From: James Cecil <jamescecil02@gmail.com>
Sent: Monday, February 3, 2025 6:43 PM
To: CouncilMail
Subject: TA02-2025 Testimony

Follow Up Flag: Follow up
Flag Status: Flagged

Good Evening Council Members,

Ahead of your vote this evening on TA02-2025, I wanted to express my concerns with the expansive nature of the requested transfer as $2.5M for two studies seems incredibly excessive, especially given the scarcity of capital funds for HCPSS and the County.

My main concern, which came up during the Legislative Hearing on 1/21, is that the projected cost of the educational sufficiency study is $2M if the estimates of $500k for the P3 study are accepted. For the sake of comparison, BCPS was able to contract out an efficiency report for the entire system at a cost of $1.2M that identified potential savings of $40M over five years in 2021.

Additionally, the IAC routinely does much of what this study is purported to do in regards to determining sufficiency standards and providing assessments.
https://iac.mdschoolconstruction.org/?page_id=908
https://iac.mdschoolconstruction.org/wp-content/uploads/2024/10/IAC-FY-2024-Annual-Report.pdf

Via the IAC, the state has already paid for and conducted a complete statewide sufficiency study in 2021, which cost the state nearly $5.4M (noted on page 2 https://iac.mdschoolconstruction.org/wp-content/uploads/2022/06/2021-09-01-SFA-Report-JCR.pdf) for 1,400 schools. It really casts doubt on the $2M placeholder for 78 schools.

There is extensive work being done around this at the state level and throughout staff testimony to the Board and in your work session, it was still unclear as to what the ROI would be once the assessment is completed. Staff in most buildings report or even testify as to areas that are insufficient, which is often ignored and there is still the matter of what HCPSS would do with the data once they have received it? A needs assessment could be completed internally and rolled into the P3 study, which would be the best bet at corrective measures being actionable. The current timeline would see suggestions returned after the P3 study was completed and solutions would be limited if the relocation of programs was going to be included in new construction/renovation/expansion plans.

Lastly, HCPSS has not shown much fidelity in putting the recommendations of consultants into action. They should be able to do a better job illustrating what it is that they are looking to get out of this.

To that end, I would suggest an amendment bifurcating the request and solely approving the $500k for

the P3 study as it is long overdue and represents significant long term benefits to the County.

I would then suggest tabling the remaining $2M request until it can be better differentiated from what the state is already doing around educational sufficiency and assessment. At the very least, a letter of support from the IAC seems like an appropriate expectation/threshold. If that is not agreeable, I would still suggest an accountability mechanism that would reduce the $2M to what it would take to develop the Scope of Work for the RFP. The remaining funds could be unlocked once they have it. Another suggested amendment would be a contingency for the funds if the studies do not expend the $2.5M by a certain timeframe. HCPSS seems inclined to request funds for a purpose, stash them and then quietly use them for other purposes. This practice needs to stop and accountability would get them their studies while preserving funds for intended purposes.

Unfortunately, HCPSS has a damaged reputation that they need to take meaningful action to address at some point. Having to increase transparency and accountability would only make them stronger and encourage better practices before their next request. Approving this request without amendments would only serve to reinforce bad habits and sloppy practices.

Please hold HCPSS to a higher standard and ensure that they are acting as good stewards of the resources available to them.

Best,
James Cecil

Title 14
INDEPENDENT AGENCIES

Subtitle 39 INTERAGENCY COMMISSION ON SCHOOL CONSTRUCTION

Chapter 07 Public School Facilities Educational Sufficiency Standards

Authority: Education Article, §5-310, Annotated Code of Maryland; Ch. 14, Acts of 2018

.01 Purpose.

The purpose of Maryland Public School Facilities Educational Sufficiency Standards is to establish acceptable minimum levels for the physical attributes, capacity, and educational suitability of existing public PreK—12 school facilities in order to assess existing facilities against a defined standard to identify deficiencies.

.02 Scope.

A. As required by Education Article, §5-310, Annotated Code of Maryland, the Facilities Educational Sufficiency Standards established in this chapter shall be used to complete assessments of existing school facilities Statewide.

B. The chapter is to be used for assessment purposes only and are not requirements for school facility design or construction.

C. This chapter may not supersede or obviate compliance with applicable building and fire codes or any other code, regulation, law, or standard that has been adopted by State agencies.

.03 General Requirements.

A. Building Condition.

(1) A school facility shall be safe and capable of being maintained.

(2) A school facility shall be structurally sound. A school facility shall be considered structurally sound if the building presents:

(a) No imminent danger;

(b) No major visible signs of decay or distress; or

(c) Structural systems support the loads imposed on them.

(3) An exterior envelope is safe and capable of being maintained if:

(a) Walls and roof are weather-tight under normal conditions with routine upkeep; and

(b) Doors and windows are weather-tight under normal conditions with routine upkeep.

(4) An interior surface is safe and capable of being maintained if it is:

(a) Structurally sound;

(b) Capable of supporting a finish; and

(c) Capable of continuing in its intended use with normal maintenance and repair.

(5) An interior finish is safe and capable of being maintained if it is:

(a) Free of exposed lead paint;

(b) Free of exposed friable asbestos; and

(c) Capable of continuing in its intended use with normal maintenance and repair.

B. Building Systems.

(1) Building systems in a school facility shall be in working order and capable of being properly maintained.

(2) Building systems include but are not limited to the following:

(a) Roof;

(b) Plumbing;

(c) Telephone;

(d) Electrical;

(e) Heating and cooling systems;

(f) Fire alarm;

(g) Two-way internal communication;

(h) Technological infrastructure; and

(i) Security systems.

(3) A building system shall be considered to be in working order and capable of being maintained if the following apply:

(a) The system is capable of being operated as intended and maintained;

(b) Newly manufactured or cost-effective refurbished replacement parts are available;

(c) The system is capable of supporting the standards established in this rule; and

(d) Components of the system present no imminent danger of personal injury.

(4) Sanitary Facilities.

(a) Fixtures shall include but are not limited to the following:

(i) Water closets;

(ii) Urinals;

(iii) Lavatories; and

(iv) Drinking fountains.

(b) Wherever possible within reasonable cost constraints, restrooms shall be accessible to general classrooms for grades 3 and below and for special-needs classrooms without having to exit the building.

.04 Classifications of Public Schools.

The classifications for public schools under these standards are as follows:

A. Elementary School, which houses pre-kindergarten through grade 5 or any subset thereof;

B. Middle School, which houses grade 6 through grade 8;

C. High School, which houses grade 9 through grade 12;

D. Combination School, which houses a combination of any grade levels; and

E. Other School, which includes but is not limited to the following:

(1) Early-childhood-education centers;

(2) Special-education centers;

(3) Career-technology centers; and

(4) Alternative-education schools.

.05 School Site.

A. A school site shall be of sufficient size to accommodate safe access, parking, drainage, and security and shall have an adequate source of water and appropriate means of effluent disposal.

B. Safe Access.

(1) A school site shall be configured for safe and controlled access that separates pedestrian traffic from vehicular traffic.

(2) If buses are used to transport students, then bus loading and unloading areas shall be separated from vehicular-traffic areas wherever possible.

(3) Dedicated student drop-off and pickup areas shall be provided for safe use by student passengers arriving or departing by automobile.

C. Parking. A school site shall include a surfaced area that is capable of being maintained, stable, firm, slip resistant, and large enough to accommodate 1.5 parking spaces per full-time-equivalent employee and one student space per ten high school students.

Alternative parking may be approved after the sufficiency of parking at the site is reviewed by the IAC based on the following criteria:

(1) Availability of street parking around the school;

(2) Availability of any nearby parking lots;

(3) Availability of public transit;

(4) Number of staff who drive to work on a daily basis; and

(5) Average number of visitors on a daily basis.

D. Drainage. A school site shall be configured such that runoff does not undermine the structural integrity of the school buildings located on-site or create flooding, ponding, or erosion resulting in a threat to health, safety, or welfare.

E. Security. All schools shall have safe and secure site fencing or other barriers with accommodations for safe passage through openings to protect students from the hazards of traffic, railroad tracks, animal nuisance, and steep slopes.

.06 Site Recreation and Outdoor Physical Education.

A. A school facility shall have area, space, and fixtures, in accordance with the standard equipment necessary to meet the educational requirements of the public education department, for physical-education activity.

B. An elementary school shall provide:

(1) At least one safe play area (and playground, including a hard surfaced court and unpaved recreation area, which shall be conveniently accessible to the students;

(2) At least one play area and appropriate equipment for physical education and school recreational purposes, based on the planned school program capacity;

(3) For schools that serve students in grade 5 and below, a protected play area; and

(4) Play-equipment areas with surfacing materials that meet or exceed safety specifications for shock-absorbing qualities as outlined by the U.S. Consumer Product Safety Commission.

C. A middle school shall provide at least one hard surfaced court and playing field for physical-education activities; and the number of playing fields and quantity and type of equipment shall be based on the planned school program capacity.

D. A high school shall provide a playing field for physical-education activities, and the number of laying fields and quantity and type of equipment shall be based on the planned school program capacity.

E. A combination school shall provide the elements of the grades served by §§B—D of this regulation without duplication, but shall meet the highest standard.

F. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

.07 Academic Classroom Space.

A. Classroom spaces, including those for physical education, shall be sufficient for educational programs that are appropriate for the class-level needs.

B. Classroom Fixtures and Equipment.

(1) With the exception of physical-education spaces, each general and specialty classroom shall contain a work surface and seat for each student in the classroom. The work surface and seat shall be appropriate for the normal activity of the class conducted in the room.

(2) Each general and specialty classroom shall have an erasable surface and a surface suitable for projection purposes, appropriate for group classroom instruction, and a display surface. A single surface may meet one or more of these purposes.

(3) Each general and specialty classroom shall have storage for classroom materials or access to conveniently located storage.

(4) With the exception of physical-education spaces and music-education spaces, each general and specialty classroom shall have a work surface and seat for the teacher and for any aide assigned to the classroom. The classroom shall have secure storage for student records that is located in the classroom or is conveniently accessible to the classroom.

C. Classroom Lighting.

(1) Each general and specialty classroom shall have a light system capable of maintaining at least 50 foot-candles of well-distributed light. A school shall provide appropriate task lighting in specialty classrooms where enhanced visibility is required.

(2) The light level shall be measured at a work surface located in the approximate center of the classroom, between clean light fixtures.

D. Classroom Temperature and Relative Humidity.

(1) Each general and specialty classroom shall have a heating, ventilation, and air conditioning (HVAC) system capable of maintaining a temperature between 68°F and 75°F and a relative humidity between 30 and 60 percent at full occupancy.

(2) The temperature and humidity shall be measured at a work surface in the approximate center of the classroom.

E. Classroom Acoustics.

(1) With the exception of physical-education spaces, each general and specialty classroom shall be maintainable at a sustained background sound level of less than 55 decibels.

(2) The sound level shall be measured at a work surface in the approximate center of the classroom.

F. Classroom Air Quality.

(1) Each general, science, and fine-arts classroom shall have an HVAC system that continuously moves air and is capable of maintaining a carbon dioxide level of not more than 1,200 parts per million.

(2) The air quality shall be measured at a work surface in the approximate center of the classroom.

.08 General Use Classrooms.

A. Cumulative classroom net square foot requirements, excluding in-classroom storage space and any in-classroom toilet rooms, shall be at least:

(1) For prekindergarten, 50 net square feet per student;

(2) For kindergarten, 50 net square feet per student;

(3) For grades 1—8, 32 net square feet per student; and

(4) For grades 9—12, 25 net square feet per student;

B. At least 2 net square feet per student shall be available for dedicated, in-classroom storage and may be provided vertically to avoid the need for additional floor area.

C. Sufficient number of classrooms shall be provided to meet State and local board mandated student-to-staff ratio requirements Administrative History.

.09 Specialty Classrooms.

A. Special Education.

(1) To the maximum extent appropriate, students with disabilities shall be educated in the least restrictive environment with students who are not disabled. A continuum of alternative placements shall be provided.

(2) If a special-education space for pull-out purposes other than calming is provided and the space is required to support educational programs, services, and curricula, the space may not be smaller than 450 net square feet.

(3) When the need is demonstrated by a local education agency, additional space in the classroom shall be provided with, or students shall have an accessible route to an accessible unisex restroom with one toilet, sink, washer/dryer, and shower stall/tub, as needed, and at least 15 net square feet of storage.

(4) When the need is demonstrated by a local education agency, in 6th grade classrooms and above, a kitchenette of least 30 net square feet shall be provided.

B. Science Classrooms.

(1) For grades PreK through 5, no additional space is required beyond the classroom requirement.

(2) For grades 6 through 12, 4 net square feet per student of the specialty program capacity for science is required. The space may not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and

may be used for other instruction. The space shall have science fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Science Content Standards.

(3) For grades 9 through 12 only, at least 40 net square feet of space is provided for securable, well-ventilated storage or prep space for each science room having science fixtures and equipment. Storage/prep rooms may be combined and shared between more than one classroom.

C. Fine-Arts Education.

(1) A school facility shall have classroom space to deliver fine-arts education programs which include the following:

(a) Art;

(b) Music;

(c) Dance; and

(d) Theater.

(2) Elementary school fine-arts education programs:

(a) May be accommodated within a general-use or dedicated arts classroom;

(b) Shall provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full-time fine-arts teacher; and

(c) Shall provide additional dedicated fine-arts program storage of at least 60 net square feet for each subject area per facility.

(3) A middle school shall provide classroom space for fine-arts education programs that:

(a) Contains no less than 4 net square feet per student of the specialty program capacity for fine-arts subjects;

(b) Provides one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full-time fine-arts teacher; and

(c) Provides additional 60 net square feet of storage for each fine-arts program subject.

(4) A high school shall provide classroom spaces for fine-arts education programs that contain no less than 5 net square feet of the specialty program capacity for fine-arts subjects.

(5) A combination school shall provide the elements of the grades served by §C(1)—(4) of this regulation without duplication but meeting the highest square footage standards.

(6) Other schools shall provide the elements included in §C(1)—(4) of this regulation that are necessary to meet the educational requirements of the specific programs and capacity of the schools.

D. Technology Education and Computer Science.

(1) For grades K through 5, no additional space is required beyond the classroom requirement.

(2) For grades 6 through 8, 3 net square feet, and 4 net square feet for grades 9 through 12, of the specialty program capacity for technology education and family and consumer science is required. The space shall be no smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction.

(3) The space shall have technology fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Technology Education Content Standards, and, in high school, the requirements of Maryland Advanced Technology Education electives where such electives are offered.

(4) Provide at least 80 net square feet for securable, well-ventilated storage/prep space for each technology education room having technology fixtures and equipment. Storage/prep rooms may be combined and shared between more than one classroom.

E. Career and Technology Education.

(1) Elementary schools have no requirement.

(2) Middle schools shall include space for career-development and career-exploration activities. Each program lab or classroom space shall be no smaller than 650 net square feet.

(3) High School Career and Technology Education.

(a) Program space shall be provided with no less than 4 net square feet of the specialty program capacity of the school for career education.

(b) Each program lab or classroom space shall be no smaller than 650 net square feet.

(c) Spaces for programs requiring licensing, certification, or accreditation by a State board or agency shall meet all applicable health and safety standards. Cosmetology and barber programs shall comply with the sanitation requirements of the State Board of Cosmetologists and the State Board of Barbers, respectively.

(4) A combination school shall provide the elements of the grades served by §E(1)—(3) of this regulation without duplication, but meeting the higher standards.

(5) Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

.10 School Library/Media Center.

A. A school facility shall have a unified school library/media program for the use of all students which shall include an organized and centrally managed collection of instructional materials and technologies and direct instruction.

B. Elementary schools shall include an area for stacks and seating space which shall be at least 3 net square feet of the planned school program capacity. The instructional space may not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

C. Middle and high schools shall include an area for stacks and seating space which shall be at least 3 net square feet of the planned school program capacity. The space may not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

D. Combination schools shall include the elements of the grades set out in §§B and C of this regulation without duplication, but meeting the higher standards.

E. Other schools shall include the elements in §§A—D of this regulation necessary to meet the educational requirements of the specific programs and capacity of the schools.

.11 Physical Education.

A. General Requirements.

(1) Each school shall provide an instructional program in physical education each year for all students in grades PreK-8. Each school shall offer a physical-education program in grades 9—12 which shall enable students to meet graduation requirements and to select physical-education electives. The following minimum spaces are required:

(a) A gymnasium;

(b) A teacher office or planning area;

(c) Equipment storage; and

(d) An outdoor instructional playing field.

(2) Elementary schools shall include a gymnasium with at least 2,200 net square feet. This space may have multi-purpose use in accommodating other educational program activities such as art program performances.

(3) Middle schools shall include a gymnasium with a minimum of 5,200 net square feet plus an additional 4 net square feet times 40 percent of the enrollment of the school devoted to bleacher seating.

(4) High schools shall include a gymnasium with at least 6,500 net square feet plus an additional 4 net square feet times 40 percent of the enrollment of the school devoted to bleacher seating.

(5) Combination schools shall include the elements of the grades served by §A(2)—(4) of this regulation without duplication, but meeting the higher net square feet standards.

(6) Other schools shall include the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

B. Physical-Education Requirements in Addition to Space Requirements in §A of This Regulation.

(1) Elementary schools shall include one office. Separate physical-education equipment storage shall be provided.

(2) Middle schools shall include one office. Separate physical-education equipment storage space shall be provided.

(3) High schools shall include two dressing rooms with lockers, showers, and restroom fixtures. Two offices shall be provided. Separate physical-education equipment storage space shall be provided.

(4) Combination schools shall include the elements of the grades served by §B(1)—(3) of this regulation without duplication, but meeting the higher standards.

(5) Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

.12 Food Services.

A. Dining Area. A school facility shall have a space to permit students to eat within the school outside of general classrooms. This space may have more than one function and may fulfill more than one sufficiency standards requirement. The dining area shall be sized to accommodate no less than one third of the planned school program capacity of the school. The dining area shall have no less than 15 net square feet per seated student.

B. Serving Area. A serving area shall be provided in addition to a dining area.

C. Kitchen Area. A kitchen shall have a telephone, plumbing providing potable water, a sink suitable for use both in preparing food and washing utensils, and a separate hand-washing sink. Kitchen and equipment shall comply with either the food preparation kitchen or the serving kitchen standards defined as follows:

(1) Food preparation kitchen: Provide at least the greater of:

(a) A minimum of 2 net square feet per meal served during the single largest serving period; or

(b) No fewer than 2 square feet per enrolled student eligible for free or reduced-price meals.

(2) Serving kitchen: Where food is not prepared, there shall be a minimum of 200 net square feet.

.13 Other Facility Areas.

A. Administrative Space. A school facility shall have space to be used for the administration of the school. The space shall consist of a minimum of 150 net square feet, plus 1 net square foot per student of the planned school program capacity.

B. Faculty Workroom/Lounge. A school facility shall have a workspace/lounge available to the faculty. This space is in addition to any workspace/lounge available to a teacher in or near a classroom. The space shall consist of 1 net square foot per student of the planned school program capacity with no less than 150 net square feet. The space may consist of more than one room and may have more than one function. This space shall include a break area with a sink.

C. Health Services. A school facility shall have a dedicated health services space with a minimum of 500 net square feet that includes:

(1) Areas for waiting, examination and treatment, resting, storage;

(2) An accessible toilet room;

(3) A separate room for private consultations and for use as a health service professional's office;

(4) Lockable cabinets for medical records and medications; and

(5) At least one sink that provides both hot and cold water in addition to the sink in the toilet room.

D. Pupil Services. A school shall provide a coordinated program of pupil services for all students, which shall include, but not be limited to, school counseling, pupil personnel, school psychology, and health services. The school facility shall provide a minimum of 120 net square feet for each discipline, except school health services, and be staffed with greater than a 0.5 full-time professional.

.14 General Storage.

For general storage, which excludes lockers, janitorial, kitchen, general classroom, specialty classrooms, and administrative storage, at least 1 net square foot of the planned school program capacity may be distributed in or throughout any type of room or space, but may not count toward required room square footages. General storage shall be securable and include textbook storage.

.15 Maintenance and Janitorial Space.

Each school shall designate 0.5 net square feet per student of the planned school program capacity for maintenance and janitorial space. Janitorial space shall include a janitorial sink.

.16 Standards Variance.

The IAC may grant a variance from any of the Sufficiency Standards if it determines that the intent of the standard can be met by the school system in an alternate manner or if a variance is required for appropriate programmatic needs as demonstrated by the school system. If the IAC grants the variance, the school system shall be deemed to have met the standard.

.17 Facility Assessment.

Each school facility shall be assessed at least once every 4 years.

Administrative History

Effective date: November 4, 2019 (46:22 Md. R. 979)
Regulation .02D adopted effective October 5, 2020 (47:20 Md. R. 876)

Chapter revised effective December 12, 2022 (49:25 Md. R. 1050)

Facilities Planning Guide
for Maryland Public Schools

Interagency Commission on School Construction

The most recent versions of IAC documents, procedures, standards, and contact information are available at http://iac.maryland.gov/.

IAC Facilities Planning Guide

Record of Changes

Date	Version	Description	IAC Approval Date
04/02/2019	1.0	Initial Publication	05/09/2019

Table of Contents

1 Acknowledgments

Special acknowledgment is given to the 21st Century Schools Commission of the General Assembly of Maryland and the staff of the Interagency Commission on School Construction, who collectively dedicated more than two years to developing the program revisions that this *Planning Guide* accompanies. Additional deep thanks is given to the staff members of the local education agencies (LEAs) who gave their scarce time to provide input into and feedback on the content of this *Guide*.

2 Glossary

Definition of terms and acronyms used in this document:

Term/Acronym	Definition
ASHRAE	The American Society of Heating, Refrigerating and Air-Conditioning Engineers is a global professional association seeking to advance heating, ventilation, air conditioning and refrigeration systems design and construction.
Building Efficiency	The ratio of net square footage to gross square footage.
Campus	The facility and the site on which it is located.
Construction	The process of building, altering, repairing, improving, or demolishing any structure, building, or other improvement to real property. This includes any major work necessary to repair, replace, prevent damage to, or sustain existing components of an improvement to real property. (Construction does not include the maintenance or routine operation of an existing improvement to real property or activities related to an energy performance contract.)
Cooperative-use Space	Space within a school facility that is utilized to serve school children and/or the general community in order to support LEA and/or community initiatives and is in addition to space primarily designed for educational functions.
DGS	Maryland Department of General Services
DLLR	Maryland Department of Labor, Licensing, and Regulation
Facility	The building or buildings located on a single site.
FAPE	Free appropriate public education
GAB	Gross Area Baseline
Gross Square Footage (GSF)	The sum of the Net Square Footage (assignable space) and the Tare, which includes all building areas as measured to the outside of the exterior walls but does not include non-assignable penthouse spaces covered by a roof.
IAC	Interagency Commission on School Construction
IDEA	Federal Individuals with Disabilities Education Act, says states must assure that a free appropriate public education is made available to all children with disabilities.
IEP	Individualized Education Program — special education and related services to meet each students' unique needs
LEA	Local Education Agency
Locally Funded Project	A school construction project that the owner has designed, built, or occupied prior to State approval of planning.
MACC	Maximum allowable construction costs
Maintenance	Routine, preventative, or corrective activities that are performed to a facility to 1) continue operations or upkeep; 2) prevent deterioration; or 3) correct a deficiency.
MSDE	Maryland State Department of Education

Term/Acronym	Definition
Net Square Footage (NSF)	The interior usable spaces of a building that are required to meet general or specific programmatic needs.
Nominal Utilization	The total number of students enrolled in a school divided by the facility's state rated capacity (SRC) or state facility capacity (SFC) when an SFC is available for that facility.
Projected Enrollment	The total number of students that an LEA estimates will attend a school in the seventh year from the year of project funding request.
Renovation	A major construction project to upgrade an existing building and site, or a portion of a building and site, to achieve the current educational, building performance, and aesthetic qualities of a new school.
Site	The bounded area of land underneath and surrounding a facility.
Space Utilization	The percentage of normal operating hours during which an assignable space in a facility is occupied by the full number of users for which it is designed. When aggregated, the utilization for all assignable spaces in a facility can produce an overall space-utilization rate for the facility.
State Facility Capacity (SFC)	The number of students that the IAC or its designee determines that an individual facility has the physical capacity to enroll based upon an analysis of programming and space utilization.
State Rated Capacity (SRC)	The number of students that the IAC or its designee determines that an individual facility has the physical capacity to enroll based upon a calculation using standardized class sizes published by the IAC.
Supportive Practice	A technique, process, activity, or consideration that typically proves to be effective in meeting or exceeding sufficiency. These techniques and processes have been tested in past school designs and construction projects and can usually be adapted for use on new projects.
Tare	The non-assignable spaces within the building, including the circulation areas such as corridors, stairways, and elevators; restrooms (except for specialized restrooms such as in a kindergarten classroom); mechanical rooms (except for those in non-assignable penthouse spaces covered by a roof, which are not counted in gross square footage); electrical rooms; and the thicknesses of the walls and other partitions.
Total Cost of Ownership	The costs of constructing the facility (including the maximum allowable construction costs (MACC) and soft costs but excluding land-acquisition costs and costs outside the property lines) plus the costs of operating and maintaining the facility over 30 years and the costs of renewing building systems and components over 30 years.

3 The Maryland Educational Facilities Sufficiency Standards

Maryland state law gives the State Superintendent of Education the authority to approve or disapprove any plan or specification for the construction or renovation of—or addition to—a school building when the project will cost more than $350,000.[1] Maryland state law also gives to the Interagency Commission on School Construction (IAC) the authority to adopt regulations containing requirements for the approval of sites, plans, and specifications for school-building capital projects.[2]

[1] Md. Educ. Code Ann. § 2-303(f); 13A COMAR 01.02.03.

[2] Md. Educ. Code Ann. § 5-303(d).

To assist local education agencies (LEAs) as they seek approvals for capital projects, the IAC adopted in 2018 the *Maryland Public School Educational Facilities Sufficiency Standards*. The *Educational Facilities Sufficiency Standards* establish **minimum** levels for the physical condition, capacity, and educational suitability of public school facilities. The scope of these standards is limited to space and attributes needed to support the educational programs and curricula required by the Maryland State Board of Education in a manner that is sustainable within the operational budgets of the school systems for staffing, maintenance, and full utilization of the facilities. The *Educational Facilities Sufficiency Standards* are dynamic; the IAC shall periodically review them and recommend changes to them as time and circumstances require.

4 Purpose

The *Facilities Planning Guide* provides information intended to assist local education agencies (LEAs) in the acquisition of school sites and the planning and design of new schools, additions, and renovations in alignment with the *Educational Facilities Sufficiency Standards*. This *Guide* presents 1) the *Educational Facilities Sufficiency Standards* and 2) supportive practices and other guidelines to help inform LEAs as they plan their school facilities.

The IAC intends this *Facilities Planning Guide* to be a reference tool that complements and supports the *Educational Facilities Sufficiency Standards*. The *Facilities Planning Guide* does not supersede or increase the state's adopted *Educational Facilities Sufficiency Standards*. If there appears to be a conflict between the *Educational Facilities Sufficiency Standards* and the *Facilities Planning Guide* during the appraisal for sufficiency of an existing facility, the *Educational Facilities Sufficiency Standards* shall control.

By design, the *Guide* remains a dynamic document that the IAC intends to review periodically and modify to adapt to changes in Maryland's educational programs and facilities requirements. As the IAC develops or amends related policies, it will update this *Guide*.

5 Selected Policies and Procedures

A. School Classifications

Although school grade-level configurations may vary from LEA to LEA and within a given LEA, the Sufficiency Standards and this Guide are based on the following grade-level configurations:

1. Elementary Schools (PK-5 or any subset thereof)
2. Middle school (6-8)
3. High school (9-12)
4. Combination school (a combination of any grade levels)
5. Other school (includes early-childhood-education centers, special-education centers, career-technology centers, alternative-education schools)

B. Space Allocation

1. **Gross Area Baselines** (**GAB**s) in **gross square feet** (**GSF**) and GSF per pupil. The IAC has established Gross Area Baselines for determining state funding participation in facilities based on the type of school and number of students that the school is designed to serve. See Appendix C. The Baselines describe the default outer boundaries of size in which the state will participate while allowing the IAC to grant variances on a case by case basis as appropriate. Working within the total GSF allotted for the projected number of students to be served, an LEA should size individual spaces within the facility to accommodate the intended programs and to meet the required building efficiency and utilization ratios.

   Exceeding the GABs. If the square footage for a planned facility exceeds the GABs, the school district may wholly fund the excess area through a locally-funded initiative in addition to contributing the required local share to the project. As in the case of all projects reviewed by the IAC, the IAC will request both an estimate of the total costs of ownership (TCO) as well as space-utilization analyses to assist the IAC in working with the LEA to optimize the design of the facility.

   Exception: Certain oversized existing spaces may cause a given facility to exceed the allowable total GSF calculated using Appendix C. If the excess existing space cannot economically be subdivided or converted for other required purposes to meet sufficiency while remaining functional, then the excess amount of such space shall be individually identified, quantified separately, and excluded from the total GSF calculation for the entire school.

2. **Space Utilization.** Space utilization is the percentage of normal operating hours during which an assignable space in a facility is occupied by the full number of users for which it is designed. The inputs needed for the analysis are a listing of the assignable spaces and, for each space, a schedule of its uses and the number of users. Due to scheduling inefficiencies, the utilization of school facilities is normally less than 100%. An appropriate total **space**-**utilization ratio** is 80% or greater for middle and high schools and 95% or greater for elementary schools. The GABs in Appendix C assume a high utilization ratio for the facility.

3. **Building-Efficiency Ratio.** Building efficiencies for school buildings vary depending on the specific building design and variables such as school level, number of students, climate, and programmatic requirements. If you know the NSF, you can estimate the GSF by either of the following two methods:

   a. **Dividing the NSF by the target building efficiency**

      Sample calculation: An example for a facility with 70,000 NSF of programmable area is as follows:

      GSF = NSF divided by 70%:

      Divide 70,000 NSF by 70% = 100,000 GSF

      Tare: 100,000 – 70,000 = 30,000 sf

   b. **Multiplying NSF by target efficiency factor**

      Efficiency factor examples:

      75% efficiency = 1.33 70% efficiency = 1.43 65% efficiency = 1.54

Sample calculation: An example for a facility with 70,000 NSF of programmable area is as follows:

GSF = NSF multiplied by efficiency factor

Multiply 70,000 NSF by 1.428 = 100,000 GSF (nearest 1,000)

Tare: 100,000 – 70,000 = 30,000 sf

c. **Tare**

The IAC maintains a target maximum tare percentage of 30% for state-funded projects. The GABs are calculated based on a target maximum tare of 30% of gross square footage.

4. **Cooperative Use.** A school facility is a major public asset to a community and can help to meet various community needs. As resources such as water and energy become more expensive, maximizing the utility of a school facility—and therefore the return on the community's capital investment in that facility—becomes even more important. One way to increase the utility of a school facility is to design it to support both the educational programs it houses and other community activities. Cooperative-use space is in addition to space primarily designed for educational functions. Examples of such activities include the delivery of health services through a school-based health center and the provision of before- or after-care services for students. The IAC encourages school districts to fully examine opportunities for developing the shared use of public-school facilities when such use is appropriate and will result in mutual benefit to the educational program and to the community and the costs of operating and maintaining the space are appropriately apportioned. Up to 3,000 gross square feet of cooperative-use space in a school facility can be eligible for State funding participation.

C. Ineligible Expenditures

See Appendix B for a list of the facilities-related expenditures that are ineligible for state funding.

D. Process for Submitting Planning and Design Documents to the IAC

The IAC staff (which includes MSDE architects and DGS architects and engineers) reviews programs and plans for all new facilities and renovation projects whether systemic or whole-school. Please contact MSDE's School Facilities Branch and DGS's Public Schools/Community Colleges team for detailed submission requirements.

The IAC plan reviewer subsequently sends written notification listing the results of each review to the LEA, the LEA's design professional, and the IAC regional project manager responsible for that LEA. If the IAC plan-review process results in the identification of design components that do not meet the Sufficiency Standards, the LEA and design professional must respond promptly with corrections or further clarifications. These should be addressed directly to the IAC plan reviewer.

In the event that the corrections or clarifications have not, in the judgment of the IAC plan reviewer, resulted in conformance with the Educational Facilities Sufficiency Standards described in the Guide, the LEA may either accept the decision or appeal it using the appeals process described in section 701 of the IAC Administrative Procedures Guide.

1. Educational Specifications

Educational specifications (ed specs) are a tool used to communicate educators' requirements to facility designers. Ed specs are required for all new construction, renovation, limited renovation, and addition projects affecting schools. Space allocations for a new project are initially developed during the production of ed specs. This *Guide* is a resource that will assist the planner and the LEA in determining the total size of the project and individual space needs. Information about ed specs and related State requirements is available in Section 202 of the IAC Administrative Procedures Guide at: http://iac.maryland.gov/APG/revisedapgindex.cfm.

Along with ed specs, the IAC requests that LEAs use and submit to the IAC the following tools:

a. The IAC's Ed Specs Total Cost of Ownership Estimator, which estimates the total cost of ownership over 30 years by applying industry standards for maintenance and operations as well as capital maintenance on an annual basis to the initial cost of construction. This tool helps LEAs estimate the future costs associated with a given project scope and shows that, in general, the 30-year costs are greater than the initial cost of construction even when not adjusted for inflation.

b. The IAC's Space-Utilization Calculators, which help LEAs calculate and project the percentage of normal operating hours during assignable spaces in a facility will be occupied by the full number of users for which they are designed. Use of this tool can help LEAs identify opportunities to trim facility size and associated costs through more efficient uses of spaces within the facility.

2. Feasibility Studies

Once an LEA has identified the programmatic requirements for a facility through ed specs, an LEA often will conduct a feasibility study to consider how various potential project solutions might meet the programmatic requirements and the pros and cons of each. A feasibility study also helps determine the practicality and likelihood that a certain site will meet given criteria. The options must evaluate how well the existing building(s) and each renovation and replacement option will accommodate the educational program.

The Maryland Interagency Commission on School Construction requires that a feasibility study be performed to justify the abandonment of an existing facility or the demolition of more than 50% of the gross square footage of an existing facility.

The study shall include one or more renovation options without major educational program deficiencies and a replacement option.

Each scheme is required to have:

a. floor plans at schematic design level;

b. a space summary comparison of each space;

c. a list of educational program deficiencies categorized as major or minor;

d. a 40-year life-cycle cost analysis of all building systems and construction; and

e. a cost estimate of construction, demolition, temporary housing (swing space), student transportation if required, interest on bond debt, maintenance costs, and energy costs.

Soft costs such as design fees, phasing costs, permitting fees, bonds, overhead and profit may also be provided in a separate section of the cost estimate.

6 Supportive Practices in Planning

As used in this Guide, a "supportive practice" is a technique, process, activity, or consideration that typically proves to be effective in meeting or exceeding sufficiency. These techniques and processes have been tested in past school designs and construction projects and can usually be adapted for use on new projects. The supportive practices included in the Guide should provide for increased efficiency in the programming and design processes and reduce the chance for errors in meeting the owner's needs. The supportive practices in this document are divided into those that are general in nature and others that are specific to each building-area category. An example of a specific supportive practice would be including two separated road access points in a school's site design as part of meeting the sufficiency standard of "[a] school site [that is] configured for safe and controlled ingress and egress."

