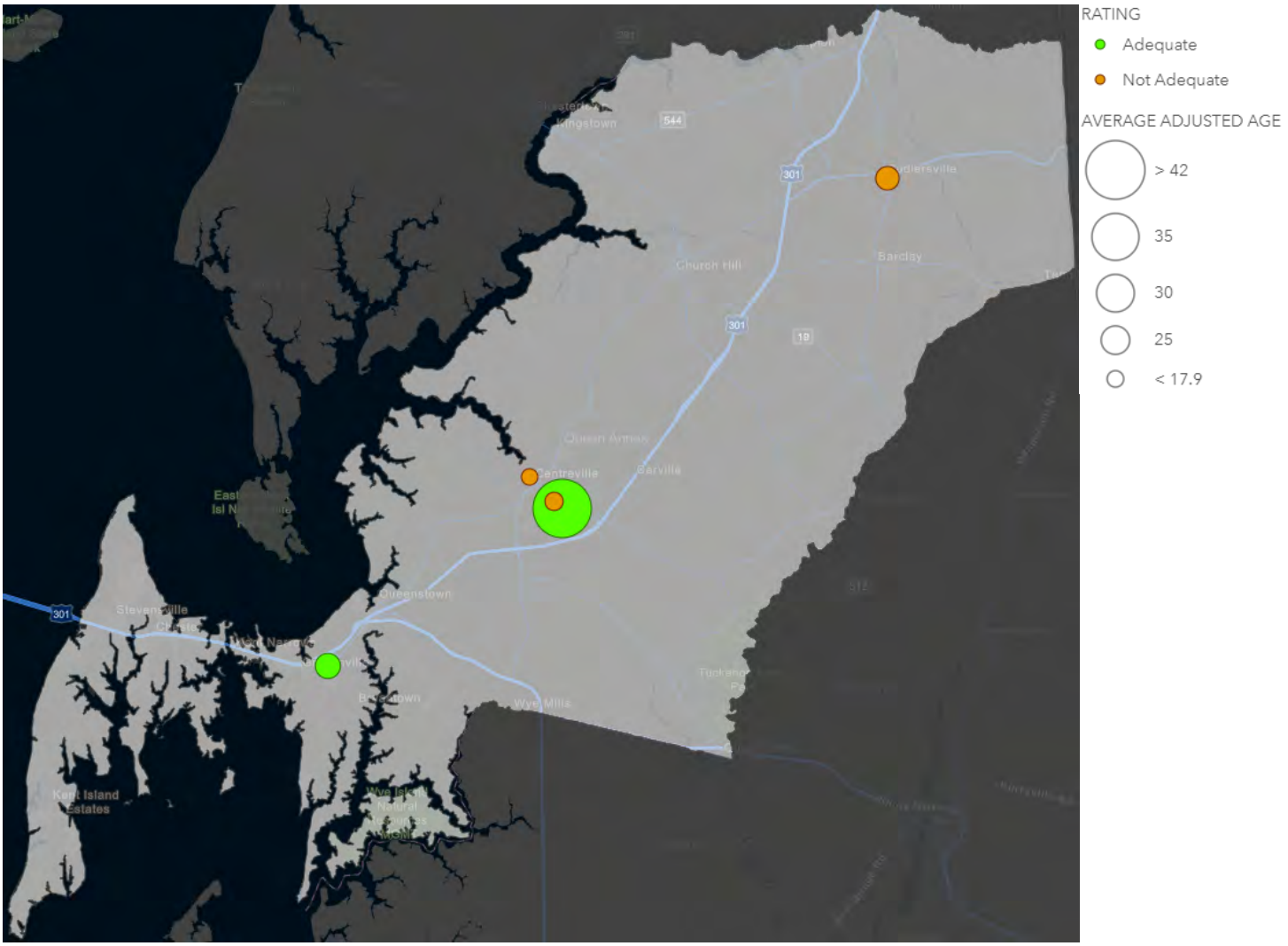
Four schools had non-operational exhaust fans or cracked, loose, or missing belts. All five schools were observed with deteriorated line set insulation. Dirty coils and/or dirty filters or filters installed incorrectly were identified at three schools.

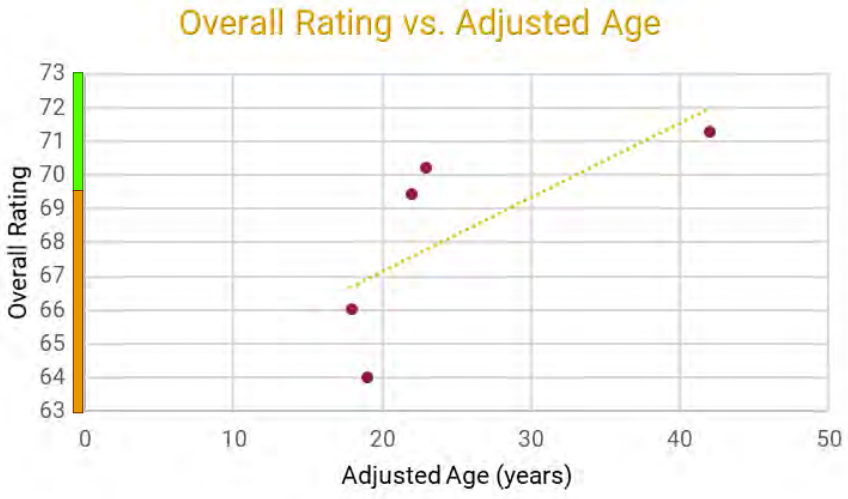
Ponding water, blisters, and vegetation growth were observed on the roofs of three schools and contributed to them receiving Not Adequate ratings.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 5 |
| | Grounds | 0 | 2 |
| | 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 | 3 |
| | Roof Drains, Gutters, & Downspouts | 0 | 3 |
| | Windows, Caulking, & Skylights | 0 | 2 |
| | Entryways & Exterior Doors | 0 | 0 |
| | Roofs, Flashing, and Gravel Stops | 0 | 1 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 2 |
| | Floors | 0 | 2 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 2 |
| | Ceilings | 0 | 2 |
| | Interior Lighting | 0 | 4 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 3 |
| | Electrical Distribution & Service Equipment | 0 | 2 |
| | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 1 |
| | Plumbing Fixtures and Equipment | 0 | 1 |
| | 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 |
| | **Total** | **0** | **40** |

# Overall Rating vs Adjusted Building Age



- Corrective maintenance work orders should be created to track any deficiencies found during the regularly scheduled roofing inspections. Work order history tracking could be beneficial to identify repeat locations on the roofing systems that are having failures.

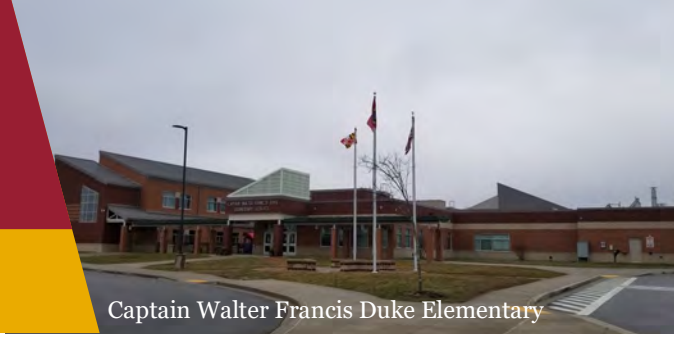
- Roadways, walkways, and parking lots should be inspected on a regularly scheduled basis to monitor for deterioration and cracking. Work orders in the computerized maintenance management system (CMMS) should be used to track any deficiencies noted to ensure that they are corrected.

- Gutters and downspouts should be included as part of the regularly scheduled roofing inspection program. Deficiencies that are identified during the inspections should be tracked using the CMMS to ensure that repairs are completed.

- Exhaust fans should be part of a regular preventive maintenance program to ensure that they are operating at maximum efficiency. Best practice is to identify each asset with a unique identifier that is used in the CMMS as well. This could help to ensure that each asset is receiving the necessary preventive maintenance.

# ST. MARY'S COUNTY

**Total Schools Assessed in FY 2021: 4**


Captain Walter Francis Duke Elementary

## FISCAL YEAR 2021: KEY FACTS

**27 schools**

St. Mary's County has 27 active schools.

**No change since FY20.**

**24.6 years old**

The average adjusted age of all 27 schools is 24.6 years old.

**+ 1 year since FY20.**

**> 2.3 M GSF**

St. Mary's County maintains 2,300,101 square feet throughout its 27 schools. It is the 13th largest LEA in Maryland.

**No change since FY20.**

**> $0.9 B**

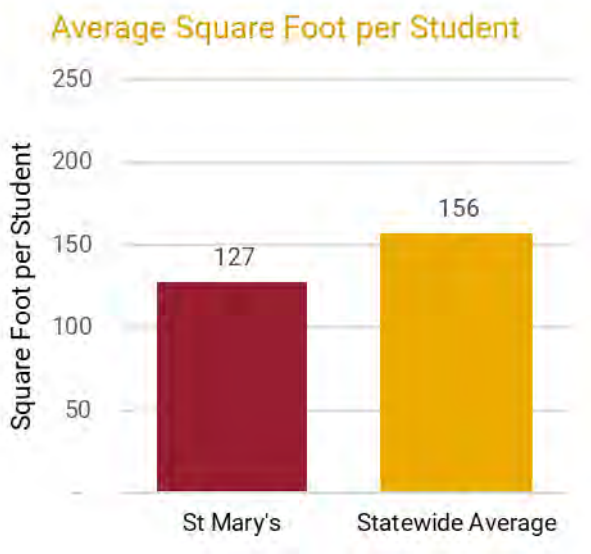
The current replacement value for St. Mary's County's >2.3M GSF, at the IAC's current replacement cost/SF, is more than $0.9B.

**+ $112M since FY20.**

**71.15 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

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

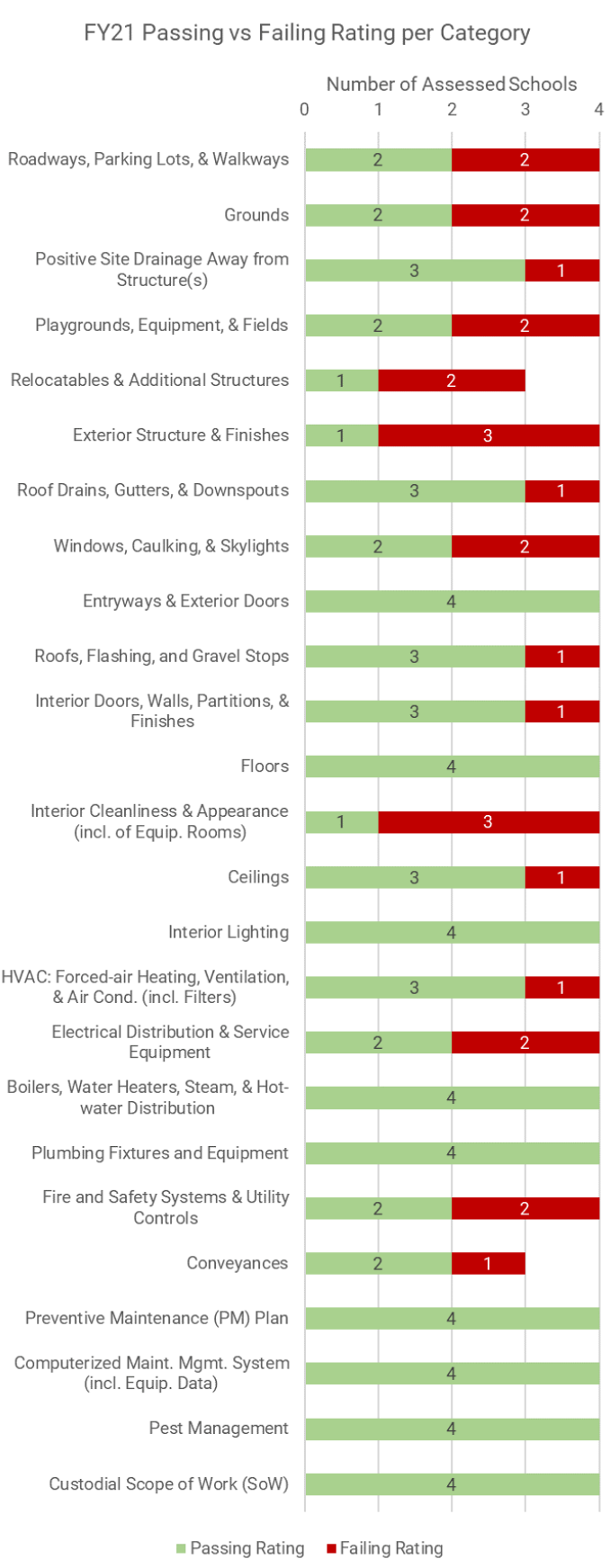


# ST. MARY'S COUNTY

## FY 2021 Results: Summary of School Ratings

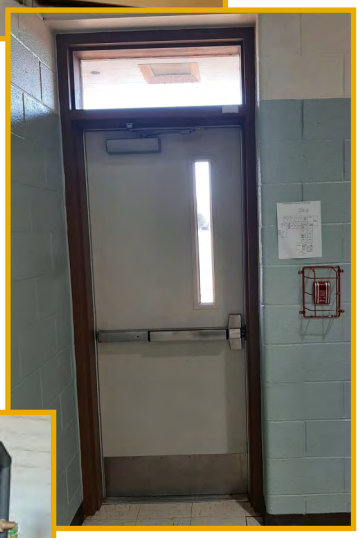
| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. White Marsh Elementary (18.016) | Elementary | 32,739 | 51 | Adequate | 0 | 2 | 22 | 1 | 0 |
| 2. Dynard Elementary (18.024) | Elementary | 49,200 | 29 | Not Adequate | 0 | 6 | 18 | 1 | 0 |
| 3. Park Hall Elementary (18.029) | Elementary | 58,831 | 27 | Not Adequate | 0 | 6 | 18 | 0 | 0 |
| 4. Captain Walter Francis Duke Elementary School (18.033) | Elementary | 77,572 | 6 | Adequate | 0 | 11 | 13 | 0 | 0 |
| Totals | | | | | 0 | 25 | 71 | 2 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 26% | 72% | 2% | 0% |

## FY 2021 Results: Assessment Findings by Category



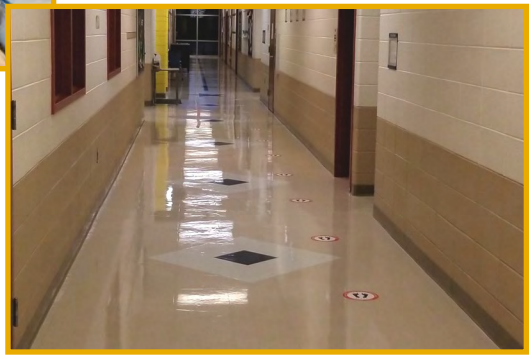

## Strengths

The interior rooms were clean and well kept. All four schools received a Good rating for Interior Cleanliness & Appearance.



The majority of entrance doors were operational and had weatherstripping that was present and intact. Every school received a passing rating for Entryways & Exterior Doors.

The majority of boilers and water heaters appeared to be well maintained. Completed preventive maintenance work orders were identified in the CMMS.



The floors were clean and appeared well taken care of. All four schools received a Good ratings for Floors.

## Weaknesses

Three out of four facilities were observed with non-functional emergency lights.

At one school, the equipment enclosures contained debris and vegetation. Three out of the four schools were noted with minor safety issues such as stripper being discarded on the grounds, a broken cleanout and a damaged site drain cover.

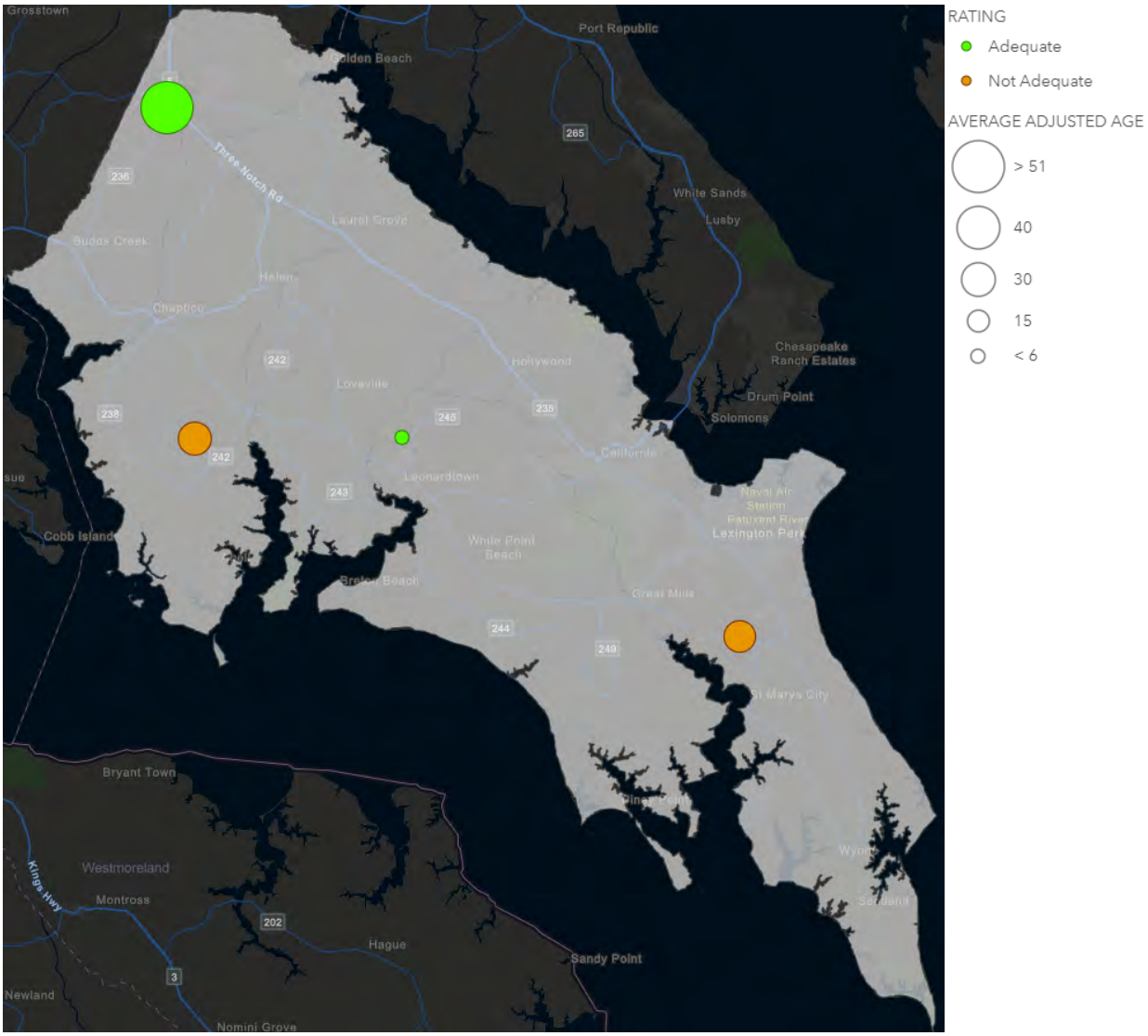
Relocatables were identified with non-functional emergency lights, stained ceiling tiles, rotten or unsafe wooden ramps, and damaged gutter systems.

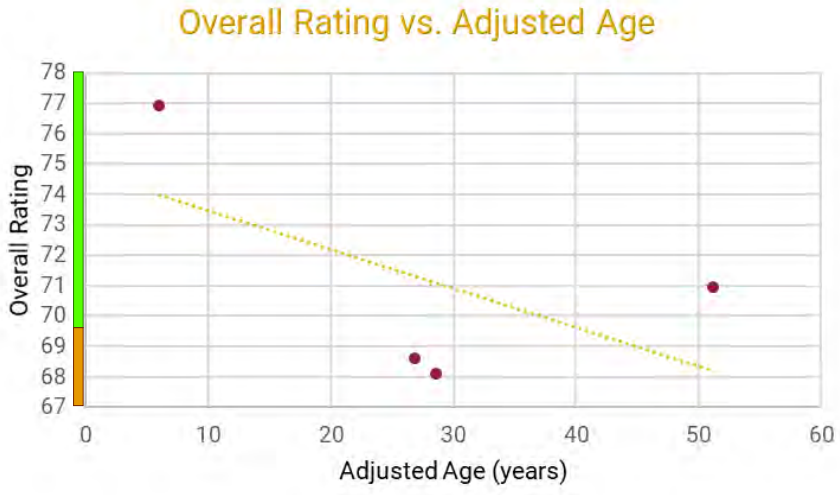
The roadways, walkways, and parking lots were noted with cracks, potholes, settlement, and damaged sealant.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 2 |
| | Grounds | 0 | 2 |
| | Positive Site Drainage Away from Structure(s) | 0 | 1 |
| | Playgrounds, Equipment, & Fields | 0 | 2 |
| | Relocatables & Additional Structures | 0 | 2 |
| Building Exterior | Exterior Structure & Finishes | 0 | 3 |
| | Roof Drains, Gutters, & Downspouts | 0 | 1 |
| | Windows, Caulking, & Skylights | 0 | 2 |
| | Entryways & Exterior Doors | 0 | 0 |
| | Roofs, Flashing, and Gravel Stops | 0 | 0 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 1 |
| | Floors | 0 | 0 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 3 |
| | Ceilings | 0 | 1 |
| | Interior Lighting | 0 | 0 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 0 |
| | Electrical Distribution & Service Equipment | 0 | 2 |
| | 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 | 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** | **25** |

# Overall Rating vs Adjusted Building Age

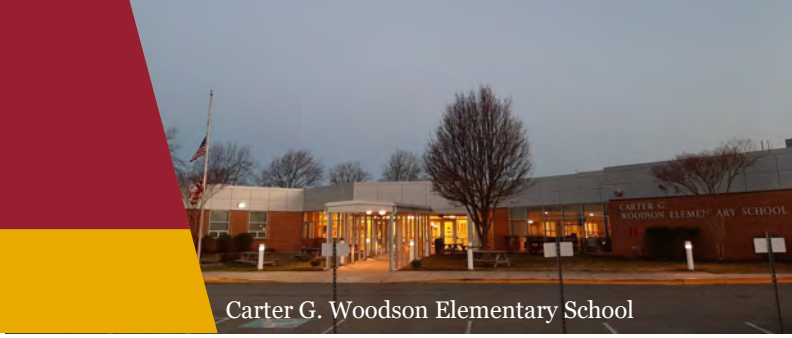


- Deficiencies that are identified during daily and weekly rounds of building employees should be documented using the computerized maintenance management system (CMMS).
- Relocatable classrooms should be included in all scopes of work and preventive maintenance checks. Relocatable equipment should be included in the CMMS asset lists.
- Emergency lights should receive regular periodic preventive maintenance (PM) checks to ensure that they are working properly. PM checks should be auto-populating and tracked in the CMMS. Deficiencies found during PM should be tracked by a work order.
- Emergency lights should be tested on a regular basis according to the manufacturer's recommendations for periodicity and length of test. Any lights that do not pass the regular inspection should be repaired or replaced and tracked with a CMMS work order. Work orders could help to identify lights that have recurring failures and might need to be replaced.
- Playground areas and grounds should be inspected on a regular basis and scheduled using the CMMS. Any deficiencies found during these inspections should be tracked using CMMS work orders.
- Floor stripper is considered hazardous waste. The appropriate employees should be trained on how to collect and dispose of it properly.
- Equipment enclosures should be clear of vegetation and debris to allow access to the equipment.

# SOMERSET COUNTY

**Total Schools Assessed in FY 2021: 3**


Carter G. Woodson Elementary School

## FISCAL YEAR 2021: KEY FACTS

**10 schools**

Somerset County has 10 active schools.

**No change since FY20.**

**20.3 years old**

The average adjusted age of all 10 schools is 20.3 years old.

**- 3.8 years since FY20.**

**> 0.6 M GSF**

Somerset County maintains 671,356 square feet throughout its 10 schools. It is the 22nd largest LEA in Maryland.

**+ 64,895 SF since FY20.**

**> $0.2 B**

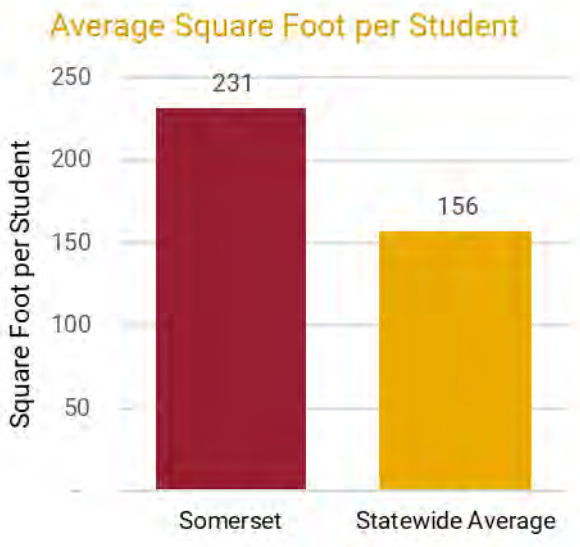
The current replacement value for Somerset County's >0.6M GSF, at the IAC's current replacement cost/SF, is more than $0.2B.

**+ $57M since FY20.**

**69.62 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

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

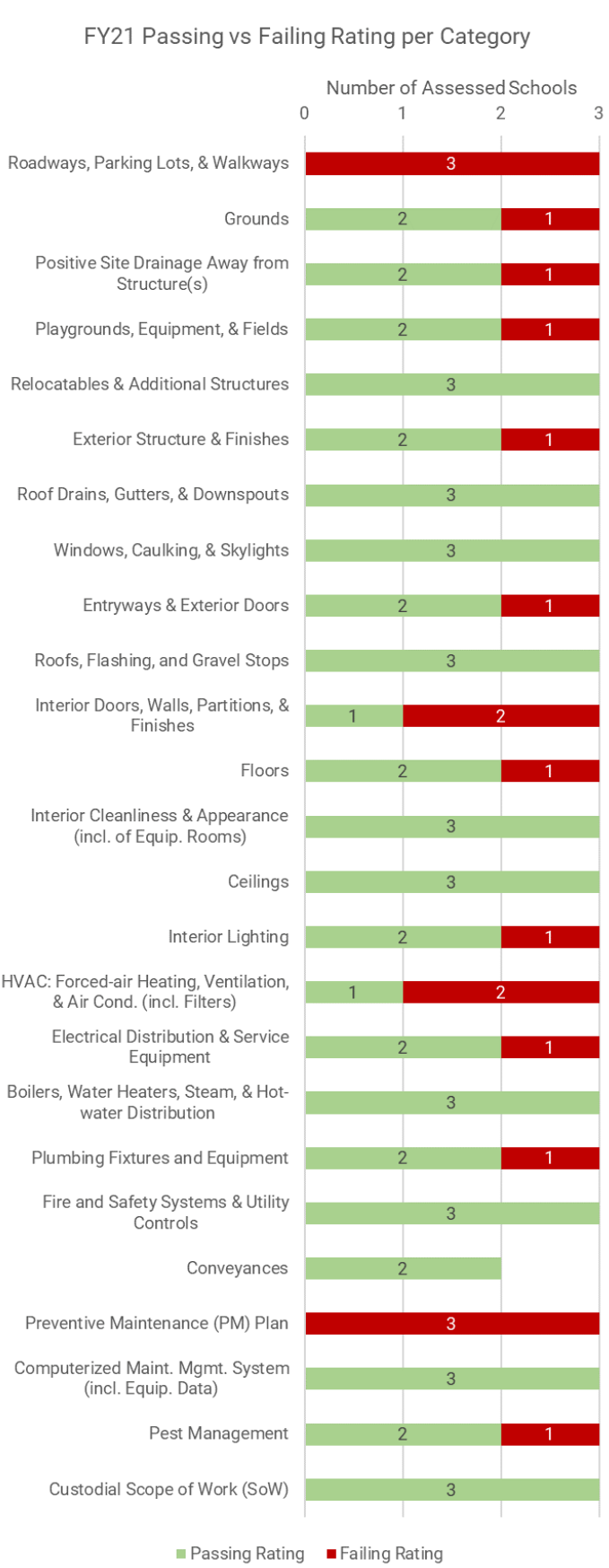


# SOMERSET COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Somerset County Board of Education (19.003) | Administrative | 49,500 | 45 | Not Adequate | 0 | 0 | 23 | 1 | 0 |
| 2. Crisfield Academy & High School (19.004) | Middle/High | 96,277 | 21 | Not Adequate | 0 | 3 | 21 | 1 | 0 |
| 3. Carter G. Woodson Elementary School (19.005) | Elementary | 68,711 | 14 | Adequate | 0 | 2 | 22 | 1 | 0 |
| Totals | | | | | 0 | 5 | 66 | 3 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 7% | 89% | 4% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths

All three facilities received a passing rating for the maintenance of their roof drains, gutters, and downspouts.