A. Function of a School Facility

The primary purpose and function of a public school facility in Maryland is to provide a physical environment that facilitates student learning and the delivery of educational programs that meet the state's educational requirements. The state supports this purpose and function through contributions to local school-construction projects. Any additional functions—such as serving as a shelter in case of natural disaster or other emergency—are secondary to the educational functions of the school facility.

A facility's physical characteristics should reinforce and support the implementation of the educational requirements set by statute as well as those adopted by the LEA. These characteristics include site development, arrangement of spaces, occupant circulation, lighting, temperature comfort such as individual room controls, adequate air changes, storage, security, safety, and noise control. Functional school buildings are a product of an educational planning process that leads to a design that organizes all activity and space around students and teachers and the desired educational outcomes.

The design of facilities should be a collaborative process developed by staff, students, and community members with a clear vision of both the learning methods and the human roles that the spaces in the school will serve. Good design for any school building pays attention to vision, educational standards, and performance criteria, and supports the activities that translate those standards into learning, the spaces needed, and the relationship between those spaces and the persons who use them.

MSDE's content standards, benchmarks, and performance standards indicate the learning outcomes to be achieved by all students. In doing so, the educational standards describe the educational requirements for public schools in Maryland that each public school facility therefore must support. The standards provide guidance to the work of MSDE, local school boards and administrators, and local school personnel.

B. Long-Term Operations, Maintenance, and Sustainability

Sustainable design, construction and operation of K-12 educational facilities are highly valued. The ASHRAE definition of Sustainability is "providing for the needs of the present without detracting from the ability to fulfill the needs of the future". The fruit of a good sustainable design is protection of taxpayer investment, lesser operational costs, and more funding available for the classroom.

Maintainability is a major consideration through the entire building life-cycle, such as how often maintenance is required, location/accessibility to equipment, unintended consequences of one system upon

another (such as roof top equipment and roof damage), ease of custodial upkeep and safety of chemicals used for custodial purposes, and so on.

Durable construction materials and efficient systems typically reduce long-term operational and maintenance costs. The significant public investment in school facilities requires solutions that consider the continued costs and responsibilities of long-term building ownership. The design must facilitate the ability of school support staff to sustain the efficient operation and maintenance of the building after occupancy.

Sustainability also pertains to the facility location. Consider water availability, snow accumulation, freeze-thaw, drainage patterns, wind loads, expansive/collapsible soil, transportation availability and cost, future traffic, and future neighborhood development in the design solutions.

Air infiltration shall be maintained in compliance with ASHRAE Standard 62.1. All reasonable measures will be taken to minimize undesirable air infiltration for purposes of energy management, maintenance, and building occupant health. These measures should include vapor barriers, foam sealing of building penetrations, continuous air infiltration retarder, airtight seals of window and doors, double-door vestibule ingress and egress, and any other applicable measures. Tracer gas and/or pressure testing may be used as a performance measure, per ASTM E779.

C. Energy Management

The volatility of energy supply markets presents a difficult challenge in predicting long-range utility costs for schools. School buildings must be designed to optimize energy use and minimize utility costs.

All school building construction or renovation projects should make use of the best available technologies that minimize energy use and life costs within the budgets of individual projects. Special consideration shall be given to the building envelope, where actual performance for building systems and components installed in the structure must meet or exceed applicable standards and code requirements that are verifiable upon installation.

D. Total Cost of Ownership

An emphasis on the total cost of ownership—rather than only the first cost to construct a facility—is essential to creating an educationally sufficient and fiscally sustainable portfolio of schools. The costs of ownership of a facility fall into three main categories: 1) the costs of constructing the facility; 2) the costs of operating and maintaining the facility; and 3) the costs of renewing the facility and its major components when they reach the end of their service lives. Because the bulk of these three types of costs fall on the LEA, each LEA must devote considerable care to evaluating the costs in each of the three categories prior to constructing a facility. LEAs' capital and operating budgets each have limits. When constructing a facility, the LEA should consider the effects that design and construction decisions may have on the costs in each of the three categories.

Maryland law requires that a district school board "obtain [from the Department of General Services (DGS)] a projection of life-cycle costs and an energy consumption analysis for any new construction or

modernization project to which the State contributes funding.[3] "Life-cycle costs" means the sum of the following costs of a building:[4]

1. The cost of initial construction;
2. The cost of all energy conservation measures;
3. The cost of operation and maintenance, including labor and materials, for the life of the building;
4. The cost, over the life of the building, of the fuel used by:
    a. the equipment that controls or provides the humidity, lighting, power, temperature, and ventilation of the building; and
    b. other energy-using equipment in the building; and
5. The other costs incident to owning the building.

Information about criteria to be used in these analyses is provided in Appendix G of the IAC Administrative Procedures Guide, DGS's *Procedures for the Implementation of Life-Cycle Cost Analysis and Energy Conservation*, and DGS's *Procedure Manual for Professional Services*. In addition, the IAC offers tools that can help LEAs estimate the total cost of ownership of a proposed facility design.

In construction, rapid cost escalation can jeopardize the timely execution of even modest building projects. The designer must clearly inform the public owner regarding any new factor significantly affecting the project budget as the design develops. Long-term operational cost savings appear to be a benefit related to simpler and more efficient designs. When more costly solutions are needed to achieve desired functional or long-term operational benefits, the designer should weigh the pros and cons with the owner prior to proceeding. The IAC encourages innovative and cost-effective design that is appropriate to the facility's location.

7 General Requirements for School Facilities

The Facilities Sufficiency Standards are not intended to supersede or support any noncompliance with applicable building and fire codes or any other code, regulation, law, or standard that has been adopted by any Maryland state agency. Applicable codes and standards can be found on the website of the Building Codes Administration within the Maryland Department of Labor, Licensing, and Regulation (DLLR) at http://www.dllr.maryland.gov/labor/build/.

The following specific requirements apply to all public school facilities in Maryland:

A. Building Condition

A school facility must be safe *(COMAR 13A.01.04.03)* and capable of being maintained.

1. Structural. A school facility must be structurally sound. A school facility shall be considered structurally sound if the building presents no imminent danger or major visible signs of decay or distress.

[3] Md. Code Ann., State Finance & Proc. Art., § 4-803.
[4] Md. Code Ann., State Finance & Proc. Art., § 4-801(f).

2. Exterior envelope. An exterior envelope is safe and capable of being maintained if:
    a. Walls and roof are weather tight under normal conditions with routine upkeep;
    b. Doors and windows are weather tight under normal conditions with routine upkeep; and
    c. The building structural systems support the loads imposed on them.
3. Interior surfaces. An interior surface is safe and capable of being maintained if it is:
    a. Structurally sound;
    b. Capable of supporting a finish when designed to carry a finish; and
    c. Capable of continuing in its intended use with normal maintenance and repair.
4. Interior finishes. An interior finish is safe and capable of being maintained if it is:
    a. Free of exposed lead paint;
    b. Free of friable asbestos; and
    c. Capable of continuing in its intended use with normal maintenance and repair.

B. Building Systems

Building systems in a school facility must be in working order and capable of being properly maintained. Building systems include roof, plumbing, telephone, electrical, and heating and cooling systems, as well as fire alarm, 2-way internal and external communication, technological infrastructure, and security systems.

1. **General**. A building system shall be considered to be in working order and capable of being maintained if all of the following apply:
    a. The system is capable of being operated as intended and maintained.
    b. Newly manufactured or cost-effective refurbished replacement parts are available.
    c. The system is capable of supporting the standards established in this rule, including those pertaining to temperature, humidity, and indoor-air quality.
    d. Components of the system present no imminent danger of personal injury.
2. **Plumbing fixtures**. Fixtures shall include, but are not limited to, water closets, urinals, lavatories, and drinking fountains. In all new construction, restrooms shall be available so students will not have to exit the building. In existing facilities, restrooms shall be available for general classrooms for grades 3 and below and special needs classrooms without having to exit the building, wherever possible within reasonable cost constraints.
3. **Fire alarm and emergency notification system**. A school facility shall have a fire alarm and emergency notification system as required by applicable State fire codes and emergency procedures.
4. **Two-way communication system**. A school facility shall have a two-way internal communication system between a central location and each classroom, isolated office space, library media center, physical education space, cafeteria, and other regularly-used spaces.

C. Building Performance

Title 5, section 312 of the Education Article of the Maryland Code Annotated states that "a new school that receives State public school construction funds shall be constructed to be a high performance building" unless specifically granted a waiver by the IAC. See also COMAR § 23.03.02 and IAC Administrative Procedures Guide § 105. For the purposes of this statute, "high performance building" is defined as a building that

1. Meets or exceeds the current version of the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Green Building Rating System Silver rating;
2. Achieves at least a comparable numeric rating according to a nationally recognized, accepted, and appropriate numeric sustainable development rating system, guideline, or standard approved by the Secretaries of Budget and Management and General Services; or
3. Complies with a nationally recognized and accepted green building code, guideline, or standard reviewed and recommended by the Maryland Green Building Council and approved by the Secretaries of Budget and Management and General Services.

8 Sufficiency Standards and Supportive Practices by Facility Area

In each subsection below, there are two parts. The first part of each subsection is labeled "Sufficiency Standards" and contains the excerpted *Sufficiency Standards* text pertaining specifically to the subsection. The second part—entitled "Supportive Practices"—provides supplemental information to be considered in planning for new school construction and renovation projects. See the definition of Supportive Practices in Glossary.

A. School Site

I. ***Sufficiency Standards—Site***

A school site shall be of sufficient size to accommodate safe access, parking, drainage, and security (COMAR 13A.01.04.03). Additionally, the site shall be provided with an adequate source of water and appropriate means of effluent disposal.

1. Safe access. A school site shall be configured for safe and controlled access that separates pedestrian from vehicular traffic. If buses are used to transport students, then bus loading/unloading areas shall be separated from vehicular-traffic areas wherever possible. Dedicated student drop-off and pickup areas shall be provided for safe use by student passengers arriving or departing by automobile.
2. Parking. A school site shall include a maintainable surfaced area that is stable, firm, and slip resistant and is large enough to accommodate 1.5 parking spaces/staff FTE and one student space /ten high school students. If this standard is not met, alternative parking may be approved after the sufficiency of parking at the site is reviewed by the IAC using the following criteria:
    a. Availability of street parking around the school;
    b. Availability of any nearby parking lots;
    c. Availability of public transit;
    d. Number of staff who drive to work on a daily basis; and
    e. Average number of visitors on a daily basis.

3. Drainage. A school site shall be configured such that runoff does not undermine the structural integrity of the school buildings located on the site or create flooding, ponding, or erosion resulting in a threat to health, safety, or welfare.
4. Security.
    a. All schools shall have safe and secure site fencing or other barriers with accommodations for safe passage through openings to protect students from the hazards of traffic, railroad tracks, animal nuisance, and steep slopes.

II. ***Supportive Practices—Site***

Consider the following when selecting or developing a site:

1. In practice, site size may be reduced significantly for urban schools, and other small schools requiring creative solutions in site development, facility utilization and building design and still remain educationally viable.
2. Considerations in properly and economically developing a school site are covered in detail in Appendix 104: Sustainable Community Planning Practices, of the IAC's Administrative Procedures Guide. The on-site characteristics that primarily impact the design and construction of a school facility are generally summarized as follows:
    a. Sub-surface conditions;
    b. Topography (slope, drainage, etc.);
    c. Size and shape of site; and
    d. Vegetation.
3. Site location and size: The initial site purchase should meet all the site location requirements because land adjacent to a new educational facility may not be available later. The site for anticipated full development should be determined largely by the nature and scope of the contemplated educational program. The IAC recommends reviewing the Smart Growth materials available from the Maryland Department of Planning at http://smartgrowth.org/ and the U.S. EPA's Smart Growth and School Siting resources available at https://www.epa.gov/smartgrowth/smart-growth-and-school-siting/.
4. Site Utilities: Essential utilities should be available to serve the site as follows:
    a. Energy: The site should have economical access to adequate energy sources such as natural gas and electrical power. Alternative energy sources for utilities may include solar power, wind, biomass fuel, and geothermal energy. Establish the availability of all utilities early in the site selection and planning process and ensure that quantity and quality of service is sufficient to accommodate estimated present and future needs.
    b. Water: There should be an ample supply of water to meet the facility's needs, including potable water, water for landscaping, and water for fire-suppression.
5. Access
    a. Holistic Access Design: Access to the school should be designed holistically as a complete system to support safe and efficient access by students, staff, visitors, and members of the community, using multiple modes of transportation.
    b. General access: There should be good connectivity between the school site and surrounding neighborhood. The site should be designed with respect for the safety and convenience of all

users. Coordinate motor vehicle and non-motorized vehicle flow to avoid or reduce conflicts between the users.

c. Vehicular access: The site should have clear, separate, distinct and safe on-site circulation paths for pedestrians, buses, staff, students, visitors and service vehicles. IAC recommends that each site have two separated road access points for safe ingress and egress from the property.

d. Pedestrian/Bicycle Access: On-site pedestrian and bicycle paths should be connected with street bike lanes, pedestrian routes, etc. to ensure safe travel to and through the campus.

6. Sidewalks: The school site should have safe walking routes for all children and adults accessing the school. These on-site routes should be connected to off-site sidewalks to provide safe and convenient walking routes. Avoid or minimize pedestrian crossings of roads, driveways, and parking lots. Provide wide sidewalks (5' minimum) and student gathering areas in convenient locations that are easily supervised. Speed zones around the school site and crossing locations need to be coordinated with local jurisdictions responsible for traffic controls in the public right-of-way.

7. Bus loading/unloading: The site should have separate bus loading/unloading zones accommodating the required number of buses for the school that do not conflict with other vehicular or pedestrian pathways and that provide for the safe loading and unloading of students. Typically, a 45' minimum outside turning radius is needed for a full-size bus. Consider also:

    a. Separate bus driveways and entrances to avoid conflicts with private cars and service vehicles.

    b. Counter-clockwise circulation for loading/unloading areas to prevent students exiting buses from crossing other vehicular paths.

8. Student drop-off/pick-up*:* The site should have a separate area for the drop-off and pick-up of students by private vehicles that provides for the safe loading and unloading of students. Traffic circulation should move in a counterclockwise direction and student-waiting areas should be designed to provide adequate space for waiting students. See the National Center for Safe Routes to School's Safe Routes to School Online Guide at http://guide.saferoutesinfo.org/index.cfm.

9. Vehicular entrances/exits*:* Vehicular entrances and exits should be planned for safe and efficient traffic flows. Avoid conflict with pedestrian flows.

10. Service/emergency access: The site should have properly identified, appropriate, and safe access to all areas for service and emergency vehicles. Service and delivery access routes should not conflict with other vehicular pathways and should avoid sharing on-site bus lanes.

11. Trash dumpsters*:* Locate convenient to pickup vehicles but also within reasonable distance from the building area(s).

12. Portable buildings*:* The site should have sufficient room for ingress and egress to and occupancy of portable buildings. Good planning practice is to consider future potential placement of portable buildings during initial site master planning. It is important that portable classrooms have equal access to centralized facilities and school support facilities while not obstructing future expansion.

13. Parking

    a. Reliance on curbside parking to handle school parking should be avoided when possible. Most Authorities-Having-Jurisdiction consider off-street parking essential. Adequate parking that is well designed for safe entrance and exit of traffic at peak hours is a key site element.

Circulation patterns of students, staff, visitors and service vehicles should be separated from bus drives and pedestrian walkways. Provide appropriate, secure, easy to use, and conveniently-located bicycle parking. See the Association of Bicycle and Pedestrian Professionals' "Bicycle Parking Guidelines" at http://www.apbp.org/.

b. Provide adequate visitor and handicapped-accessible parking conveniently located near the school office. Driveways and parking areas should be well-drained with solid, traffic-bearing surfaces. Parking areas should be landscaped to improve appearance, reduce heat-island effects, and promote better drainage.

c. Parking lots should address the needs of motorists when in their vehicles and when walking through the parking lots, such as providing pedestrian pathways and raised crosswalks.

14. Grading: Creative, functional grading of the site can improve the appearance of the building and provide screening from noise, wind and other climatic conditions. For example, earth berms, or mounding, along highways can shield the site from traffic noise.

15. Drainage/Storm Water Management: The school site should be well-drained and free from erosion. The maximum recommended site slope is 2% - 4% over a minimum of 50% of the site for ease of design and access. Drainage considerations include the following:

    a. The impacts of off-site drainage patterns upon the site itself should be considered to prevent the danger of erosion or flooding.

    b. Water should not discharge over sidewalks except by un-concentrated sheet flow.

    c. Design sidewalks with a 1% cross slope for drainage.

    d. Drainage should be removed by adequate catch basins and drainpipes or retained on-site.

    e. Roof drainage should be directed away from the building while avoiding sidewalk areas subject to freezing during cold weather (i.e., at the north side of structures).

    f. Recreation and play areas should be properly drained.

    g. Drainage into public rights of way should be avoided.

    h. Consider use of run-off water as a resource. Incorporate water-harvesting techniques where practical for use in irrigation or groundwater recharging.

16. Security

    a. Safety/security hazards: The site should be free of safety or security hazards such as excessive slope and stairs and retaining walls not designed in compliance with life-safety requirements and building codes. Sidewalks should be located and designed to reduce the formation of ice upon their surfaces. Balance safety and security with inviting community access.

    b. Fencing: Fences should be provided to protect students from the hazards of traffic, railroad tracks and steep terraces; to protect adjacent properties from trespass by students; and to discourage passersby from walking onto the campus. Security fencing should not prohibit students who are walking or bicycling from accessing the school site via the most convenient and direct access points. Connectivity with the surrounding neighborhood should be considered to provide multiple access points that facilitate safe and convenient walking and bicycling routes for students.

    c. Security lighting: Site should have illuminated parking areas, walks, entrances and exterior building areas for both safety and security purposes. Comply with any "night sky" ordinances and avoid creating lighting nuisance conditions for adjacent neighbors.

d. Utility systems: Discourage tampering and improper activation of exposed utility fixtures such as backflow preventers, electrical panels, irrigation and fire safety systems by installing protective lockable coverings, fencing, etc.

e. Drain fields: Septic tanks and drainage fields should be isolated from recreational areas where possible and protected from traffic.

f. Site and playground supervision: The site and play areas should be laid out to allow ease of visual supervision of the entire area by school personnel standing in one or two locations. The school facility shall invite the community in while ensuring student safety. Locate the main administrative office in a prominent place to help control access to the site. Community use of fields and other school facilities shall not interrupt the educational mission.

B. Site Recreation and Outdoor Physical Education

I. ***Sufficiency Standards—Site Recreation and Outdoor Physical Education***

A school facility shall have area, space and fixtures, in accordance with the standard equipment necessary to meet the educational requirements of the public education department, for physical education activity. (COMAR 13A.01.02.05 and 13A.04.13, Physical Education only)

1. Elementary school. Safe play area(s) and playground(s) including hard surfaced court(s) and unpaved recreation area(s) shall be conveniently accessible to the students. Play area(s) and appropriate equipment for physical education and school recreational purposes shall be provided based on the planned school program capacity. For schools that serve students in grade 5 and below, a protected play area shall be provided. Play-equipment areas shall have surfacing materials that meet or exceed safety specifications for shock-absorbing qualities as outlined by the U.S. Consumer Product Safety Commission.
2. Middle school. Hard surfaced court(s) and playing field(s) for physical education activities shall be provided. Playing field(s) and equipment shall be based on the planned school program capacity.
3. High school. A playing field for physical education activities shall be provided. Playing fields and equipment shall be based on the planned school program capacity.
4. Combination school. A combination school shall provide the elements of the grades served by Subsections A, B and C above without duplication, but shall meet the highest standard.
5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

II. ***Supportive Practices—Site Recreation and Outdoor Physical Education***

Consider the following when developing recreation and outdoor physical education facilities on the school site:

1. The physical education program of the school determines the main extent of required outdoor playing areas, while the general category of “Site Recreation” is established to provide for outdoor activities.
2. Community and Shared Use: Opportunities to share facilities with other schools and/or LEAs should be explored. The site facilities may be used as community resources as long as they can operate as such without disrupting the educational program. Sharing the funding and operational costs with

community groups and public organizations should be explored when considering expanded or enlarged site recreation facilities which serve the community beyond the educational program's needs.

3. Intramural and Interscholastic athletics: Intramural athletics are commonly a part of the total educational program. The type and quality of special facilities for interscholastic athletic programs will depend on the available local funds and on the level of importance given to competitive sports by the school's students, staff, parents, alumni and community.
4. Suggested Kindergarten to 5th-Grade Recreation Areas:
    a. General design considerations for playgrounds: Students should not have to cross service roads, parking lots, or driveways to access play areas. The design of play facilities should be based upon the range of student ages and total student population. Provide appropriate areas and equipment devoted to safe, active play. Provide appropriate fencing for separation of play areas designed for very young students from the general playground area. Playground design and equipment installation must meet LEA insurance-coverage safety requirements and be in conformance with all governing safety standards. Verify such standards with the district's insurance administrator.
    b. Playground equipment: Playground apparatus and equipment should be carefully selected by playground committees and playground design professionals. Only equipment of sturdy construction should be selected. Equipment should be erected by certified playground equipment installation contractors. Hard surfaces under climbing equipment must conform to required safety standards to reduce injuries. In locating equipment, consider safety, the ease of supervision, and the economical use of space. Placement of play areas and equipment near building exits can facilitate accessibility, but the noise created during play should be considered. Ample space for safe use around equipment and fall zones must meet playground safety standards. Hard-surfaced or unpaved play areas shall be provided for P.E. based upon program capacity needs and made accessible for all students.
5. Suggested Middle School/Junior High School Recreation Areas:
    a. Playing field(s) and fixed equipment for P.E.: Larger schools may require more fields based on utilization requirements for physical education classes.
6. Suggested High School Recreation Areas:
    a. Playing field(s) for P.E.: Larger schools may require more fields based on utilization requirements for physical education classes.
7. Suggested Combination School Recreation Areas: A facility serving multiple grade-level bands will require the provision of recreation and playground facilities to accommodate all grade levels served.

C. Academic Classroom Space

I. ***Sufficiency Standards—Academic Classroom Space***

All classroom space shall meet or exceed the requirements listed below:

1. Area of classroom spaces. Classroom spaces, including those for physical education, shall be sufficient for educational programs that are appropriate for the class-level needs.
2. Classroom fixtures and equipment

a. With the exception of physical-education spaces, each general and specialty classroom shall contain a work surface and seat for each student in the classroom. The work surface and seat shall be appropriate for the normal activity of the class conducted in the room.

b. Each general and specialty classroom shall have an erasable surface and a surface suitable for projection purposes, appropriate for group classroom instruction, and a display surface. A single surface may meet one or more of these purposes.

c. Each general and specialty classroom shall have storage for classroom materials or access to conveniently located storage.

d. With the exception of physical-education spaces and music-education spaces, each general and specialty classroom shall have a work surface and seat for the teacher and for any aide assigned to the classroom. The classroom shall have secure storage for student records that is located in the classroom or is conveniently accessible to the classroom.

3. Classroom lighting

    a. Each general and specialty classroom shall have a light system capable of maintaining at least 50 foot-candles of well-distributed light. Provide appropriate task lighting in specialty classrooms where enhanced visibility is required.

    b. The light level shall be measured at a work surface located in the approximate center of the classroom, between clean light fixtures.

4. Classroom temperature and relative humidity

    a. Each general and specialty classroom shall have a heating, ventilation and air conditioning (HVAC) system capable of maintaining a temperature between 68 and 75 degrees Fahrenheit and a relative humidity between 30 and 60% at full occupancy.

    b. The temperature and humidity shall be measured at a work surface in the approximate center of the classroom.

5. Classroom acoustics

    a. With the exception of physical-education spaces, each general and specialty classroom shall be maintainable at a sustained background sound level of less than 55 decibels.

    b. The sound level shall be measured at a work surface in the approximate center of the classroom.

6. Classroom air quality

    a. Each general, science, and fine arts classroom shall have an HVAC system that continually moves air and is capable of maintaining a CO2 level of not more than 1,200 parts per million.

    b. The air quality shall be measured at a work surface in the approximate center of the classroom.

For more information about classroom design, see the Maryland State Department of Education's *Facility Guidelines for General Classroom Design* (2005) and *Classroom Acoustics Guidelines* (2006).

D. General-Use Classrooms

(English Language Arts/Literacy, Mathematics, Social Studies, and World Languages)

I. ***Sufficiency Standards—General-Use Classrooms***

1. Cumulative classroom net square foot (sf) requirements, excluding in-classroom storage space and any in-classroom toilet rooms, shall be at least:
    a. Prekindergarten 50 net sf/student
    b. Kindergarten 50 net sf/student
    c. Grades 1 – 8 32 net sf/student
    d. Grades 9 – 12 25 net sf/student
2. At least 2 net sf/student shall be available for dedicated, in-classroom storage and may be provided vertically to avoid the need for additional floor area.
3. Sufficient number of classrooms shall be provided to meet state and local board mandated student/staff ratio requirements.

II. ***Supportive Practices—General-Use Classrooms***

1. General Classroom Environment
    a. Size and arrangement: Many factors, such as furniture, equipment (computers), class size and educational programs, will affect the optimum size and arrangement of a classroom. Configure electrical outlet locations in a manner that allows for locating furnishings and equipment to suit varying needs. Take into consideration the location of white boards and interactive projection surfaces in relation to glare-producing windows. It is recommended that interactive white boards be tilted from 5 to 10 degrees away from the wall at the base to prevent glare. Provide a good balance of window vs. wall space. White boards should be installed in every room that has an interactive white board and both should be specified with a low visible sheen.
    b. Lighting: Studies have found a correlation between the levels of natural light and educational achievement. In addition to encouraging energy savings through proper control of artificial lighting, the designer should emphasize the provision of diffuse natural light that can be controlled when needed into all learning spaces. The Sufficiency Standards require a level of at least 50 foot candles of well-distributed light at classroom work surfaces. Skylights, clerestories, windows with light diffusing “eyebrows,” and other daylight-harvesting features are typical elements of a well-lighted space. These apertures should be able to be darkened for AV presentations and positioned so that the room does not become overheated. Properly adjusted dual-technology occupancy controls can help maintain sufficient lighting during times of low occupancy conditions. Zoned lighting controls can help occupants modulate the lighting to match the activities taking place in each area of a room and to save energy.
    c. Temperature: Classroom temperature should be easily maintained between 68 and 75 degrees Fahrenheit with individual controls for each classroom. Special attention should be paid to regulating air flows and drafts at the floor level in pre-Kindergarten and Kindergarten classrooms, as that is where the students spend a substantial portion of their time.

d. Acoustics: The acoustical quality of learning spaces is becoming a critical matter. Designers will need to pay attention to the effect of noise-producing factors and absorbing noise that is generated within the classroom. The Sufficiency Standards require that a one-hour, A-weighted Noise Criteria of less than 55 decibels should be maintained (45 decibels or less is preferred). Keep reverberation times in classrooms within a range of 0.4 – 0.6 seconds.

e. Air Quality: Comply with ventilation standards in ASHRAE 62.

f. Computer Technology: Accommodations for networked multimedia computer connections shall be provided. These computers may be dispersed throughout the entire facility, concentrated in computer labs, or provided through a combination of both methods.

2. Grade-Level Considerations

a. Pre-Kindergarten/ Kindergarten: Instruction tends to be project and center oriented. The curriculum is generally contained in one space and should accommodate many activities. The space in the Classroom should support physical movement, long-term projects, and learning centers. Water should be readily available.

b. Grades 1 – 5: Curriculum at the elementary level tends to be self-contained within a single classroom involving a single teacher supported by any number of specialty instructors. Consequently, large groups, small groups and independent study should all be supported within the confines of the classroom at various times. Classroom activities include physical movement, long-term projects, cooperative learning groups, learning centers and process learning. Space layout should be flexible enough to accommodate these needs.

c. Grades 6 – 8: Early adolescence is a unique period of transition with specific educational requirements. Programs provide exploratory learning opportunities typically based around interdisciplinary instructional teams. The need for specialty subject-area classrooms begins to emerge at the middle school level.

d. Grades 9 – 12: The content-driven curriculum of high schools is expressed in the trend toward academic teaming, with many schools developing learning academies that focus on a number of separate disciplines within a single facility. The goal of facility planning at the high school level should be to create a dynamic learning environment that allows both faculty and students a fair amount of flexibility in organizing their time and schedules. The layout of general classrooms should allow for easy access to specialized learning environments. Facilities should be designed with the potential future reconfiguration of learning spaces in mind.

3. Standard Classroom Furnishings. Provisions for the following items should be made in the layout of each classroom.

Grade Level	**Standard Furnishings**
Pre- Kindergarten/ Kindergarten	• Storage (some lockable) • Cubbies/lockers for storing the belongings of each student • 1 snack area w/sink and bubbler, counter and overhead cabinets • Toilet facilities accessible from the classroom • Access to computer networking (1 network drop for every 3 students, or wireless capability) • Bookshelves • Intercom system • White board • Kidney-shaped table for group work

Grade Level	Standard Furnishings
	• One seat per student plus at least three additional seats
Elementary	• Storage (some lockable) • Cubbies within the classroom or lockers in an adjacent corridor for the belongings of each student • Countertop with sink and bubbler • Cabinets and file storage • Access to computer networking (1 computer station for each 3 students or wireless capability) • Projection surface • Intercom system • White boards • Kidney-shaped table for group work • One seat and workspace per student plus at least three additional seats
Middle/ Junior High/ High School	• Storage (some lockable) • Cabinets and file storage • Computer networking (1 computer station for every 3 students or wireless capability) • Projection surface • Intercom system • White boards • One seat and workspace per student plus at least three additional seats

For more information about classroom design, see the Maryland State Department of Education's *Facility Guidelines for General Classroom Design* (2005).

E. Collaboration Spaces

I. ***Supportive Practices—Collaboration Spaces***

1. Current educational practices put a high value on flexible individual and small group instruction as well as collaborative learning. To support these activities, consider providing
    a. Extra space within a classroom to accommodate several small groupings of students or
    b. Collaborative learning areas outside but near the classroom, such as in the nearby public areas of the school. These spaces may be widened corridors, niches within a corridor, or partially enclosed spaces.
2. Collaborative learning spaces within the public areas of the school should be highly visible, located near the classrooms that they serve, and easily monitored by teachers and other staff.
3. Ensure that the acoustics of the space support teaching and learning.
4. Provide adequate teaching aids such as white boards, tack boards, electrical outlets, and data access.
5. Consider defining the space through changes in ceiling planes, changes in flooring material and/or color, or by providing low barriers such as bookshelves or low built-in seating, especially when placed in an area of egress.

F. Specialty Classrooms—Special Education

I. ***Sufficiency Standards—Special Education Classrooms***

Maryland assures a free appropriate public education for all students with disabilities, birth through the end of the school year in which the student turns 21 years old, in accordance with the student's Individualized Education Program. Early Intervention Services for children from birth through two years is typically provided through the Maryland Infants and Toddlers Program. To the maximum extent appropriate, students with disabilities are educated in the least restrictive environment with students who are not disabled. A continuum of alternative placements shall be provided.

1. If a special-education space for pull-out purposes other than calming is provided and the space is required to support educational programs, services, and curricula, the space shall not be smaller than 450 net sf.
2. When the need is demonstrated by the LEA, additional space in the classroom shall be provided with, or students shall have an accessible route to: an accessible unisex restroom with one toilet, sink, washer/dryer, and shower stall/tub, as needed, and at least 15 net sf of storage.
3. When the need is demonstrated by the LEA, in 6th grade classrooms and above, a kitchenette of least 30 net sf shall be provided.

II. ***Supportive Practices—Special Education***

In order to be eligible to receive funds under Part B of the federal Individuals with Disabilities Education Act (IDEA), states must assure that a free appropriate public education (FAPE) is made available to all children with disabilities. The student's Individualized Education Program (IEP)—which contains the statement of the special education and related services to meet each disabled students' unique needs—forms the basis for the entitlement of each student with a disability to an individualized and appropriate education.

IDEA further provides that states must have in place procedures assuring that, "to the maximum extent appropriate, children with disabilities are educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily."

Each Local School System and Public Agency must ensure that a continuum of placements be available to meet the needs of students with disabilities. The Least Restrictive Environment (LRE) mandate of the IDEA requires that students with disabilities receive their education in a general-education setting to the maximum extent possible. If such a setting is not appropriate, the student is to receive his or her education in a setting with the least amount of segregation from his or her non-disabled peers as is possible. The continuum begins with the general-education classroom. Placements in self-contained settings and in public or nonpublic facilities should be used only when a student's IEP cannot be implemented in a less restrictive setting.

Schools need flexible spaces that can be used for a variety of purposes. In many cases, spaces used for special-education functions are also used for other purposes; IEP meetings are held in a conference room that may also be used for grade-level-team meetings, etc., if scheduling permits. An "intervention room" that is used by a special-education teacher to deliver instruction to an individual student or small group may also be used for small-group instruction of students without disabilities that are participating in remediation or enrichment activities. Spaces are necessary for related-service providers (speech pathologists,

occupational and physical therapists, etc.) to deliver services outside of the classroom setting. Depending on caseloads, schedules, and equipment needs, these spaces may be dedicated or shared spaces. School planners should also consider space needs relating to instructional staff who work across multiple subjects and grade levels and therefore are not assigned a dedicated classroom, but who still need to store records, materials, and personal items; and engage in planning and report writing, etc. The size and configuration of these spaces will vary based on the size, structure, and student and staff populations of the school.

The size and configuration of a special-education classroom will vary depending on the number of students served, the nature of their disabilities, their equipment needs, and the personnel support that may be required. These classrooms should be flexible in their design and should contain adequate storage space for curricular materials and for the equipment required to support students requiring special apparatus (e.g., wheelchairs, readers, text-to-sound translators, walkers, standers, etc.) so that such materials and equipment do not take up valuable classroom space. Special-education classrooms may also need to contain or have ready access to kitchen and laundry facilities and may contain separate restroom and/or shower facilities.

G. Specialty Classrooms—Science

I. ***Sufficiency Standards—Science Classrooms***

1. For grades PK through 5, no additional space is required beyond the classroom requirement.
2. For grades 6 through 12, 4 net sf/student of the specialty program capacity for science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction. The space shall have science fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Science Content Standards.
3. For grades 9 through 12 only, at least 40 net sf of space is provided for securable, well-ventilated storage/prep space for each science room having science fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.

II. ***Supportive Practices—Science Classrooms***

1. Shared spaces may decrease the need for laboratories dedicated to a specific science discipline. Lecture areas can be combined with lab space or separated within the same room or in different rooms. For safety and program quality, science labs should be designed for a maximum of 28 students and may accommodate the following:
    a. Sink(s);
    b. Lab equipment;
    c. Computer and multimedia presentations;
    d. Flexible furnishings that facilitate working in teams;
    e. Interactive learning programs that facilitate hands-on assignments;
    f. Flexible, high-density storage;
    g. Secure storage;
    h. OSHA requirements (e.g., eyewash stations, emergency shutoffs, etc.); and
    i. Student outlets for water, electricity, and gas.