The certifications were all up to date for the conveyance systems. Both facilities that had conveyance systems earned a Good rating.

All windows were operational and sealants were intact. All three facilities received a passing rating for windows, caulking, and skylights.

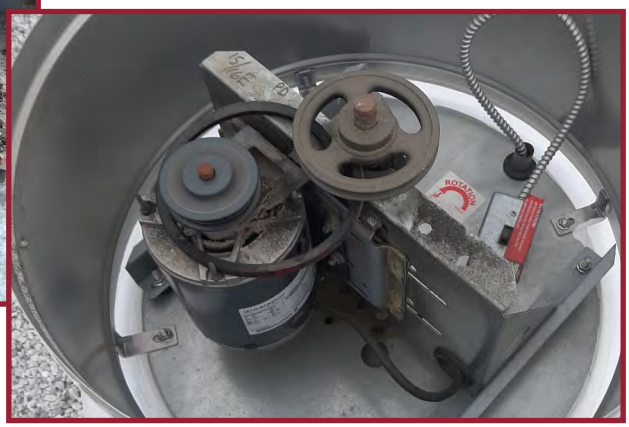
Roofing maintenance appeared to be adequate and all three facilities received passing ratings.

## Weaknesses

Interior wall cracks were observed at all three schools, but two schools had cracks significant enough to be observed from both sides of the wall.


All three facilities' walkways were observed with cracks. Trip hazards were identified at two schools. Roadways and walkways are not included in the preventive maintenance plan.

The CMMS is not being used to track corrective or planned work orders for a majority of the facilities. Various deficiencies were noted throughout the facilities with no work orders submitted.

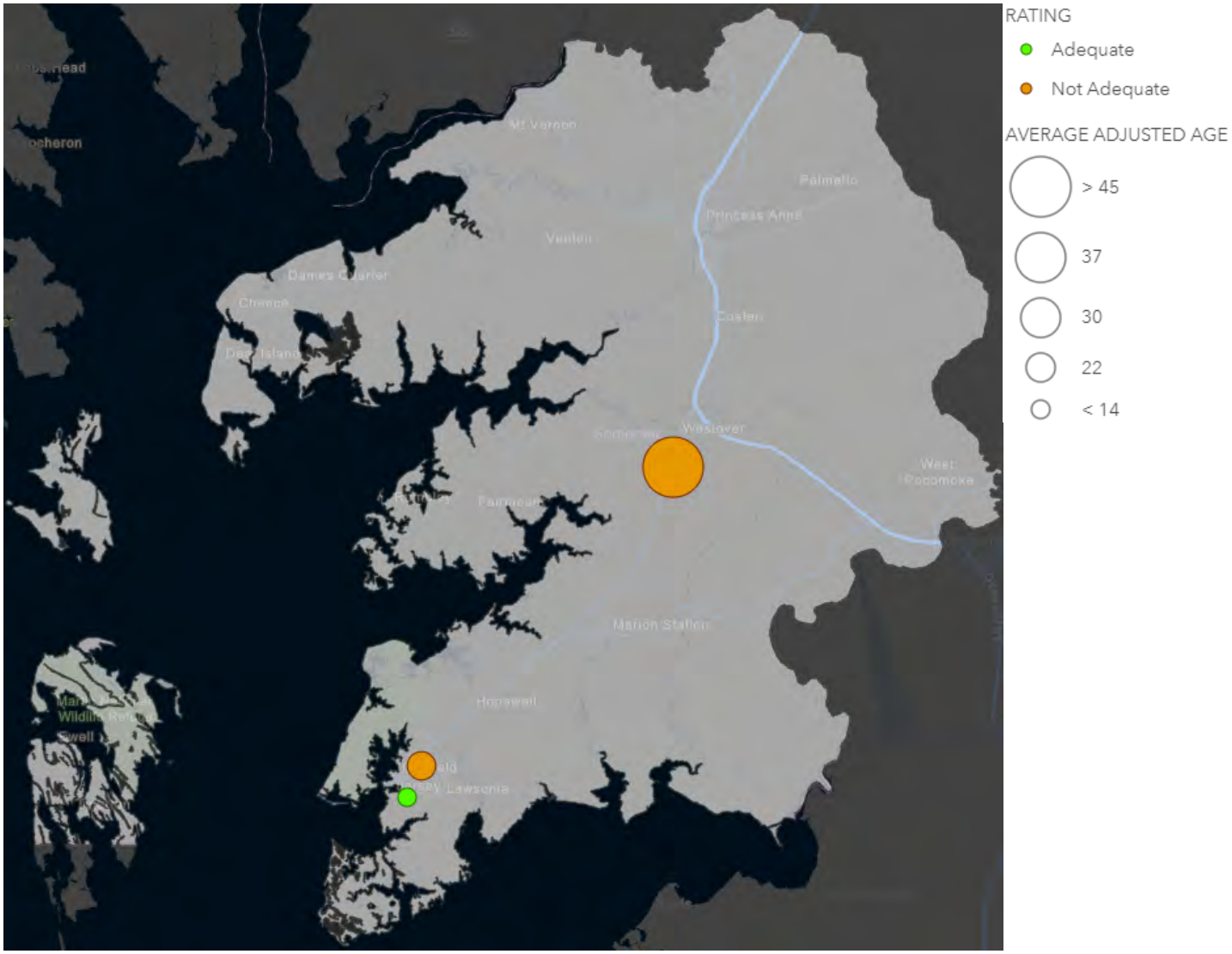


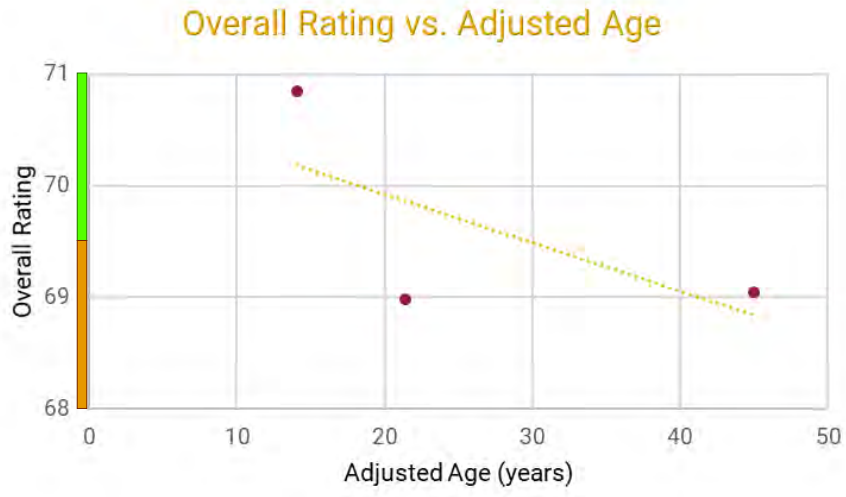
Two facilities were observed with broken drive belts in the rooftop exhaust fans.

## FY 2021 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 | 1 |
| | Playgrounds, Equipment, & Fields | 0 | 1 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 1 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 0 |
| | Entryways & Exterior Doors | 0 | 1 |
| | Roofs, Flashing, and Gravel Stops | 0 | 0 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 2 |
| | Floors | 0 | 1 |
| | 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 | 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 | 1 |
| | Custodial Scope of Work (SoW) | 0 | 0 |
| | **Total** | **0** | **17** |

# Overall Rating vs Adjusted Building Age



- To ensure that deficiencies are identified and repaired in a timely manner, the computerized maintenance management system (CMMS) functionality should be used. Auto-populating preventive maintenance (PM) and asset identification help to ensure that all assets are receiving the required maintenance.

- HVAC components such as filters and exhaust fans should have regularly scheduled PM. Industry best practice is to use the CMMS to track and plan PM on this type of equipment.

- Roadways and parking lots should be inspected on a regular basis to identify deficiencies. Deficiencies should be tracked using the CMMS.

- Wall cracks should be evaluated to identify the severity of the crack. Crack monitors should be used to track the progress of the cracks. Regular inspections of the interior and exterior walls should be conducted.

# TALBOT COUNTY

**Total Schools Assessed in FY 2021: 2**


Easton High

## FISCAL YEAR 2021: KEY FACTS

**7 schools**

Talbot County has 7 active schools.

**- 2 schools since FY20.**

**19.5 years old**

The average adjusted age of all 7 schools is 19.5 years old.

**- 0.7 years since FY20.**

**> 0.5 M GSF**

Talbot County maintains 572,216 square feet throughout its 7 schools. It is the 23rd largest LEA in Maryland.

**- 130,759 SF since FY20.**

**> $0.2 B**

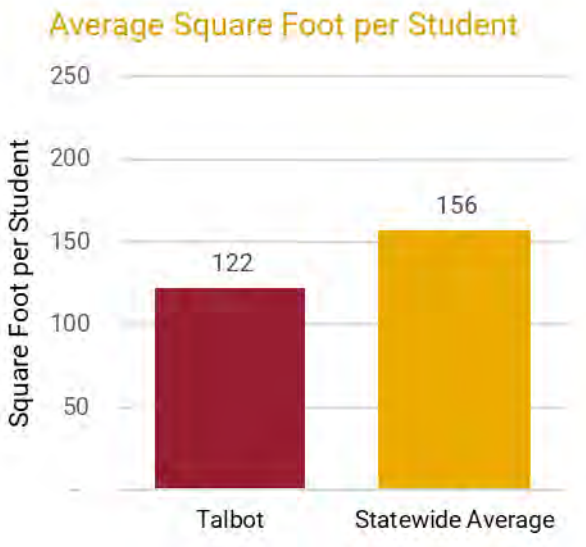
The current replacement value for Talbot County's >0.5M GSF, at the IAC's current replacement cost/SF, is more than $0.2B.

**- $21M since FY20.**

**72.39 (Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

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



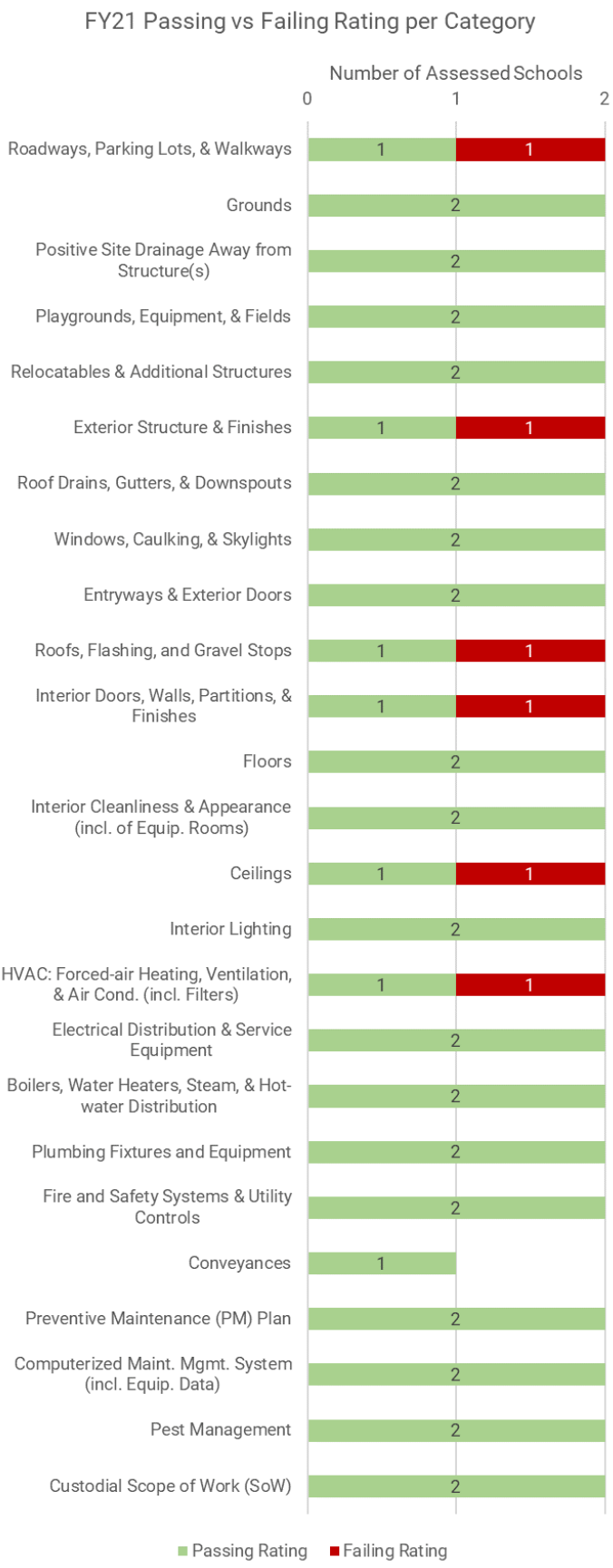
# TALBOT COUNTY

## FY 2021 Results: Summary of School Ratings

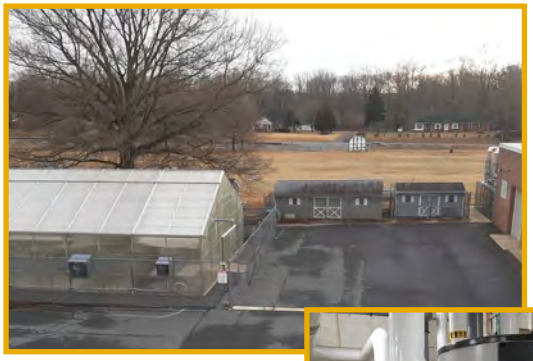
| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Easton High (20.002) | High | 186,829 | 24 | Adequate | 0 | 0 | 25 | 0 | 0 |
| 2. Chapel District Elementary (20.006) | Elementary | 46,070 | 27 | Adequate | 0 | 0 | 23 | 1 | 0 |
| Totals | | | | | 0 | 0 | 48 | 1 | 0 |
| Percentage of Total Ratings for System | | | | | 0% | 0% | 98% | 2% | 0% |

# TALBOT COUNTY

## FY 2021 Results: Assessment Findings by Category

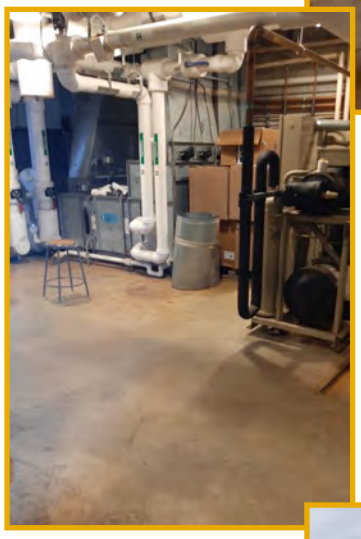



## Strengths



The exterior structures were well maintained and appeared to be included in the maintenance program.

The boiler certificates were up to date. Boiler systems were identified in the comprehensive maintenance plan's preventive maintenance program.



The equipment rooms were clean and well organized. The cleaning plan and details appeared to be followed by school personnel.

The grounds and playgrounds were adequately maintained and both schools received passing ratings.

## Weaknesses

Missing and stained ceiling tiles were identified throughout both schools and no work orders were noted in the CMMS to identify the cause or repair the tiles.

At one school, there were issues with cracking on a knee-high wall, retaining walls, and multiple areas on the exterior walls around the building.

Both schools were identified with dirty HVAC filters or coils as well as non-functional exhaust fans.

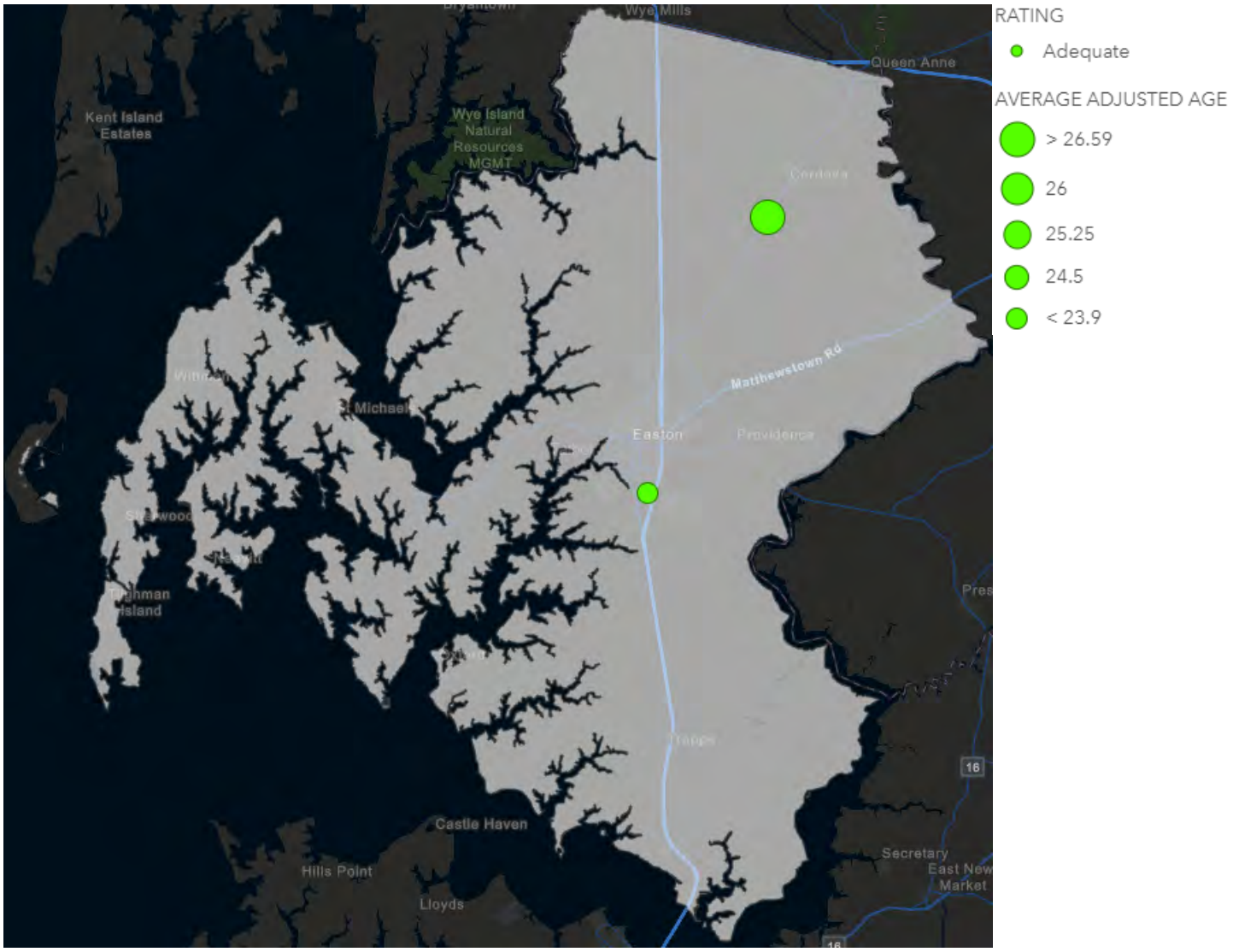
The LEA roofing surveys did not appear to correspond to the actual conditions identified during the IAC maintenance assessment. Roofs were observed with failing sealants, stains, and vegetation.

# TALBOT COUNTY

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 1 |
| | Grounds | 0 | 0 |
| | Positive Site Drainage Away from Structure(s) | 0 | 0 |
| | Playgrounds, Equipment, & Fields | 0 | 0 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 1 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 0 |
| | Entryways & Exterior Doors | 0 | 0 |
| | Roofs, Flashing, and Gravel Stops | 0 | 0 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 1 |
| | Floors | 0 | 0 |
| | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 0 |
| | Ceilings | 0 | 1 |
| | Interior Lighting | 0 | 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 | 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




- Exterior structures should be inspected on a regular basis and any deficiencies should be documented with corrective maintenance work orders in the computerized maintenance management system (CMMS).
- Auto-populating preventive maintenance (PM) checks should be used to track and plan HVAC system maintenance. Maintaining a unique identifier in the CMMS for each asset will assist with ensuring that all equipment is serviced appropriately.
- Deficiencies identified during roofing inspections should be put into the CMMS for tracking and future planning. Recurring problems will be more easily identifiable by looking at the work order history for a specific asset.
- Additional training for current staff or contracting with private third parties may be needed to ensure the regular roof inspection reports are thorough and accurate.
- More routine inspections or additional oversight are needed to ensure deficiencies throughout the building and property are identified and repairs are completed in a timely manner.
- The functionality of the CMMS should be utilized more fully to ensure deficiencies are identified and repaired in a timely manner.

# WASHINGTON COUNTY

**Total Schools Assessed in FY 2021: 16**


Jonathan Hager Elementary

## FISCAL YEAR 2021: KEY FACTS

**46 schools**

Washington County has 46 active schools.

**No change since FY20.**

**34.0 years old**

The average adjusted age of all 46 schools is 34.0 years old.

**- 0.4 years since FY20.**

**> 3.4 M GSF**

Washington County maintains 3,447,181 square feet throughout its 46 schools. It is the 11th largest LEA in Maryland.

**+ 94,994 SF since FY20.**

**> $1.4 B**

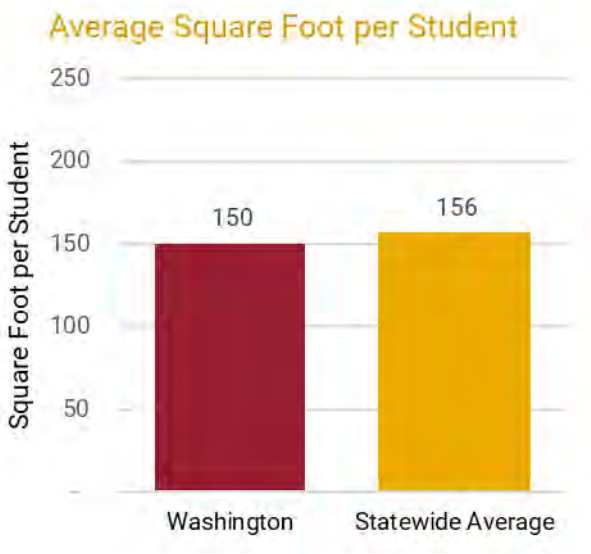
The current replacement value for Washington County's >3.4M GSF, at the IAC's current replacement cost/SF, is more than $1.4B.

**- $204M since FY20.**

**78.26 (Adequate)** = Average Overall Rating for FY 2021

### FY 2021 Overall Rating Results by School Type

| | Environmental | Special Ed. | Elementary | Middle | Middle/ | High | Career | |
|---|---|---|---|---|---|---|---|---|
| **Superior** | | | | | | | | |
| **Good** | | | 5 | | | 1 | | 6 |
| **Adequate** | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 10 |
| **Not Adequate** | | | | | | | | |
| **Poor** | | | | | | | | |
| Totals | 1 | 1 | 7 | 2 | 1 | 2 | 2 | **16** |



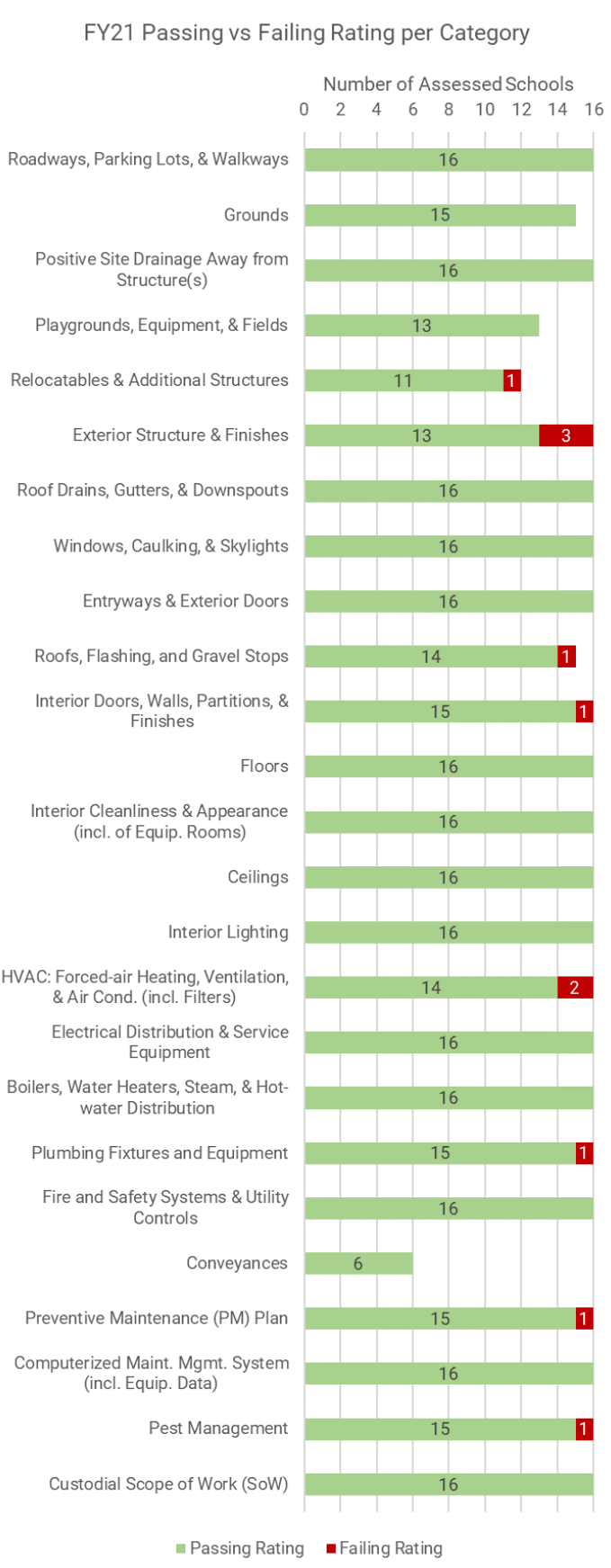
# WASHINGTON COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Springfield Middle (21.009) | Middle | 134,755 | 43 | Adequate | 0 | 7 | 17 | 0 | 0 |
| 2. Washington County Technical High (21.013) | Career Tech | 109,336 | 43 | Adequate | 0 | 7 | 18 | 0 | 0 |
| 3. Marshall St. Elementary (21.016) | Special Ed. | 49,945 | 44 | Adequate | 0 | 5 | 19 | 0 | 0 |
| 4. South Hagerstown High (21.020) | High | 163,959 | 21 | Good | 0 | 16 | 9 | 0 | 0 |
| 5. Pleasant Valley Elementary (21.022) | Elementary | 28,550 | 29 | Good | 0 | 13 | 11 | 0 | 0 |
| 6. Boonsboro Elementary (21.027) | Elementary | 62,716 | 29 | Good | 0 | 14 | 11 | 0 | 0 |
| 7. Lincolnshire Elementary (21.037) | Elementary | 64,791 | 23 | Adequate | 0 | 5 | 17 | 0 | 0 |
| 8. E. Russell Hicks Middle (21.038) | Middle | 103,131 | 53 | Adequate | 0 | 13 | 12 | 0 | 0 |
| 9. Clear Spring Elementary (21.042) | Elementary | 43,393 | 20 | Adequate | 0 | 9 | 14 | 1 | 0 |
| 10. Claud Kitchens Outdoor School at Fairview (21.048) | Environmental Ed. | 21,080 | 41 | Adequate | 0 | 9 | 13 | 0 | 0 |
| 11. Antietam Academy (21.049) | Middle/High | 45,000 | 10 | Adequate | 0 | 7 | 17 | 0 | 0 |
| 12. Funkstown Elementary (21.051) | Elementary | 24,197 | 53 | Good | 0 | 13 | 11 | 0 | 0 |
| 13. Ruth Ann Monroe Primary (21.052) | Elementary | 80,816 | 9 | Good | 0 | 19 | 4 | 0 | 0 |
| 14. Barbara Ingram School for the Arts (21.053) | High | 81,495 | 4 | Adequate | 2 | 9 | 12 | 0 | 0 |
| 15. Jonathan Hager Elementary (21.055) | Elementary | 65,433 | 4 | Good | 0 | 17 | 8 | 0 | 0 |
| 16. Public Service Academy (21.056) | Career Tech | 15,956 | 63 | Adequate | 0 | 4 | 15 | 3 | 0 |
| Totals | | | | | 2 | 167 | 208 | 4 | 0 |
| Percentage of Total Ratings for System | | | | | 1% | 44% | 55% | 1% | 0% |

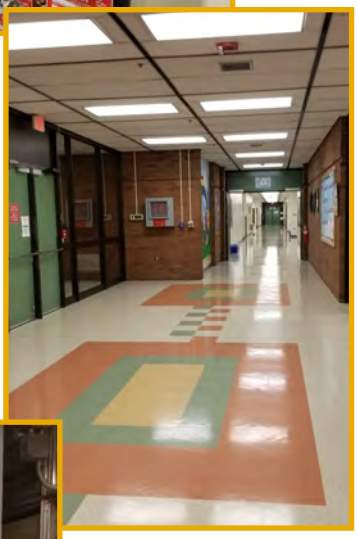
# WASHINGTON COUNTY

## FY 2021 Results: Assessment Findings by Category




## Strengths

Many of the schools had documentation in the CMMS for preventive and corrective work on the fire sprinkler and fire alarm systems.