2. To maximize the integration of students with disabilities with their non-disabled peers, provide a multi-student work station lowered in its entirety to meet accessibility requirements including accessible reach requirements for utilities.
3. The trend toward "virtual" lab investigations requires consideration of computer networking, portable demonstration tables, yet smaller table-based furnishings and equipment.
4. Science classrooms may be larger than regular classrooms in order to accommodate lecture areas, demonstration areas, lab tables for small-group investigations, and specialized furniture and equipment.
5. Science classrooms in small schools might be used for other programs during part of the day.
6. When storage/prep space is provided, it shall be separate, well-ventilated, and preferably adjacent and accessible to each lab. It shall contain safe and secure storage for valuable equipment and chemicals used for investigations. The space may be combined and shared between more than one classroom. It is recommended to provide one storage/prep room shared between paired classroom/labs.
7. Separate the fume hood and the safety center by a distance of fifteen to twenty feet to allow the emergency eyewash/safety center to be used in case of accidental discharge of fumes at the hood.
8. To maintain the effectiveness of the exhaust hood, avoid locating it in proximity to foot traffic, particularly at the classroom or laboratory entrances and exits.
9. Provide negative pressure in labs when the hood exhaust is in use.
10. Provide no supply air velocities greater than 50 cfm near a science laboratory hood exhaust.
11. Locate outside air intakes a minimum of 7 feet vertically and 25 feet horizontally from known sources of air contaminants such as a cooling tower, loading dock, science laboratory fume hood exhaust, or chemical storage room exhaust.

For more information about science classroom design, see the Maryland State Department of Education's *Science Facilities Design Guidelines* (1994).

H. Specialty Classrooms—Fine-Arts Education

I. ***Sufficiency Standards—Fine-Arts Education Classrooms***

A school facility shall have classroom space to deliver fine-arts education programs. Fine arts subjects include dance, media arts, music, theater, and visual art. Classroom space(s) for fine-arts education shall not be smaller than the average classroom at the facility. Fine-arts education classroom space(s) may be included in the academic-classroom requirement and may be used for other instruction.

1. Elementary school. Fine-arts education programs may be accommodated within a general use or dedicated arts classroom. Provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full time fine-arts teacher. Provide additional dedicated fine-arts program storage of at least 60 net sf for each subject area per facility.
2. Middle school. Classroom space(s) for fine-arts education programs shall have no less than 4 net sf/student of the specialty program capacity for fine-arts subjects. Provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full time fine-arts teacher. Provide additional 60 net sf of storage for each fine-arts program subject.

3. High school. Classroom space(s) for fine-arts education programs shall have no less than 5 net sf/student of the specialty program capacity for fine-arts subjects.
4. Combination school. A combination school shall provide the elements of the grades served by paragraphs (1), (2) and (3) above without duplication but meeting the higher standards.
5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

II. ***Supportive Practices—Fine-Arts Education Classrooms***

1. Visual-arts learning spaces
    a. Visual-arts learning spaces are best located on the ground floor with access to related curricular areas and convenient entry for delivery purposes. If the spaces are to be used after regular school hours, they should permit easy but controlled entry from the outside. During school hours, students need ready access to the out-of-doors for sketching, painting, field trips, and other such activities.
    b. High school visual-arts programs at larger schools or schools with specialty arts programming may justify separate areas for classes such as painting/drawing/printmaking, jewelry/ceramics/sculpture and photography/filmmaking/digital design. Small-scale or limited programs might only require shared use of appropriately sized and equipped space so long as adequate storage space is provided.
    c. Art activities are best performed on tables with mar-resistant surfaces.
    d. Illumination that is glare-free, intense enough for detailed work and that allows true color discrimination is vital. Natural light from north-facing windows is ideal. Provisions for adjustable spot lighting to highlight still-life setups or wall displays are beneficial for art rooms in the upper grades.
    e. In schools with enrollments below 500 students, art can be shared with other uses or incorporated into the regular classroom. Depending on layout, design, and equipment, an art room can share a dual-purpose room with music or science programming so long as a sink with a clay trap and drain board is provided.
2. Performing-arts learning spaces
    a. Consider including the following when designing performing-arts spaces for music:
        i. Teaching spaces for instrumental and vocal instruction on an individual and group basis.
        ii. Acoustically-treated rehearsal room for individuals and small groups. Offices for the faculty and staff, some of which may double as studios.
        iii. Storage areas to accommodate musical instruments, teaching aids, uniforms, music stands, risers, shells, lights and other performance apparatuses. These should be located close to areas where the equipment will be used. Storage areas for student instruments work best when designed for flow-through one-way traffic.
        iv. Facilities for instrument repair that include a sink.
    b. Pay careful attention to acoustics, room size, shape (provide at least one non-parallel wall), temperature, relative humidity, and spatial relationships.

c. Because acoustics are critically important, a consultant can be helpful in designing spaces that enhance the quality of sound. Surface materials that eliminate distortions and undesirable transmissions of sound can be applied. Windows, doors, walls and floors should be treated so that transmission of sounds to and from areas is reduced. Keep reverberation times in rehearsal areas within a range of 0.6 – 1.1 seconds.

d. Band, orchestra and chorus programs at larger schools may justify separate areas for each program while small-scale programs might only require shared use of appropriately sized and equipped space so long as adequate lockable storage space is provided.

e. Dance may need to be provided in a shared-use space, particularly in elementary school. Consideration should be given to impact-resilient flooring materials and sufficient travel distances for combinations of steps. Spaces suitable for dance instruction in middle and high school should also include flooring designed to minimize injuries, ballet barres, mirrored surfaces, and sufficient travel distance. With consideration for lighting and curtains, such a space may also be used for theater.

f. Many schools expressing an interest in creating some form of performance venue may develop performance space within schools without creating a separate auditorium. Black-box theaters and multi-purpose rooms can provide solutions, but such spaces should have proper lighting and acoustics. Music rooms can be located next to cafeterias to double as a stage or green room. Combining gyms and cafeterias separated by movable partitions can help to create even larger spaces.

For more information about arts-education facilities design, see the Maryland State Department of Education's *Facilities Guidelines for Fine Arts Programs (2001).*

I. Specialty Classrooms—Digital Experiences/Technology Education and Computer Science

I. ***Sufficiency Standards—Digital Experiences***

1. For grades K through 5, no additional space is required beyond the classroom requirement.
2. For grades 6 through 8, 3 net sf/student, and 4 net sf/student for grades 9 through 12, of the specialty program capacity for technology education and family and consumer science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction.
3. The space shall have technology fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Technology Education Content Standards, and in high school, the requirements of Maryland Advanced Technology Education electives where such electives are offered.
4. Provide at least 80 net sf for securable, well-ventilated storage/prep space for each technology education room having technology fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.

II. ***Supportive Practices—Digital Experiences***

1. Adequate access to electrical outlets and network connections shall be provided to ensure flexibility of the space.

2. Include dust-free writing boards (instead of chalkboards), and increased shelving, cabinets, and storage space.
3. Include independent temperature controls if the lab is in a separate room.
4. Determine whether portable and/or wirelessly networked technology should be accommodated.
5. There are few differences between a classroom, tech-ed lab, computer lab, business lab, and other classroom areas in a building. If all of the spaces are equipped appropriately, any space can be designated as a computer lab. Portable carts may be used to transport portable devices to classrooms for computer instruction.

For more information about classroom design, see the Maryland State Department of Education's *Technology Education Facilities Guidelines* (2006).

J. Specialty Classrooms—Career & Technology Education (CTE)

I. ***Sufficiency Standards—Career & Technology Education (CTE)***

1. Elementary school. No requirement.
2. Middle school. Space shall be provided for career-development and career-exploration activities. Each program lab or classroom space shall be no smaller than 650 net sf.
3. High school. Career and technology education programs space shall be provided with no less than 4 net sf/student of the specialty program capacity of the school for career education. Each program lab or classroom space shall be no smaller than 650 net sf. Spaces for programs requiring licensing, certification, or accreditation by a state board or agency shall meet all applicable health and safety standards. Cosmetology and barber programs shall comply with the sanitation requirements of the State Board of Cosmetologists and the State Board of Barbers, respectively.
4. Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.
5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

II. ***Supportive Practices—Career & Technology Education (CTE)***

1. During the initial planning phase, it is essential to consult with faculty, administration, and community members to gain a thorough understanding of the immediate and long-range goals and needs of the career education program that the facility will support. Many LEAs have begun to organize these programs into career academies and school-to-work or career pathway programs, fostering or strengthening partnerships with community colleges, technical/vocational schools, and the surrounding business community. The character and design of career education spaces will depend on the nature of the specific programs offered, the students served, and the resources of the school.
2. The Career & Technology Education field is undergoing rapid change. Today, all fields have a major technology focus. Agriculture is dominated by science and business, and manufacturing by robotics and advances in technology-based tools. Schools delivering CTE programming will need flexible spaces such as multipurpose classrooms that have the ability to incorporate extensive technology,

especially computers with moveable furnishings and equipment. Shared fabrication areas should be capable of easy reconfiguration to meet the requirements of multiple disciplines and instructors.

3. Many CTE spaces will require adequate electrical circuitry with receptacles in well-planned locations. Floor outlets should be avoided. Consider outlets mounted in "pony" walls or integral with furnishings. Ceilings should be acoustically treated and may need to accommodate a separate ventilation system. CTE spaces should be located where there is easy but controlled access to/from the outside. Adequate storage should be provided, including cabinets, shelving and closets. Consider including a sink with hot and cold water. Beyond minimum standards, the space should be large enough to accommodate persons, machinery, and furniture, as well as to allow easy traffic flow.

For more information about career/technical-education facilities design, see the Maryland State Department of Education's *Family and Consumer Sciences: A Facility Planning and Design Guide for School Systems* (2001).

K. Student-Support and Resource Spaces

I. ***Supportive Practices—Student-Support and Resource Spaces***

1. Resource spaces are essential to providing well-rounded educational experiences for students and necessary support for the educational staff.
2. Provide a variety of office spaces for essential staff, including itinerant staff, speech pathologists, reading specialists, occupational therapists, and physical-therapy practitioners. An appropriately configured office setting can double as a space in which to deliver instruction or support services to a small number of students.
3. Provide several sizes of resource rooms: a small instructional space for 6–8 students (350–450 NSF) and a large instructional space for 10–18 students (600 NSF). Both instructional rooms require a teacher's computer workstation; lockable storage for teacher belongings; desks and chairs for students (occupants + 3 additional chairs); one kidney-shaped table; 10–15 linear feet of magnetic marker board; tack strips and a map rail; glare-free marker boards; 50 linear feet of built-in adjustable shelving; and mailboxes for student work. A sink with a bubbler, counter space, and storage cabinets are preferred in large instructional rooms. Provide electrical, voice, and data outlets.

L. Libraries/Media Centers

I. ***Sufficiency Standards—Libraries/Media Centers***

A school facility shall have a unified school library/media program for the use of all students which shall include an organized and centrally managed collection of instructional materials and technologies and direct instruction. Provide space for collections, reference, circulation, instruction, workroom for staff, and storage.

1. Elementary school. The area for stacks and seating space shall be at least 3 net sf/student of the planned school program capacity. The instructional space shall not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

2. Middle or high school. The area for stacks and seating shall be at least 3 net sf/student of the planned school program capacity. The space shall not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.
3. Combination school. Provide the elements of the grades set out in Paragraphs (1) and (2) above without duplication, but meeting the higher standards.
4. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

II. ***Supportive Practices—Libraries/Media Centers***

1. The library/media center is the academic core of the building, serving as an extension of each classroom. It should occupy a central physical and visual position in the building.
2. Provide space for instruction; team collaboration; creation/innovation; storage; and secure areas and appropriate space for computers, digital devices, and electronic communications equipment. For elementary schools, consider ways to integrate space for a storytelling area. In larger schools, consider programming for multi-media production.
3. Design the library/media center as an inviting, stimulating and accessible place providing workspace for individuals and small and large groups for research, browsing, listening, viewing, reading and producing materials for instructional purposes.
4. Provide maximum flexibility in order to meet the needs of students and staff, accommodate program priorities and respond to student population growth, information expansion and changing technologies.
5. Because libraries/media centers may receive extensive after-hours use by students, staff, and the community, consideration might be given to locating the media center near a public entry point of the building.
6. Logical circulation patterns should be considered early in the design process. Design for ease of visual control.
7. The use of natural lighting is encouraged.
8. Lighting fixtures and patterns should be designed to illuminate between, not over, bookcases. Strive to maintain a light level of between 50 and 70 foot candles in reading areas. Efforts should be made to reduce glare in computer areas.
9. Appropriate wiring for audiovisual and computer equipment is required.
10. Access to the library/media center should be controllable.
11. Provide an adjacent office for the librarian.
12. Carefully consider immediate and long-term library/media center needs and technological trends. As some portions of a collection are converted to digital technology, the overall storage needs of a facility may diminish. The spread of wireless technology may make expensive wiring of computer stations obsolete. Flexibility of design and technology planning is becoming increasingly necessary in considering the infrastructure and space layout of new libraries and the updating of existing facilities.
13. Sturdy bookshelves with adjustable shelving and locking wheels is recommended for flexibility and easy reconfiguration of the space. Utilize tables and chairs that can be stacked, nested, or otherwise compactly stored when not in use to increase the flexibility of the space.

14. The library media center should have a range of furniture types and placement to appeal to different users and address the range of activities that occur in the space: class instruction, small group collaboration at tables or informal seating, individual study and research (such as at counters or partitioned tables), and recreational reading in lounge chairs and window seats if windows are included.
15. In addition to computers, consider providing space and required supports for electronic and communications equipment (e.g., copiers, telephones, scanners, printers, etc.) that may be needed. Provide appropriate storage and workstation space for such equipment.
16. To protect the collection and electronic equipment, controls for the heating, cooling and ventilation of a library/media center should be independent of other parts of the facility.

For more information about library and media-center design, see the Maryland State Department of Education's *Facilities Guidelines for Library Media Programs* (1998).

M. Physical Education

Note: See "School Site" section for outdoor P.E. area requirements.

I. ***Sufficiency Standards—Physical Education***

1. General requirements. Each school shall provide an instructional program in physical education each year for all students in grades PK-8. Each school shall offer a physical-education program in grades 9–12 which shall enable students to meet graduation requirements and to select physical education electives. The following minimum spaces are required: gymnasium, teacher office or planning area, equipment storage, and outdoor instructional playing field.
    a. Elementary school. Provide a gymnasium with at least 2,200 net sf. This space may have multi-purpose use in accommodating other educational program activities such as art program performances.
    b. Middle school. Provide a gymnasium with a minimum of 5,200 net sf plus an additional 4 net sf times 40% of the enrollment of the school devoted to bleacher seating.
    c. High school. Provide a gymnasium with at least 6,500 net sf plus an additional 4 net sf times 40% of the enrollment of the school devoted to bleacher seating.
    d. Combination school. Provide the elements of the grades served by Paragraphs (a), (b) and (c) above without duplication, but meeting the higher net sf standards.
    e. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.
2. Additional physical education requirements in addition to space requirements in Subsection 1:
    a. Elementary school. One office shall be provided. Separate physical education equipment storage shall be provided.
    b. Middle school. One office shall be provided. Separate physical education equipment storage space shall be provided.
    c. High school. Two dressing rooms shall be provided, with lockers, showers and restroom fixtures. Two offices shall be provided. Separate physical education equipment storage space shall be provided.

d. Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

e. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

II. ***Supportive Practices—Physical Education***

1. Due to the high cost and difficulty of expanding physical-education facilities, consider the immediate and long-range use requirements during initial planning phases. Indoor gymnasium facilities made larger for expanded community use will have greater construction and operational costs. Consideration should be given to partnering with local government, community groups, or organizations to share in both initial and operating/maintenance costs for added portions of enlarged facilities if shared use is planned.
2. It is important to define the interrelationship between indoor and outdoor facilities early on. Interscholastic sports and community recreation provide opportunities for partnerships between the LEA, parks & recreation departments, and other local organizations. Because these facilities may be used during non-school hours, considerations should be made for separate entrances, zoning of HVAC, location of parking, exterior lighting, storage, location of toilet rooms, and the ability of accessing these facilities without accessing the entire building.
3. Include the provision of equal facilities for men and women, access and suitability for physically impaired persons and providing flexibility so that the facility can be used for a variety of purposes.
4. Isolate physical education facilities from other classroom areas due to noise considerations. Reduce noise, reverberation, and echoes within the gymnasium. Keep reverberation times in the gym within a range of .8 - 1.5 seconds. (See “Performing Arts” section for acoustical recommendations for gyms used also as performing arts spaces).
5. Specify non-slip floors and non-abrasive wall surfaces.
6. Ensure that there are no sharp edges, corners, or dangerous protrusions within reach in any court space.
7. Protect all wall-mounted items susceptible to damage with wire guards or other durable coverings.
8. Suitable light fixtures that are recessed or shielded should be installed. Windows in the gymnasium should be elevated and protected.
9. Provide a public address system with provisions for an assistive listening system.
10. Facilities for applying emergency first aid should be conveniently accessible.
11. PE facilities in elementary schools are typically designed to allow for multi-use of the space.
12. For middle/junior-high and high schools: It is important to recognize the trend at the middle school/junior high school level to use the physical education facility for all-school assemblies. This may result in the increased need for proper acoustic control.
    a. Placement and storage of bleachers should be carefully studied.
    b. Consider providing outdoor equipment storage accessible from outdoor areas.
    c. Floors in shower and drying areas should have slip-resistant floor surfaces.
    d. Ensure adequate storage space for equipment (recreation mats, chairs, etc.), particularly if the space is to be used for multiple functions.

For more information about physical-education facilities design, see the Maryland State Department of Education's *Physical Education Facilities Guidelines for New Construction and Major Renovations* (2011).

N. Food Services

I. ***Sufficiency Standards—Food Services***

1. Dining. A school facility shall have a space to permit students to eat within the school outside of general classrooms. This space may have more than one function and may fulfill more than one sufficiency standards requirement. Schools are encouraged to provide sufficient lunch periods that are long enough to give all students enough time to be served and to eat their lunches. The dining area shall be sized to accommodate no less than one third of the planned school program capacity of the school. The dining area shall have no less than 15 net sf/seated student.
2. A serving area shall be provided in addition to a dining area.
3. Kitchen. A kitchen shall have a telephone, plumbing providing potable water, a sink suitable for use both in preparing food and washing utensils, and a separate hand-washing sink. Kitchen and equipment shall comply with either the food preparation kitchen or the serving kitchen standards defined as follows:
    a. Food preparation kitchen. Provide at least the greater of 1) a minimum of 2 net sf/meal served during the single largest serving period or 2) no fewer than 2 sf per enrolled student eligible for free or reduced-price meals.
    b. Serving kitchen. Where food is not prepared, there shall be a minimum of 200 net sf.

II. ***Supportive Practices—Food Services***

1. The designer should work to understand the owner's plan for food service and consider the following:
    a. Design to a maximum of three serving periods for each meal.
    b. Food service equipment, layout of serving areas and overall size depend on the typical menu and food preparation and serving concepts.
    c. Determine whether the kitchen will provide food for other sites in addition to the facility where located.
    d. Many schools have satellite kitchens that serve or warm food entirely prepared off-site. Some schools serve as main food-preparation facilities for several satellite kitchens and therefore require more space and equipment.
    e. Many locations in Maryland can augment a cafeteria with protected outdoor dining areas.
    f. It is recommended that enough storage be provided for a schedule that does not exceed one week between deliveries of food provisions. Schools in remote locations may require additional storage space if deliveries are less frequent.
    g. For most schools under 300, and allowing for two cafeteria sittings per day, the likely solution will be a multi-purpose space that is used as the cafeteria and for assemblies and performances. If a cafeteria is to double with any other function, the designer should eliminate interior columns where possible and provide adequate space for storage. A multi-use space also calls for extra attention to acoustics and a built-in sound system with reverberation times within a range of 0.7 – 1.2 seconds.

h. Areas in which large amounts of food are prepared are typically regulated by the appropriate state and federal agencies concerned with health and environmental hazards related to prevention of food contamination. In addition, the types of activities inherent in the delivery and preparation of food demand great care. Hazard Analysis and Critical Control Points (HACCP) is a systematic preventive approach to food safety. It is recommended that a HACCP analysis is performed by the food services designer to identify potential food safety hazards which can be avoided by the design. Large kitchen projects may benefit from the services of a consultant who is experienced in this type of analysis.

2. General requirements for related spaces:

   a. Receiving Area: The receiving dock should permit easy unloading of supplies and food. This area should be located away from student traffic. The floor level of the dock and the storage/kitchen areas should be the same.

   b. Storage: Storage for food items that do not require refrigeration should be adjacent to the receiving area and convenient to the kitchen. This area should be dry and clean. Separate bulk storage from food preparation area.

   c. Kitchen: The type of kitchen planned will depend on the nature of the food service program. The following questions should be answered:

      i. Is the food to be prepared on site or will it be delivered from an off-site kitchen?

      ii. What type of food will be served – hot meals, convenient pre-packaged foods, vended items?

      iii. How many meals will be served every school day for breakfast, for lunch, for after-school programs, and for special events?

   d. The size of the kitchen will depend on the nature of the equipment and the number of people required preparing meals. Food preparation equipment is expensive, and it should be chosen with care before the kitchen is designed. Refrigerators and freezers for food storage – if required by the program – must be planned for and accommodated. Lay out the kitchen with defined cold-food-prep, hot-food-prep, and assembly areas to enable the staff to operate efficiently.

3. *Service:* Food service may occur in a section of the kitchen, in a separate room, or in the dining area. The space needed, the equipment required, and the food preparation/service program will determine the arrangement of service counters. The objective here is to facilitate an attractive display, easy selection, and quick service of food. Student circulation related to serving should be well-planned and coordinated within the space with other traffic paths.

4. *Dishwashing:* The dishwashing and maintenance area is a separate function from food preparation and holding, and should be located separately but adjacent to the dining room, preferably near its exit. Equipment selected for cleaning dishes and utensils will determine the size of the space.

5. *Garbage and trash disposal* must be separated from food to prevent contamination. This applies to dirty dishes and trays, food waste, soaps and detergents, de-greasers, pesticides, and other potential contaminants. Garbage and trash should never be carried through the cafeteria or kitchen to be disposed. Provisions in space and equipment should be made for appropriate separation and collection of recyclables.

6. *Office:* Provide an enclosed office(s) for the head cook and/or administrator to accommodate menu preparation, purchasing, and other tasks related to the management and supervision of the kitchen. The office should have a window providing a view of the kitchen and serving areas. Provide a telephone with an external line. Locate the office near the receiving door and/or near the cafeteria dining room.
7. *Utility Room:* A utility/custodial room with mop sink is required within the food services area.
8. *Staff Restrooms:* Appropriate restroom facilities, isolated from food prep areas but easily accessible to the kitchen staff, should be provided. Individual lockers for the use of kitchen staff may be required.
9. The type of food service program operated by the school will depend on the site location of the school and the ease with which deliveries can be made. Site therefore influences the type of kitchen facility that will be needed and the type of equipment that should be purchased. Thus, if a school is in a rural area, daily deliveries from a central kitchen may be impractical, and a fully equipped, independent kitchen may be a necessity. Also, a remote location may call for the installation of large freezers for the storage of food that would not be necessary in a suburban school to which deliveries can be quickly and easily made.
10. If the preparation and packaging of food is done at a remote location outside the school, the elaborate cooking, service, and clean-up facilities described above may not be required.

For more information about food-services facilities design, see the Maryland State Department of Education's *School Food and Nutrition Service* (1996).

O. Other Facility Areas

I. ***Sufficiency Standards—Other Facility Areas***

1. Administrative space. A school facility shall have space to be used for the administration of the school. The space shall consist of a minimum of 150 net sf, plus 1 net sf/student of the planned school program capacity.
2. Faculty workroom/lounge. A school facility shall have workspace/lounge available to the faculty. This space is in addition to any workspace/lounge available to a teacher in or near a classroom. The space shall consist of 1 net sf/student of the planned school program capacity with no less than 150 net sf. The space may consist of more than one room and may have more than one function. This space shall include a break area with a sink.
3. Health services. (COMAR 13A.01.02.05 and 13A.05.05.10A) A school facility shall have a dedicated health services space with areas for waiting, examination and treatment, resting, storage, and an accessible toilet room. There shall be a separate room for private consultations and for use as a health service professional's office. Provide lockable cabinets for medical records and medications and at least one sink in addition to the sink in the toilet room. All sinks must provide both hot and cold water. Provide a minimum of 500 net sf.
4. Pupil services. (COMAR 13A.05.05) A school shall provide a coordinated program of pupil services for all students which shall include, but not be limited to, school counseling, pupil personnel, school psychology, and health services. The school facility shall provide a minimum of 120 net sf for each discipline, except school health services, staffed with greater than a 0.5 full time professional.

II. ***Supportive Practices—Other Facility Areas***

1. Administrative Space: Provide space for the basic administrative functions concerned with the operation of the school. This area should be located near the main entrance of the school where it is easily accessible to visitors and close to parking areas, with a suitable reception area readily available to students, teachers and visitors. Appropriate display areas should be available to display student art and other school artifacts. The administration offices should be accessed directly through the administrative reception area. The principal's office should be accessible from within the main office area as well as directly from the main corridor and commons areas. Additional considerations for the administrative space should include:
    a. Ample and conveniently located storage.
    b. Conferencing space.
    c. Secure place for permanent records (fireproof file storage). (REQUIRED)
    d. A small safe.
    e. All appropriate building infrastructure for telecommunications and technology.
    f. Mail rooms/workrooms.
    g. Acoustically-separated small meeting or conference spaces for specialized staff use.
    h. Staff toilets and coat closet.
    i. A waiting area.
2. Counseling: In elementary schools these services may be only needed on a part-time basis but space for both individual and small group consultation sessions is recommended. Middle and high schools typically require space for full-time counseling staff and usually employ the services of several counselors depending on school size. Small schools may have only one counselor. Part-time counseling services may be provided on a shared-schedule basis in another office. Students should feel secure and comfortable in accessing and utilizing the counseling area.
3. Student Health: Provide space for activities including maintaining student health records, treating minor injuries, conferencing with students and parents, conducting health screening activities, immunizations and conferring with other health professionals, teachers and administrators. Additional considerations are as follows:
    a. The Health Suite should have its entry door off a main corridor in the school and close to a main entrance for quick access in cases of emergency. Ideally, it should be adjacent to the administrative office with a secondary entrance for ease of access when the nurse may need additional staff support.
    b. The Health Suite needs to efficiently accommodate large numbers of student visits in a short period of time. The placement of the suite's entrances and treatment area should allow a flow of circulation for ease of medication distribution and prompt treatment.
    c. At a minimum, a health suite should have a separate space that can serve as the health professional's office and consultation/examination room. This should be acoustically separate from the waiting, treatment, and rest areas so that the health practitioner can discuss a student's health concerns in private. However, it must be positioned in the suite and with glazing to allow the health professional to have clear sight lines to all areas of the suite—particularly its entrance, waiting, rest, and treatment areas. This office should have a phone.

d. There should be sufficient space to conduct eye examinations (minimum of 20 feet).

e. The rest areas should be open but have privacy curtains that can be closed when needed. A wall separating the rest areas for male and female students is recommended in secondary schools.

f. Locked file cabinets shall be available for storing health records and medications.

g. Any examination space must include a sink.

For more information about school health-services facilities design, see the Maryland State Department of Education's *School Health Services: A Facility Planning and Design Guide for School Systems* (2002).

4. Faculty Workspace/Teacher Lounge: Locate near the administrative hub of the facility. The atmosphere of the lounge should be relaxing and comfortable. The room should invite relaxation and informal communication, as well as provide an atmosphere of work-related collaboration. The space should be provided to accommodate the following:

    a. A sink;

    b. A break area with comfortable chairs and tables;

    c. Technology access (Internet, etc.); and

    d. Where feasible, a small private space should be provided for private telephone calls.

5. Parent Workspace: Parents are encouraged to form active partnerships with schools to assist with planning and carrying out school activities. This space should have:

    a. Small group meeting capabilities;

    b. Space to house parent coordinator or volunteers to coordinate school outreach activities;

    c. Storage space; and

    d. Easy access to administration and outside entrance.

6. School-Based Health Center (SBHC): In addition to the general student health area, a school may be eligible to incorporate a school-based health center. SBHCs provide primary and behavioral health care including substance abuse treatment. Services are available to all students/clients regardless of ability to pay. The oversight and distribution of state funding for the Maryland SBHC program is monitored by the Maryland State Department of Education, Division of Student Services, Academic Enrichment, and Educational Policy - Student Services and Strategic Planning Branch. Additional funding sources include the Maryland Department of Health and local funding sources. The Maryland Department of Health, Office of Health Services provides oversight for the Medicaid billing process for SBHC Programs. The SBHC is operated by contracted health professional partners and groups who may be subject to additional accrediting requirements and regulations pertaining to facilities. Each state SBHC is classified to provide one of three levels of service (Level 1, 2 or 3) depending upon staffing capabilities and arrangements. Some SBHCs are designed to serve a client base which extends beyond the school campus and into the surrounding community. The SBHCs and schools work as cooperative partners serving the needs of the students and the community.

    When planning an SBHC, it is important to identify the anticipated level of the program, the professional-service providers, and whether or not services will extend into the community. The SBHC must have qualities of privacy, safety and comfort and should be convenient to accessible student pathways, parking and emergency vehicle access. Proximity to the school nurse's area is

preferred, dependent upon that area's location on campus. Sharing of the center's waiting area with the general student health center waiting area may also be considered. Confidentiality in accessing SBHC services must be fostered by the location on campus and the design. The location should be inclusive without impairing the student's perception of privacy when traveling to and visiting the center. Locating the SBHC in proximity to administration and/or security staff offices is not recommended. Interior provisions for privacy and confidentiality are necessary and can be achieved through the use of visual screening and sound transmission control. Other important considerations are security of records, medications, instruments, etc., maintaining hygiene and the proper disposal of clinical waste. The private areas of the SBHC should be designed as a suite of spaces that can be entirely secured after-hours or when not in use.

An SBHC should include a waiting/reception room, a business office for coordinator or provider, exam rooms, a behavioral health office and group counseling room (if part of the program), a pharmacy area, a laboratory area with toilet room nearby, and general storage and medical-record storage.

More detailed programmatic information is available from the Maryland State Department of Education, Division of Student Services, Academic Enrichment, and Educational Policy - Student Services and Strategic Planning Branch and in the Maryland School-Based Health Center Standards (April 2006) published by the Maryland School-Based Health Center Advisory Council.

P. Building-Support Spaces

I. ***Sufficiency Standards—Building-Support Spaces***

For storage, at least 1 net sf/student of the planned school program capacity may be distributed in or throughout any type of room or space, but may not count toward required room square footages. General storage must be securable and include textbook storage.
Each school shall designate 0.5 net sf per student of the planned school program capacity for maintenance and janitorial space. Janitorial space shall include a janitorial sink.

II. ***Supportive Practices—Building-Support Spaces***

1. General storage is typically dispersed throughout the facility and receiving areas should be located where easily and safely accessed for deliveries without disrupting other normal school traffic.
2. The number and locations of such areas are dependent upon the scale of the facility and the limitations of the systems or functions provided. For example, custodial space should be provided to allow for reasonable access to a mop sink and supplies in every major building area.
3. It is essential that custodial and grounds maintenance storage be sufficient in size, properly located, and separate from general storage and mechanical/electrical rooms. Safe storage of potentially hazardous cleaning materials, fuels, etc. is mandatory. Code compliance in rooms with mechanical and electrical equipment requires that general and custodial storage not be accommodated within these spaces.
4. Provide an access hatch to the roof that is accessible within a lockable storage, custodial, or mechanical space.
5. Provide secure filing space for building maintenance documents, training videos, handbooks, and manuals.

6. General design considerations related to building maintenance are as follows:
    a. Where there will be above-ceiling space for mechanical and electrical system components, design spaces for convenient installation and maintenance of fixtures and equipment. Provide access panels in ceilings and include doorways for large chase spaces to facilitate maintenance and repair work.
    b. Make sure there is proper lighting in all support spaces.
    c. When planning rooms for specialized data and telephone electronics equipment, work closely with the appropriate specialists to determine room sizes, clearances and any critical ventilation requirements to handle the heat buildup from this equipment. Louvers in interior doors are not recommended. Use ducted transfer ventilation or undercut doors. Consider any other special requirements such as needed to prevent or reduce dust infiltration.

Q. Circulation, Entryways, and Commons

I. ***Supportive Practices—Circulation, Entryways, and Commons***

1. Key points to consider when designing *hallways* and *entries* are as follows:
    a. Exit-way widths are prescribed in the code, and can be increased to allow for locker installations.
    b. Exit ways should be carefully laid out to provide a simple, clear, supervised way out of all school facilities.
    c. Openings to outdoor areas may include vestibules and airlocks.
    d. If interior windows are provided between classrooms and corridors, install blinds to allow visual control capability.
2. Key points to consider when designing *commons* are as follows:
    a. The student commons can be a central location in the school where students can congregate for relaxation, conversation, committee meetings, study and snacks. Its purpose is to nurture social and personal as well as academic advancement and to provide for student-teacher interchange in an informal atmosphere. It is normally provided only in secondary facilities and may be a repetitive feature in schools designed for learning academies.
    b. Although the student commons should be centrally located – perhaps in conjunction with a library, auditorium or dining area – it should be somewhat secluded.
    c. Commons space may be dispersed among the various “houses” and associated with grade levels and/or academies.
    d. It should always be available for use and furnished as a place for informal study and socializing.
    e. Snacking facilities may be incorporated within or adjacent to the area.

9 Resources

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National Center for Safe Routes to School, *Safe Routes to School Guide: Student Drop-off and Pick-up Strategies* (2007), available at http://guide.saferoutesinfo.org/index.cfm.

National Clearinghouse for Educational Facilities Resource Lists. View online at: http://www.ncef.org/.

U.S. Environmental Protection Agency, Smart Growth and School Siting resources, available at https://www.epa.gov/smartgrowth/smart-growth-and-school-siting.

10 Appendices

Appendix A: Accessibility and Universal Design

The Maryland Building Code has adopted accessibility codes for all public buildings. Compliance with the Americans with Disabilities Act (ADA) is a requirement for all public schools. Further, in 1997 the Individuals with Disabilities Education Act (IDEA) was amended to strengthen, to the maximum extent possible, the right of students with disabilities to be educated with non-disabled students (mainstreaming). Once relegated to special needs classrooms or specialized facilities, an increasing number of students with moderate, severe and even profound disabilities are now requiring full accessibility to public school facilities at all grade levels. Accordingly, issues of accessibility are a fundamental component of public school facility design. The final decision on interpretation of accessibility requirements shall be according to the State of Maryland Building Code.

The following issues should be considered with regard to accessibility in public schools:

Universal Design. Pursuing universal design principles results in easier access and increased safety for all users. The expansion of school-based programs means an increase of users ranging from preschoolers to senior citizens. The application of universal design principles can allow a wider range of users' access to a facility.

Versatile Classroom Space. Classrooms that provide a variety of choices in the physical environment can be important in meeting the needs of students with a wide range of disabilities. The creation of alcoves and use of varying ceiling heights to define space separations within the classroom can aid students with emotional disabilities and those with attention disorders who require greater physical and/or acoustic separation between activities to reduce distractions. Modular furniture can also lend an element of versatility to the classroom. Data outlets should be dispersed throughout a classroom rather than clustered.

Minimized Travel Distances. It is important to minimize the distance any student travels from one destination to another, especially for students with disabilities. Gymnasiums, libraries, music and art classrooms and elevators should all be centrally located to reduce travel distances. In multi-story facilities, it may be necessary to provide more than one elevator to provide reasonable travel distances.

Integration of General and Specialty Classrooms. To the extent possible, specialized education spaces should not be isolated or clustered in a single area of the building, but dispersed throughout the school.

Outdoor Areas. Accessibility issues are not limited to the facility but should be extended to include the entire site. Far too often playgrounds and other outdoor areas are inaccessible to students with disabilities. New federal guidelines address what types and to what extent playground components must be made accessible. Though the Department of Justice has not yet adopted these, they should be used as a guide. (The outdoor play area guidelines and all other regulations of the ADAAG and UFAS are available at http://www.access-board.gov.)

Classroom Acoustics. The acoustical quality of learning spaces is becoming a critical matter in today's schools. Designers should pay specific attention to the effect of noise-producing factors and absorption of noise generated within the learning space and of noise isolation between spaces. A good source of information on this subject is the publication entitled "Classroom Acoustics" issued by the Acoustical Society of America, available at https://acousticalsociety.org/.

In 2002, voluntary acoustic standards were adopted for classrooms serving students with hearing impairments, attention disorders, emotional disabilities and multiple disabilities. The background noise standard is set at a

maximum of 35 dBA with a reverberation time standard in an unoccupied classroom of 0.5 seconds for classroom volume under 10,000 cubic feet, 0.6 seconds for volumes between 10,001 and 20,000, and reverberation times of 1.5 seconds for classrooms with volumes exceeding 20,001 cubic feet.

For classrooms serving mainstream students the background noise standard is set at a maximum of 45 dBA for new construction and renovation projects, with a reverberation time standard in an unoccupied classroom of 0.6 seconds for classroom volume under 10,000 cubic feet, 0.7 seconds for volumes between 10,001 and 20,000, and reverberation times of 1.5 seconds for classrooms with volumes exceeding 20,001 cubic feet.

Special attention shall be given to noise isolation of and between classrooms and noisy adjacencies as outlined in ANSI S12.60 - 2002.

Building Security. The general trend toward controlling access to keep unauthorized individuals from entering schools can also serve to keep students with disabilities, such as autism and emotional disabilities from leaving the school building. Such students are prone to leaving the school building unsupervised and risking harm to them. Access to areas such as storage rooms and mechanical areas with potentially dangerous equipment or supplies presents other security issues worthy of consideration.

Appendix B: Expenditures Ineligible for State Funding

COMAR § 23.03.02.12 lists the expenditures that are ineligible for state funding:

1. Site acquisition;
2. Offsite development costs except those listed as eligible in Regulation .11 of this chapter;
3. Architecture, engineering, or other consultant fees, except as permitted by Regulation .10 of this chapter;
4. Master plans, feasibility studies, programs, educational specifications, or equipment specifications;
5. Projects proposed in buildings or portions of buildings that have been constructed or renovated within 15 years, except that a building or portion of a building in which a limited renovation was performed is eligible for additional work within 15 years of the date that the limited renovation construction was completed;
6. Systemic renovation projects to replace, upgrade, or renovate building systems that have been replaced, upgraded, or renovated within 15 years.
7. Ancillary construction costs such as: (1) Permits; (2) Test borings; (3) Soil analysis; (4) Bid advertising; (5) Water and sewer connection charges; (6) Topographical surveys; (7) Models; (8) Renderings; or (9) Cost estimating;
8. Leasing or purchasing school facilities except as provided in COMAR 23.03.05;
9. Construction inspection services;
10. Relocation costs for site occupants;
11. Salaries of local employees;
12. Construction of administrative or support facilities, including regional or central administrative offices, warehousing, resource, printing, vehicle storage, and maintenance facilities;
13. Movable equipment, furnishings, and artwork as defined by the IAC;
14. Maintenance; and
15. Temporary storage.

Appendix C: Gross Area Baselines in Gross Square Feet (GSF)/GSF per Pupil

1. Reference. Code of Maryland Regulations 23.03.02.06.
2. Gross Area Baselines in Gross Square Feet (GSF)/GSF per Pupil

for Elementary Schools (Grades PK - 5)		
Est. Total Projected Enrollment	Baseline GSF per Student	Baseline Total Facility GSF
300 or fewer	141	
350	140	49,000
400	136	54,400
450	131	58,950
500	127	63,500
550	122	67,100
600	120	72,000
650	117	76,050
700	114	79,800
750	112	84,000
800	110	88,000
850	108	91,800
900	106	95,400
950	105	99,750
1,000 or more	105	

for Middle Schools (Grades 6 - 8)		
Est. Total Projected Enrollment	Baseline GSF per Student	Baseline Total Facility GSF
600 or fewer	145	
650	144	93,600
700	142	99,400
750	141	105,750
800	140	112,000
850	138	117,300
900	136	122,400
950	135	128,250
1000	134	134,000
1050	133	139,650
1100	132	145,200
1150	131	150,650
1200	130	156,000
1250	129	161,250
1,300 or more	128	

for High Schools (Grades 9 - 12)					
Est. Total Projected Enrollment	Baseline GSF per Student	Baseline Total Facility GSF	Est. Total Projected Enrollment	Baseline GSF per Student	Baseline Total Facility GSF
800 or fewer	160		1600	154	246,400
850	160	136,000	1650	154	254,100
900	159	143,100	1700	153	260,100
950	159	151,050	1750	153	267,750
1000	158	158,000	1800	153	275,400
1050	158	165,900	1850	153	283,050
1100	157	172,700	1900	152	288,800
1150	157	180,550	1950	152	296,400
1200	157	188,400	2000	152	304,000
1250	156	195,000	2050	151	309,550
1300	156	202,800	2100	151	317,100
1350	156	210,600	2150	151	324,650
1400	155	217,000	2200	150	330,000
1450	155	224,750	2250	150	337,500
1500	154	231,000	2300	150	345,000
1550	154	238,700	2350 or more	149	350,150

3. In General. These total GSF baselines are for determining state funding participation. They are intended to support all of the spaces required to deliver the educational programs required by the

State of Maryland and to encourage multiple uses of spaces and other utilization-maximizing strategies that can reduce facility size and therefore the long-term costs of ownership. An LEA may challenge these baselines for a given project on a case-by-case basis through an application for consideration by the IAC for a variance. As part of such an application, the LEA shall provide information sufficient that the IAC staff can analyze the proposed spaces and uses on a program-by-program basis.

4. Special Education. For the purpose of determining state-funded Gross Area Baselines, special-education students in MSDE LRE categories C, S, and W in grades PK through 8 are counted separately and assigned 180 GSF each instead of the baseline GSF per student. Special-education students in MSDE LRE categories C, S, and W in grades 9 through 12 are counted separately and assigned 200 GSF each instead of the baseline GSF per student.
5. Career and Technology Education (CTE). For the purpose of determining state-funded Gross Area Baselines, students in grades 9 through 12 who are in career and technology education programs are counted separately and assigned 210 GSF each instead of the baseline GSF per student.
6. Combination Schools. For schools with grade configurations not matching the above tables, please contact the IAC staff for a customized calculation of gross area baselines.
7. Alternative Education – separate school. The gross area baseline will be determined by program offerings, with an allowance for administration, support, circulation, mechanical system, etc. The baseline shall not exceed 225 gross square feet per full time equivalent student.
8. Auditorium. An auditorium may be designed within the gross area baseline. No additional area allowance will be made to increase the maximum square footage or State funding for an auditorium.
9. Auditorium Addition – constructed as a separate project. The gross area baseline will be determined on a case by case basis.
10. Career and Technology Education – separate school. The gross area baseline will be determined by program offerings, with an allowance for administration, support, circulation, mechanical system, etc. The baseline shall not exceed 240 gross square feet per full time equivalent student.
11. Cooperative-Use Space. The gross area baseline will be determined by program offerings with an allowance for support space. Cooperative use space is above and beyond the size of school function areas typically provided by the LEA. The baseline shall not exceed 3,000 gross square feet.
12. Fine-Arts High School. The gross area baseline will be determined by program offerings, with an allowance for administration, support, circulation, mechanical system, etc. The gross area baseline will be determined on a case by case basis.
13. Gymnasium – constructed as a separate project.
    a. Elementary - The gross area baseline will be determined by program offerings with an allowance for storage, toilet, mechanical system, circulation, and other support spaces. The maximum shall not exceed 6,500 gross square feet per gymnasium designed for one teacher and one class and 11,000 gross square feet per gymnasium designed for simultaneous use by two teachers and two classes.
    b. Secondary - The gross area baseline will be determined on a case by case basis.
14. High School Science – constructed as a separate project. The gross area baseline shall be determined by program offerings with an allowance for preparation, storage, mechanical system, circulation, and

other support spaces. The baseline shall not exceed 2,200 gross square feet per classroom/laboratory.

15. Kindergarten and prekindergarten – constructed as a separate project. The gross area baseline shall be determined by program offerings with an allowance for lecture, laboratory, preparation, storage, mechanical system, circulation, and other support spaces. The baseline shall not exceed 1,800 gross square feet per classroom.
16. Special Education – public separate day school. The gross area baseline will be determined by program offerings, with an allowance for administration, support, circulation, mechanical system, etc. The gross area baseline will be determined on a case by case basis.

Appendix D: Natural Lighting in the Classroom

A substantial percentage of the energy use in Maryland public schools goes toward lighting the facilities. The proper use of natural lighting in the classroom can help to reduce overall energy use. Recent studies have shown that daylight in the classroom can also have a positive effect upon human psychology and performance. A number of studies have demonstrated a direct correlation between increased daylight exposure in the classroom and increased test scores on standardized tests for students at all grade levels. Properly designed daylighting systems can be both aesthetically pleasing and cost-effective to integrate into building design. Successful daylighting solutions in schools include translucent wall panels and clerestory light monitors with operable shading devices. Any solution needs to consider the problems of glare and the distribution of usable light.

In selecting window types, sizes, and locations, consider safety, security, the potential of distracting views to the outside, and any necessity for visual monitoring. Properly selected blinds or shades are typically useful in controlling natural light and views to the outside and classroom interior. Avoid window coverings and windows that introduce visual patterns that are distracting to students. Consider the need for a certain level of room-darkening for audio/visual presentations. Black-out shades are not recommended except where absolutely necessary.

END OF DOCUMENT

Procedures prepared by:
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State of Maryland

Interagency Commission on School Construction

Fiscal Year 2024 Annual Report

IAC

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Visit the IAC online at mdschoolconstruction.org
Subscribe to hear from us at bit.ly/IACemails
Questions? Email iac.pscp@maryland.gov

Cover/TOC: Cross Country ES/MS, Baltimore City Public Schools. Photo: City Schools

A Message From
IAC Chair Ed Kasemeyer

As of July 1, 2023, the IAC became an independent unit of State Government. The IAC began in the 1970s as an entity of the Board of Public Works, and then was organized as an independent unit of the Maryland State Department of Education in 2018. With the change in 2023, our staff and Commission members have now embarked on a new journey towards a fiscally sustainable and educationally sufficient statewide portfolio of Pre-Kindergarten through 12th grade public school facilities.

The IAC and its talented staff have worked tirelessly through the last year to bring a 52 year-old commission into fully fledged independence by establishing numerous administrative and operational procedures; moving offices; and taking on tasks that are essential for all State agencies. In addition, this year saw the culmination of a years-long effort to launch our Business Management System (BMS) which will bring the IAC's processes into one web-based access-controlled system. We've also brought to fruition meaningful updates to the Gross Area Baselines, which were developed in collaboration with local school facility experts to support programs included in the Blueprint for Maryland's Future. Our 40-person staff has adapted to these changes with determination, vigor, and a mindset of constant improvement.

Our school construction funding programs awarded approximately $950 million; our Statewide Facilities Assessment entered its third cycle; our Maintenance Effectiveness Assessment completed its 18th year; and we have worked hard to continue growing our capacity and relationships with the Local Education Agencies through our everyday work and our involvement in Workgroups on the local level.

Our Commission members and staff are committed to continuing our challenging work and embrace the positive change that we firmly believe is equitably moving our state's school facilities forward. We are excited to share the contents of this report with you.

Edward Kasemeyer
Chair

The IAC's Third Annual Report

This report is provided, in conjunction with the IAC's website, as a tool for public information regarding the IAC's programs and services. With a shared mission to achieve a safe, healthy, and educationally sufficient learning environment for every child attending a public school in Maryland, the IAC collaborates with Local Education Agencies in an effort for constant improvement and long-term sustainability of our state's portfolio of schools. The IAC's vision is a fiscally sustainable statewide portfolio of PreK-12 school facilities that will remain educationally sufficient for current and future generations of students and teachers.

We hope that you will enjoy, share, and refer back to the IAC's third annual report.

FY 2024

$68B

REPLACEMENT VALUE

= 142.1 M GSF x $481 (FY 2024 construction cost per SF plus site)

1362 **ACTIVE & HOLDING K-12 PUBLIC SCHOOLS**

142.1M **GROSS SQUARE FEET**

885K+ **STUDENTS**

The Commission

IAC Members

Meet the IAC Members

Edward Kasemeyer, Chair
Linda Eberhart, Vice-chair
Atif Chaudhry, Secretary, Maryland Department of General Services
Michael Darenberg, Member of the Public
Rebecca Flora, Secretary, Maryland Department of Planning
Brian Gibbons, Member of the Public
Gloria Lawlah, Member of the Public
Dr. Carey M. Wright, Superintendent, Maryland State Department of Education

The 9 IAC Members are reported to by:

MSDE

MD Dept. of Education

Designee - State Superintendent

- Review Ed Specs for alignment with LEA goals
- Review Feasibility Studies
- Review design submissions for alignment with Ed Specs
- Provide technical assistance and advice on school facilities architecture

MDP

MD Dept. of Planning

Designee - Secretary of Planning

- Develop annual enrollment projections
- Review Educational Facility Master Plans
- Site reviews and recommendations
- Planning advice to IAC and LEAs

DGS

MD Dept. of General Services

Designee - Secretary of General Services

- Review design development and construction documents
- Review eligiblity of items
- Technical advice to the IAC and LEAs

IAC

Interagency Commission

Executive Director & Staff

- Manage programs and fiscal records
- Maintain facilities inventory database
- Facility and maintenance assessments
- Share best practices and provide technical support

Legislative Update

The 2024 legislative session made a number of positive changes and new initiatives for the IAC to tackle in the coming months:

School Facility Mapping

HB 472 allows Local Education Agencies (LEAs) to apply for funding to produce school mapping data, which is data in an electronic format used by first responders in case of emergencies at a school and by facilities management, funding, and oversight personnel. The IAC and the Maryland Center for School Safety are to collaborate on the development of proposed standards, which have a target completion of July 2025.

Workgroup on the Assessment and Funding of School Facilities (AFWG)

Originally established by HB 1783 in 2018, HB 1390 reestablishes the AFWG to develop recommendations on how results of the Statewide Facilities Assessment can be incorporated into school construction funding decisions. The AFWG will meet after June 1, 2025 and report findings by January 1, 2026.

Funding-Related Changes/Clarifications

HB 1390 also delayed the Nancy K. Kopp Public School Facilities Priority Fund by one year to FY 2028 with funding temporarily provided in FY 2027 only for projects related to healthy school environments, removed the sunset date of the School Safety Grant Program so it can continue indefinitely, clarified that the annual overall target of $450M for school construction does not include the Built to Learn Program, and provided for 100% State cost shares for projects that meet specific criteria.

Artificial Intelligence Weapon Detection Systems

The IAC is required by HB 1390 to report by December 15, 2024 of the funding eligibility of AI weapon detection systems.

East MS, Carroll County. Photo: Jim Marks

School Openings

Hillsmere Elementary | Anne Arundel County

Photo: Coyle Studios

Quarterfield Elementary | Anne Arundel County

Rippling Woods Elementary | Anne Arundel County

Photo: Turner Construction, Margaret Hughes

Cross Country Elementary/Middle | Baltimore City

Photo: Baltimore County Public Schools | Murphy & Dittenhafer Architects

Red House Run Elementary | Baltimore County

Summit Park Elementary | Baltimore County

Photo: Oak Contracting, Coyle Studios

Beach Elementary | Calvert County

Photo: Jim Marks, Carroll County

East Middle | Carroll County

Brunswick Elementary | Frederick County

Photo: TCA Architects

Guilford Park High | Howard County

Photo: MCPS

Burnt Mills Elementary | Montgomery County

Photo: MCPS

Cabin Branch Elementary | Montgomery County

Photo: MCPS

South Lake Elementary | Montgomery County

Photo: MCPS

Stonegate Elementary | Montgomery County

Woodlin Elementary | Montgomery County

Photo: Tom Holdsworth | PGCPS

Colin L. Powell Academy | Prince George's County

Photo: PGCPS

Drew-Freeman Middle | Prince George's County

Photo: PGCPS

Hyattsville Middle | Prince George's County

Photo: PGCPS

Kenmoor Middle | Prince George's County

Sonia Sotomayor Middle | Prince George's County

Photo: PGCPS

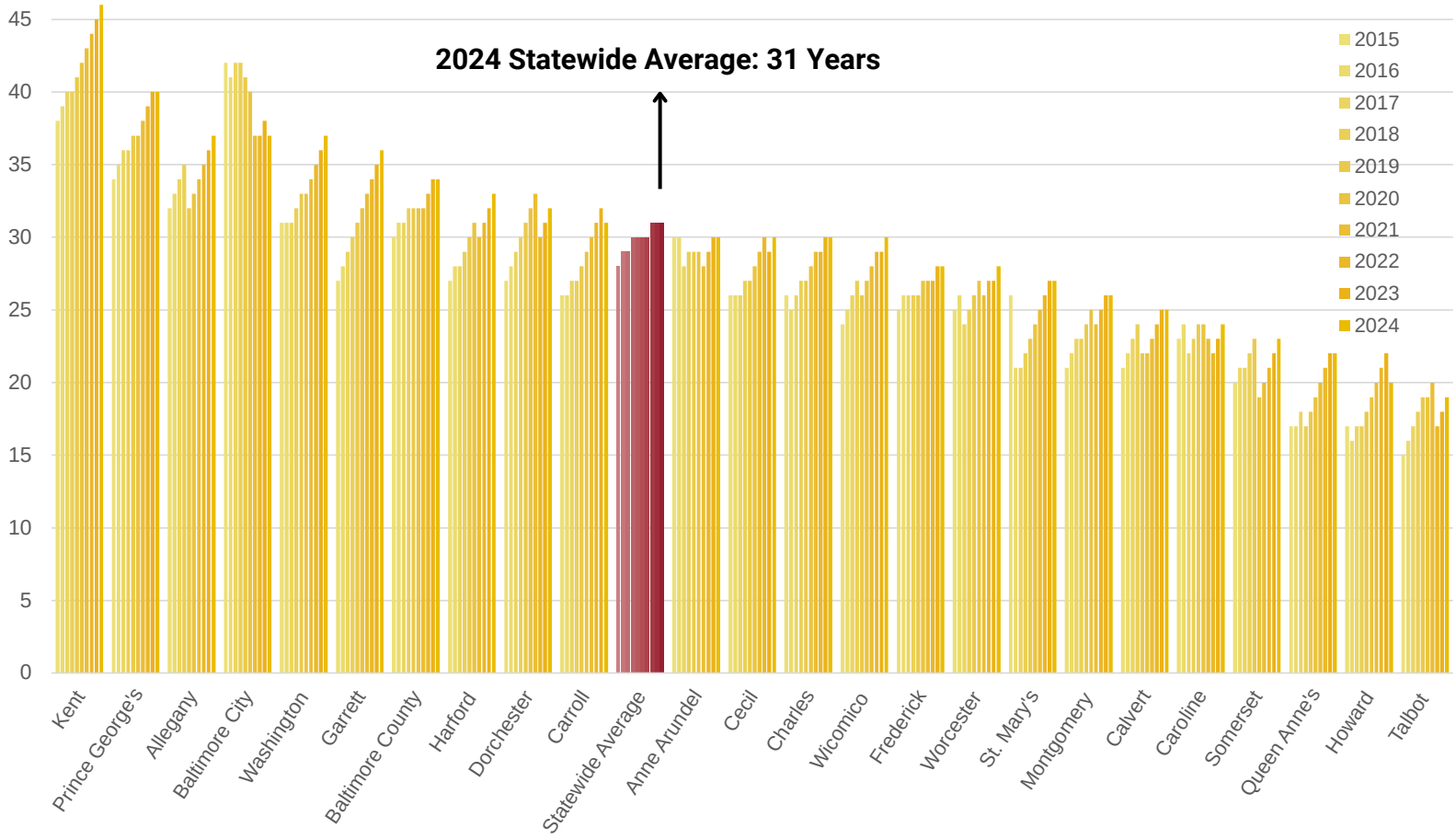
Walker Mill Middle | Prince George's County

Facility Condition & Maintenance

x

School Facility Condition Indicators

Based solely on the **average age of square footage** statewide, the average age of school facilities in Maryland is 31 years.



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

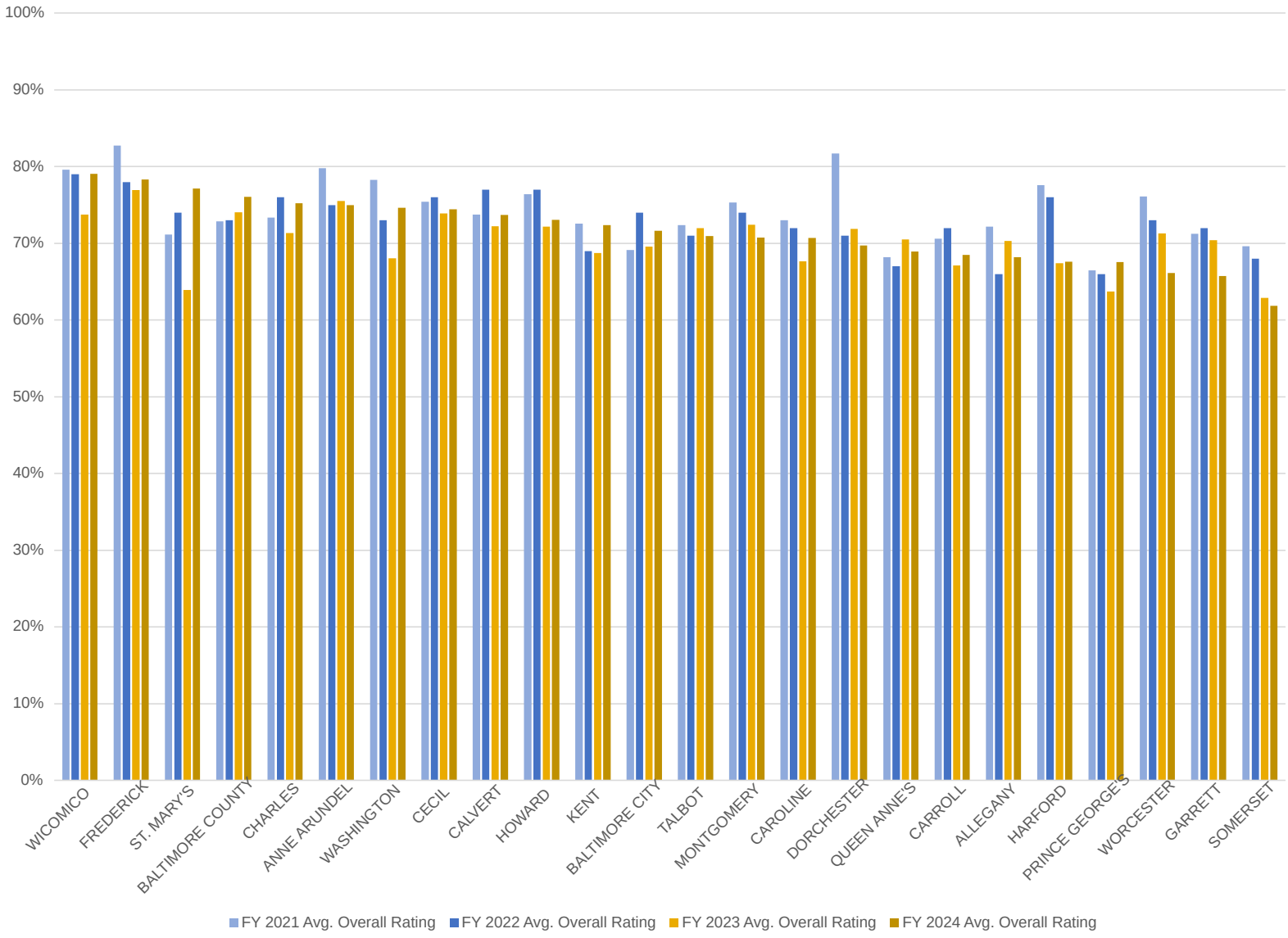
The IAC's two assessments, the **Statewide Facilities Assessment** and the **Maintenance Effectiveness Assessment**, provide more sophisticated and accurate evaluations of the condition and maintenance of Maryland's public school facilities. Those two assessments are detailed on the following pages.

Maintenance Effectiveness Assessment

145 facilities were assessed as part of the Maintenance Effectiveness Assessment (MEA) in FY 2024.

Because of significant changes to the MEA process, results of the FY 2021 and subsequent fiscal year assessments are not comparable to results in prior years. A different sample set of facilities is assessed each year, so results from one year to the next are not necessarily directly comparable.

FY 2021 - FY 2024 Average Overall MEA Ratings



The Annual Maintenance Report is released every October on the IAC website.

Learn more about the MEA through the IAC's Reference Guide and Preventive-Maintenance Task List

Statewide Facilities Assessment

A Day in the Life: Facilities Assessor

The IAC's Statewide Facilities Assessment (SFA) assesses the physical condition and educational sufficiency of all public PreK-12 school facilities so the State can begin to identify the facilities with the highest needs, and to provide data so decision makers can focus capital dollars where they will do the most good.

In 2020-2021, the IAC conducted a baseline assessment of all school facilities in the state and, starting in 2022, a team of IAC staff began what are called "Refresh Cycles," where about 25% of the state's facilities are reassessed each year so the data stays up to date. This fall, the IAC's seven SFA assessors will start Refresh Cycle #4 to finish the first refresh assessment of each facility. As new schools are built and go through a baseline assessment, they'll join the Refresh Cycle Process.

This is what the assessor's days look like from September to June:

Months in advance

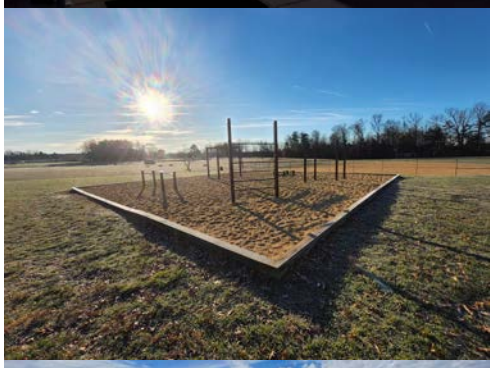
Download the SFA Info Packet to learn more

In each Refresh Cycle, a team of seven assessors (Ken, Dave, Jason, Mark, Soulihe, Ed, and Danny) are responsible for physically assessing approximately 350 facilities in about nine months. The assessment schedule is planned far in advance so this number of assessments, and the prep work required for each, can be accomplished in this time period. Equipped with tablets, solid shoes, safety equipment, and extensive knowledge of building systems from their diverse experiences in construction project management, commercial and public facility maintenance, engineering, carpentry, portfolio analysis, and assessment of facilities for governmental agencies including NASA and multiple branches of the military, they hit the road as early as 5am on an assessment day.

5:00 AM

The SFA team is punctual, methodical, and prepared, so when they arrive at the school, they've already spent about a day reviewing floor plans, construction history, and prior assessment data about the building's systems. This allows the assessors to set a game plan for how they'll walk through the school as efficiently as possible, covering as many spaces as possible before students arrive, and then making every effort to continue their work while not interrupting the delivery of education. After meeting up with a representative from the LEA around 7am, they can get started with their on-site work.

7:00 AM



The SFA uses a visual assessment process that focuses on efficiency and accuracy, covering nearly every area of a facility, inside and out. The assessors go up on the roof and down to the basement; checking out the cafeteria serving line, dance studios, and storage closets. All areas of the school are broken up into 17 systems for the assessment, and then up to 162 different major building-system components (or "assets") in each system. As part of the visual assessment, the assessor determines the Observed Remaining Useful Lifespan of each major building-system component. That figure is important because it identifies approximately how much longer the asset can be expected to function before needing to be replaced. And, when combined with the typical expected useful lifespan for the asset, that figure generates a condition indicator for the asset.

If any questions or immediate concerns pop up while the assessors are in the field, they can reach out to their colleagues, Scott (Maintenance & Assessment Manager), Ken (Lead SFA Assessor), Ben (Data Coordinator), and Brooke (Administrative Officer), for support.

Even with all of the preparation in the world, the assessors can encounter any number of surprises that can range from comedic (flipping a light switch to find a room full of medical training manikins) to heartwarming (class pets) to concerning (very old equipment). But they continue on, recording data and photos meticulously on tablets as they go.

11:00 AM

After two to four hours (depending on the size of the school) spent collecting and verifying 800 data points, the assessor can have a quick lunch and drive back to their workstation to start the assessment report.

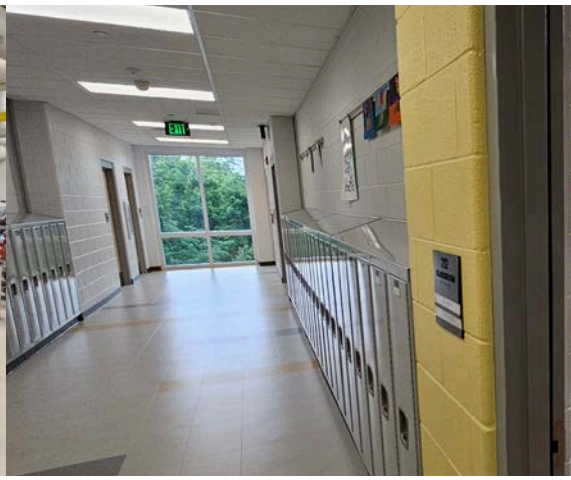
1:00 PM
+ the next 48 hours

After working through the afternoon, they'll finish up the report within 48 hours and then start preparing for their next assessment. With a schedule of 2-3 assessments a week, sticking to the routine is essential.

Over the last four years, this routine has resulted in around three million data points. Just in Refresh Cycle 3, the assessors observed or confirmed five data points for each of 48,148 assets across 322 facilities.

Within 7 days

All of this data undergoes a thorough quality-control procedure by the lead assessor and the data coordinator, and within seven days, the report is sent to the LEA, which has 30 days to review and respond to the IAC's evaluation.



Within 30 days

The assessment produces what is called a Facility Condition Index (FCI) score for each facility, which allows for an apples-to-apples comparable condition ranking of assets, building systems, and facilities regardless of the LEA, the size of the student population served, or the type of school. The end goal is to combine the FCI scores with Educational Sufficiency measures to create a Maryland Condition Index (MDCI) score for each facility. The Workgroup on the Assessment and Funding of School Facilities will begin meeting in Summer of 2025 to determine exactly how that will be done.

The MDCI will be used to generate a ranked list of the school facilities that have the most need for construction projects. That list will be used, starting in FY 2027, for awarding funds through the Nancy K. Kopp Public School Facilities Priority Fund.