All of the floors had a good shine and appeared well maintained. 13 schools received a Good rating in Floors.

Washington County Public Schools participates in the infrared testing program provided through the Maryland Association of Boards of Education.

Every school had well maintained interior lighting systems and ceilings. One school received Superior ratings for both categories.

## Weaknesses

Three facilities had additional structures observed with significant deterioration or damage. Damaged or missing downspouts, stained ceiling tiles, and rotted wood decking and siding were identified at several schools.

Five schools were identified with roof drain issues. The downspouts and gutters were observed damaged or clogged at eight schools.

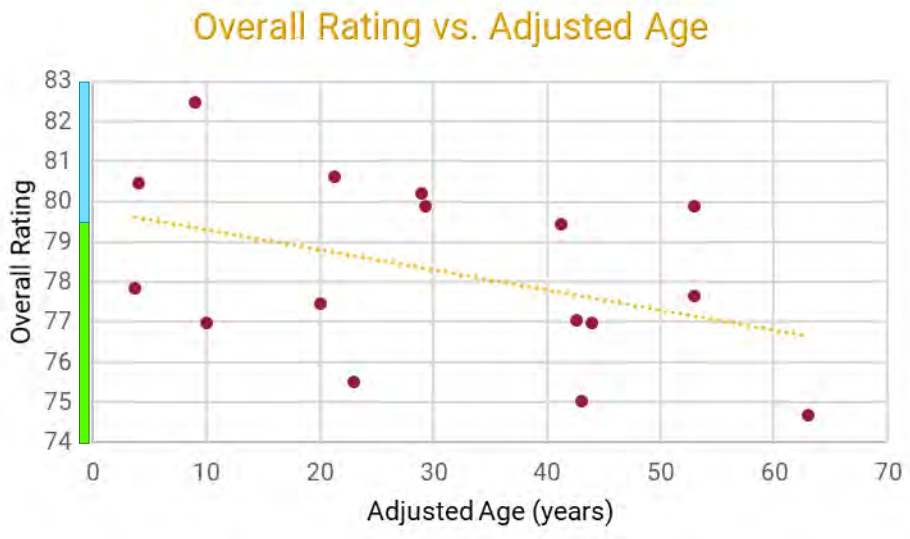
Minor cracks, deteriorated mortar, and damaged bricks were identified on the exterior structures and finishes at some of the buildings.

Five schools had inoperable exhaust fans or damaged belts. Several schools had dirty filters inside of their HVAC equipment.

## FY 2021 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 | 1 |
| 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 | 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 | 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 |
| | **Total** | **0** | **7** |

# Overall Rating vs Adjusted Building Age

- The exterior surfaces of the buildings should be evaluated on a regular basis to identify deterioration early on. Regularly scheduled preventive maintenance (PM) checks with corrective work orders for deficiencies should be used.

- All ventilation assets should be documented in the computerized maintenance management system (CMMS) with unique identifiers. Auto-populated PM work orders should be considered for exhaust fans on a regular basis to ensure they are functioning. Filters should be checked on a regular basis and replaced as needed. Auto-populating PM work orders are recommended to help track filter life span.

- All relocatables should be included in the facility PM plan. The asset list should be reviewed to ensure that equipment in the relocatables is being maintained.

- Roof drains, gutters, and downspouts should be inspected and serviced on a regular basis with regularly scheduled PM. Industry best practice is to use the CMMS to auto-populate required PMs and track required corrective work orders.

# WICOMICO COUNTY

**Total Schools Assessed in FY 2021: 9**


Willards Elementary

## FISCAL YEAR 2021: KEY FACTS

**24 schools**

Wicomico County has 24 active schools.

**No change since FY20.**

**28.4 years old**

The average adjusted age of all 24 schools is 28.4 years old.

**+ 0.9 years since FY20.**

**> 2.2 M GSF**

Wicomico County maintains 2,242,600 square feet throughout its 24 schools. It is the 14th largest LEA in Maryland.

**+ 5,709 SF since FY20.**

**> $0.9 B**

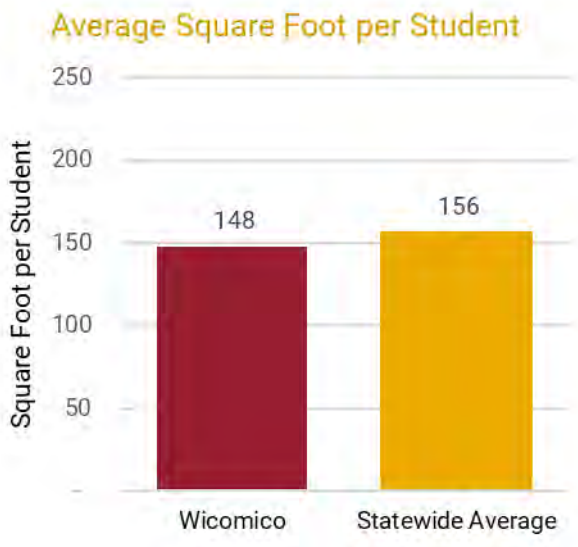
The current replacement value for Wicomico County's >2.2M GSF, at the IAC's current replacement cost/SF, is more than $0.9B.

**+ $112M since FY20.**

**79.59 (Good) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

| | Elementary | Middle | High | |
|---|---|---|---|---|
| **Superior** | 1 | | | 1 |
| **Good** | 2 | 1 | | 3 |
| **Adequate** | 3 | 1 | 1 | 5 |
| **Not Adequate** | | | | |
| **Poor** | | | | |
| Totals | 6 | 2 | 1 | **9** |

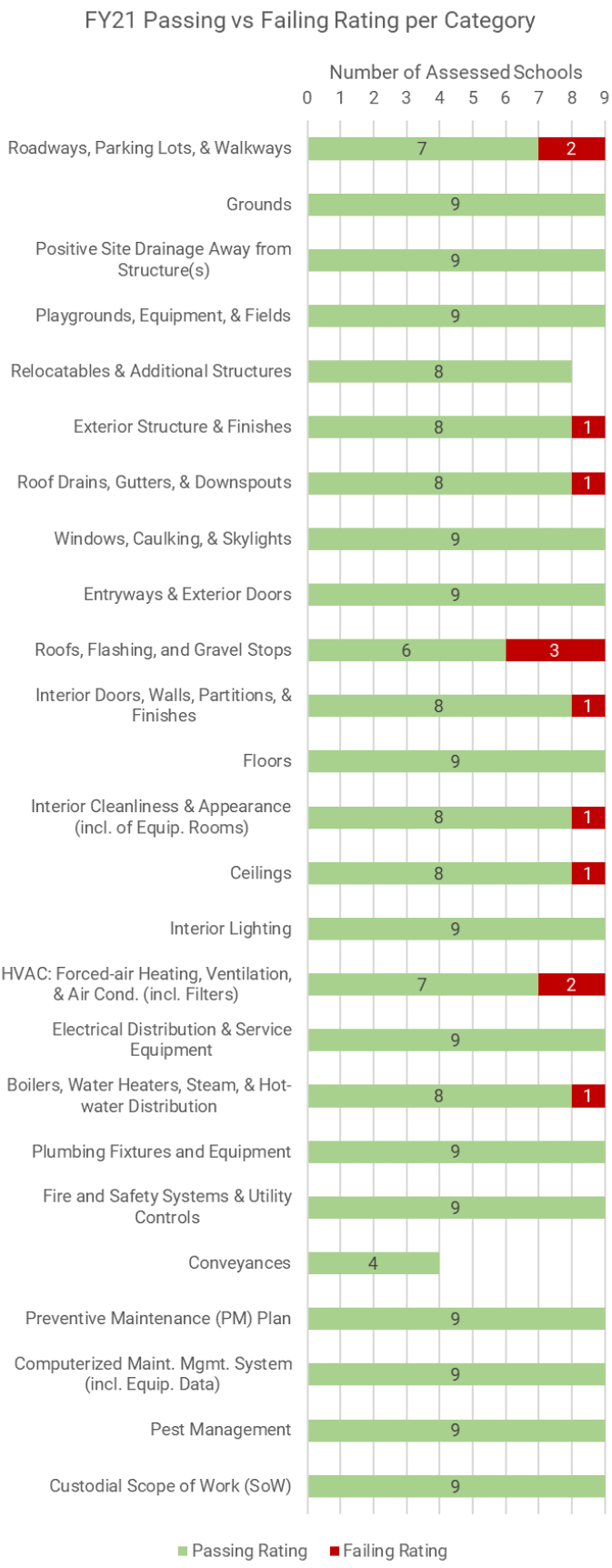


# WICOMICO COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Parkside High (22.001) | High | 277,724 | 37 | Adequate | 0 | 4 | 21 | 0 | 0 |
| 2. Northwestern Elementary (22.012) | Elementary | 26,800 | 48 | Adequate | 0 | 12 | 11 | 1 | 0 |
| 3. Chipman Elementary (22.020) | Elementary | 40,752 | 35 | Good | 3 | 9 | 12 | 0 | 0 |
| 4. Westside Primary (22.024) | Elementary | 20,569 | 64 | Adequate | 0 | 7 | 17 | 0 | 0 |
| 5. Salisbury Middle (22.025) | Middle | 143,519 | 22 | Adequate | 1 | 7 | 15 | 2 | 0 |
| 6. Willards Elementary (22.027) | Elementary | 51,247 | 18 | Good | 9 | 9 | 6 | 0 | 0 |
| 7. Pemberton Elementary (22.028) | Elementary | 73,917 | 20 | Adequate | 0 | 6 | 19 | 0 | 0 |
| 8. West Salisbury Elementary (22.029) | Elementary | 60,833 | 3 | Superior | 12 | 9 | 3 | 0 | 0 |
| 9. New Bennett Middle (22.030) | Middle | 167,013 | 6 | Good | 1 | 16 | 6 | 1 | 0 |
| Totals | | | | | 26 | 79 | 110 | 4 | 0 |
| Percentage of Total Ratings for System | | | | | 12% | 36% | 50% | 2% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths

The boilers and water heaters all appeared to be maintained and all certifications were up to date. Four schools earned a Superior rating.

Wicomico County Public Schools participates in the infrared testing program provided through the Maryland Association of Boards of Education. Three schools earned a Superior rating.

The majority of windows and skylights appeared to be secure, weathertight, and maintained. Two schools earned a Superior rating.

Exterior doors appeared to receive an annual preventive maintenance inspection to check for proper operation and repair any issues found. Two schools earned a Superior rating.

## Weaknesses

Three roofs were observed with their membranes exposed or damaged. Vegetation growth was identified on four roofs.

Six facilities had damaged, leaking, or clogged gutters. Debris in roof drains and missing splash blocks were identified at some schools.

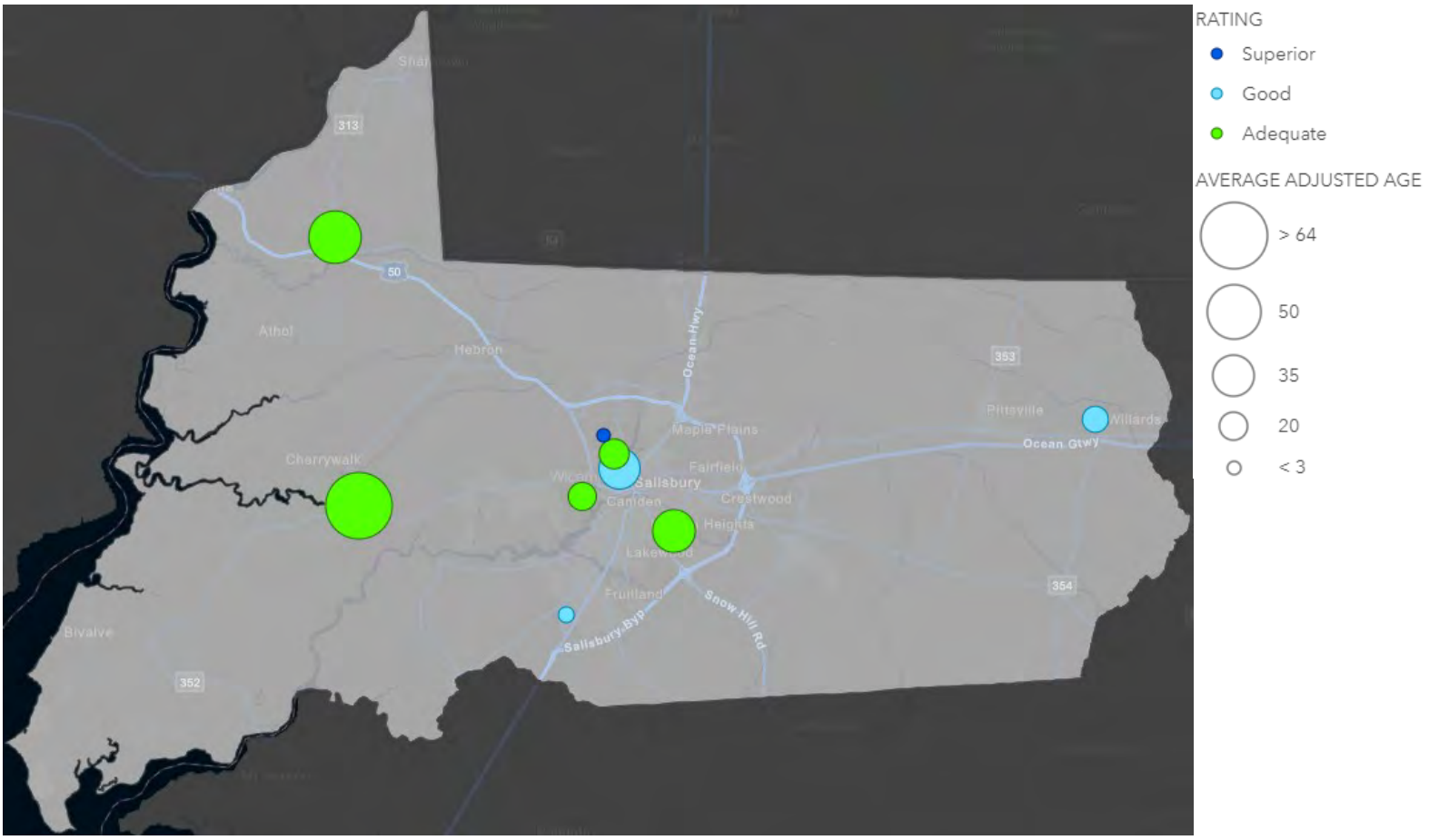
Four schools were observed with cluttered or improperly stored items, some of which were blocking access to electrical panels.