The SFA and the Priority Fund are essential parts of Maryland's progress towards our goal of a safe, healthy, and educationally sufficient learning environment for every public school student in the state. To get there, the IAC's assessment team works hard to keep the data collection moving forward. The following pages show the data we've been working on:

How to Visualize Facility Condition Index Scores

52.66%
State Average FCI

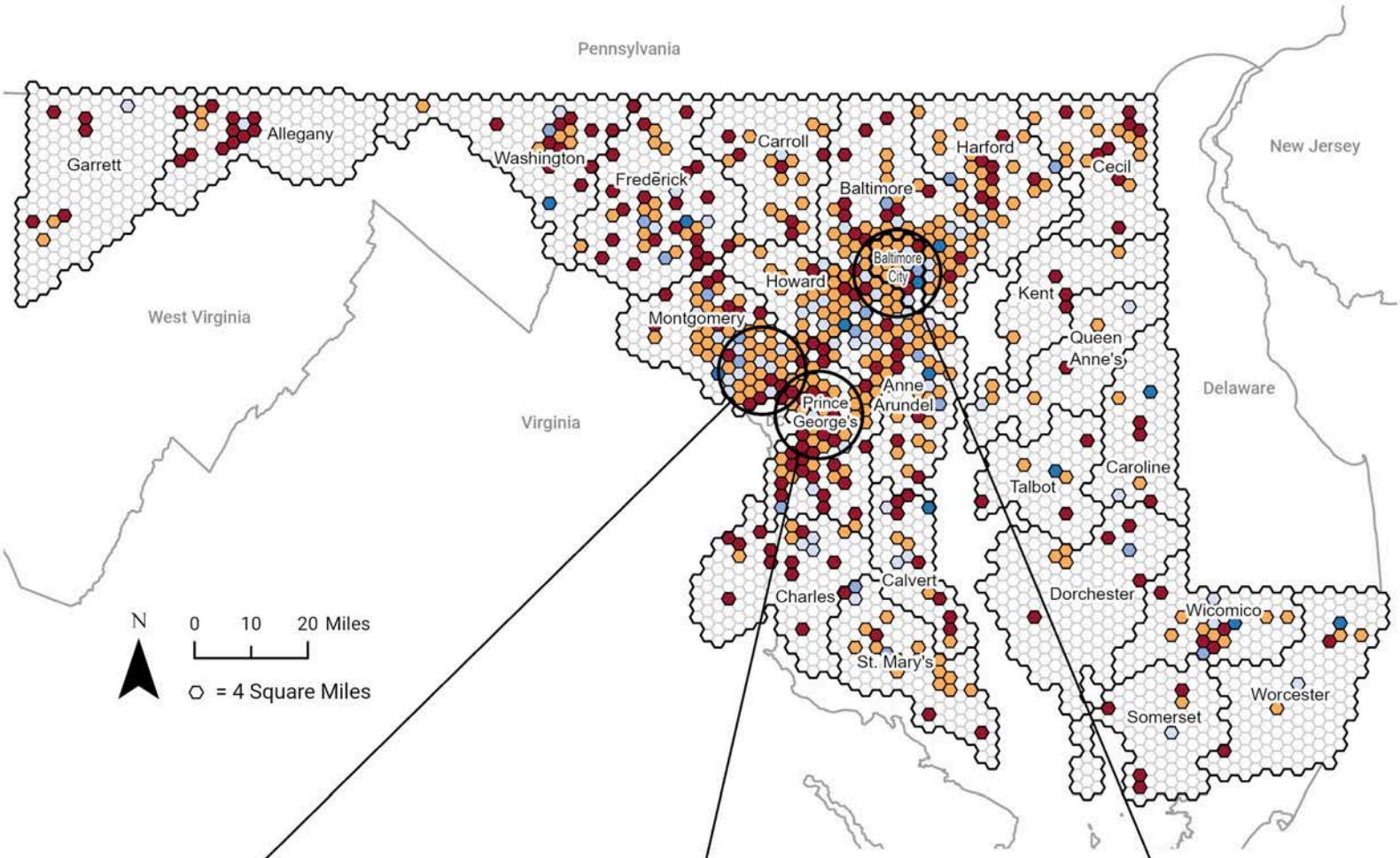
0%

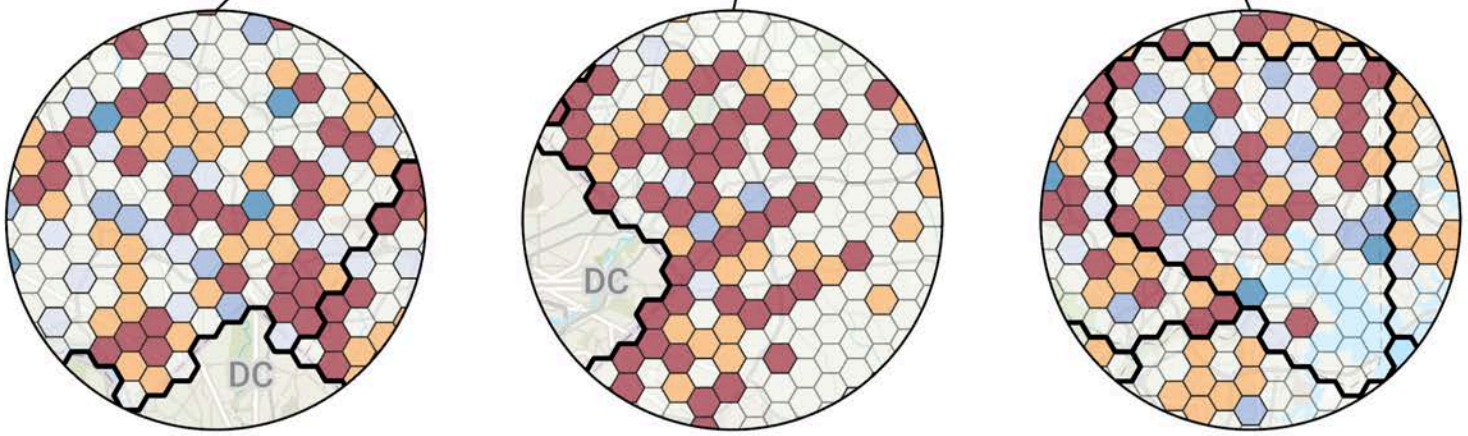
Lower FCI is better

100%

FCI	Common First Perceptions
15% and below	Feels essentially like a new building!
15-30%	Good condition. Comfortable. Appears to be in good overall repair. Generally, everything operates as intended.
30-45%	Condition is satisfactory, although some repairs are needed. Does not generally feel uncomfortable anywhere in the occupied spaces of the facility.
45-60%	Visibly in need of repair. Conditions verge on uncomfortable with some areas of the facility worse than others. Building generally functions OK, but occasionally becomes unreliable. LEA should be considering and planning improvement solutions.
Above 60%	Building functions have become unreliable. Not esthetically or environmentally comfortable in some or all areas of the facility. Should be considered imminently for improvements (including potential renovation/replacement)

FCI Scores Statewide





Montgomery | Prince George's | Baltimore City

Facility Condition Index (FCI)

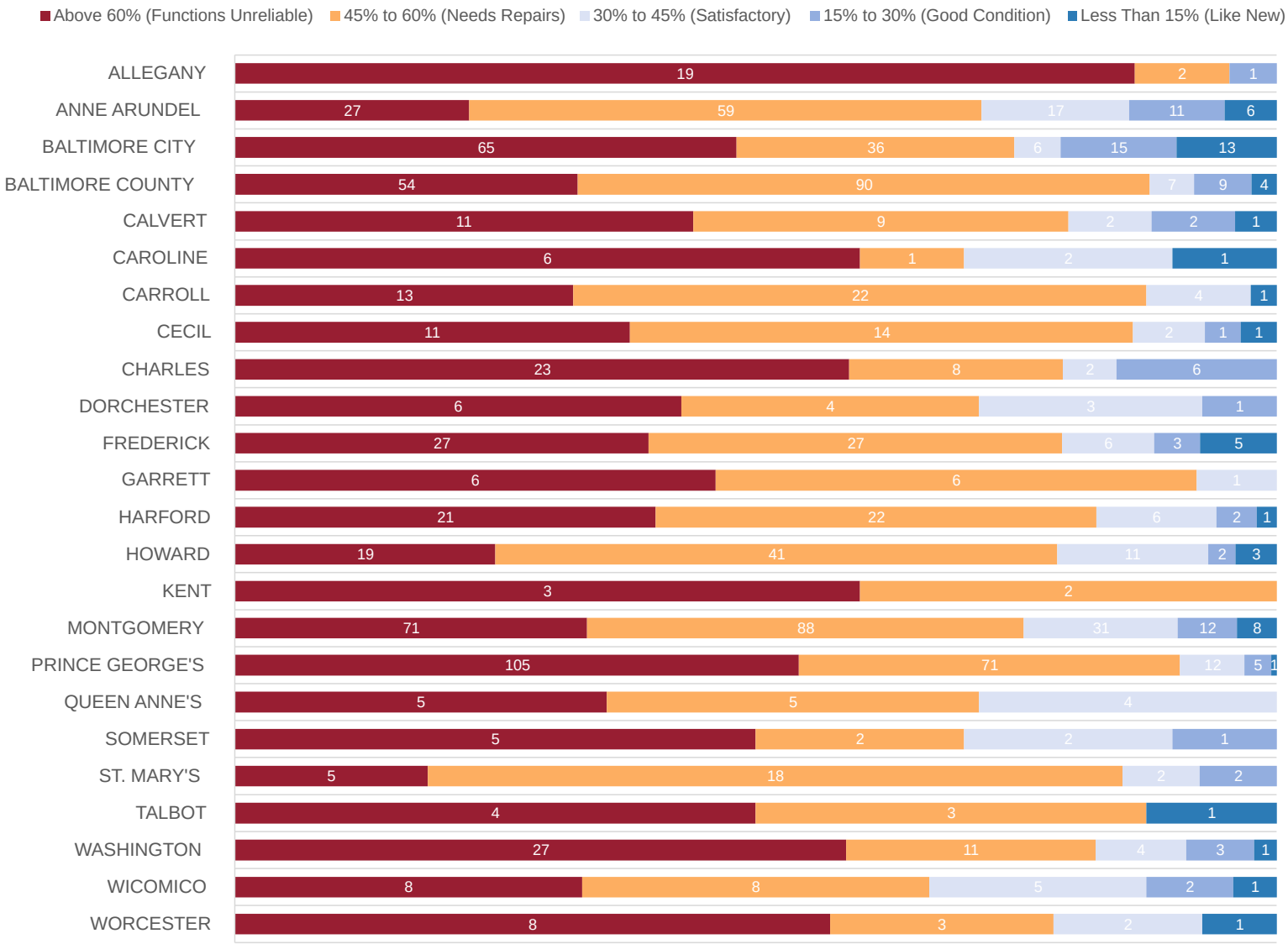
- Less Than 15% (Like New)
- 15% to 30% (Good Condition)
- 30% to 45% (Satisfactory)
- 45% to 60% (Needs Repairs)
- Above 60% (Functions Unreliable)
- No Facility Present

Facility Condition Index (FCI) aggregated by 4 sq. mi. hexagonal grid. Given jurisdiction edges are approximated by the grids; facilities whose true location is outside of their gridded jurisdiction boundary have been reassigned to the nearest grid within the proper jurisdiction.

The three large scale (1 sq mi. hexagonal grid) call-out exhibits display aggregate FCI for high density areas.

FCI scores for individual facilities can be found on the IAC website.

FCI by LEA



Data following Refresh Cycle 3

The baseline assessment, conducted from December 2020 - June 2021 assessed 1,383 facilities.

Refresh Cycle 1 (7/2022 - 10/2022): 392 facilities reassessed
Refresh Cycle 2 (1/2023 - 8/2023): 328 facilities reassessed
Refresh Cycle 3 (10/2023 - 6/2024): 322 facilities reassessed
Refresh Cycle 4 (9/2024 - 6/2025): 362 facilities slated to be reassessed

The IAC's facilities assessment team will continue to conduct physical refresh assessments each year of approximately 25% of school facilities in the state, ensuring that every facility in Maryland is re-assessed at least every four years. Facilities not assessed in a given year will have their scores mathematically updated.

Financial & Program Reports

The IAC administered six funding programs for public school construction and one funding program for non-public school construction in FY 2024. Full details, including procedures guides, eligibility requirements, past year information, and legacy programs, are available on the IAC website.

The Nonpublic Aging Schools Program awarded $3.5 million in FY 2024. Detailed information on the IAC's public funding programs follows.

How does the IAC make funding decisions?

Data, policy, and more data.

Funding amounts for the State's Capital Improvement Program are based on funding targets, which are a combination of the LEA's ten-year funding average and enrollment. Other programs use different allocation methods.

Some IAC programs have statutory minimums for LEAs and/or projects and some are competitive based on need.

All funding awards are granted to the extent that the LEA requests funding for projects that are eligible. Learn more about eligibility and program requirements on the IAC website.

IAC staff work closely with each county to ensure that the IAC's funding programs are taken advantage of with the greatest long-term benefit to the local and statewide portfolios of school facilities.

With 1,362 public PK-12 school facilities, we rely on and generate a lot of data.

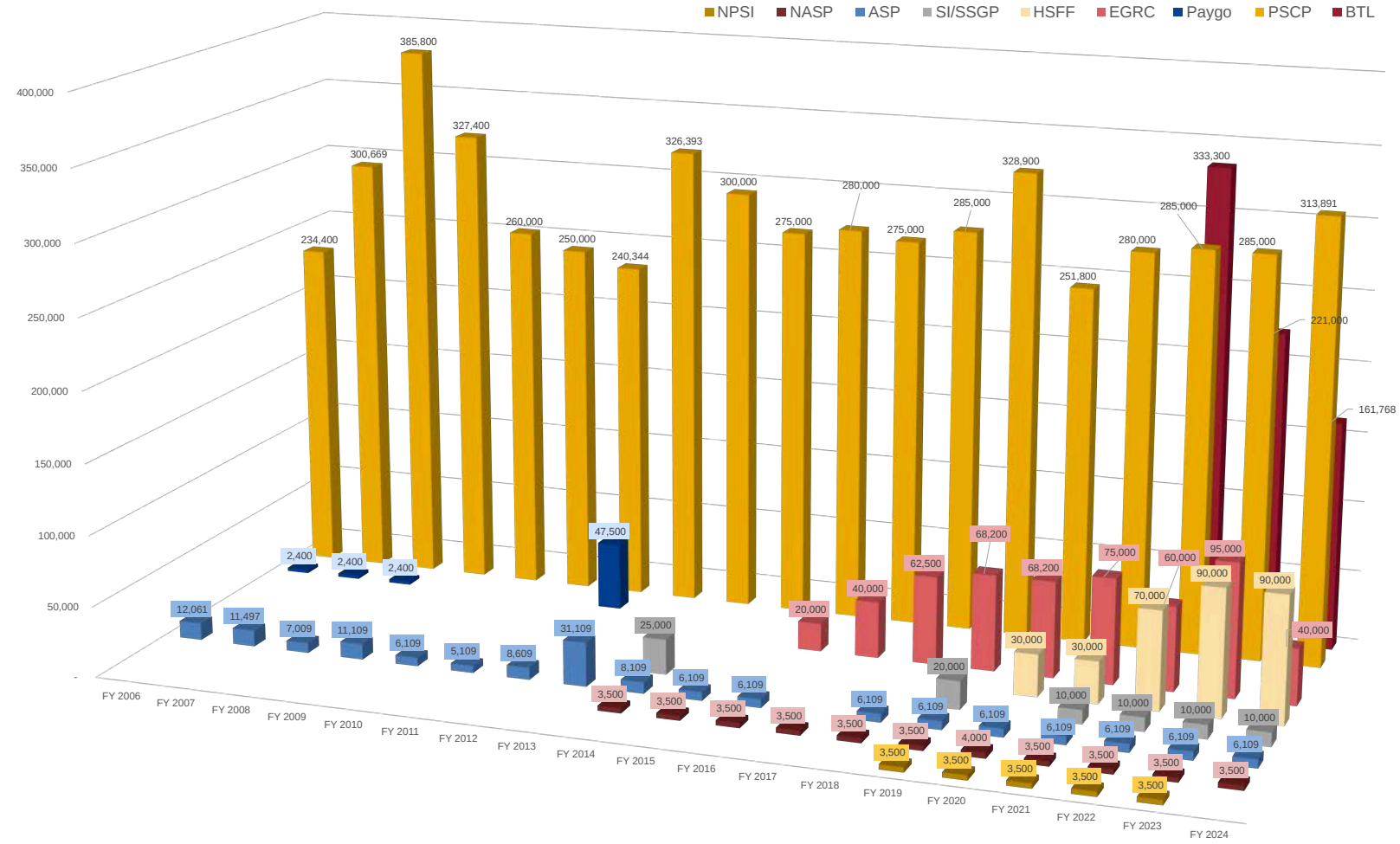
$816,452,160 FY 2024 Appropriations

$950,474,902 FY 2024 Awards

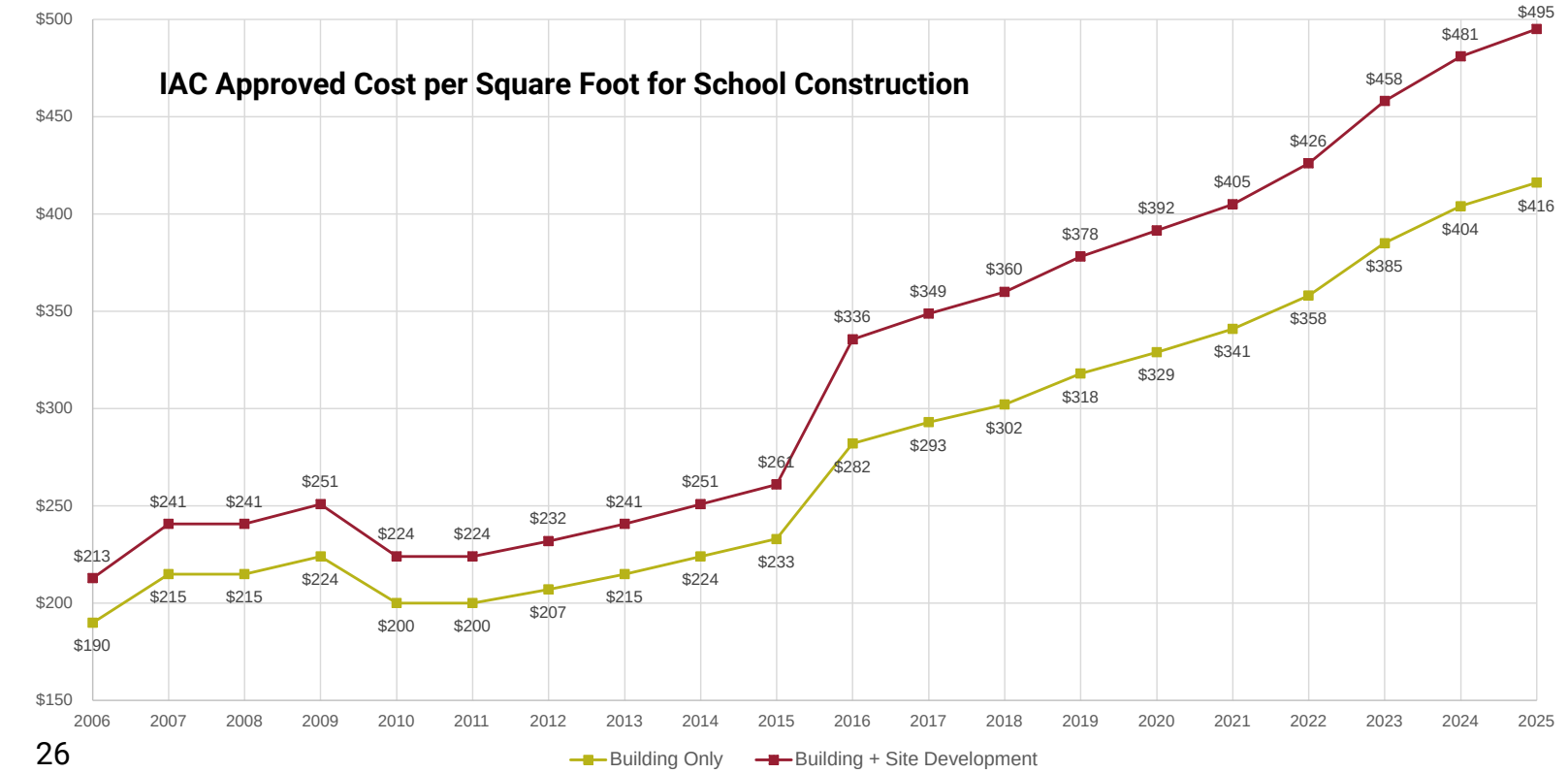
Includes multi-year funding programs, which are not appropriated on a FY basis

Capital Funding by IAC Program FY 2006-2024

(in $ millions)



While the level of State funding has increased over time, cost inflation in the construction industry is an obstacle to completing the quantity of school construction projects needed in Maryland.



Helping School Districts Meet the Need

Just as car owners must periodically replace worn out tires, school facilities require significant periodic investments to ensure that they continue to be a sufficient space for teaching and learning. Maryland's public school districts must put a great deal of money and effort every year into maintaining the physical condition and educational sufficiency of the nearly 1,400 PreK-12 facilities in our state.

There are Five Key Areas of Need

In its work to quantify what our state's school facilities need in order to support decision making at local and State levels regarding both strategies for managing facilities portfolios, the IAC has identified five key areas, or buckets, of need:

Physical Condition

Needs in this category include regular maintenance for normal wear and tear and for replacements (or full modernizations) at the end of a facility's life.

Educational Sufficiency

Includes alterations to facility configurations, spaces, and attributes that are required to meet changing educational requirements.

Capacity to Meet K-12 Enrollment Demand

Needs for additional seats in some areas as a result of increased enrollments.

Space Required for Additional Pre-Kindergarten Under the Blueprint for Maryland's Future

The Blueprint, which was enacted in 2021, requires the expansion of Pre-Kindergarten services, which results in the needs for additional classroom spaces.

Decarbonization and Improvement of Energy Efficiency

Maryland has a goal to reduce the state's greenhouse-gas emissions by at least 60% by 2031, obtain net-zero greenhouse gas emissions by 2045, and attain 100% clean energy by 2035.

Expanding State Supports for School District Projects

The IAC is taking action on multiple levels to support Maryland's school districts in their management of their facilities portfolios. In FY 2024, the IAC undertook significant activities to expand the funding supports that it provides to LEAs' projects, including:

Increased Per-Student Square-Footage Funding

In September 2023, the IAC approved increases to the amount of space per student in which it will participate when it funds additions and major projects. It did so both as a periodic update of its square-feet-per-student Gross Area Baselines (GABs) and to align with requirements in the Blueprint.

In whole, the Blueprint's goal is to make transformational improvements to Maryland's public education system through five pillars:

Pillar 1: Early Childhood Education
Pillar 2: High Quality and Diverse Teachers and Leaders
Pillar 3: College and Career Readiness
Pillar 4: More Resources for all Students to be Successful
Pillar 5: Governance and Accountability

The Gross Area Baselines are the outer boundary of State-supported square footages, based upon traditional practices in facility-space allocations, with additional square footage assigned for Career and Technology Education (CTE) and Special Education programs.

Throughout 2023, the IAC formed and facilitated the Blueprint Facilities Workgroup to hear LEA and State-agency input about how the IAC might implement changes to align funding-allocation policies with the Blueprint. The Workgroup met more than 13 times to explore how school facilities, and our processes for building them, may need to change to support the education initiatives in the Blueprint.

To do this, the Workgroup focused on updates to the GABs. By evaluating data about facility spaces and LEA approaches to designing them, the Workgroup and IAC staff took a deep dive into what school facilities need for several focus areas: Pre-Kindergarten, CTE programs, English Language Learners, small group workspaces, Community Schools and schools with high Concentrations of Poverty, and collaborative teacher spaces.

Approved by the IAC in September of 2023, the updated GABs provide up-to-date square footages for elementary, middle, and high schools, adjusted physical education space components of State-Rated Capacity calculations, and created new square footage add-ons for CTE programs and for schools with high percentages of English Language Learners and Concentrations of Poverty.

These GAB updates, which are a major factor in the State funding that can be applied to each school construction project, allow for additional financial support to LEAs as they implement Blueprint requirements.

To learn more about the overall Blueprint, visit blueprint.marylandpublicschools.org

State Participation in the Cost of Activities Related to School Construction Projects

In 2022, the IAC enacted policy changes that made school construction project development and design costs (up to 10% of the project's construction cost) and furniture, fixtures, and equipment (FF&E) (up to 5% of the project construction cost) eligible for State funding. During FY 2024, IAC staff made strides in implementing this new policy to support the hundreds of millions of dollars of projects that LEAs submitted for State funding through the CIP and Built to Learn Program. LEAs can now obtain more State dollars for each major project, which frees up more local dollars for meeting other needs.

Increased Project Funding Through Add-Ons to State Cost Share of LEAs' Projects

Also in 2022, the General Assembly enacted Chapter 32, which directed that counties receive additional percentage points of State share on eligible costs as follows:

- Ten percentage points if the project is at a school with a Concentration of Poverty level of 80% or greater;
- Five percentage points if the project is at a school with a Concentration of Poverty level of less than 80% but greater than 55%;
- Five percentage points if the project is at a school that received a qualifying high rating on its most recent IAC Maintenance-Effectiveness Assessment; and
- Five percentage points if the project is to build a net-zero-energy school.

During FY 2024, IAC staff worked with each LEA's staff to identify and encourage projects that could qualify for these State-share add-ons. In the FY 2025 100% CIP, the IAC approved allocations to 65 projects that included one or more of these add-ons.

Connecting LEAs with Additional State and Federal Capital Funds

As described above, modifying school facilities to support meeting the State's climate-protection goals will require significant investment over the next two decades, both to increase energy efficiency and to decarbonize facilities.

During FY 2024, IAC staff coordinated extensively with the Maryland Energy Administration (MEA) to bring financial support from the MEA for energy-related planning and construction projects to LEAs. During FY 2024, with the IAC's assistance, the MEA's Decarbonizing Public Schools Program provided eight district-wide technical-assistance grants to support the implementation of clean-energy practices. These awards will allow the recipients to begin a number of projects, from analyzing facility data and integrating Net-Zero Energy practices to providing general technical and planning support for future years. Additionally, 35 facilities received project-specific awards for a variety of scopes: LED relamping, electrification of boilers, ground-mounted and rooftop solar projects, construction of ground-source heat pump systems, and technical studies for future projects like these.

The MEA's decarbonization program will continue in FY 2025 and LEAs are encouraged to apply and take advantage of the added financial and technical support.

Learn more about the MEA's decarbonization program

In addition, IAC staff worked with a national nonprofit organization to deliver informational webinars to Maryland's LEAs and counties to inform them about how to take advantage of federal Inflation Reduction Act (IRA) Direct Pay reimbursements for eligible components that increase energy efficiency and/or decarbonize their facilities.

Technical Assistance to LEAs to Maximize Project-Funding Eligibility

During FY 2024, IAC staff continued to work collaboratively with LEAs to best position the projects in each LEA's project pipeline to both maximize their eligibility for State financial support and optimize the fiscal sustainability of their portfolios. Just a few of these projects are highlighted below:

Cool Spring Elementary School in Prince George's County

Approved for local planning and partial construction funding in the FY 2025 CIP, this PreK-6 replacement project factored in Cooperative Use Space and add-ons to the State cost share for maintenance effectiveness (+5%) as well as a community with a high concentration of poverty (+10%). The State will provide 86% of eligible project costs for a project that would have received 71% without these factors. The IAC anticipates providing additional State funding in future fiscal years.

Furley Elementary School #206 in Baltimore City

This PreK-5 school received prior support from the IAC in FYs 2021-2024, with additional construction funding in the FY 2025 CIP to replace the existing school facility with a LEED Gold certified public school facility. A portion of the construction funding awarded to this project will be used to create community use spaces and collaborative spaces that will be available to the public during and after school hours. In addition, Baltimore City Recreation and Parks has secured separate funding to replace the recreational center adjoined to the school facility.

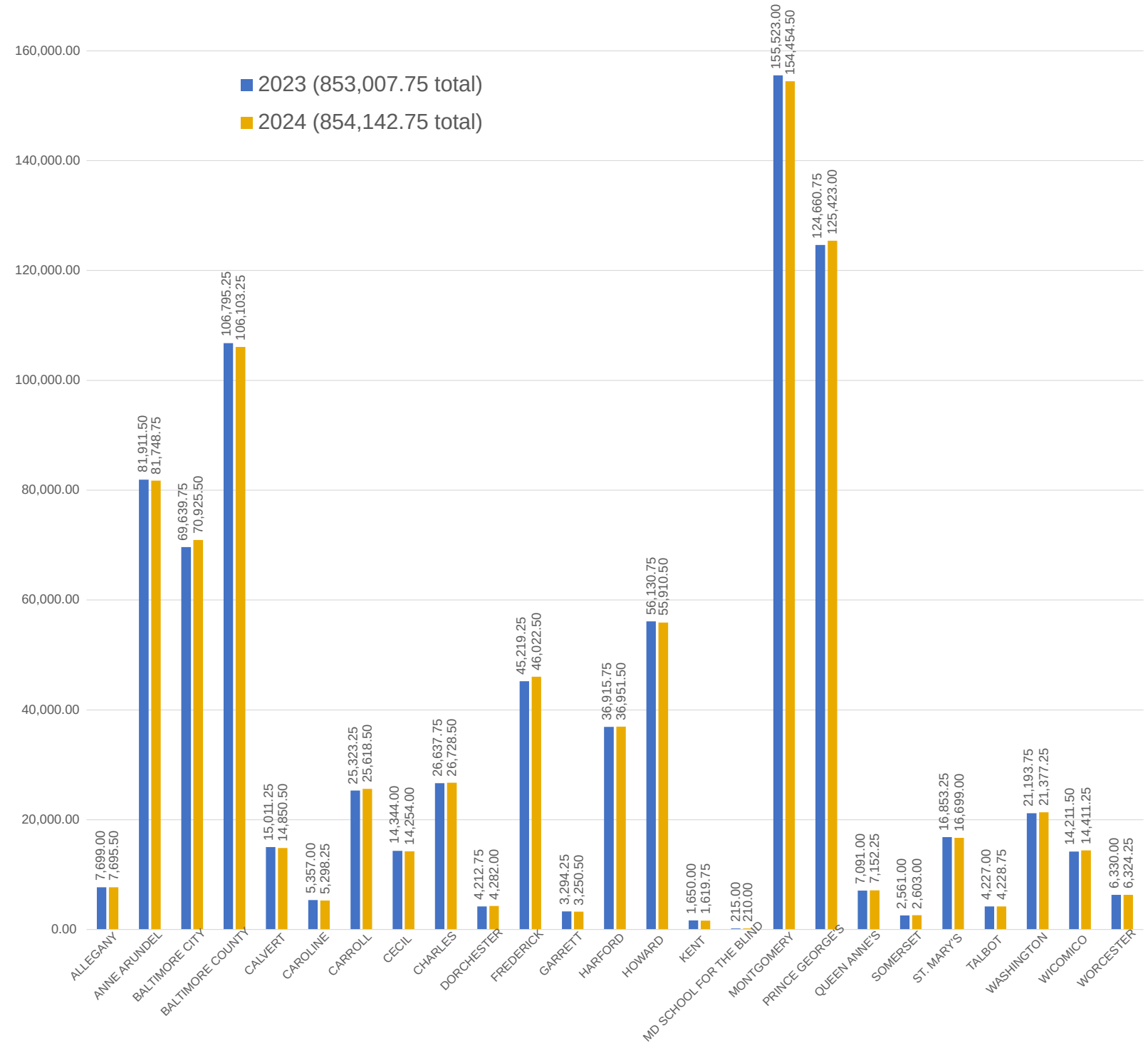
Deer Park Elementary in Baltimore County

The IAC recently approved $34,499,000 in Built to Learn funds for the Deer Park Elementary replacement project. In addition to a 5% add-on to the State cost share for maintenance effectiveness, this project was the first to receive the new 5% add-on for net-zero-energy. Deer Park will become Baltimore County's first net-zero-energy school.

Enrollment by LEA

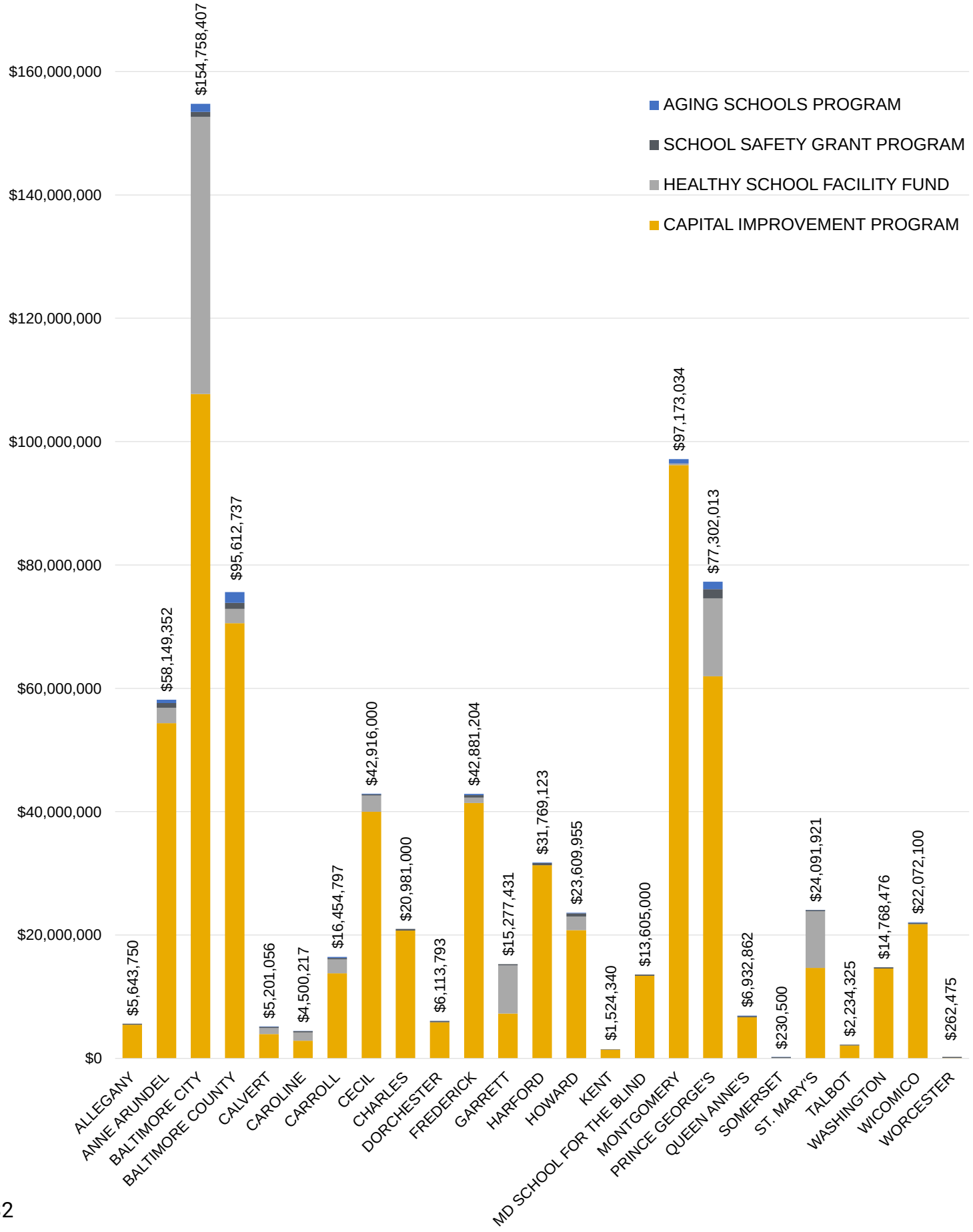
Some, but not all, IAC funding programs and allocations are driven by enrollments, either as a formula like SSGP or as a rough target like the CIP. Compare the enrollment graph below with the funding chart on the following page to see that generally, the distribution of State funding follows enrollments fairly closely.

Enrollments are shown as Full Time Equivalent (FTE) students from Kindergarten through Grade 12.



Annual Funding Programs

Excludes Multi-Year Programs (Pass-Through Grant and Built to Learn)



Capital Improvement Program

$659M Awarded **172** Schools **25** LEAs

The State's largest school construction grant program. Can be used for major new, renewal, replacement, addition, or capital maintenance (systemic renovation) projects and includes add-ons for certain LEAs through the Enrollment Growth and Relocatable Classroom program. The FY 2024 CIP included new authorization funds, prior year funds, and LEA reserve funds.

Healthy School Facility Fund

$90M Awarded **59** Schools **13** LEAs

For projects improving HVAC, mold remediation, temperature regulation, plumbing (including lead in drinking water), roofs, and windows. Priority is given to issues posing an immediate life, safety, or health threat to occupants.

School Safety Grant Program

$10M Awarded **433** Schools **25** LEAs

Provides funds for school security improvements such as access control, new camera surveillance systems, door hardware and improvements, emergency generators, campus lighting, etc. This program is administered in partnership with the Maryland Center for School Safety.

Aging Schools Program

$6M Awarded **45** Schools **17** LEAs

Funds projects in aging facilities for capital improvements, repairs, maintenance, and deferred maintenance. Funds can also be used to address life, safety, and public health risks that may negatively impact building occupants.

Multi-Year Funding Programs

The IAC has two active multi-year funding programs, which involve a one-time infusion of funds to each program to be awarded on a rolling basis over multiple fiscal years until fully awarded.

Pass-Through Grants

2022 Md. Laws, Ch. 344 (SB291) appropriated $237 million to be distributed to specified LEAs for school construction projects selected by each County government. These funds are statutorily required to be allocated as block grants to the LEAs with minimal oversight by the IAC. PTG funding was almost entirely awarded in FY 2023, but FY 2024 saw some adjustments of previously awarded projects and small awards to exhaust remaining allocations in three LEAs.

$20M Awarded **3** Schools **3** LEAs

Built to Learn Program

The program involves revenue bonds issued by the Maryland Stadium Authority (MSA) to fund school construction projects and provides for MSA to optionally manage projects. The total available funding for BTL is based on bond proceeds; the most recent estimate is $1.7 billion. Approximately $551M remains to be awarded.

$162M **11** Schools **6** LEAs

A note about Built to Learn and Public Private Partnerships (P3s)

In FY 2024, Prince George's County opened six new school buildings through a locally-funded P3, which is an alternative financing method that can be used to fund school construction and maintenance. A second P3, which will involve State funding, was closely reviewed by IAC staff during much of FY 2024. In July 2024, the IAC entered into a Memorandum of Understanding (MOU) and approved of the Project Agreement (PA) between Prince George's County Public Schools and the private developer. In accordance with with §4-126.1 of Education Article, these actions will allow for Built to Learn program funding to be used for the State share of projects completed in Prince George's second P3.

Funds Awarded in FY 2024

	Aging Schools Program	School Safety Grant Program	Pass Through Funding	Healthy School Facility Fund	Built to Learn	Capital Improvement Program	Total
Allegany		$200,000				$5,443,750	$5,643,750
Anne Arundel	$515,689	$797,000		$2,480,500		$54,356,163	$58,149,352
Baltimore City	$1,305,712	$806,000		$44,937,198		$107,709,497	$154,758,407
Baltimore County	$1,739,227	$1,001,000	$20,000,000	$2,299,160		$70,573,350	$95,612,737
Calvert	$68,304	$200,000		$989,295	$13,566,212	$3,943,457	$18,767,268
Caroline	$24,134	$200,000	$56,883	$1,355,200		$2,864,000	$4,500,217
Carroll	$161,500	$243,000		$2,240,000		$13,810,297	$16,454,797
Cecil	$100,000	$200,000		$2,616,000		$40,000,000	$42,916,000
Charles		$251,000				$20,730,000	$20,981,000
Dorchester	$38,293	$200,000				$5,875,500	$6,113,793
Frederick	$184,402	$415,000		$880,300		$41,401,502	$42,881,204
Garrett		$199,931		$7,815,500	$3,162,862	$7,262,000	$18,440,293
Harford	$99,000	$353,000				$31,317,123	$31,769,123
Howard	$87,776	$510,000		$2,214,300		$20,797,879	$23,609,955
Kent		$71,881	$18,459		$1,569,659	$1,434,000	$3,093,999
MSB		$200,000				$13,405,000	$13,605,000
Montgomery	$708,700	$1,476,000		$268,084	$139,590,500	$96,196,250	$238,239,534
Prince George's	$1,209,000	$1,141,000		$12,671,192		$61,945,821	$76,967,013
Queen Anne's	$49,800	$199,500				$6,683,562	$6,932,862
Somerset	$30,500	$200,000					$230,500
St. Mary's	$50,272	$199,997		$9,170,469		$14,671,183	$24,091,921
Talbot		$149,325			$3,878,801	$2,085,000	$6,113,126
Washington		$207,000				$14,561,476	$14,768,476
Wicomico	$106,627	$200,000				$21,765,473	$22,072,100
Worcester		$200,000				$62,475	$262,475
Total	$6,478,936	$9,820,634	$20,075,342	$89,937,198	$161,768,034	$658,894,758	**$946,974,902**

An additional $3,499,999 was awarded to nonpublic school facilities in MD through the Nonpublic Aging Schools Program.