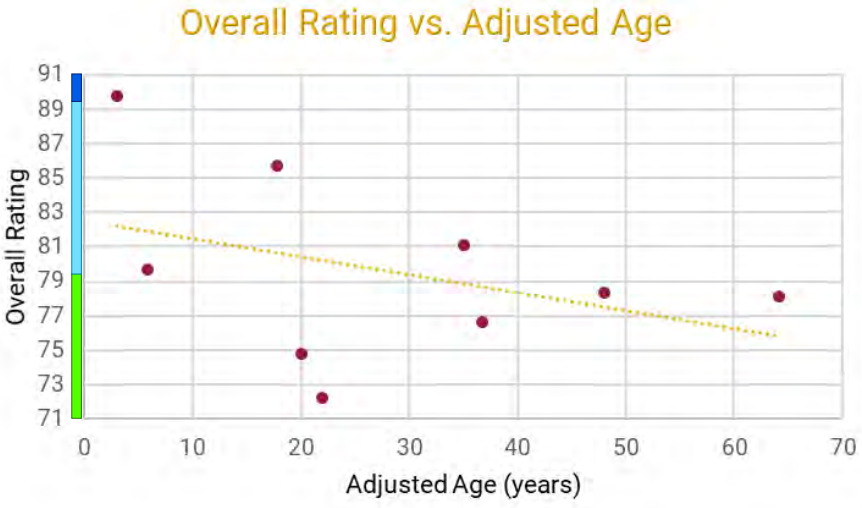
Four schools were observed with emergency lights not working properly. The emergency utility shut-offs were missing signage at five facilities.

## FY 2021 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 | 0 |
| | Relocatables & Additional Structures | 0 | 0 |
| Building Exterior | Exterior Structure & Finishes | 0 | 1 |
| | Roof Drains, Gutters, & Downspouts | 0 | 0 |
| | Windows, Caulking, & Skylights | 0 | 0 |
| | Entryways & Exterior Doors | 0 | 0 |
| | Roofs, Flashing, and Gravel Stops | 0 | 2 |
| 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 | 0 |
| 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** | **9** |

# Overall Rating vs Adjusted Building Age



- Roof drains, gutters and downspouts should be inspected on a regular basis. Inspections and repairs in response to deficiencies identified during the inspections should be tracked using the computerized maintenance management system (CMMS).

- Equipment and storage room cleanliness should be addressed on a regular basis throughout the year. Electrical equipment shall be accessible at all times.

- Issues that are identified during roofing inspections should have work orders to ensure that items found during the inspection are tracked and repaired. The CMMS work order history could assist in identifying repeat problem areas of the roof.

- Emergency lights and fire extinguisher maintenance should be tracked using the CMMS. Regularly scheduled preventive maintenance should generate work orders for the assets that need to be inspected.

# WORCESTER COUNTY

**Total Schools Assessed in FY 2021: 3**


Showell Elementary

## FISCAL YEAR 2021: KEY FACTS

**14 schools**

Worcester County has 14 active schools.

**No change since FY20.**

**25.6 years old**

The average adjusted age of all 14 schools is 25.6 years old.

**- 1.7 years since FY20.**

**> 1.2 M GSF**

Worcester County maintains 1,285,852 square feet throughout its 14 schools. It is the 18th largest LEA in Maryland.

**+ 45,799 SF since FY20.**

**> $0.5 B**

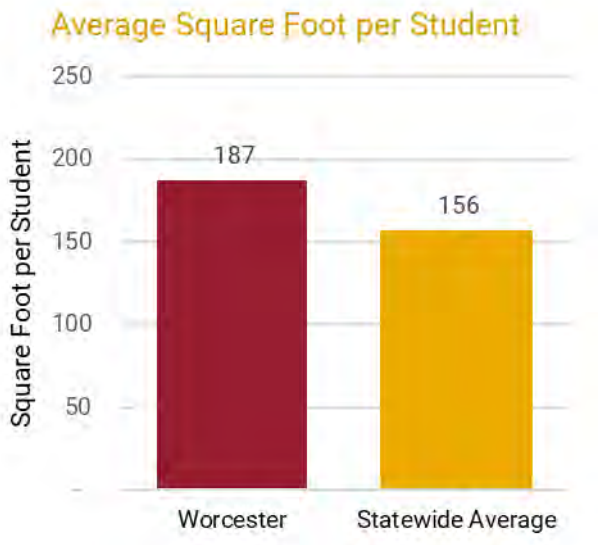
The current replacement value for Worcester County's >1.2M GSF, at the IAC's current replacement cost/SF, is more than $0.5B.

**+ $81M since FY20.**

**76.09% (Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

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

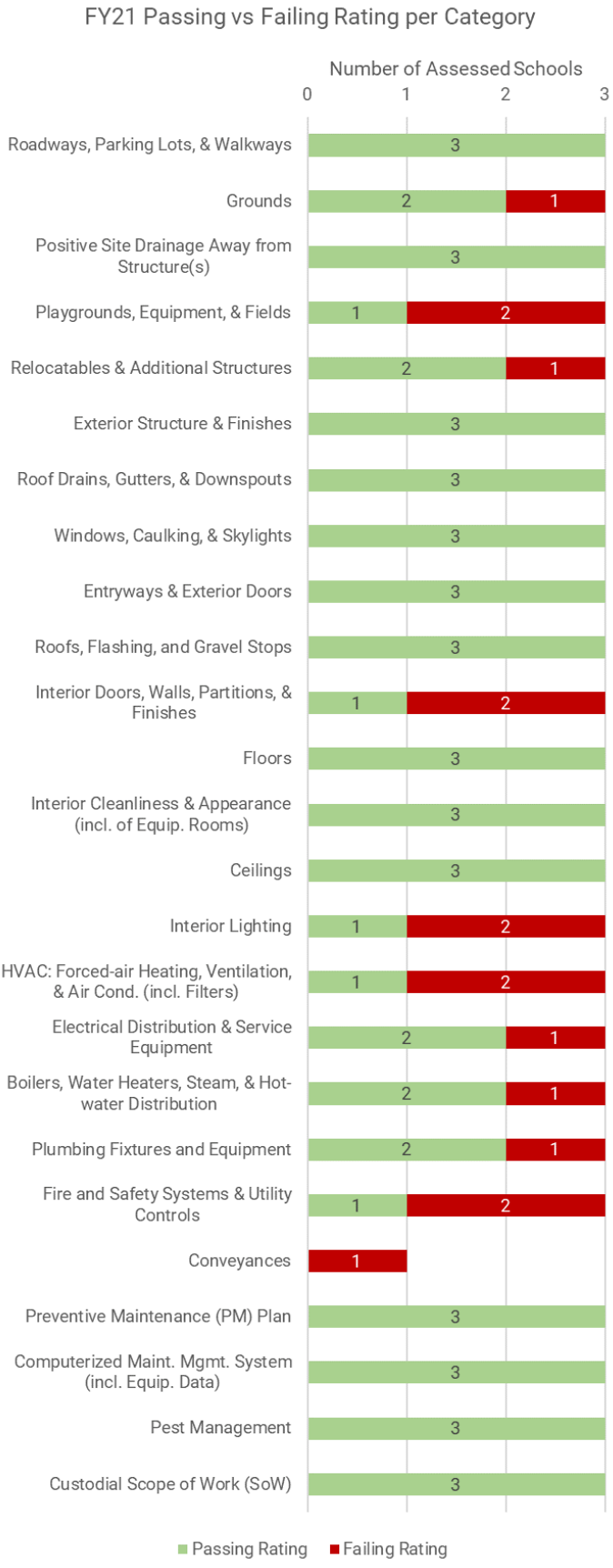


# WORCESTER COUNTY

## FY 2021 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) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Showell Elementary (23.001) | Elementary | 52,610 | 1 | Good | 10 | 6 | 8 | 0 | 0 |
| 2. Pocomoke High (23.003) | High | 124,202 | 10 | Adequate | 2 | 6 | 16 | 0 | 0 |
| 3. Buckingham Elementary (23.007) | Elementary | 49,000 | 43 | Adequate | 1 | 4 | 18 | 2 | 0 |
| Totals | | | | | 13 | 16 | 42 | 2 | 0 |
| Percentage of Total Ratings for System | | | | | 18% | 22% | 58% | 3% | 0% |

## FY 2021 Results: Assessment Findings by Category




## Strengths


Worcester County Public Schools participates in the infrared testing program provided through the Maryland Association of Boards of Education.

The windows appeared well maintained and functioned as designed at all three facilities. Two schools received Superior ratings.

Two schools received Superior ratings for the maintenance practices associated with their boilers and hot-water heaters. All certifications were up to date.

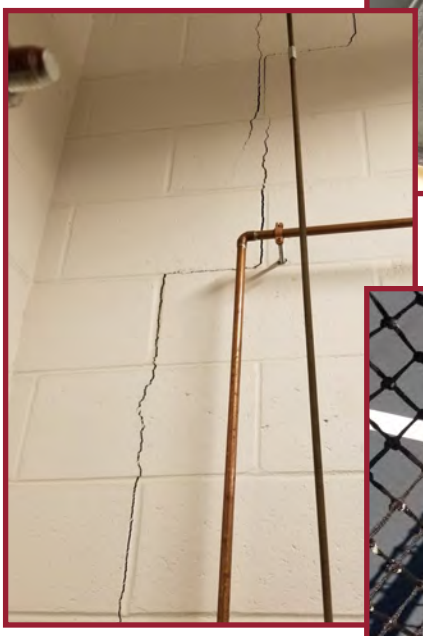
The exterior doors appeared to receive regular maintenance and functioned properly. Two schools received Superior ratings.

## Weaknesses

Inoperable emergency lighting was identified at two schools. The fault light indicator for the emergency lighting equipment at one of those schools was illuminated on two panels.


All three schools had at least one HVAC unit that was identified as non-operational. At one school, the recovery wheels were damaged and metal shavings were observed in multiple energy recovery ventilation units.

Two facilities were observed with interior wall cracks.

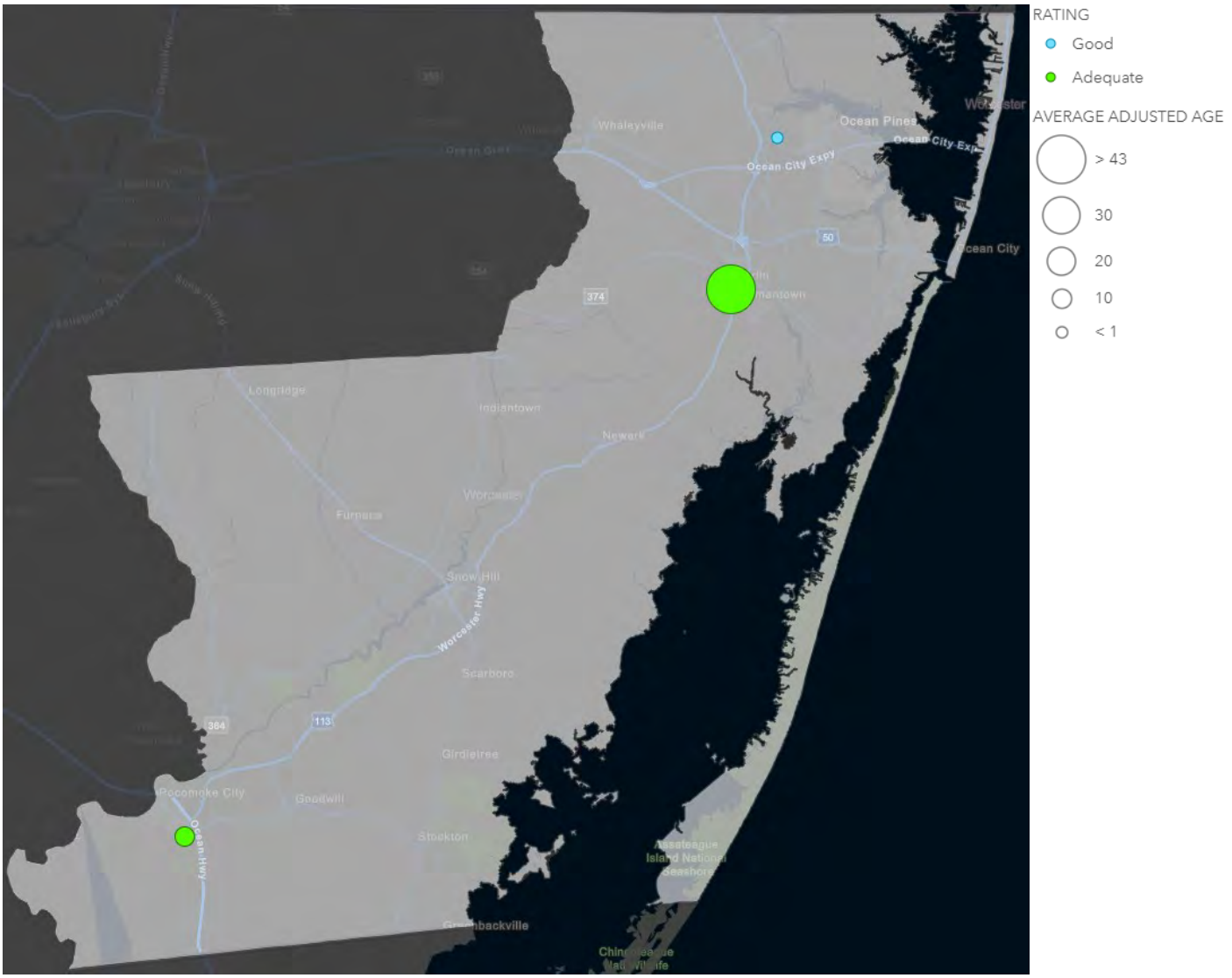


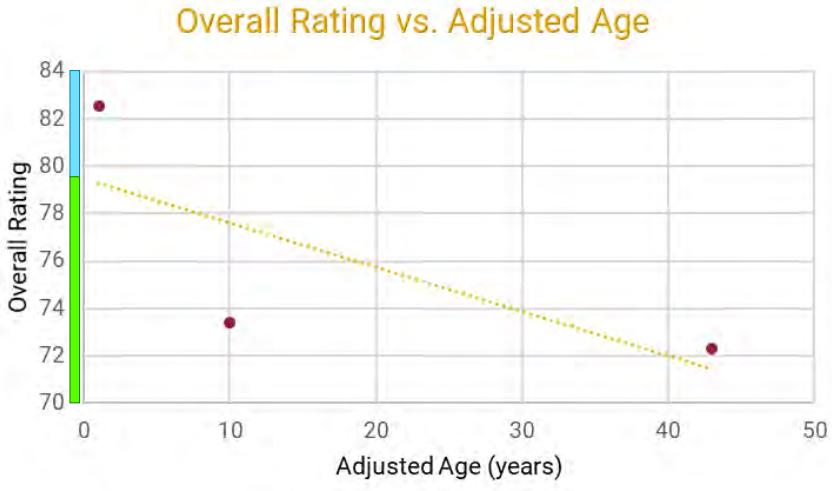
Playground equipment was observed damaged at two schools. Two schools also had hard play surfaces that were stained or cracked.

## FY 2021 Results: Summary of School Ratings

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 0 |
| | Grounds | 0 | 1 |
| | Positive Site Drainage Away from Structure(s) | 0 | 0 |
| | Playgrounds, Equipment, & Fields | 0 | 1 |
| | Relocatables & Additional Structures | 0 | 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 | 2 |
| | 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 | 2 |
| | 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 | 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** | **14** |

# Overall Rating vs Adjusted Building Age



- Routine preventive maintenance (PM) should be conducted on playground equipment. PM should be planned and tracked using the computerized maintenance management system (CMMS). Items found during maintenance that need repair should be tracked through corrective work orders.

- Interior walls should be part of a PM program to identify any cracking or deficiencies within the buildings. Cracking should be evaluated and monitored with crack monitors to track changes.

- All assets in the building should be assigned unique identifiers to ensure that they are serviced when required by the PM plan. The frequency of PM checks should be based on the manufacturer's recommendations.

- The emergency lighting should be regularly inspected according to the manufacturer's recommendations. Inspections should be documented using the CMMS. Best practice is to develop PM plans from the manufacturer's recommendations and have auto-generated work orders created.

# BALTIMORE CITY

**Total Schools Assessed in FY 2021: 43**


Frederick Elementary # 260

## FISCAL YEAR 2021: KEY FACTS

**149 schools**

Baltimore City has 149 active schools.

**- 6 schools since FY20.**

**37.0 years old**

The average adjusted age of all 149 schools is 37.0 years old.

**- 5.2 years since FY20.**

**> 16 M GSF**

Baltimore City maintains 16,885,420 square feet throughout its 149 schools. It is the 3rd largest LEA in Maryland.

**- 571,576 SF since FY20.**

**> $7.2 B**

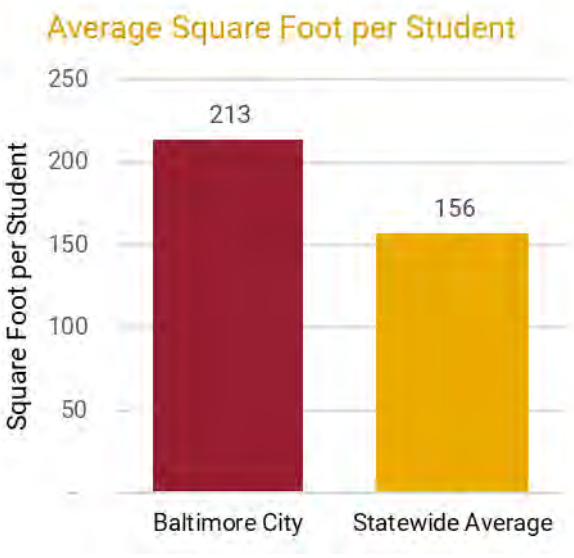
The current replacement value for Baltimore City's >16M GSF, at the IAC's current replacement cost/SF, is more than $7.2B.

**+ $611M since FY20.**

**69.15 (Not Adequate) = Average Overall Rating for FY 2021**

### FY 2021 Overall Rating Results by School Type

| | Alternate | Special Ed. | Elementary | Elementary/ | PreK-8 | Middle | Middle/ | High | |
|---|---|---|---|---|---|---|---|---|---|
| **Superior** | | | | | | | | | |
| **Good** | | | | | | | | | |
| **Adequate** | 1 | 2 | 6 | 3 | 5 | | | 2 | 19 |
| **Not Adequate** | | | 7 | | 9 | 1 | 2 | 4 | 23 |
| **Poor** | | 1 | | | | | | | 1 |
| Totals | 1 | 3 | 13 | 3 | 14 | 1 | 2 | 6 | **43** |



# BALTIMORE CITY

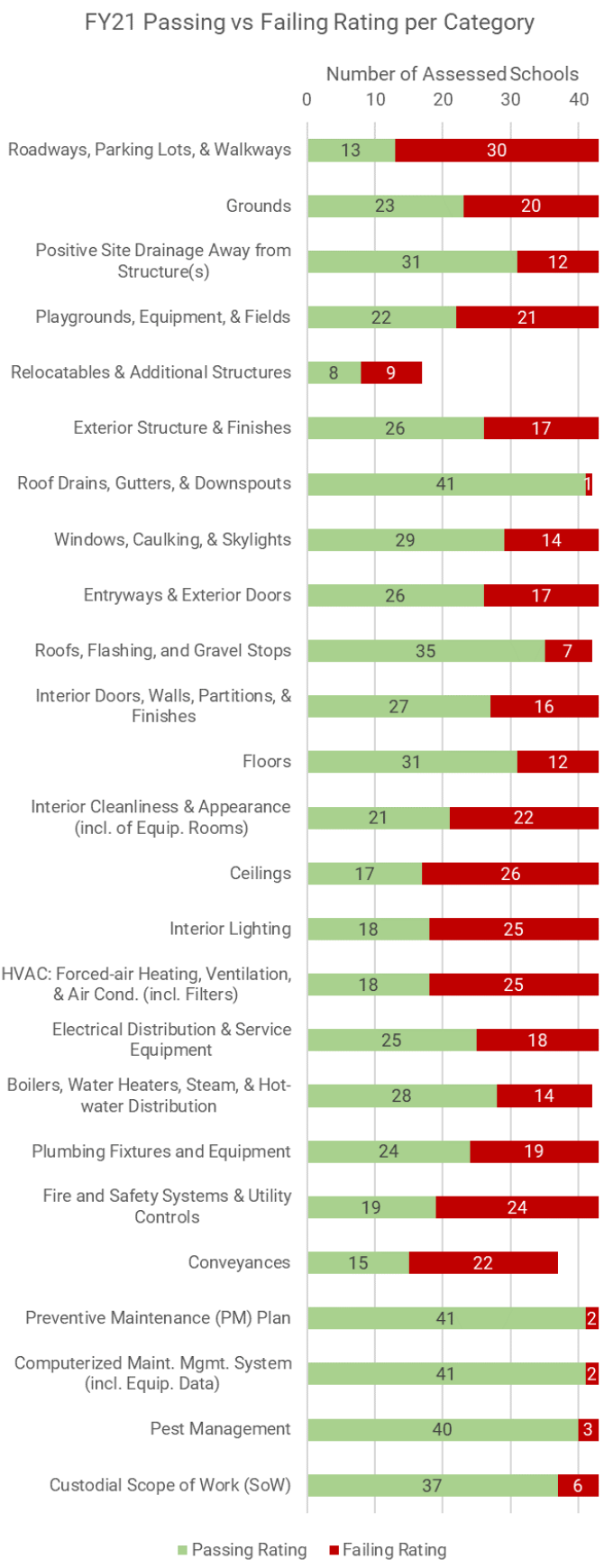
## FY 2021 Results: Summary of School Ratings - Part 1 of 2

| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 1. Wolfe Street Academy Elementary # 023 (formerly General Wolf (30.016) | Elementary | 22,650 | 44 | Adequate | 0 | 13 | 8 | 4 | 0 |
| 2. Commodore John Rodgers PK-8 # 027 (30.017) | PreK-8 | 110,776 | 46 | Adequate | 0 | 2 | 17 | 4 | 0 |
| 3. Charles Carroll Barrister Elementary # 034 (30.018) | Elementary | 48,137 | 40 | Not Adequate | 0 | 0 | 19 | 6 | 0 |
| 4. Margaret Brent PK-8 # 053 (30.029) | PreK-8 | 47,626 | 41 | Not Adequate | 0 | 1 | 19 | 4 | 0 |
| 5. Dorothy I. Height Elementary # 061 (30.034) | Elementary | 91,400 | 20 | Adequate | 0 | 20 | 4 | 0 | 0 |
| 6. North Bend PK-8 # 081 (30.041) | PreK-8 | 77,152 | 46 | Not Adequate | 0 | 0 | 20 | 5 | 0 |
| 7. William Paca Elementary # 083 (30.042) | Elementary | 85,700 | 41 | Not Adequate | 0 | 0 | 24 | 1 | 0 |
| 8. Windsor Hills PK-8 # 087 (30.045) | PreK-8 | 59,000 | 74 | Adequate | 0 | 11 | 12 | 2 | 0 |
| 9. Lockerman-Bundy Elementary # 261 (30.067) | Elementary | 48,600 | 42 | Not Adequate | 0 | 1 | 19 | 4 | 0 |
| 10. Alexander Hamilton Elementary # 145 (30.068) | Elementary | 53,304 | 37 | Adequate | 0 | 10 | 13 | 0 | 1 |
| 11. Mt. Royal Elementary/Middle # 066 (30.069) | Elementary/ Middle | 112,020 | 38 | Adequate | 0 | 3 | 18 | 3 | 0 |
| 12. Highlandtown PK-8 # 215 (30.072) | PreK-8 | 61,646 | 45 | Not Adequate | 0 | 0 | 21 | 1 | 0 |
| 13. George W. F. McMechen Special Ed. High # 177 (30.074) | Special Ed. | 100,728 | 47 | Poor | 0 | 0 | 12 | 11 | 0 |
| 14. Guilford PK-8 # 214 (30.077) | PreK-8 | 65,851 | 37 | Adequate | 0 | 1 | 13 | 10 | 0 |
| 15. Violetville PK-8 #226 (30.085) | PreK-8 | 100,271 | 20 | Adequate | 0 | 13 | 9 | 2 | 0 |
| 16. Thomas Jefferson PK-8 # 232 (30.090) | PreK-8 | 57,430 | 25 | Not Adequate | 0 | 0 | 21 | 4 | 0 |
| 17. Hamilton PK-8 # 236 (30.096) | PreK-8 | 84,068 | 21 | Not Adequate | 0 | 4 | 18 | 3 | 0 |
| 18. Southeast Building Middle/High # 255 (30.105) | Alternate | 95,000 | 44 | Adequate | 0 | 4 | 21 | 0 | 0 |
| 19. Francis M. Wood Building # 178 (30.115) | High | 76,475 | 42 | Not Adequate | 0 | 7 | 16 | 2 | 0 |
| 20. Harriet Tubman Building # 138 (30.150) | Elementary | 48,600 | 44 | Adequate | 0 | 10 | 10 | 2 | 2 |
| 21. Lois T. Murray Special Ed. PK-8 # 313 (30.154) | Special Ed. | 20,725 | 41 | Adequate | 0 | 14 | 9 | 0 | 0 |
| 22. Sharp-Leadenhall Special Ed. ES # 314 (30.155) | Special Ed. | 20,725 | 41 | Adequate | 0 | 9 | 14 | 0 | 0 |
| 23. Frederick Elementary # 260 (30.162) | Elementary | 84,171 | 3 | Adequate | 0 | 4 | 19 | 1 | 0 |
| 24. Patterson High # 405 (30.164) | High | 303,582 | 55 | Not Adequate | 0 | 1 | 20 | 3 | 1 |
| 25. Forest Park High # 406 (30.167) | High | 203,508 | 3 | Adequate | 0 | 16 | 7 | 1 | 0 |
| 26. Wildwood PK-8 # 088 (formerly Lyndhurst) (30.176) | Elementary/ Middle | 112,936 | 11 | Adequate | 0 | 11 | 8 | 5 | 0 |

## FY 2021 Results: Summary of School Ratings - Part 2 of 2

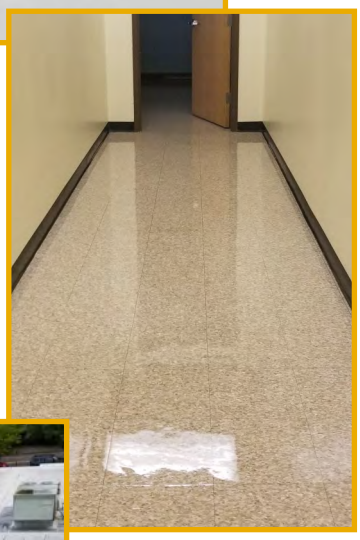
| School Name | School Type | Square Footage | Adjusted Age | Overall Rating | Rating of Individual Categories (does not include items not rated) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Superior | Good | Adequate | Not Adequate | Poor |
| 27. George Washington Elementary # 022 (30.177) | Elementary | 40,211 | 30 | Adequate | 0 | 8 | 16 | 0 | 0 |
| 28. Lakeland PK-8 # 012 (30.179) | PreK-8 | 98,465 | 22 | Not Adequate | 0 | 5 | 19 | 1 | 0 |
| 29. Garrison Middle # 042 (30.182) | Middle | 149,627 | 31 | Not Adequate | 0 | 8 | 13 | 3 | 0 |
| 30. Armistead Gardens PK-8 # 243 (30.186) | PreK-8 | 62,031 | 29 | Not Adequate | 0 | 2 | 15 | 8 | 0 |
| 31. Northwestern High #401 (30.187) | High | 307,200 | 53 | Not Adequate | 0 | 3 | 19 | 2 | 1 |
| 32. Beechfield PK-8 # 246 (30.195) | PreK-8 | 75,603 | 60 | Not Adequate | 0 | 3 | 19 | 3 | 0 |
| 33. Steuart Hill PK-5 # 004 (30.208) | Elementary | 96,669 | 50 | Not Adequate | 0 | 0 | 20 | 4 | 0 |
| 34. Professional Development Center Building #93 [aka Dr. Samuel (30.209) | Middle/High | 298,325 | 49 | Not Adequate | 0 | 0 | 17 | 6 | 1 |
| 35. Belmont Elementary # 217 (30.214) | Elementary | 92,858 | 57 | Not Adequate | 0 | 8 | 14 | 1 | 0 |
| 36. CHERRY HILL 3-8 #159 (30.220) | Elementary/ Middle | 129,509 | 2 | Adequate | 1 | 19 | 3 | 1 | 0 |
| 37. Western High Building #407 (30.227) | High | 289,200 | 52 | Adequate | 0 | 9 | 14 | 2 | 0 |
| 38. Joseph C. Briscoe Building #451 (30.236) | Middle/High | 91,774 | 46 | Not Adequate | 0 | 2 | 17 | 4 | 1 |
| 39. Pimlico PK-8 # 223 (30.251) | PreK-8 | 119,015 | 2 | Not Adequate | 0 | 3 | 14 | 6 | 1 |
| 40. Hilton Elementary # 021 (30.254) | Elementary | 75,993 | 54 | Not Adequate | 0 | 0 | 19 | 5 | 0 |
| 41. Edgewood PK-5 # 067 (30.262) | Elementary | 66,199 | 61 | Not Adequate | 0 | 9 | 13 | 1 | 0 |
| 42. Fort Worthington Elementary # 085 (30.270) | PreK-8 | 103,351 | 3 | Adequate | 0 | 7 | 18 | 0 | 0 |
| 43. Harlem Park Building #078 (30.274) | High | 332,952 | 56 | Not Adequate | 0 | 0 | 14 | 10 | 0 |
| Totals | | | | | 1 | 241 | 655 | 135 | 8 |
| Percentage of Total Ratings for System | | | | | 0% | 23% | 63% | 13% | 1% |