Anne Arundel's Quarterfield ES | Photo: Coyle Studios

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CORRESPONDENCE - September 1, 2021

The Honorable Senator Guy Guzzone
Chair, Senate Budget and Taxation
3 West
Miller Senate Office Building
Annapolis, MD 21401
Guy.guzzone@senate.state.md.us

The Honorable Delegate Maggie McIntosh
Chair, House Appropriations
Room 121
House Office Building
Annapolis, MD 21401

Dear Chairs Guzzone and McIntosh,

The 2021 Joint Chairmen's Report notes that:

> *...provided that $200,000 of this appropriation may not be expended until the Interagency Commission on School Construction submits to the budget committees a draft of the final report on the Statewide Facilities Assessment. This report shall incorporate the contractor's preliminary report and provide the following information:*
>
> *(1) data from the assessment pilot and a copy of the final assessment rubric;*
> *(2) facilities condition index data on all school facilities assessed; and*
> *(3) detail of project expenditures by object and subobject.*
>
> *The report shall be submitted by September 1, 2021, and the budget committees shall have 45 days from the receipt of the report to review and comment. Funds restricted pending the receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund if the report is not submitted to the budget committees.*

The IAC is happy to submit the materials required above for the review of the budget committees as described in the following table. It is important to note that the data submitted here is preliminary data that pertains primarily to the physical condition of the school facilities assessed, not the educational sufficiency of those facilities, and therefore these data do not fully describe the state of Maryland's PK-12 school facilities. For the data to be useful in formulating options for allocating State capital dollars to school facilities needs, the data on physical condition and the data on educational sufficiency must be combined into a single facility score using factors to be considered in the near future by the Workgroup on the Assessment & Funding of School Facilities (AFWG).

Required Item	Enclosures
1) Contractor's preliminary report	The contractor's preliminary report consists of a Level 1 (summary) report and a Level 2 (more detailed) report for each of the 1,383 assessed schools. Because these reports amount to thousands of pages, IAC submitted to DLS on Aug. 31, 2021 an Excel file containing the data in the Level 1 and Level 2 reports; and we enclose here a sample of each report type.

<table>
<tr><td>2) Data from the assessment pilot</td><td>The data from the assessment's pilot study of nine schools are contained in nine reports enclosed here. Below is a summary of the key takeaways from the pilot study.</td></tr>
<tr><td>3) A copy of the final assessment rubric</td><td>Enclosed are 1) the Maryland Educational Facilities Sufficiency Standards against which the facilities are measured for educational sufficiency; and 2) a description of the criteria and process for assessing condition and sufficiency.</td></tr>
<tr><td>4) Facilities condition index data on all school facilities assessed</td><td>On Aug. 31, 2021, IAC provided to DLS the FCI data for each of the 1,383 facilities assessed and their building systems. Enclosed here is a sample of the letter that the IAC distributed on Aug. 20, 2021 to each LEA along with the LEA's FCI data.</td></tr>
<tr><td>5) Detail of project expenditures by object and subobject</td><td>Based upon all project invoices processed through July 2021, all costs are in 08- Contractual Services -- 0872-Outside Services-Consulting Services as follows:
<table>
<tr><th colspan="3">Bureau Veritas Technical Assessments</th></tr>
<tr><th>Invoice Date</th><th>Invoice Number</th><th>Amount</th></tr>
<tr><td>12/3/2020</td><td>INV00003020</td><td>$ 233,000.00</td></tr>
<tr><td>1/13/2021</td><td>INV00003062</td><td>$ 88,600.00</td></tr>
<tr><td>1/28/2021</td><td>INV00003124</td><td>$ 547,175.52</td></tr>
<tr><td>3/2/2021</td><td>INV00003171</td><td>$ 714,039.24</td></tr>
<tr><td>4/23/2021</td><td>INV00003281</td><td>$ 1,217,464.92</td></tr>
<tr><td>4/23/2021</td><td>INV00003227</td><td>$ 817,373.04</td></tr>
<tr><td>6/11/2021</td><td>INV00003293</td><td>$ 983,886.60</td></tr>
<tr><td>6/30/2021</td><td>INV00003733</td><td>$ 414,671.52</td></tr>
<tr><td>7/14/2021</td><td>INV00003524</td><td>$ 420,736.56</td></tr>
<tr><td>Total to Date</td><td></td><td>$ 5,436,947.40</td></tr>
</table></td></tr>
</table>

With regard to Item 2 (Pilot Assessment) above, we provide the following additional information:

Overview of Pilot Assessment

A pilot assessment was conducted on a reasonable number of buildings in order to achieve validation of process, technology data input, and results. Validation includes verifying that the contracted scope has been delivered, that errors or oversights in the process are identified, triaged, and remedied, and that any errors identified are addressed going forward. The pilot assessment was conducted in November 2020 and the draft results compiled in early December 2020. Included in the Nov. 2020 pilot assessment were nine Maryland schools: three elementary schools, three middle schools, and three high schools, spread across urban, rural, and high-growth LEAs for the purpose of testing the assessment parameters on a wide range of schools.

Because both the data collected in the pilot assessment and many of the assessment's basic parameters and calculations were subsequently refined, updated, or changed, the data in those pilot reports are no longer valid, and data identifying the schools has been redacted in order to avoid ascribing incorrect data to those schools.

Key Takeaways from Pilot Assessment

- The condition measure that was used returned condition scores reasonably close to the scores expected based upon previous assessment experience and known or anecdotal conditions of facilities.
- As a result of the pilot, certain parameters pertaining to the condition calculation, such as the expected useful lifespans (EULs) for selected building systems were adjusted.
- Certain data parameters pertaining to enrollments were adjusted to accurately reflect the projected demand for seats and space.
- Data on sizes and nomenclature of spaces within facilities pulled from drawings provided by LEAs were found to be incomplete or inaccurate at a high enough rate that the assessment process was modified to obtain space measurements conducted by on-site assessors.
- The assessment category for relocatable classrooms was divided to distinguish between modular structures fixed upon foundations and relocatable structures not fixed to any foundation; and to distinguish between such structures used for instructional purposes versus ones used for storage and other purposes.
- The proposed report template was revised to provide information in a more useful way.

Best Regards,

Robert A. Gorrell
Executive Director
Interagency Commission on School Construction

Cc: Laura Hyde, DLS Analyst
Sarah Albert, Department of Legislative Services (5 Copies)

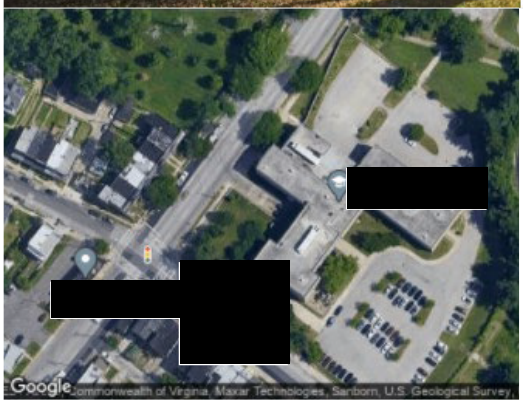
Attachments: 1A - Sample Level 1 SFA school-level report
1B - Sample Level 2 SFA school-level report
2 - 9 Pilot Assessment reports
3A - Maryland Educational Facilities Sufficiency Standards
3B - SFA rubric summary
4 - Sample of IAC letter of 8/20/2021 to LEAs re: Prelim FCI Data

[redacted] - Facility Assessment Overview

Facility Data

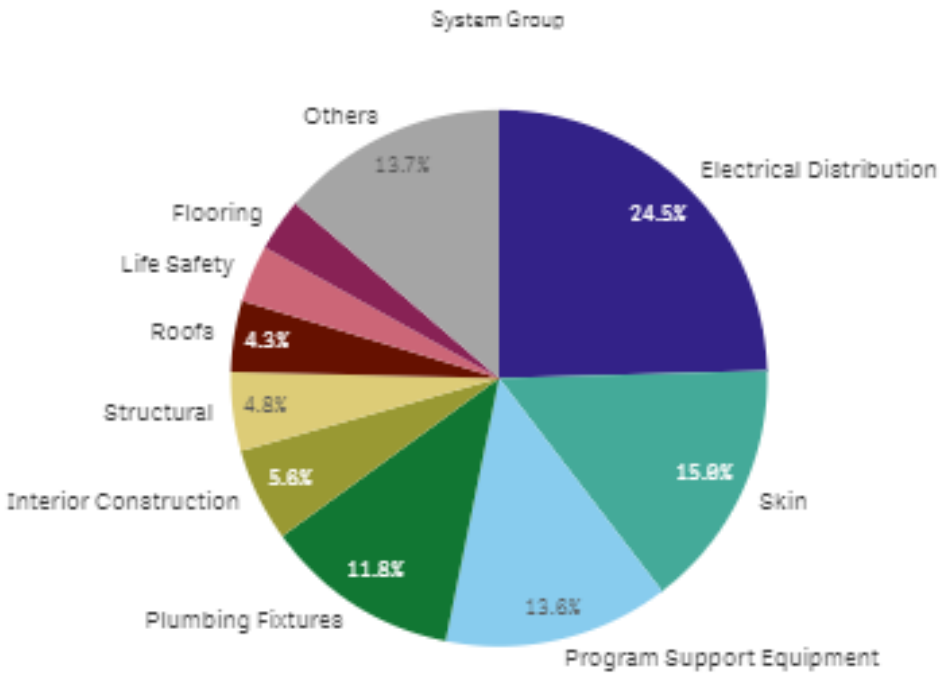
Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	2
Total SF	[redacted]
Year Built	1932
Last Major Renovation	2004
GPS	[redacted]
Assessed Date	2020-12-09
FCI	0.51
MDCI	

Note: The LOWER calculated FCI and MDCI metrics indicate better facility conditions



Facility Condition

FCI Contribution



System Groups

System Group	Min Year in Service	FCI	Percent FCI Contribution	Avg Lifespan Gain/Loss
Ceilings	2001	0.64	2%	0%
Conveyances	2004	0.46	1%	0%
Electrical Distribution	1932	0.72	25%	69%
Flooring	2004	0.40	3%	19%
HVAC	2004	0.52	3%	22%
Interior Construction	1985	0.38	6%	-9%
Interior Doors and Hardware	1989	0.50	2%	0%
Life Safety	2004	0.28	3%	29%
Plumbing Fixtures	1932	0.76	12%	135%
Program Support Equipment	1932	0.32	14%	33%
Roofs	2004	0.72	4%	0%
Site	2000	0.39	3%	2%
Skin	1932	0.37	15%	58%
Structural	1932	0.31	5%	33%
Wall Finishes	2000	0.27	3%	0%
Totals	**1932**	**0.45**	**100%**	**28%**

Educational Sufficiency

Percent Open Plan
0%

Space Type	Deficiency
	-
Administrative	
Dining	57 SF
Fine Arts	1006 SF
General Classroom	
Gymnasium / Auditorium	2448 SF
Health Services	328 SF
Kitchen	
Library/Media Center	459 SF
Maintenance / Janitorial Space	69 SF
Pupil Services	
Science	
Storage (Non-Classroom)	
Technology and Computer Science	1055 SF
Workspace/Lounge	

MDCI

[redacted] - Facility Assessment Overview

Facility Data

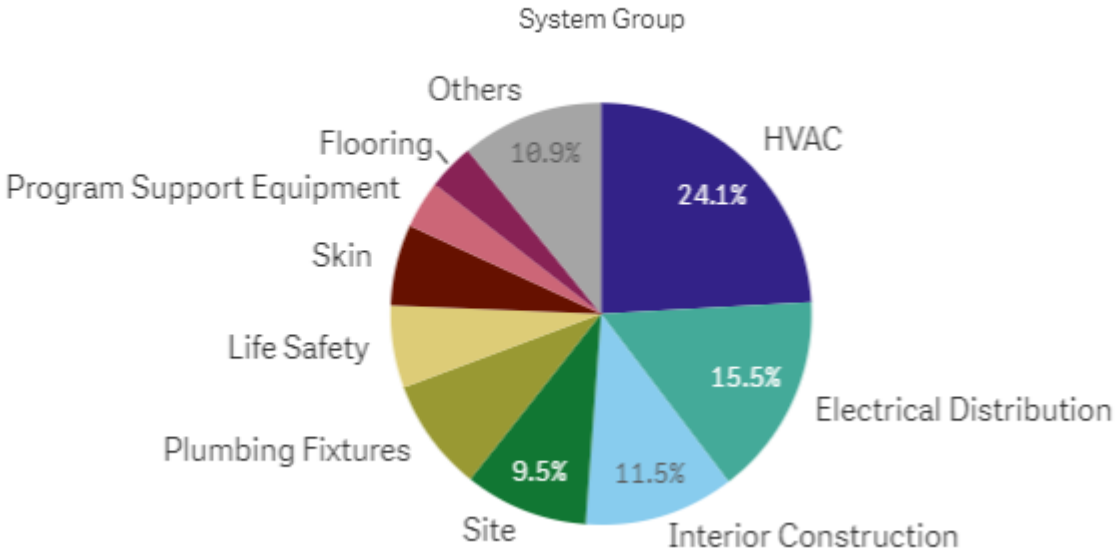
Address	[redacted]
Local Education Agency	[redacted]
School Type	Middle School
Stories	2
Total SF	[redacted]
Year Built	1992
Last Major Renovation	0
GPS	[redacted]
Assessed Date	2021-01-10
FCI*	**38%** [redacted]
[redacted]	[redacted]
Average Lifespan Gain/Loss	**52%** [redacted]

* *Range from 0.00 - 1.00. Lower scores indicate better condition.*

Note: The lower FCI and MDCI Metrics the better condition

Facility Condition

FCI Contribution



System Groups

System Group	Min Year in Service	FCI	Percent FCI Contribution	Avg Lifespan Gain/Loss
Ceilings	1992	0.71	3%	14%
Conveyances	1992	0.57	0%	40%
Electrical Distribution	1992	0.37	16%	20%
Flooring	1992	0.52	4%	3%
HVAC	1992	0.66	24%	34%
Interior Construction	1992	0.33	12%	0%
Interior Doors and Hardware	1992	0.52	2%	0%
Life Safety	1992	0.52	6%	65%
Plumbing Fixtures	1992	0.52	9%	0%
Program Support Equipment	1992	0.08	4%	59%
Relocatables	2005	0.44	3%	40%
Roofs	2010	0.09	1%	25%
Site	1992	0.49	9%	73%
Skin	1992	0.43	6%	8%
Structural	1992	0.08	1%	2%
Wall Finishes	1992	0.58	1%	16%
Totals	**1992**	**0.37**	**100%**	**28%**

Educational Sufficiency

Percent Open Plan

0%

Space Type	Deficiency
Administrative	
Cafeteria / Auditorium	
Fine Arts	
General Classroom	1085 SF
Gymnasium	
Health Services	
Kitchen	
Library/Media Center	
Locker Room	-
Maintenance / Janitorial Space	40 SF
Pupil Services	
Science	
Storage (Non-Classroom)	
Technology and Computer Science	
Workspace/Lounge	

System Detail

System Name	Year in Service	Expected Life	Remaining Life	Quantity	Unit of Measure	Total Cost	Percent Degraded	Lifespan Gain/Loss
Aluminum-Framed Fully-Glazed	2004	40	23	71	Each	$ 92,300	18.1%	0%
Asphalt Pavement - Vehicular	2004	25	8	52,000	SF	$ 338,000	46.2%	0%
Basement Wall	1932	100	44	13,843	SF	$ 456,819	31.4%	33%
Built-Up	2004	20	3	27,000	SF	$ 378,000	72.3%	0%
Carpet	2004	12	5	3,549	SF	$ 26,618	34.0%	83%
Casework/Cabinetry - Premium Quality	2004	22	5	142	Each	$ 71,000	59.7%	0%
Ceramic Tile	2004	40	23	10,646	SF	$ 191,628	18.1%	0%
Ceramic Wall Tile	2000	40	19	38,327	SF	$ 689,886	27.6%	0%
Commercial Kitchen Equipment - Cooking	2004	15	8	1	Each	$ 40,000	21.8%	67%
Concrete Block (CMU) Wall	2004	50	19	38,327	SF	$ 766,540	38.4%	-28%
Concrete Cast-in-Place Framing	1932	100	44	65,762	SF	$ 2,630,480	31.4%	33%
Concrete Pavement - Pedestrian	2004	50	33	16,000	SF	$ 128,000	11.6%	0%
Concrete Slab	1932	100	44	27,000	SF	$ 378,000	31.4%	33%
Door	2004	40	13	12	Each	$ 11,400	45.6%	-25%
Even Mix of Package Units & Split Systems	2004	18	5	180	Each	$ 342,000	52.2%	22%
Fire Alarm System	2004	20	3	65,762	SF	$ 197,286	72.3%	0%
Gypsum Board/Plaster	1985	50	19	51,103	SF	$ 178,861	38.4%	10%
Hydraulic Machine/Controller/Cab	2004	25	8	4	Each	$ 100,000	46.2%	0%
Lighting System	2004	20	3	65,762	SF	$ 526,096	72.3%	0%
PK-5 Playground Surfaces - Rubber	2000	20	0	800	SF	$ 16,800	100.0%	5%
Security & Low Voltage Systems - Average	2004	15	11	65,762	SF	$ 263,048	7.1%	87%
Service Door	1932	40	7	2	Each	$ 1,800	68.1%	140%
Shallow - Foundation Wall	1932	100	44	1,013	SF	$ 141,820	31.4%	33%
Sprinkler System	2004	40	23	65,762	SF	$ 328,810	18.1%	0%
Stone	1932	50	19	36,000	SF	$ 2,160,000	38.4%	116%
Supply & Sanitary	1932	40	5	65,762	SF	$ 986,430	76.6%	135%
Suspended Acoustical Tile (ACT)	2001	25	5	58,000	SF	$ 203,000	64.0%	0%
Switchgear/board w/Sub Panels and Generator/UP	1932	40	6	65,762	SF	$ 1,644,050	72.3%	138%
Vinyl Composition Tile (VCT)	2011	20	5	56,781	SF	$ 283,905	56.3%	-25%
Window	2004	30	13	6,800	SF	$ 408,000	32.1%	0%
Wood Solid-Core	1989	40	8	135	Each	$ 202,500	64.0%	0%

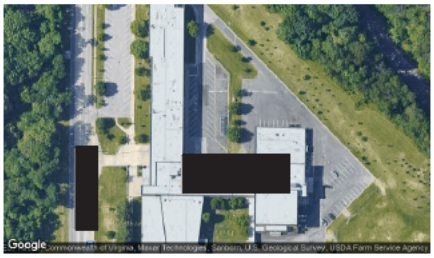
Sufficiency Detail

Space Type	Total Square Feet of Space Type	Total Square Feet Over/Under Minimum
Administrative	2,423.00	-1,677.57
Dining	2,920.00	57.16
Fine Arts	1,376.00	1,005.73
General Classroom	20,418.00	-8,466.00
Gymnasium / Auditorium	3,705.00	2,447.69
Health Services	172.00	328.00
Kitchen	1,102.00	0.00
Library/Media Center	1,327.00	459.30
Maintenance / Janitorial Space	94.00	68.50
Pupil Services	467.00	-347.00
Science	1,001.00	-57.00
Storage (Non-Classroom)	1,076.00	0.00
Technology and Computer Science	731.00	1,055.30
Workspace/Lounge	864.00	-714.00
Total	38,438.00	-5,839.89

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	4
Total SF	[redacted]
Year Built	1958
Last Major Renovation	2013
GPS	[redacted]
Assessed Date	2020-10-27
FCI	0.45
MDCI	



Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] was originally constructed in 1958 and renovated in 2013.

MAJOR RENOVATION DATES:

Ages of the major building systems vary. Major building system ages are listed below:

• Building façade is mostly original

• Roofing system components replaced circa 2005

• HVAC system components replaced circa 2015

• Electrical system components replaced circa 1985

• Plumbing system components are mostly original

• Life Safety Systems had renovations circa 2005

• Interior finishes had renovations circa 2005

• Site pavement finishes had renovations circa1995

HIGH-LEVEL RECOMMENDATIONS:

Based on the age and observed conditions of the facility, the following major building systems sow near-term lifecycle considerations:

• Replacement / Renovations of the Roofing System

• Replacement / Renovations of the HVAC System components

• Replacement / Renovations of the Interior Finish components

SUFFICIENCY ANALYSIS:

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

• There are no students in grades 3 or below in relocatables.

Obsolete Test Data

Demographics

Current Staff/Students	[redacted]													TOTAL
Total FTE Students by Grade											150	126	121	85	**482**
Total FTE Teachers (non-administrative) by Grade															**0**

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment		163	327	394	482		47.8	5,027

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs [1]

	[redacted]													TOTAL
Students														**0**
Teachers														**0**

Buildings and Relocatable Classrooms [2]

	Construction/Installation Year	Square Footage	Comments
Main building	1958	[redacted]	
[redacted]	1969	12908	8 active classrooms

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2013	8	[redacted] GSF
Conveyances	Dumbwaiter	Electric, up to 5 Stories	1958	0	4 EA
HVAC	Boiler(s) - Gas		2011	21	9,846 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Air Sourced		2011	16	397 Ton
HVAC	Package Units (RTUs)		2002	5	31 Ton
HVAC	Split Systems		2004	5	32 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	2011	15	[redacted] GSF
Electrical Distribution	Main Distr bution Panel w/Sub Panels and Generator/UPS - Medium Density		1980	5	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2011	11	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1958	7	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	2011	31	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, Office (per SF)	2011	11	[redacted] GSF
Conveyances	Traction Machine/Controller/Cab		2011	16	4 STOP
Program Support Equipment	Masonry Bearing Walls		1958	20	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Cooking		2011	6	1 LS
Program Support Equipment	Commercial Kitchen Equipment - Cooking		2000	8	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2000	5	427 LF

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2013	15	670 LF
Site					
Relocatables	G2-09 - Modular Building		2013	-7	1 -
Site	Concrete Pavement	Parking Lot	1990	20	8,000 SF
Site	Asphalt Pavement	Parking Lot	2000	8	84,500 SF
Site	Lawn Area w/Plantings and Trees		2000	8	42,700 SF
Building Exterior					
Skin	Brick		1958	20	55,860 SF
Skin	Metal		1995	15	9,100 SF
Skin	Window	Metal-Frame	2011	21	52,900 SF
Skin	Door	Exterior Door	2000	20	18 EA
Skin	Service Door		2011	20	35 EA
Skin	Overhead Door	Insulated Roll-up Door, 144 SF	1958	5	1 EA
Roofs	Modified Bitumen		2013	10	94,500 SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1958	20	94,500 LF
Structural	Concrete Slab		1958	20	94,500 SF
Building Interior					
Interior Construction	Gypsum Board/Plaster	Interior Wall	2000	20	75,000 SF
Interior Construction	Concrete Block (CMU)		1958	20	75,000 SF
Flooring	Quarry Tile		1957	15	3,500 SF
Flooring	Ceramic Tile		2000	20	6,000 SF
Flooring	Vinyl Composition Tile (VCT)		2000	1	178,858 SF
Flooring	Terrazzo		1957	15	15,000 SF
Flooring	Carpet	Standard Commercial, Medium Traffic	2011	3	5,000 SF
Flooring	Wood Sports Floor		2000	10	5,000 SF
Wall Finishes	Ceramic Wall Tile	Interior Wall Finish	1958	10	50,000 SF
Ceilings	Splined Acoustical Tile (ACT)		2000	5	130,000 SF
Ceilings	Splined Acoustical Tile (ACT)		1958	3	20,000 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2011	41	113,358 SF
Interior Doors and Hardware	Steel	Interior Door	2011	31	12 EA
Interior Doors and Hardware	Wood Solid-Core	Interior Door	2000	8	128 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	Yes
Does the school have an AHERA report?	Yes
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	No
How many parking spaces exist at the site, total?	106
How many standard ADA parking spaces exist at the site?	7

How many van-accessible ADA parking spaces exist at the site?	2
Is there at least one hard surface court present (e.g. basketball court or similar)?	No
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	Yes

Room Inventory 165

	Room #	SF	Type	ID
General Classroom (68)		**59,588**		
010A Classroom	010A	550	General Classroom	380
011A Classroom	011A	486	General Classroom	378
011B Classroom	011B	569	General Classroom	376
017B Classroom	017B	730	General Classroom	261
02A Classroom	02A	557	General Classroom	373
02B Classroom	02B	550	General Classroom	801
03B Classroom	03B	654	General Classroom	262
04A Classroom	04A	614	General Classroom	374
05B Classroom	05B	620	General Classroom	375
06 Classroom	06	770	General Classroom	377
09A Classroom	09A	550	General Classroom	382
09B Classroom	09B	524	General Classroom	381
101 Classroom	101	788	General Classroom	255
102 Classroom	102	767	General Classroom	364
106 Classroom	106	1,046	General Classroom	813
10B Classroom	10B	508	General Classroom	379
110 Classroom	110	740	General Classroom	369
111 Classroom	111	1,005	General Classroom	368
112 Classroom	112	1,154	General Classroom	367
113 Classroom	113	830	General Classroom	366
115 Classroom	115	725	General Classroom	365
119 Classroom	119	802	General Classroom	363
120 Classroom	120	788	General Classroom	362
121 Classroom	121	837	General Classroom	258
123 Classroom	123	895	General Classroom	371
126 Classroom	126	791	General Classroom	370
132 Classroom	132	740	General Classroom	361
133 Classroom	133	746	General Classroom	360
Classroom	200	712	General Classroom	243
201 Classroom	201	773	General Classroom	349
202 Classroom	202	773	General Classroom	352
203 Classroom	203	767	General Classroom	353
Classroom	211.1	520	General Classroom	305
Classroom	211.2	510	General Classroom	830
212 Classroom	212	808	General Classroom	355
215 Classroom	215	796	General Classroom	354
216 Classroom	216	808	General Classroom	351
217 Classroom	217	833	General Classroom	350
219 Classroom	219	802	General Classroom	348

Obsolete Test Data

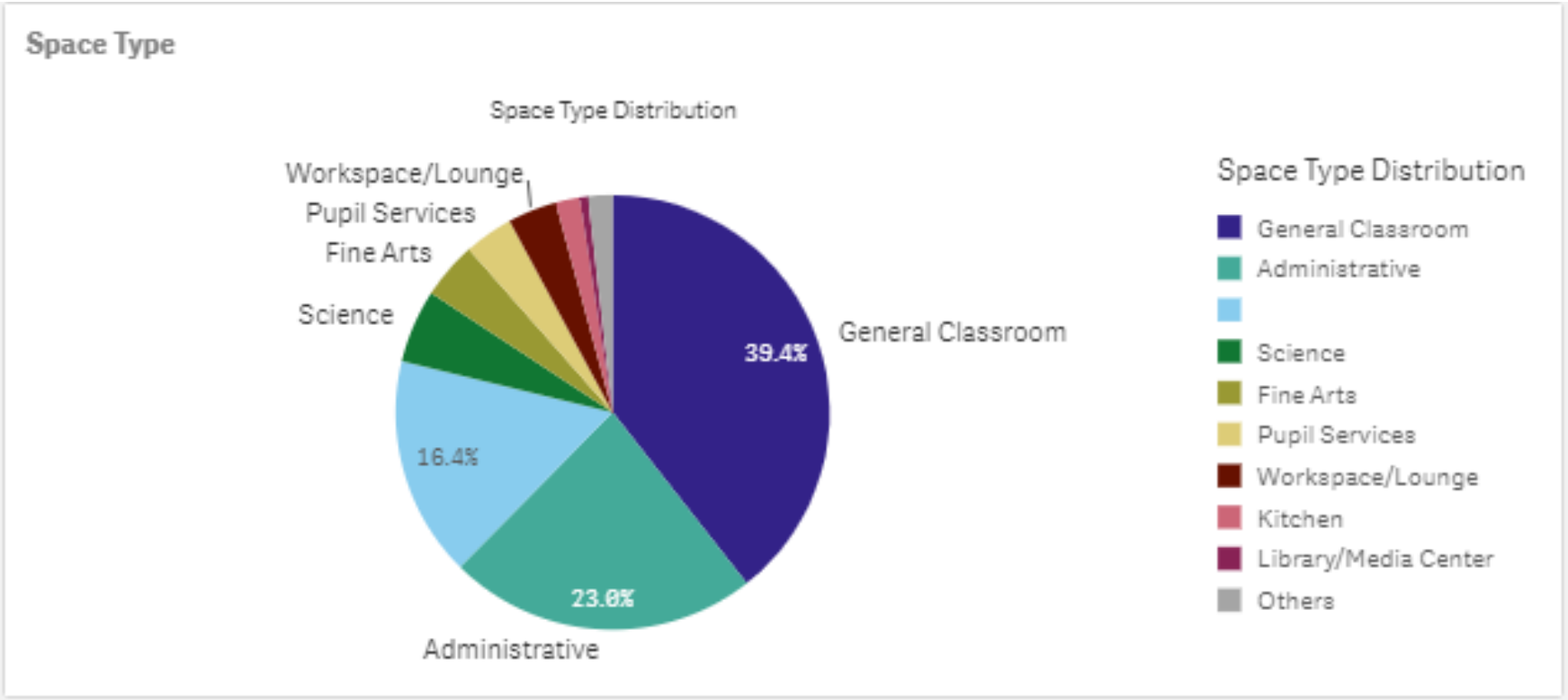
	Room #	SF	Type	ID
220 Classroom	220	788	General Classroom	347
221	221	837	General Classroom	306
224	224.3	113	General Classroom	359
228 Classroom	228	790	General Classroom	358
229 Classroom	229	803	General Classroom	357
Classroom	230	1,085	General Classroom	346
230B Classroom	230B	683	General Classroom	356
300 Classroom	300	776	General Classroom	345
303 Classroom	303	788	General Classroom	335
304 Classroom	304	837	General Classroom	337
306 Classroom	306	1,182	General Classroom	340
307 Classroom	307	788	General Classroom	341
308 Classroom	308	788	General Classroom	342
309 Classroom	309	780	General Classroom	343
313 Classroom	313	790	General Classroom	339
315 Classroom B	315	375	General Classroom	336
Classroom 315 A	315	365	General Classroom	832
318 Classroom	318	794	General Classroom	289
Classroom-(Modular building)	5	828	General Classroom	842
Classroom R7 (Modular building)	7	380	General Classroom	838
Classroom (Modular building)	7.1	440	General Classroom	839
Classroom R9 (Modular building)	9	816	General Classroom	837
314 Classroom		803	General Classroom	338
316 Classroom		792	General Classroom	334
317 Classroom		781	General Classroom	344
Auditorium Auditorium		10,532	General Classroom	270
R-2 (Modular Building)		818	General Classroom	820
R-4 Classroom (Modular Building)		818	General Classroom	819
R-6 (Modular Building)		780	General Classroom	818
Administrative (38)		**15,739**		
Administrative office (Modular building)	000	128	Administrative	840
Administrative office 2 -Modular building	000	140	Administrative	841
Administrative office 3 (Modular building)	000	419	Administrative	844
Administrative office 4 (modular building)	000	389	Administrative	845
01 Office	01	1,102	Administrative	372
011B Office x 117B	011B	136	Administrative	806
03A Office	03A	450	Administrative	800
08A Office	08A	444	Administrative	267
08B+C Office	08B+C	253	Administrative	265
08D Office	08D	683	Administrative	266
100 Office	100	1,109	Administrative	252
100A Principal	100A	201	Administrative	251
100C Asst Prin	100C	191	Administrative	254
105 Office	105	307	Administrative	257
117A Office	117A	125	Administrative	798
117D Office	117D	132	Administrative	808
117E Office	117E	132	Administrative	809
12 Office	12	285	Administrative	263
124 Office	124	632	Administrative	259
128 A Office	128	1,198	Administrative	250
204 Office	204	777	Administrative	245

	Room #	SF	Type	ID
Office	207.2	230	Administrative	828
Office	207.3	95	Administrative	829
214 Office	214	821	Administrative	244
0ffice	224.0	450	Administrative	824
Office	224.2	113	Administrative	822
Office	224.4	108	Administrative	823
225 office	225	395	Administrative	291
Office	225.1	393	Administrative	821
226 Office	226	780	Administrative	248
227A Office	227A	208	Administrative	247
227F Office	227F	250	Administrative	246
301 Office	301	503	Administrative	241
302A Office	302	380	Administrative	240
302B Office	302	413	Administrative	242
8C Office		187	Administrative	264
Office x 110		385	Administrative	810
R-10 Office		795	Administrative	815
Storage (Non-Classroom) (21)		**7,048**		
Stair storage	000	391	Storage (Non-Classroom)	834
Storage 313	000	244	Storage (Non-Classroom)	833
03 Storage	03	210	Storage (Non-Classroom)	796
05 Storage	05	127	Storage (Non-Classroom)	795
07 Storage	07	277	Storage (Non-Classroom)	797
07 Storage	07	540	Storage (Non-Classroom)	803
08 Storage	08	580	Storage (Non-Classroom)	802
100D Storage	100D	194	Storage (Non-Classroom)	253
103A Chemical Storage	103A	373	Storage (Non-Classroom)	256
107 Storage	107	141	Storage (Non-Classroom)	812
108 Storage	108	236	Storage (Non-Classroom)	811
118 Bookroom	118	405	Storage (Non-Classroom)	442
124 Storage	124	470	Storage (Non-Classroom)	814
130 Storage	130	413	Storage (Non-Classroom)	805
131 Storage	131	209	Storage (Non-Classroom)	804
136 Security Storage	136	362	Storage (Non-Classroom)	249
Book storage	218	675	Storage (Non-Classroom)	831
Storage	231	253	Storage (Non-Classroom)	825
Storage	231.1	101	Storage (Non-Classroom)	826
Tech storage	232	687	Storage (Non-Classroom)	439
Storage (Modular Building)		160	Storage (Non-Classroom)	817
Technology and Computer Science (3)		**3,768**		
07 Computer	07	1,523	Technology and Computer Science	799
109 Computer	109	1,440	Technology and Computer Science	428
127 Computer	127	805	Technology and Computer Science	429
Pupil Services (6)		**1,166**		
117 Counselor	117	410	Pupil Services	411
Counselor	117A	140	Pupil Services	23062
Counselor	117B	187	Pupil Services	807
Counselor	117C	147	Pupil Services	23059
Counselor	117D	147	Pupil Services	23060
Counselor	117E	135	Pupil Services	23061

	Room #	SF	Type	ID
Gymnasium (1)		**6,251**		
227 Gym	227	6,251	Gymnasium	385
Health Services (1)		**947**		
116 Clinic	116	947	Health Services	392
Workspace/Lounge (6)		**2,357**		
124E Lounge	124E	153	Workspace/Lounge	293
135A Workroom	135A	99	Workspace/Lounge	292
Workspace	207.1	365	Workspace/Lounge	827
233 Workroom	233	679	Workspace/Lounge	290
Lounge R8 (Modular building)	8	801	Workspace/Lounge	836
Teachers Lounge (Modular Building)		260	Workspace/Lounge	816
Food - Cafeteria (1)		**7,239**		
124 Student Dining	124	7,239	Food - Cafeteria	273
Food - Kitchen (3)		**2,264**		
124A Kitchen Serving	124A	519	Food - Kitchen	400
124B Kitchen Serving	124B	1,457	Food - Kitchen	401
STOR 02 Food Svc		288	Food - Kitchen	402
Fine Arts (7)		**7,623**		
107A Darkroom	107A	36	Fine Arts	408
205 Art	205	1,151	Fine Arts	303
206 Art	206	1,170	Fine Arts	304
207 Instrument/Band	207	1,389	Fine Arts	299
Dance studio	208	1,405	Fine Arts	300
209 Vocal	209	1,232	Fine Arts	302
Dance	210	1,240	Fine Arts	301
Science (9)		**8,054**		
15 Science	015	1,075	Science	420
016 Science	016	1,100	Science	418
02B Science	02B	597	Science	417
03B Science	03B	615	Science	419
04B Science	04B	540	Science	421
05A Science	05A	495	Science	422
103 Science	103	1,150	Science	415
104 Science	104	1,170	Science	416
223 Laboratory	223	1,312	Science	440
Library/Media Center (1)		**1,978**		
135 Library	135	1,978	Library/Media Center	441

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Ser...	Dining_Sp...
Totals			**482**	**124022**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	482	22298	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	482	0	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	482	15739	-	-	-13902	-	-	-	-	-	-
Building 1 - [redacted]	Dining	[redacted]	482	7239	-	-	-	-	-	-	-	-	1196
Building 1 - [redacted]	Fine Arts	[redacted]	482	7623	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	482	48106	-36056	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	482	6251	-	1648.2	-	-	-	-	-	-	-
Building 1 - [redacted]	Health Services	[redacted]	482	947	-	-	-	-	-	-	-	-447	-
Building 1 - [redacted]	Kitchen	[redacted]	482	2264	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Library/Media Center	[redacted]	482	1978	-	-	-	3083	-	-	-	-	-
Building 1 - [redacted]	Pupil Services	[redacted]	482	1166	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Science	[redacted]	482	8054	-	-	-	-	-	-6126	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	482	2357	-	-	-	-	-2207	-	-	-	-

[redacted] - Facility Assessment

Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	2
Total SF	[redacted]
Year Built	1971
Last Major Renovation	2008
GPS	[redacted]
Assessed Date	2020-10-26
FCI	0.42
MDCI	

Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE:

The [redacted] was originally constructed in 1971.

MAJOR RENOVATION DATES:

Ages of the major building systems vary. Major building system ages are listed below:

• Building façade is mostly original

• Roofing system components replaced circa 1995

• HVAC system components replaced circa 2005

• Electrical system components replaced circa 2005

• Plumbing system components are mostly original to building construction.

• Life Safety Systems are mostly original, some renovations circa 2015

• Interior finishes are mostly original

• Site pavement finishes are mostly original

HIGH-LEVEL RECOMMENDATIONS:

Based on the age and observed conditions of the facility, the following major building systems show near-term lifecycle considerations:

• Replacement of the HVAC System components

• Replacement of the Plumbing System components

• Replacement of the Life Safety components

• Replacement of the Interior Finish components

• Replacement of the Pavement / Site components

SUFFICIENCY ANALYSIS:

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

Demographics

Current Staff/Students	[redacted]	TOTAL
Total FTE Students by Grade	127 106 119	352
Total FTE Teachers (non-administrative) by Grade		0

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment	244	237	250	253	352		10.7	649

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs [1]

	[redacted]	TOTAL
Students		0
Teachers		0

Buildings and Relocatable Classrooms [1]

	Construction/Installation Year	Square Footage	Comments
Main building	1971	[redacted]	Masonry Bearing Walls

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Conveyance					
Elevators	Add Elevator/Lift to accommodate ADA			0	2 STOP
	Window	Aluminum Double-Glazed, 16-25 SF	1971	3	37 EA
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2018	13	[redacted] GSF
HVAC	Boiler(s) - Gas		2008	18	5,436 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Air Sourced		2008	13	207 Ton
HVAC	Split Systems		2003	3	8 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	1971	3	[redacted] GSF
Electrical Distribution	Switchgear/board w/Sub Panels and Generator/UPS - Medium Density		2008	28	[redacted] GSF
Electrical Distribution	Interior Lighting System	Full Upgrade, Medium Density & Standard Fixtures	2008	8	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1971	3	[redacted] GSF
Life Safety	Retrofit Fire Suppression System			3	[redacted] SF
Life Safety	Sprinkler System	Full Retrofit, School (per SF)	1971	4	[redacted] GSF
Life Safety	Fire Alarm System	Full System Upgrade, Advanced Addressable	2012	12	[redacted] GSF
Program Support Equipment	Masonry Bearing Walls		1971	26	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Warming Only		2012	7	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2019	19	465 LF
Site					
Site	Concrete Pavement	Parking Lot	1971	10	5,044 SF

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Site	Parking Lots	Pavement, Asphalt	2014	19	42,959 SF
Site	Asphalt Pavement	Parking Lot	1998	3	2,800 SF
Site	Sports Courts & Play Surfaces		2018	13	2,500 SF
Site	Sports Courts & Play Surfaces		2000	3	1,873 SF
Site	Lawn Area w/Plantings and Trees		2000	15	36,780 SF
Building Exterior					
Skin	Brick Wall		1971	15	43,960 SF
Skin	Door	Exterior Door	2001	21	22 EA
Skin	Exterior Door	Steel, Standard	2001	21	27 EA
Roofs	Built-Up		1991	3	55,220 SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1971	26	1,800 LF
Structural	Concrete Slab		1971	26	55,220 SF
Building Interior					
Interior Construction	Concrete Block (CMU)		1971	20	171,808 SF
Interior Construction	Gypsum Board/Plaster	Interior Wall	2001	31	2,500 SF
Flooring	Ceramic Tile		1971	15	5,000 SF
Flooring	Vinyl Composition Tile (VCT)		2006	8	33,040 SF
Flooring	Quarry Tile		1971	20	28,910 SF
Flooring	Wood Sports Floor		2001	11	2,600 SF
Wall Finishes	Ceramic Wall Tile	Interior Wall Finish	1971	15	34,365 SF
Ceilings	Suspended Ceilings	Acoustical Tile (ACT)	2003	8	53,690 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2001	31	1,500 SF
Interior Doors and Hardware	Wood Solid-Core	Solid Core, Painted/Stained, Interior Door	2001	21	210 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	No
Does the school have an AHERA report?	No
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	No
How many parking spaces exist at the site, total?	83
How many standard ADA parking spaces exist at the site?	3
How many van-accessible ADA parking spaces exist at the site?	0
Is there at least one hard surface court present (e.g. basketball court or similar)?	No
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	No

Room Inventory 73

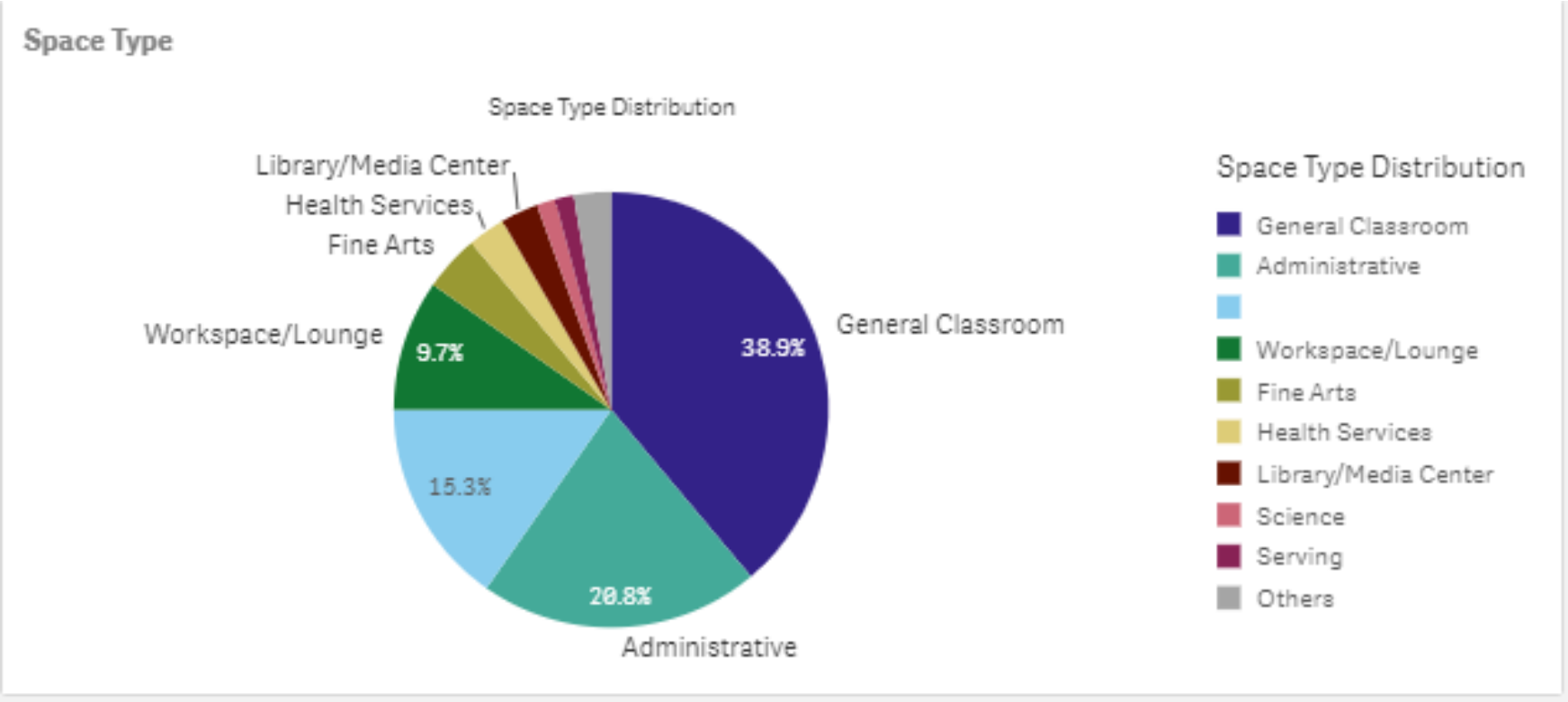
Obsolete Test Data

	Room #	SF	Type	ID
Administrative (15)		**3,089**		
Office	100.1	600	Administrative	620
Office	100.2	145	Administrative	622
Conference room	100.7	255	Administrative	618
Office	100.9	265	Administrative	617
Office	103	72	Administrative	625
Gym office	107.6	96	Administrative	630
Office	108	190	Administrative	611
Office	119	194	Administrative	602
Office	122	174	Administrative	599
Office	137	103	Administrative	612
Office	213	240	Administrative	553
Conference room	218	179	Administrative	580
Office	230	207	Administrative	570
Office	232	196	Administrative	569
Conference	27	173	Administrative	573
General Classroom (28)		**23,921**		
Classroom	109	890	General Classroom	610
Classroom	110	864	General Classroom	609
Classroom	112	846	General Classroom	607
Classroom	113	882	General Classroom	606
Classroom	120	855	General Classroom	601
Classroom	121	866	General Classroom	600
Classroom	123	860	General Classroom	598
Classroom	124	890	General Classroom	596
Classroom	126	1,392	General Classroom	593
Classroom	127	1,253	General Classroom	592
Classroom	128	1,246	General Classroom	590
Resource	200	159	General Classroom	566
Classroom	202	899	General Classroom	564
Classroom	207	907	General Classroom	560
Classroom	208	865	General Classroom	559
Classroom	209	176	General Classroom	558
Classroom	210	874	General Classroom	557
Classroom	211	902	General Classroom	556
Classroom	213	500	General Classroom	554
Classroom	216	878	General Classroom	582
Classroom	217	857	General Classroom	581
Classroom	219	852	General Classroom	579
Classroom	220	873	General Classroom	578
Classroom	225	852	General Classroom	575
Classroom	226	858	General Classroom	574
Classroom	228	863	General Classroom	572
Classroom	229	857	General Classroom	571
Classroom	233	905	General Classroom	568
Storage (Non-Classroom) (10)		**2,110**		
Kitchen storage	103.2	368	Storage (Non-Classroom)	626
Administrative storage	114	193	Storage (Non-Classroom)	605
Book storage	125	200	Storage (Non-Classroom)	597
Book storage	127.1	159	Storage (Non-Classroom)	594
Book storage	128.1	160	Storage (Non-Classroom)	595

	Room #	SF	Type	ID
Bookroom	204	250	Storage (Non-Classroom)	562
Bookroom	212	191	Storage (Non-Classroom)	555
Bookroom	215	191	Storage (Non-Classroom)	583
Book room	221	191	Storage (Non-Classroom)	577
Bookroom	224	207	Storage (Non-Classroom)	576
Workspace/Lounge (7)		**1,517**		
Workroom	100.3	148	Workspace/Lounge	621
Lounge	100.4	78	Workspace/Lounge	619
Lounge	100.8	175	Workspace/Lounge	616
Print lounge	116	239	Workspace/Lounge	604
Lounge	117	491	Workspace/Lounge	603
Workspace	203	196	Workspace/Lounge	563
Work lounge	206	190	Workspace/Lounge	561
Technology and Computer Science (1)		**880**		
201 Computer lab	201	880	Technology and Computer Science	565
Science (2)		**778**		
Lab	138	778	Science	613
(234) Lab	234	0	Science	567
Fine Arts (3)		**1,725**		
Music studio	111	174	Fine Arts	608
Music room	130	771	Fine Arts	588
Art room	131	780	Fine Arts	584
Library/Media Center (2)		**1,777**		
Library	000	1,436	Library/Media Center	585
Periodicals	133	341	Library/Media Center	586
Health Services (2)		**291**		
Clinic	137.1	147	Health Services	614
Clinic	137.2	144	Health Services	615
Food - Cafeteria (1)		**3,600**		
Cafeteria	000	3,600	Food - Cafeteria	623
Food - Kitchen (1)		**1,562**		
Kitchen	000	1,562	Food - Kitchen	624
Gymnasium (1)		**3,200**		
Gym	000	3,200	Gymnasium	629

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Serv...	Dining_Sp...
Totals			**0**	**44450**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	0	2990	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	0	0	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	0	3089	-	-	-2939	-	-	-	-	-	-
Building 1 - [redacted]	Fine Arts	[redacted]	0	1725	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	0	23921	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	0	3200	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Health Services	[redacted]	0	291	-	-	-	-	-	-	-	209	-
Building 1 - [redacted]	Kitchen	[redacted]	0	1562	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Library/Media Center	[redacted]	0	1777	-	-	-	-1777	-	-	-	-	-
Building 1 - [redacted]	Science	[redacted]	0	778	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Serving	[redacted]	0	3600	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	0	1517	-	-	-	-	-1367	-	-	-	-

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	1
Total SF	[redacted]
Year Built	1975
Last Major Renovation	2006
GPS	[redacted]
Assessed Date	2020-10-27
FCI	0.42
MDCI	

Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] school was originally constructed in 1975 and partially renovated in 2006.

MAJOR RENOVATION DATES:

There have been no major system-wide renovations since the facility was originally constructed. Architectural finish and limited MEPF component replacements have been performed on an as-needed basis.

Ages of the major building systems vary. Major building system ages are listed below:

• Building façade components were updated circa 2015

• Roofing system components were replaced circa 2005

• HVAC system components are replaced circa 2005

• Electrical system components had renovations circa 1995

• Plumbing system components had renovations circa 1995

• Life Safety Systems had renovations circa 2005

• Interior finishes had renovations circa 2005

• Site pavement finishes had renovations circa 2005

HIGH-LEVEL RECOMMENDATIONS:

Due to the relatively recent comprehensive renovations, no major system-level replacements or rehabilitations are recommended in the near term.

Limited architectural and MEPF component replacements are anticipated on an as-needed basis.

SUFFICIENCY ANALYSIS:

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

• There are no students in grades 3 or below in relocatables.

Demographics

Obsolete Test Data

Current Staff/Students	[redacted]													TOTAL
Total FTE Students by Grade	34	76	79	96	87	80	98							550
Total FTE Teachers (non-administrative) by Grade													72	72

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment	478	505	514	551	550		3.6	680

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs 1

	[redacted]											12	TOTAL
Students													0
Teachers													0

Buildings and Relocatable Classrooms 3

	Construction/Installation Year	Square Footage	Comments
Main building	1975	[redacted]	Masonry Bearing Walls
Trailer 1 (no manufacturer)	1969		wood siding is in need of re
Trailer 2 (no manufacturer)	1969		wood siding is in need of re

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2010	5	[redacted] GSF
HVAC	Boiler(s) - Gas		1995	5	6,153 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Air Sourced		2010	15	200 Ton
HVAC	Even Mix of Package Units & Split Systems		2008	6	40 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	1998	3	[redacted] GSF
Electrical Distribution	Main Distr bution Panel w/Sub Panels and Generator/UPS - Medium Density		1998	18	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2005	5	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1998	18	[redacted] GSF
Life Safety	Retrofit Fire Suppression System		1975	0	[redacted] SF
Life Safety	Fire Alarm System	Full Upgrade/Install, Multi-Family (per SF)	2010	10	[redacted] GSF
Program Support Equipment	Structural Framing	Masonry (CMU) Bearing Walls	1975	30	[redacted] SF
Program Support Equipment	Steel Columns & Beams Framing		1975	30	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Warming Only		2010	10	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2010	10	200 LF
Site					
Site	Concrete Pavement	Parking Lot	2010	40	59,986 SF
Site	Concrete Pavement	Parking Lot	1975	5	2,000 SF

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Site	Asphalt Pavement	Parking Lot	1975	24	55,000 SF
Site	Sports Courts & Play Surfaces		2015	10	4,200 SF
Site	Sports Courts & Play Surfaces		2015	10	4,200 SF
Site	Sports Courts & Play Surfaces		2010	2	82,000 SF
Site	Lawn Area w/Plantings and Trees		1975	5	43,560 SF
Building Exterior					
Skin	Metal		1975	10	3,500 SF
Skin	Brick		1975	5	14,000 SF
Skin	Window	Metal-Frame	2010	20	750 SF
Skin	Door	Exterior Door	2000	20	18 EA
Skin	Door	Fully Glazed, Exterior Door	2015	25	36 EA
Roofs	Modified Bitumen		2010	10	62,824 SF
Roofs	Modified Bitumen		2010	10	5,190 SF
Roofs	Built-Up		1998	3	56,727 SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1975	30	1,820 LF
Structural	Concrete Slab		1975	30	61,917 SF
Building Interior					
Interior Construction	Concrete Block (CMU)		1995	25	81,103 SF
Flooring	Quarry Tile		1998	28	642 SF
Flooring	Ceramic Tile		1975	20	10,000 SF
Flooring	Vinyl Composition Tile (VCT)		2010	8	40,182 SF
Flooring	Carpet	Standard Commercial, Medium Traffic	2018	8	12,000 SF
Ceilings	Splined Acoustical Tile (ACT)		2005	10	5,000 SF
Ceilings	Suspended Acoustical Tile (ACT)		2005	10	50,907 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2010	40	6,917 SF
Interior Doors and Hardware	Wood Solid-Core	Solid Core, Painted/Stained, Interior Door	2010	30	127 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	No
Does the school have an AHERA report?	No
Are the any students in grades [redacted] or below in the modulars?	Yes
Are there separate bus, cars, students drop off?	Yes
How many parking spaces exist at the site, total?	88
How many standard ADA parking spaces exist at the site?	4
How many van-accessible ADA parking spaces exist at the site?	0
Is there at least one hard surface court present (e.g. basketball court or similar)?	Yes
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes

Is there at least one play field (soccer, baseball, or football) present?

Obsolete Test Data

Yes

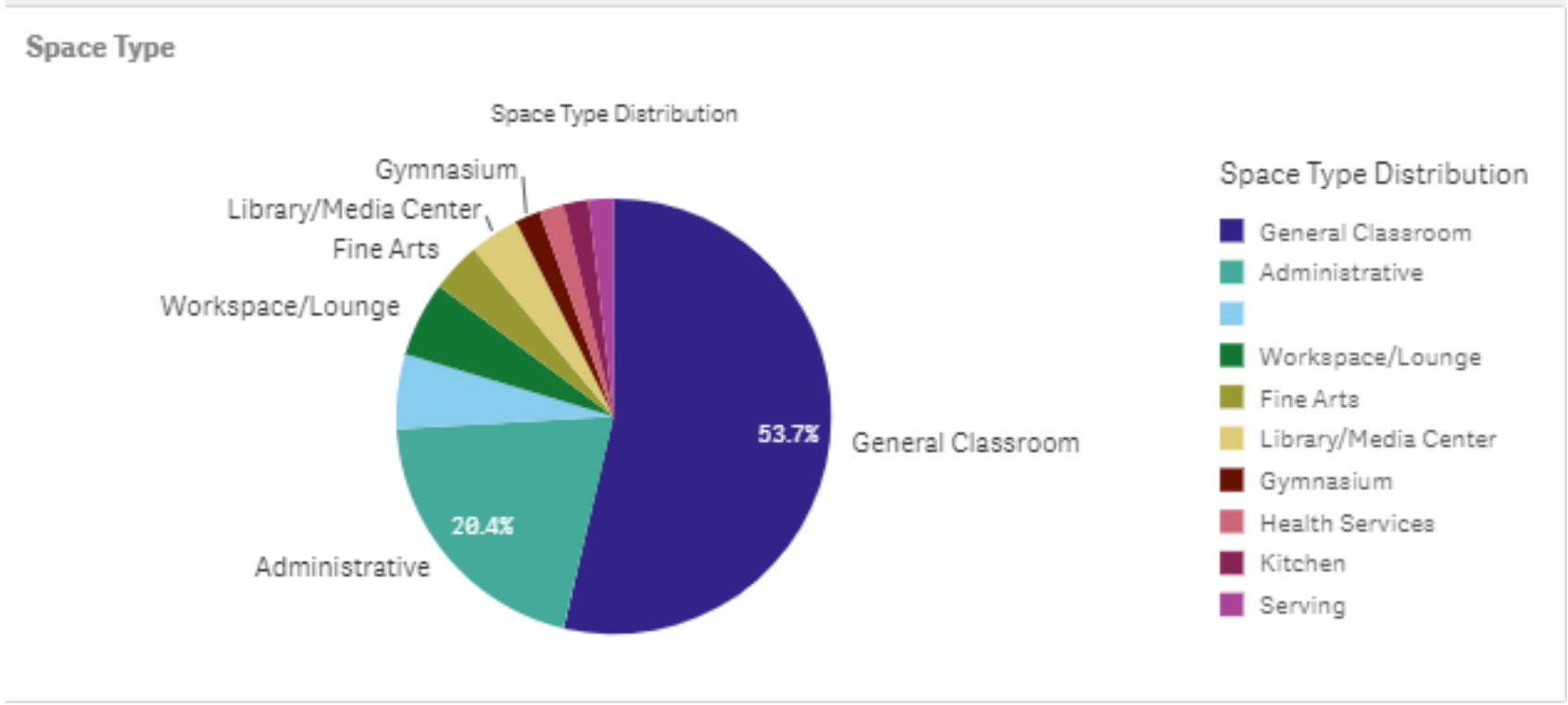
Room Inventory 55

	Room #	SF	Type	ID
General Classroom (29)		**24,579**		
General Classroom	112	1,115	General Classroom	960
General Classroom	113	819	General Classroom	961
General Classroom	114	744	General Classroom	962
General Classroom	116	906	General Classroom	963
General Classroom	117	755	General Classroom	964
General Classroom	118	755	General Classroom	965
General Classroom	119	973	General Classroom	966
General Classroom	121	970	General Classroom	967
General Classroom	122	862	General Classroom	948
General Classroom	123	864	General Classroom	949
General Classroom	124	865	General Classroom	951
General Classroom	125	862	General Classroom	947
General Classroom	130	822	General Classroom	943
General Classroom	132	1,160	General Classroom	941
General Classroom	133	770	General Classroom	939
General Classroom	135	619	General Classroom	950
General Classroom	136	675	General Classroom	944
General Classroom	137	778	General Classroom	940
General Education	138	876	General Classroom	925
General Classroom	139	884	General Classroom	927
General Classroom	140	885	General Classroom	926
Special Education	141	750	General Classroom	924
[redacted]	142	877	General Classroom	922
General Classroom	206	772	General Classroom	930
General Classroom	208	920	General Classroom	957
General Classroom	215	857	General Classroom	971
General Classroom	216	883	General Classroom	972
General Classroom	217	782	General Classroom	968
General Classroom	218	779	General Classroom	969
Fine Arts (2)		**2,011**		
Music Room	126	1,170	Fine Arts	946
Art classroom	200	841	Fine Arts	923
Administrative (12)		**1,718**		
Office Main	100	484	Administrative	970
Conference Room	101	278	Administrative	973
Principal Office	102	125	Administrative	975
Assistant Principal	103	89	Administrative	974
Office	104	185	Administrative	976
Office pe	110	112	Administrative	959
Office kitchen	128.1	51	Administrative	952
Office	202	91	Administrative	928
Office	203.1	122	Administrative	954
Office	204	91	Administrative	953
Office speech	205	90	Administrative	929
Media Office	209.1	0	Administrative	932

	Room #	SF	Type	ID
Library/Media Center (2)		**2,343**		
Media	209	2,127	Library/Media Center	931
Media Production	214	216	Library/Media Center	935
Workspace/Lounge (3)		**1,677**		
Lounge	106	765	Workspace/Lounge	956
Lounge	210	354	Workspace/Lounge	934
Workroom	211	558	Workspace/Lounge	933
Storage (Non-Classroom) (2)		**182**		
Storage	212	91	Storage (Non-Classroom)	936
Storage	214	91	Storage (Non-Classroom)	937
Food - Cafeteria (1)		**2,380**		
Cafeteria	129	2,380	Food - Cafeteria	938
Technology and Computer Science (1)		**612**		
Computer lab	134	612	Technology and Computer Science	942
Food - Kitchen (1)		**642**		
Kitchen	128	642	Food - Kitchen	945
Health Services (1)		**378**		
Health Suite	105	378	Health Services	955
Gymnasium (1)		**3,920**		
Gymnasium	109	3,920	Gymnasium	958

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

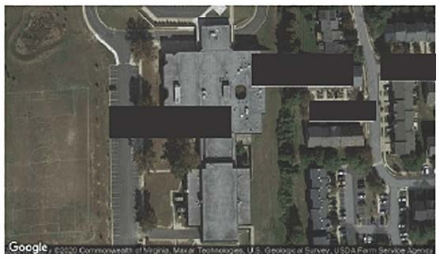
SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Serv...	Dining_Sp...
Totals			**0**	**40442**	-	-	-	-	-	-	-	-	-
Building 1 [redacted]		[redacted]	0	794	-	-	-	-	-	-	-	-	-
Building 1 [redacted]		[redacted]	0	0	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Administrative	[redacted]	0	1718	-	-	-1568	-	-	-	-	-	-
Building 1 [redacted]	Fine Arts	[redacted]	0	2011	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	General Classroom	[redacted]	0	24579	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Gymnasium	[redacted]	0	3920	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Health Services	[redacted]	0	378	-	-	-	-	-	-	-	122	-
Building 1 [redacted]	Kitchen	[redacted]	0	642	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Library/Media Center	[redacted]	0	2343	-	-	-	-2343	-	-	-	-	-
Building 1 [redacted]	Serving	[redacted]	0	2380	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Workspace/Lounge	[redacted]	0	1677	-	-	-	-	-1527	-	-	-	-

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	2
Total SF	[redacted]
Year Built	1971
Last Major Renovation	2005
GPS	[redacted]
Assessed Date	2020-10-26
FCI	0.41
MDCI	



Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] school was originally constructed in 1971 according to data provided by the state and verified with the LEA.

MAJOR RENOVATION DATES:

Ages of the major building systems vary. Major building system ages are listed below:

- Building façade is mostly original
- Roofing system components were replaced circa 2005
- HVAC system components were replaced circa 2005
- Electrical system components are mostly original / renovations circa 2005
- Plumbing system components are mostly original / renovations circa 2005
- Life Safety Systems are mostly original / renovations circa 2005
- Interior finishes had renovations circa 2005
- Site pavement finishes are mostly original

HIGH-LEVEL RECOMMENDATIONS:

Based on the age and observed conditions of the facility, the following major building systems are estimated to have a remaining useful life of five years or less:

- Replacement / Renovations of the Fire Alarm System components

SUFFICIENCY ANALYSIS:

There are major issues regarding the educational sufficiency of this school.

- The schools has lead or lead paint. The school has a lead paint O&M manual.
- The schools has asbestos containing material. The school has an AHERA report.

Demographics

Obsolete Test Data

Current Staff/Students	[redacted]														TOTAL
Total FTE Students by Grade								351	339	318					1008
Total FTE Teachers (non-administrative) by Grade															0

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment	916	912	929	989	1008	0	2.5	1,166

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs 3

		[redacted]													TOTAL
Special Education	Students														0
	Teachers														0
ESOL	Students														0
	Teachers														0
FARMS	Students														0
	Teachers														0

Buildings and Relocatable Classrooms 4

	Construction/Installation Year	Square Footage	Comments
Main building	1971	[redacted]	
Relocatable 1	1995	1200	
Relocatable 2	1995	1200	
Relocatable 3	1995	1200	

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Site					
Relocatables	G9-00 - Other Site Item		2018	0	1 -
Parking Lots	ADA Parking	Designated Stall, Pavement Markings & Signage	2000	0	2 EA
Relocatables	G9-00 - Other Site Item		2018	0	1 -
Relocatables	G9-00 - Other Site Item		2018	0	1 -
Site	Concrete Pavement	Parking Lot	2000	30	15,520 SF
Site	Concrete Pavement	Parking Lot	2000	8	31,040 SF
Site	Asphalt Pavement	Parking Lot	2000	8	46,560 SF
Site	Sports Courts & Play Surfaces		2000	10	5,000 SF
Site	Sports Courts & Play Surfaces		2010	5	5,000 SF
Site	Lawn Area Only			20	20,000 SF
Site	Lawn Area w/Plantings and Trees		1971	20	620,800 SF
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2005	4	[redacted] GSF
HVAC	Boiler(s) - Gas		2005	15	4,840 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Water Sourced		2005	10	303 Ton
HVAC	Even Mix of Package Units & Split Systems		2006	4	50 Ton
HVAC	Even Mix of Piped and Forced Air		2000	10	[redacted] GSF

Obsolete Test Data

Category/Subcategory	Component	Details	Est. Year in Service	RUL	Est. Quantity
Electrical Distribution	Switchgear/board w/Sub Panels and Generator/UPS - Medium Density		1971	12	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2000	10	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		2000	20	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	2000	20	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, Office (per SF)	2005	5	[redacted] GSF
Life Safety	Retrofit Fire Alarm / Life Safety System			3	[redacted] SF
Conveyances	Hydraulic Machine/Controller/Cab		1971	8	2 STOP
Program Support Equipment	Concrete Cast-in-Place Framing		1971	26	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Cooking			4	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2000	6	242 LF
Building Exterior					
Skin	Stucco	Painted, Exterior, 3+ Stories	1971	20	7,960 SF
Skin	Brick Wall		1971	25	30,000 SF
Skin	Window	Metal-Frame	2005	15	759 SF
Skin	Door	Exterior Door	2000	20	4 EA
Skin	Service Door		2000	20	6 EA
Roofs	Built-Up		2005	10	61,500 SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1971	26	1,460 LF
Structural	Concrete Slab		1971	26	61,500 SF
Building Interior					
Interior Construction	Concrete Block (CMU)		1971	20	163,350 SF
Interior Construction	Gypsum Board/Plaster	Interior Wall	2005	35	43,560 SF
Flooring	Quarry Tile		2000	30	4,000 SF
Flooring	Vinyl Composition Tile (VCT)		2000	6	90,000 SF
Flooring	Wood Sports Floor		1971	10	26,205 SF
Wall Finishes	Ceramic Wall Tile	Interior Wall Finish	1971	20	10,890 SF
Ceilings	Suspended Acoustical Tile (ACT)		2000	5	100,000 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2000	30	20,205 SF
Interior Doors and Hardware	Wood Solid-Core w/Extensive Glazing	Solid Core w/ Safety Glass, Painted/Stained, Interior Door	1971	8	21 EA
Interior Doors and Hardware	Wood Solid-Core	Interior Door	1971	8	100 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	No
Does the school have an AHERA report?	No
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	Yes
How many parking spaces exist at the site, total?	120
How many standard ADA parking spaces exist at the site?	6

How many van-accessible ADA parking spaces exist at the site?	1
Is there at least one hard surface court present (e.g. basketball court or similar)?	Yes
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	Yes