## FY 2021 Results: Assessment Findings by Category

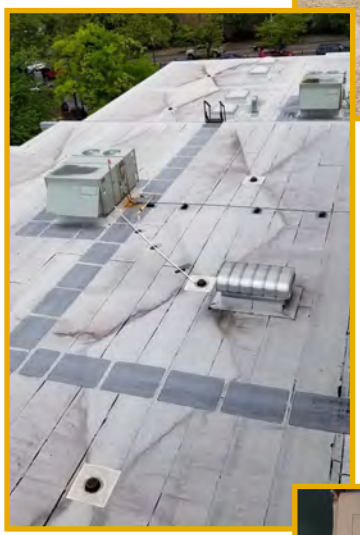



## Strengths

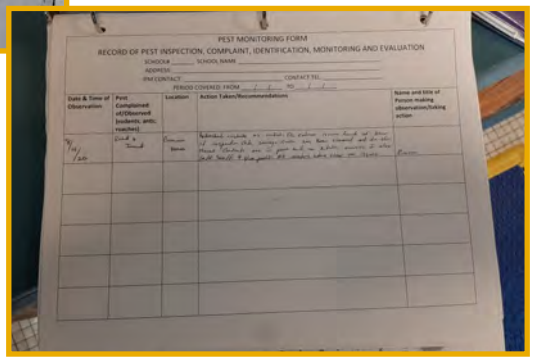
The majority of roof drains were well maintained and clear of debris. Preventive maintenance work orders were clearly identified in the CMMS.



Most of the floors appeared adequately maintained. Many schools had work orders in the CMMS to track repairs.



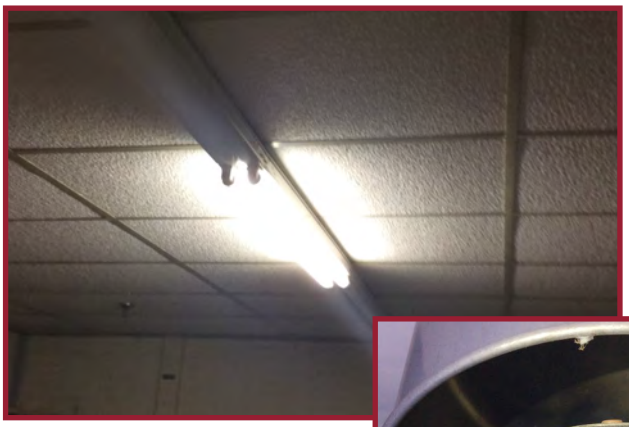
Work orders were being entered into the CMMS for tracking roof inspections and various preventive maintenance checks. Work orders were also being entered to track repairs for the deficiencies identified during the inspections.

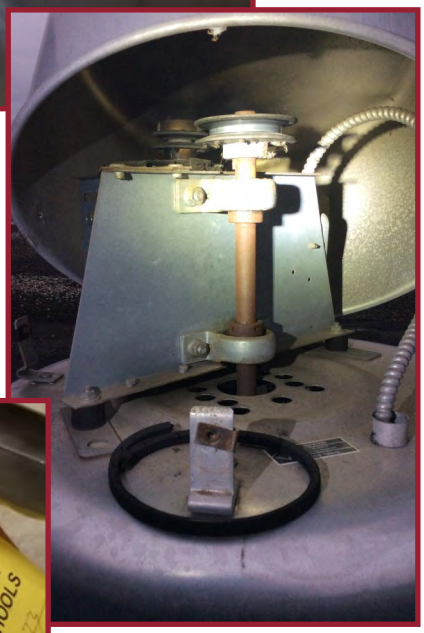


The pest management program appeared to be well implemented at the majority of schools. Preventive maintenance work orders appeared to have been completed on a regular basis.

## Weaknesses

25 schools were observed with interior lighting fixtures not working. Damaged or missing protective light covers were identified at 28 schools. At 7 schools, exposed wires were noted at lighting fixtures.





14 schools received a Not Adequate rating and one school received a Poor rating for HVAC due to issues such as dirty filters, inoperable exhaust fans, and missing or damaged belts.

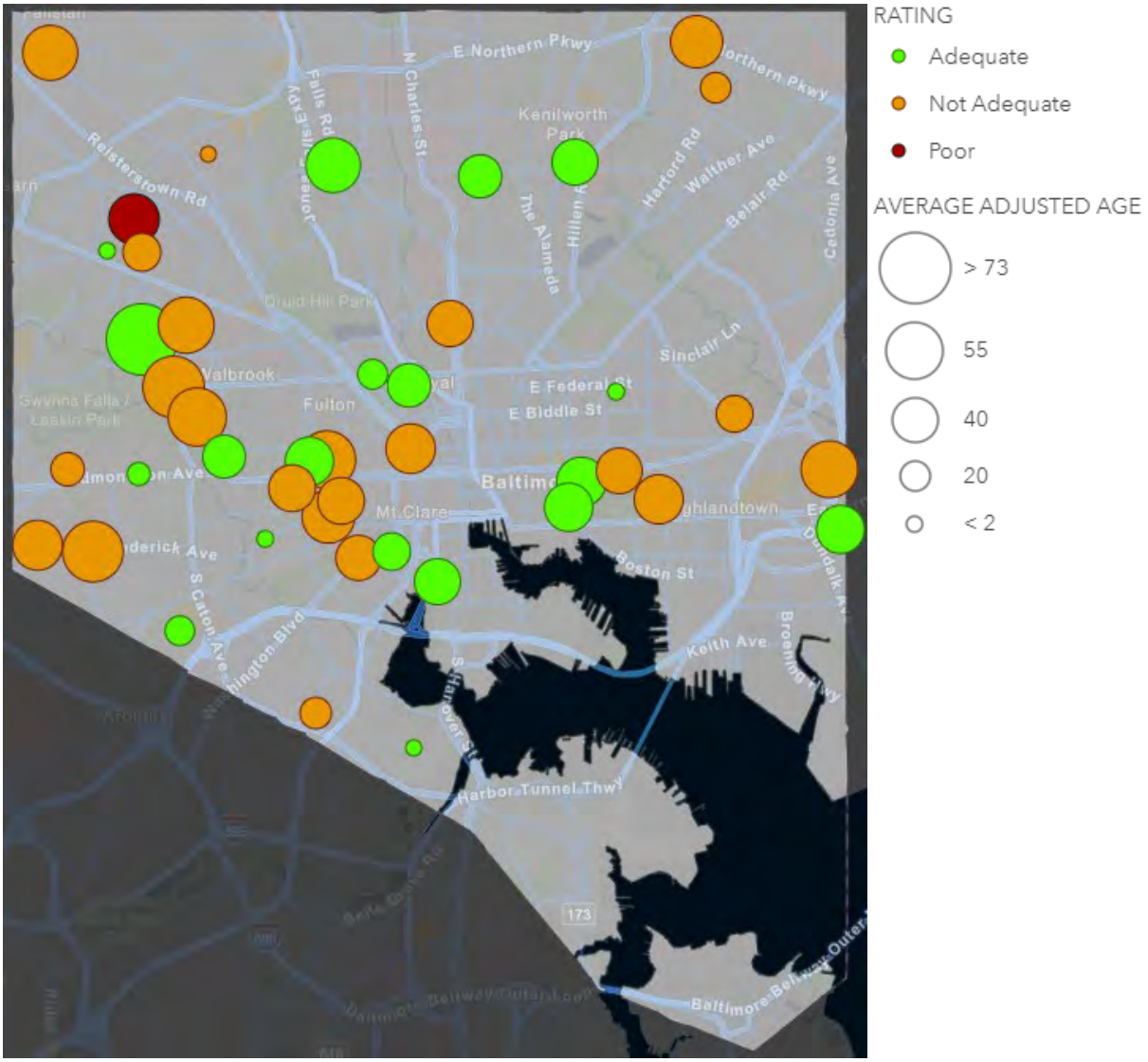
20 schools were noted with out-of-date fire extinguisher inspections. Leaking water lines, blocked egress or access to equipment, and non-functional emergency lights were noted at several schools.

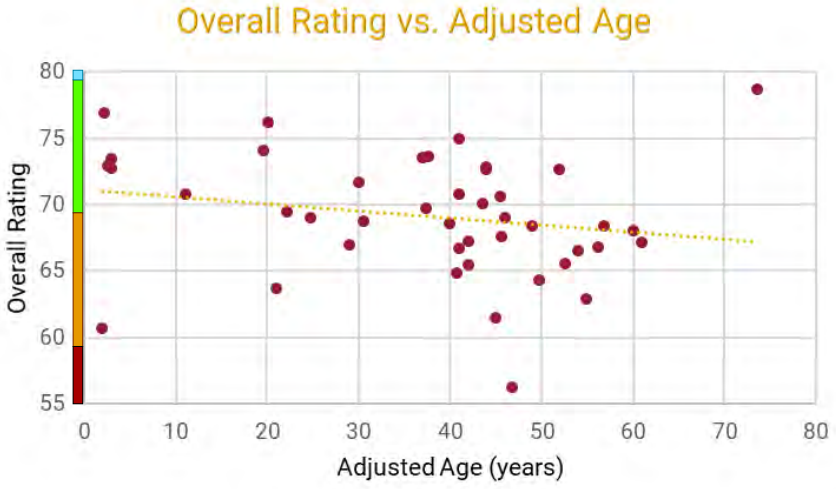

Ceiling tiles were stained and/or damaged at 39 schools. Missing ceiling grids and sagging sections of drop ceiling were also identified.

## FY 2021 Results: Summary of Deficiencies by Category

| | Category | # of Major Deficiencies | # of Minor Deficiencies |
|---|---|---|---|
| Site | Roadways, Parking Lots, & Walkways | 0 | 26 |
| Site | Grounds | 0 | 13 |
| Site | Positive Site Drainage Away from Structure(s) | 0 | 9 |
| Site | Playgrounds, Equipment, & Fields | 1 | 17 |
| Site | Relocatables & Additional Structures | 0 | 8 |
| Building Exterior | Exterior Structure & Finishes | 0 | 13 |
| Building Exterior | Roof Drains, Gutters, & Downspouts | 0 | 1 |
| Building Exterior | Windows, Caulking, & Skylights | 0 | 10 |
| Building Exterior | Entryways & Exterior Doors | 0 | 13 |
| Building Exterior | Roofs, Flashing, and Gravel Stops | 0 | 7 |
| Building Interior | Interior Doors, Walls, Partitions, & Finishes | 0 | 9 |
| Building Interior | Floors | 0 | 10 |
| Building Interior | Interior Cleanliness & Appearance (incl. of Equip. Rooms) | 0 | 17 |
| Building Interior | Ceilings | 0 | 24 |
| Building Interior | Interior Lighting | 0 | 19 |
| Building Equipment & Systems | HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters) | 0 | 14 |
| Building Equipment & Systems | Electrical Distribution & Service Equipment | 0 | 15 |
| Building Equipment & Systems | Boilers, Water Heaters, Steam, & Hot-water Distribution | 0 | 10 |
| Building Equipment & Systems | Plumbing Fixtures and Equipment | 0 | 15 |
| Building Equipment & Systems | Fire and Safety Systems & Utility Controls | 0 | 22 |
| Building Equipment & Systems | Conveyances | 0 | 13 |
| Maintenance Management | Preventive Maintenance (PM) Plan | 0 | 1 |
| Maintenance Management | Computerized Maint. Mgmt. System (incl. Equip. Data) | 0 | 1 |
| Maintenance Management | Pest Management | 0 | 1 |
| Maintenance Management | Custodial Scope of Work (SoW) | 0 | 2 |
| | **Total** | **1** | **290** |

# Overall Rating vs Adjusted Building Age



- Fire extinguisher inspections should have auto-populating preventive maintenance (PM) checks to ensure that all extinguishers are serviced on a regular basis. A location list or marked floor plan will help ensure that all extinguishers are serviced at each location.

- 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 computerized maintenance management system (CMMS) and corrective work orders could help to identify recurring problems in specific areas.

- Essential HVAC equipment should be labeled with asset tags that are identified in the auto-populating PM program. Asset identification listed in the PM program and on-site labeling will increase the effectiveness of the PMs and help ensure all equipment is serviced.

- Interior building lighting assessments should be carried out on a regular basis to identify and correct deficient fixtures. Corrective work orders should be entered into the CMMS for problems that could not be corrected by on-site staff. CMMS work orders could allow the maintenance staff to correct deficiencies during maintenance work.

- The work orders entered into the CMMS do not represent the full extent of the work required to effectively sustain the conditions of the portfolio of City Schools' facilities. The extent of the work needed cannot be fully met until the need is fully determined.