Room Inventory 120

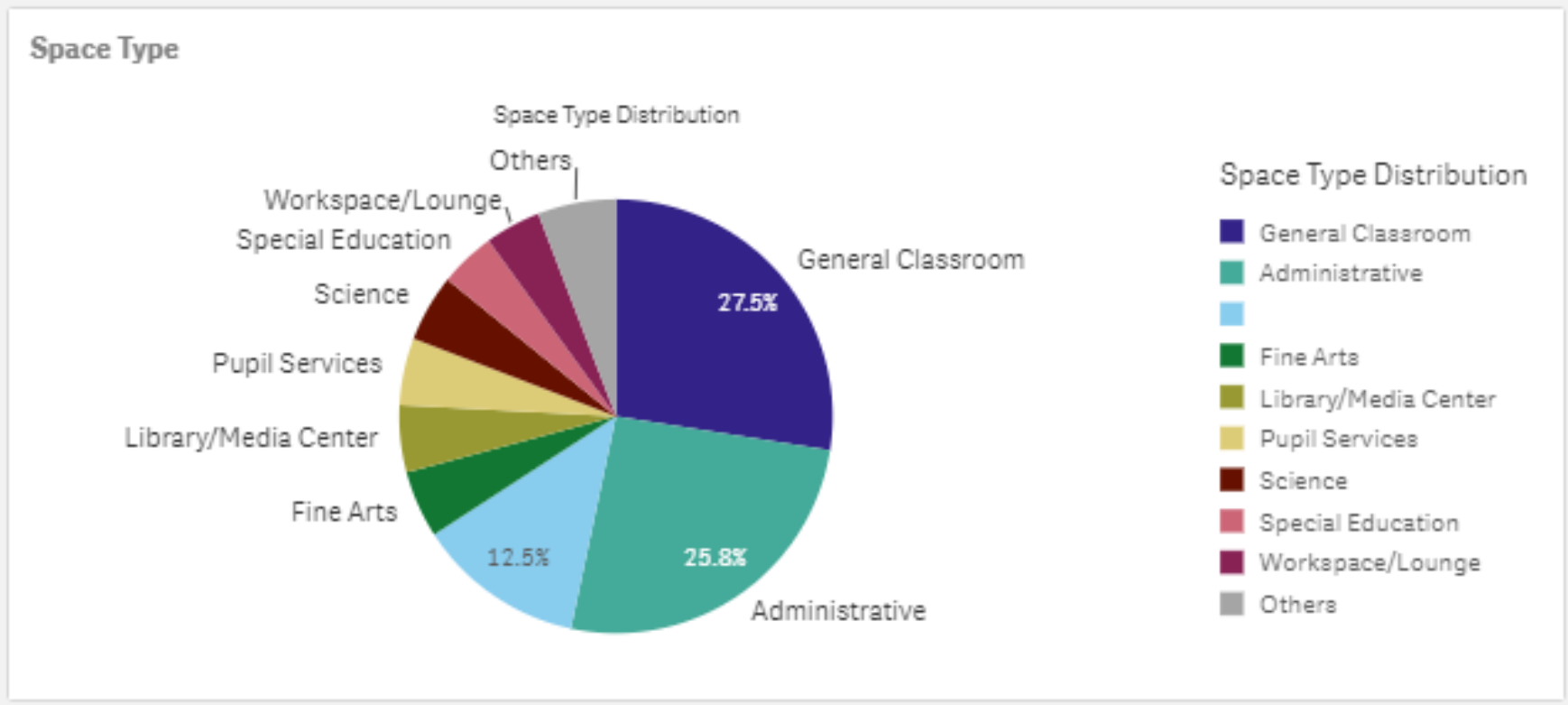
	Room #	SF	Type	ID
Technology and Computer Science (10)		**10,828**		
106 Computer Lab	106	1,316	Technology and Computer Science	536
Comp Lab	115	1,250	Technology and Computer Science	24
Computer Lab	123	1,180	Technology and Computer Science	15
Food Service - Cafeteria	125	1,006	Technology and Computer Science	13
127 Computer Lab	127	993	Technology and Computer Science	543
128 Computer Lab	128	990	Technology and Computer Science	545
129 Computer Lab	129	1,002	Technology and Computer Science	544
Computer Lab	130	1,037	Technology and Computer Science	57
Computer Lab	131	1,039	Technology and Computer Science	64
Comp Lab	212	1,015	Technology and Computer Science	53
Special Education (5)		**3,315**		
Food Service - Commercial Kitchen	122	1,140	Special Education	14
Spec Ed	134	615	Special Education	21
Alt Ed	134B	670	Special Education	20
ESOL	208	680	Special Education	55
Speech Resource	213	210	Special Education	48
Fine Arts (6)		**6,311**		
Photo Lab	126	1,050	Fine Arts	17
Dark Room	126A	250	Fine Arts	16
222 Music Room	222	1,608	Fine Arts	517
Choral - General Classroom	236	1,113	Fine Arts	37
Instrumental	237	1,450	Fine Arts	36
Stage	238	840	Fine Arts	35
Career and Tech Ed (3)		**5,450**		
Home Ec.	133	1,920	Career and Tech Ed	22
[redacted] **Tech Ed**	136	1,390	Career and Tech Ed	19
[redacted] **Tech Ed**	137	2,140	Career and Tech Ed	18
General Classroom (33)		**27,800**		
101 Class Room	101	903	General Classroom	531
102 Class Room	102	903	General Classroom	532
Class Room	103	842	General Classroom	56
104 Class Room	104	881	General Classroom	535
105 Class Room	105	864	General Classroom	534
107 Class Room	107	849	General Classroom	539
108 Class Room	108	858	General Classroom	538
109 Class Room	109	865	General Classroom	540
Class Rm 1	110	850	General Classroom	34
Class Rm 2	111	906	General Classroom	33
Class Rm 3	112	790	General Classroom	32

	Room #	SF	Type	ID
Class Rm 5	113	890	General Classroom	23
Class Rm 4	114	800	General Classroom	31
Math Lab	116	210	General Classroom	30
Class Rm 5	117	870	General Classroom	25
Class Rm 4	118	800	General Classroom	29
Class Rm 3	119	800	General Classroom	28
Class Rm 2	120	850	General Classroom	27
Class Rm 1	121	840	General Classroom	26
204 Class Room	204	670	General Classroom	527
Class Rm 1	205	840	General Classroom	52
Class Rm 2	206	996	General Classroom	51
Class Rm 3	207	800	General Classroom	50
Reading	208	670	General Classroom	54
Class Rm 4	209	790	General Classroom	49
210 Class Room	210	911	General Classroom	523
Class Rm 5	214	790	General Classroom	47
Class Rm 6	217	800	General Classroom	46
Class Rm 7	218	850	General Classroom	45
Class Rm 8	219	900	General Classroom	44
221 Class Room	221	931	General Classroom	516
231 Class Room	231	1,136	General Classroom	508
234 Class Room	234	1,145	General Classroom	509
Science (6)		**6,168**		
Lab	223	1,050	Science	43
Lab	226	1,170	Science	42
Lab	227	1,170	Science	41
Lab	229	1,170	Science	40
Lab	230	1,150	Science	39
Lab	233	458	Science	38
Library/Media Center (6)		**7,038**		
IMC	202	2,736	Library/Media Center	58
IMC	202	1,540	Library/Media Center	62
IMC	202C	858	Library/Media Center	60
IMC	202D	790	Library/Media Center	61
204 C Book Room	204	214	Library/Media Center	525
220 TV Studio	220	900	Library/Media Center	515
Storage (Non-Classroom) (5)		**930**		
IMC AV Storage	202B	314	Storage (Non-Classroom)	59
235 C Special Ed Supply Room	235	140	Storage (Non-Classroom)	510
Storage by 236		95	Storage (Non-Classroom)	511
Storage in the cafeteria		41	Storage (Non-Classroom)	530
Storage/ Office		340	Storage (Non-Classroom)	542
Administrative (31)		**10,263**		
105 C Office	105	203	Administrative	537
Team Off	111A	320	Administrative	66
Team Off	120A	320	Administrative	65
Off	137C	200	Administrative	63
200 B Principal Off	200	175	Administrative	78
200 K Conference Room	200	294	Administrative	87
General Office Admin	200	700	Administrative	89

	Room #	SF	Type	ID
Principal Intern	200A	160	Administrative	88
Conf Room	200C	280	Administrative	86
Sec Off	200D	160	Administrative	85
Prin Sec Off	200J	140	Administrative	79
Team Off	2017	315	Administrative	80
Off	203A	100	Administrative	84
205 C Office	205	202	Administrative	526
Team Off	206A	320	Administrative	81
ESOL for Lang Off	211	905	Administrative	82
Off	223A	150	Administrative	74
Off	228A	200	Administrative	73
Bldg Serv Off - Class Room	232	1,201	Administrative	71
Off	233A	150	Administrative	72
Class Room	235	1,126	Administrative	70
236 A Office	236	181	Administrative	512
Off	236D	110	Administrative	68
Off	241A	220	Administrative	67
Off	242A	210	Administrative	69
Conference Room		299	Administrative	549
Main Office Reception Area		867	Administrative	551
Office		137	Administrative	550
Office in front of 236 A		228	Administrative	513
Office Next to Library		90	Administrative	514
Office Space Next to Counselors' Office		300	Administrative	552
Workspace/Lounge (5)		**2,292**		
102 C Workspace	102	332	Workspace/Lounge	533
109 C Workspace	109	333	Workspace/Lounge	541
209 C Work Room	209	334	Workspace/Lounge	524
230A Science Office	230A	270	Workspace/Lounge	507
Staff Dinning		1,023	Workspace/Lounge	528
Pupil Services (6)		**870**		
Coun Off	201A	170	Pupil Services	75
Coun Off	201B	130	Pupil Services	76
Coun Off	201C	130	Pupil Services	77
Counselor Office		140	Pupil Services	548
Grade [redacted] Counselor		160	Pupil Services	546
Grade [redacted] Counselor		140	Pupil Services	547
Food - Cafeteria (1)		**4,131**		
Cafeteria		4,131	Food - Cafeteria	529
Health Services (1)		**400**		
Nurse	203	400	Health Services	83
Gymnasium (2)		**9,043**		
Gymnasium	239	7,800	Gymnasium	91
Aux Gym	243	1,243	Gymnasium	90

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Serv...	Dining_Sp...
Totals			**1008**	**94839**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	1008	11758	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	1008	0	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	1008	10263	-	-	-8873.16	-	-	-	-	-	-
Building 1 - [redacted]	Career Development	[redacted]	1008	5450	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Dining	[redacted]	1008	4131	-	-	-	-	-	-	-	-	2068.2
Building 1 - [redacted]	Fine Arts	[redacted]	1008	6311	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	1008	27800	4456	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	1008	9043	-	-1859.256	-	-	-	-	-	-	-
Building 1 - [redacted]	Health Services	[redacted]	1008	400	-	-	-	-	-	-	-	100	-
Building 1 - [redacted]	Library/Media Center	[redacted]	1008	7038	-	-	-	-3318.48	-	-	-	-	-
Building 1 - [redacted]	Pupil Services	[redacted]	1008	870	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Science	[redacted]	1008	6168	-	-	-	-	-	-5160	-	-	-
Building 1 - [redacted]	Special Education	[redacted]	1008	3315	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	1008	2292	-	-	-	-	-2142	-	-	-	-

[redacted] Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	1
Total SF	[redacted]
Year Built	1963
Last Major Renovation	
GPS	[redacted]
Assessed Date	2020-10-27
FCI	0.16
MDCI	

Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] was originally constructed in 1963 and renovated in mid 1990s and 2012.

MAJOR RENOVATION DATES:

Ages of the major building systems vary. Major building system ages are listed below:

• Building façade is mostly original

• Roofing system components replaced circa 2005

• HVAC system components are replaced circa 2015

• Electrical system components had renovations circa 2005

• Plumbing system components are mostly original

• Life Safety Systems had renovations circa 2015

• Interior finishes had renovations circa 2015

• Site pavement finishes had renovations circa 2015

HIGH-LEVEL RECOMMENDATIONS:

Due to the relatively recent comprehensive renovations, no major system-level replacements or rehabilitations are expected in the near term.

Limited architectural and MEPF component replacements are anticipated on an as-needed basis.

SUFFICIENCY ANALYSIS:

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

• There are no students in grades 3 or below in relocatables.

Demographics

Current Staff/Students	[redacted]															**TOTAL**
																/

Obsolete Test Data

Current Staff/Students	[redacted]													TOTAL
Total FTE Students by Grade											251	295	303	298	**1147**
Total FTE Teachers (non-administrative) by Grade															**0**

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment	1166	1173	1206	1227	1147		-0.3	1,124

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs 1

	[redacted]													TOTAL
Students														**0**
Teachers														**0**

Buildings and Relocatable Classrooms 7

	Construction/Installation Year	Square Footage	Comments
Main building			No demountable trailers
Trailer 1, DSI Inc.	1995		Windows occasionally leak
Trailer 2, DSI Inc.	1995		Windows occasionally leak,
Trailer 3, Triple A Custom	1980		Roof has had leaks, entranc
Trailer 4, Triple A Custom	1980		Roof has had leaks, windov
Trailer 5, Roger Carter	1994		Entrance and exit decks/rar
Trailer 6, Roger Carter	1994		Entrance and exit decks/rar

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - High Density	Full Upgrade/Install, Cameras and CCTV (per SF)	2012	7	[redacted] GSF
HVAC	Boiler(s)/System - Gas		2012	22	17,522 MBH
HVAC	Chiller(s) / Cooling Tower(s)/ System - Water Sourced		2012	17	400 Ton
HVAC	Split Systems		2012	7	10 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	2012	22	[redacted] GSF
Electrical Distribution	Switchgear/board w/Sub Panels and Generator/UPS - Medium Density		2012	32	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2012	12	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		2012	32	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	2012	32	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, School (per SF)	2012	12	[redacted] GSF
Conveyances	Hydraulic Machine/Controller/Cab		2012	17	5 STOP
Program Support Equipment	Masonry Bearing Walls		2012	67	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Cooking		2012	7	999 LS
Site					
Site	Asphalt Pavement	Parking Lot	2014	19	175,000 SF

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Site	Concrete Pavement	Parking Lot	2014	44	56,000 SF
Site	Playground Surfaces - Rubber Tiles		2019	14	24,000 SF
Site	Playground Surfaces - Rubber Tiles		1963	10	476,000 SF
Site	Lawn Area Only		2010	15	435,600 SF
Building Exterior					
Skin	Brick		1963	15	7,500 SF
Skin	Metal/Insulated Sandwich Panels	Exterior, 2" Thick	2012	24	3,550 SF
Skin	Concrete Block (CMU)	Exterior, 3+ Stories	2012	42	31,950 SF
Skin	Window	Metal-Frame	2012	22	3,500 SF
Skin	Storefront		2012	22	1,000 SF
Skin	Door	Exterior Door	2012	32	20 EA
Skin	Door	Fully Glazed, Exterior Door	2012	22	25 EA
Skin	Overhead Door	144 SF	2012	22	2 EA
Roofs	Metal Roof		2012	32	2,433 SF
Roofs	Built-Up		2012	17	164,264 SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	2012	67	2,389 LF
Structural	A2 - 02 - Slab on Grade			30	106,260 -
Building Interior					
Interior Construction	Concrete Block (CMU)		2012	42	200,000 SF
Interior Construction	Gypsum Board/Plaster	Interior Wall	2012	42	200,000 SF
Flooring	Vinyl Composition Tile (VCT)		2012	7	180,000 SF
Flooring	Terrazzo		2012	24	28,000 SF
Flooring	Wood Sports Floor		2014	24	13,000 SF
Ceilings	Fiberglass Ceiling Panel	Rigid	2012	17	2,980 SF
Ceilings	Suspended Acoustical Tile (ACT)		2012	17	185,000 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2012	42	7,500 SF
Interior Doors and Hardware	Wood Solid-Core	Interior Door	2012	32	250 EA
Interior Doors and Hardware	Steel	Interior Door	2012	32	20 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	No
Does the school have an AHERA report?	No
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	Yes
How many parking spaces exist at the site, total?	255
How many standard ADA parking spaces exist at the site?	6
How many van-accessible ADA parking spaces exist at the site?	5
Is there at least one hard surface court present (e.g. basketball court or similar)?	Yes

Obsolete Test Data

Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	Yes

Room Inventory 88

	Room #	SF	Type	ID
General Classroom (43)		**58,488**		
Choral/ General Music	110	2,079	General Classroom	1011
Design and Marketing Lab*	202	1,473	General Classroom	993
Foreign Language	204	822	General Classroom	994
Earth Science	206	1,474	General Classroom	995
Earth Science	209	1,435	General Classroom	1007
ISS/ISI(In School Suspension / Intervention)	211	578	General Classroom	1008
Direct Instructional Space	216	866	General Classroom	1000
Foreign Language 1	218	828	General Classroom	1001
Foreign Language 2	220	799	General Classroom	1002
Nutrition and Food Science Lab	222	2,145	General Classroom	1003
Classroom	225	1,300	General Classroom	1086
[redacted]	227	1,218	General Classroom	1004
In-School Suspension	25	396	General Classroom	1092
Social Studies	302	800	General Classroom	977
Social Studies	303	817	General Classroom	1060
Social Studies	304	822	General Classroom	979
Math	310	806	General Classroom	980
Classroom	311	821	General Classroom	1064
Math	313	820	General Classroom	1063
Math	314	839	General Classroom	981
Math	315	820	General Classroom	1065
Math	316	839	General Classroom	982
Math	318	883	General Classroom	983
Math	319	895	General Classroom	1066
Classroom	321	790	General Classroom	1067
Classroom	322	833	General Classroom	1068
Classroom	323	850	General Classroom	1069
Classroom	324	677	General Classroom	1070
English	326	880	General Classroom	984
English	328	836	General Classroom	985
English	329	748	General Classroom	1073
English	331	794	General Classroom	1074
English	332	865	General Classroom	987
English	333	793	General Classroom	1075
Classroom	334	820	General Classroom	988
English Lab	335	1,088	General Classroom	1077
Social Studies	336	821	General Classroom	989
Social Studies	337	820	General Classroom	1078
Social Studies	338	822	General Classroom	990
Social Studies Jury	339	1,234	General Classroom	1079
Social Studies	340	819	General Classroom	991
Auditorium	400	18,597	General Classroom	1009
Classroom	605	826	General Classroom	1028

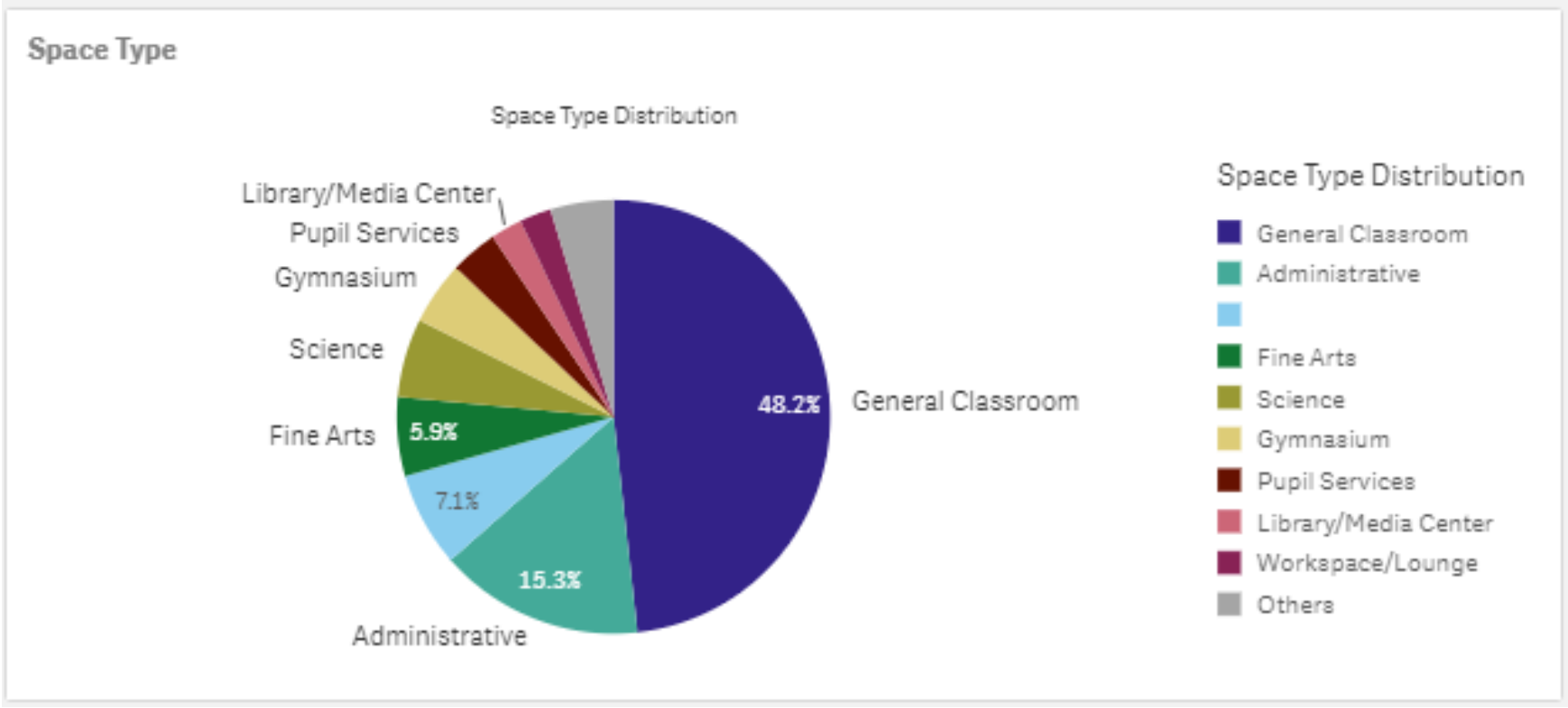
Obsolete Test Data

	Room #	SF	Type	ID
Administrative (14)		**4,869**		
Training Room*	000	306	Administrative	1012
Reception	10	950	Administrative	1020
Conference	11	294	Administrative	1021
Assistant Principal	12	150	Administrative	1091
Assistant Principal	13	139	Administrative	1090
Assistant Principal	14	139	Administrative	1089
Assistant Principal	15	139	Administrative	1088
Principal	16	292	Administrative	1087
Conference Room	24	280	Administrative	1024
Finance Secretary	29	167	Administrative	1023
Business Electronic Office	306	1,093	Administrative	978
Office	42	92	Administrative	1027
Modular - IT Office	604	828	Administrative	1100
Guidance Main Office		0	Administrative	1099
Storage (Non-Classroom) (2)		**894**		
Storage w/Testing	28	198	Storage (Non-Classroom)	1022
Social Studies/ Storage Planning*	342	696	Storage (Non-Classroom)	992
Gymnasium (4)		**15,772**		
Dance/Aerobics Room	113	1,336	Gymnasium	1014
Wrestling/Dance/Aerobics	114	1,954	Gymnasium	1013
Auxiliary Gymnasium	115	3,182	Gymnasium	1015
Gymnasium		9,300	Gymnasium	1055
Technology and Computer Science (4)		**4,036**		
Computer Lab	208	928	Technology and Computer Science	996
Business Computer Lab	307	1,045	Technology and Computer Science	1061
Business Computer Lab	309	1,050	Technology and Computer Science	1062
Computer Lab	325	1,013	Technology and Computer Science	1071
Library/Media Center (2)		**4,589**		
Media Center	210	4,077	L brary/Media Center	998
Broadcast Room	212	512	L brary/Media Center	997
Workspace/Lounge (2)		**1,076**		
Teacher Lounge	1	558	Workspace/Lounge	999
Teacher Lounge	2	518	Workspace/Lounge	1080
Science (5)		**6,771**		
Chemistry *	201	1,436	Science	1005
Chemistry	205	1,444	Science	1006
Biology	217	1,328	Science	1083
Biology	221	1,050	Science	1084
Physics	223	1,513	Science	1085
Fine Arts (5)		**5,400**		
Instrumental Band/ Orchestra	109	1,325	Fine Arts	1010
Visual Arts	402	1,221	Fine Arts	1016
Visual Arts	404	1,215	Fine Arts	1017
Visual Arts Photography	406	1,195	Fine Arts	1018
Journalism Lab		444	Fine Arts	1076
Maintenance / Janitorial Space (1)		**47**		
Custodian	5	47	Maintenance / Janitorial Space	1072
Health Services (1)		**520**		
Treatment	43	520	Health Services	1019

	Room #	SF	Type	ID
Food - Cafeteria (1)		**6,188**		
Cafeteria	200	6,188	Food - Cafeteria	1081
Food - Kitchen (1)		**2,980**		
Kitchen		2,980	Food - Kitchen	1082
Pupil Services (3)		**437**		
Counselor	17	150	Pupil Services	1097
Counselor	18	147	Pupil Services	1096
Counselor	19	140	Pupil Services	1095

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Serv...	Dining_Sp...
Totals			**1147**	**92078**	-	-	-	-	-	-	-	-	-
Building 1 [redacted]		[redacted]	1147	4930	-	-	-	-	-	-	-	-	-
Building 1 [redacted]		[redacted]	1147	0	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Administrative	[redacted]	1147	4695	-	-	-3452.4825	-	-	-	-	-	-
Building 1 [redacted]	Dining	[redacted]	1147	6188	-	-	-	-	-	-	-	-	-725.4125
Building 1 [redacted]	Fine Arts	[redacted]	1147	5400	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	General Classroom	[redacted]	1147	38673	-9998	-	-	-	-	-	-	-	-
Building 1 [redacted]	Gymnasium	[redacted]	1147	15772	-	-7523.972	-	-	-	-	-	-	-
Building 1 [redacted]	Health Services	[redacted]	1147	520	-	-	-	-	-	-	-	-20	-
Building 1 [redacted]	Kitchen	[redacted]	1147	2980	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Library/Media Center	[redacted]	1147	4589	-	-	-	-1311.4475	-	-	-	-	-
Building 1 [redacted]	Maintenance / Janitorial Space	[redacted]	1147	47	-	-	-	-	-	-	526.5	-	-
Building 1 [redacted]	Pupil Services	[redacted]	1147	437	-	-	-	-	-	-	-	-	-
Building 1 [redacted]	Science	[redacted]	1147	6771	-	-	-	-	-	-2183	-	-	-
Building 1 [redacted]	Workspace/Lounge	[redacted]	1147	1076	-	-	-	-	-926	-	-	-	-

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	1
Total SF	[redacted]
Year Built	1972
Last Major Renovation	1972
GPS	[redacted]
Assessed Date	2020-10-26
FCI	0.52
MDCI	

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] school was originally constructed in 1972.

MAJOR RENOVATION DATES:

There have been some major system-wide renovations since the facility was originally constructed. Architectural finish and limited MEPF component replacements have been performed on an as-needed basis.

Major building system that are renovated listed below:

• Roofing system components are replaced circa 2005

• Life Safety Systems had renovations circa 2005

• Interior finishes had renovations circa 2005

• Site pavement finishes had renovations circa 2005

HIGH-LEVEL RECOMMENDATIONS:

Based on the age and observed conditions of the facility, the following major building systems show near-term lifecycle concerns:

• Replacement / Renovations on the Building Facade

• Replacement / Renovations of the HVAC System components

• Replacement / Renovations of the Electrical System components

• Replacement / Renovations of the Plumbing System components

• Replacement / Renovations of the Life Safety components

SUFFICIENCY ANALYSIS:

There are major issues regarding the educational sufficiency of this school.

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

• There are students in grades 3 or below in relocatables.

• There is no room for additions or additional parking.

Demographics

Current Staff/Students	[redacted]													**TOTAL**
Total FTE Students by Grade		34	41	36	34	86	99							**330**
Total FTE Teachers (non-administrative) by Grade														**0**

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20***	**Growth Factor (%)**	**Projected 2025 Enrollment**
Historical Enrollment	335	334	322	327	330	0	-0.4	323

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs [1]

[redacted]														**TOTAL**
Students														**0**
Teachers														**0**

Buildings and Relocatable Classrooms [1]

Obsolete Test Data

	Construction/Installation Year	Square Footage	Comments
Main building	1977	[redacted]	

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
	Roadways	Pavement, Asphalt	2012	17	29,870 SF
	Wheelchair Lift (5' Rise)		2012	17	1 EA
Site					
Site	Athletic Surfaces & Courts	Skate Park, Concrete Pavement	1972	5	22,000 SF
Site	Athletic Surfaces & Courts	Basketball/General, Asphalt Pavement	2000	5	16,230 SF
Site	[redacted] Surfaces - Rubber Tiles		2012	7	73,700 SF
Site	[redacted] Surfaces - Rubber Tiles		2012	7	17,075 SF
Site	Lawn Area Only		2012	17	9,100 SF
Site	Lawn Area w/Plantings and Trees		2010	15	8,800 SF
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2010	5	[redacted] GSF
HVAC	Boiler(s) - Gas		1972	3	4,376 MBH
HVAC	Chiller(s) / Cooling Tower(s)/ System - Water Sourced		1972	3	118 Ton
HVAC	Even Mix of Package Units & Split Systems		2012	10	12 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	1972	4	[redacted] GSF
Electrical Distribution	Main Distribution Panel w/Sub Panels and Generator/UPS - Medium Density			5	[redacted] GSF
Electrical Distribution	Switchgear/board w/Sub Panels and Generator/UPS - Medium Density		1972	4	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2005	5	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1972	4	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	2012	32	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, Office (per SF)	2008	8	[redacted] GSF
Program Support Equipment	Masonry Bearing Walls		1972	27	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Warming Only		2008	3	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2005	5	94 LF
Building Exterior					
Skin	Brick Wall		1972	15	23,750 SF
Skin	Window	Metal-Frame	1972	4	1,250 SF
Skin	Door	Exterior Door	1972	4	8 EA
Skin	Door	Exterior Door	1972	5	10 EA
Roofs	Asphalt Shingle		2012	12	[redacted] SF
Roofs	Single-Ply EPDM Membrane		2012	12	4,450 SF
Roofs	Single-Ply EPDM Membrane		2012	12	1,600 SF
Structural	Slab on Grade		1977	0	[redacted] -
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1972	27	1,250 LF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1977	24	1,250 LF

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Building Interior					
Interior Construction	Gypsum Board/Plaster	Interior Wall	2000	30	21,150 SF
Interior Construction	Concrete Block (CMU) Wall		1972	15	63,450 SF
Flooring	Ceramic Tile			10	7,000 SF
Flooring	Vinyl Composition Tile (VCT)		2010	5	5,000 SF
Flooring	Carpet	Standard Commercial, Medium Traffic	2014	4	35,500 SF
Flooring	Wood Sports Floor		2012	22	3,715 SF
Ceilings	Suspended Acoustical Tile (ACT)		2002	7	42,000 SF
Ceilings	Fiberglass Ceiling Panel	Rigid	2002	7	1,055 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2000	30	2,000 SF
Interior Doors and Hardware	Steel	Interior Door	2000	20	40 EA
Interior Doors and Hardware	Steel	Interior Door	2010	30	7 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	Yes
Does the school have an AHERA report?	Yes
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	Yes
How many parking spaces exist at the site, total?	63
How many standard ADA parking spaces exist at the site?	4
How many van-accessible ADA parking spaces exist at the site?	0
Is there at least one hard surface court present (e.g. basketball court or similar)?	Yes
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	Yes

Room Inventory 128

	Room #	SF	Type	ID
Gymnasium (2)		**7,440**		
Gymnasium /	28	3,715	Gymnasium	383
Gymnasium - 31	31	3,725	Gymnasium	128
Health Services (6)		**889**		
137 Clinic	137	144	Health Services	388
137-2	137-2	144	Health Services	386
137-4 Clinic	137-4	99	Health Services	387
Health - 167	167	162	Health Services	122
Health Room		193	Health Services	723

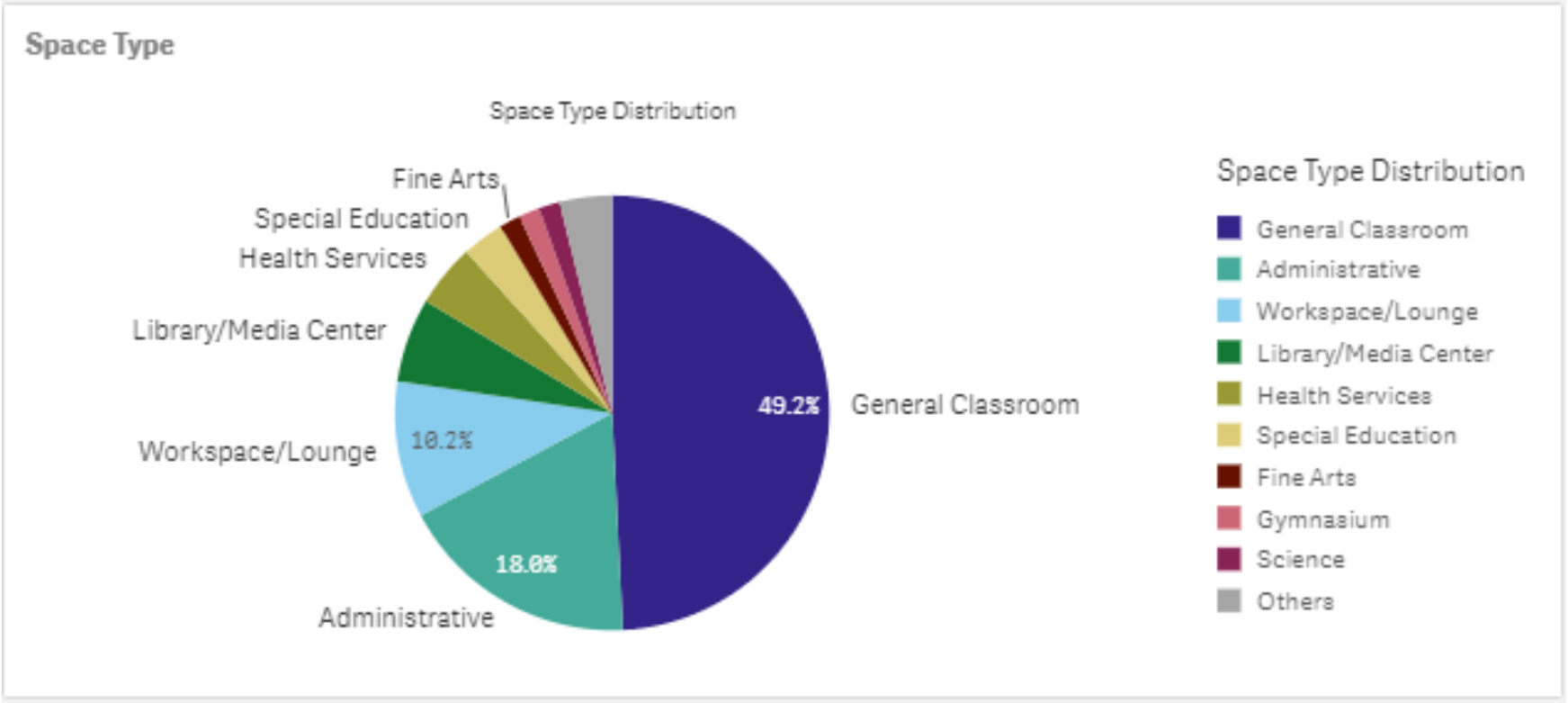
	Room #	SF	Type	ID
x137-1 Clinic		147	Health Services	389
General Classroom (63)		**69,219**		
O-Classroom /	1.2	2,332	General Classroom	714
Classroom /	10	942	General Classroom	708
Classroom - 102	102	879	General Classroom	98
Station - 103	103	926	General Classroom	97
Station - 104	104	923	General Classroom	96
109 Classroom	109	896	General Classroom	324
O-Classroom /	11.12.13	2,528	General Classroom	707
Station - 110	110	896	General Classroom	95
Station - 111	111	828	General Classroom	94
112 Classroom	112	846	General Classroom	323
Station - 112	112	1,011	General Classroom	93
113 Classroom	113	882	General Classroom	322
Station - 113	113	951	General Classroom	92
Classroom - 117	117	917	General Classroom	103
Station - 118	118	633	General Classroom	107
Station - 119	119	638	General Classroom	108
120 Classroom	120	855	General Classroom	320
Station - 120	120	907	General Classroom	109
121 Classroom	121	866	General Classroom	321
123 Classroom	123	860	General Classroom	319
127 [redacted] Classroom	127	1,253	General Classroom	394
128 [redacted] Classroom	128	1,246	General Classroom	393
Station - 132	132	957	General Classroom	110
Station - 132	132	654	General Classroom	111
Station - 132	132	566	General Classroom	112
Classroom - 133	133	899	General Classroom	116
Station - 135	135	725	General Classroom	115
Station - 136	136	755	General Classroom	114
Station - 137	137	804	General Classroom	113
Classroom 14 /	14	904	General Classroom	700
Station - 144	144	1,228	General Classroom	106
Station - 145	145	887	General Classroom	105
Station - 146	146	871	General Classroom	104
Classroom - 147	147	937	General Classroom	102
O-Classroom /	15.16.17	2,732	General Classroom	715
[redacted] - 150	150	1,470	General Classroom	101
[redacted] - 156	156	1,552	General Classroom	100
All Purpose Rm. - 173	173	2,979	General Classroom	119
O-Classroom /	20.19.18	3,032	General Classroom	705
207 Classroom	207	907	General Classroom	315
208 Classroom	208	865	General Classroom	317
209 Classroom	209	176	General Classroom	318
Classroom /	21	952	General Classroom	704
210 Classroom	210	874	General Classroom	316
211 Classroom	211	907	General Classroom	314
216 Classroom	216	878	General Classroom	309
217 Classroom	217	857	General Classroom	307
O-Classroom /	22.23.24	3,472	General Classroom	703
220 Classroom	220	873	General Classroom	308

	Room #	SF	Type	ID
226 Classroom	226	858	General Classroom	311
227 Conf	227	173	General Classroom	404
228 Classroom	228	863	General Classroom	312
229 Classroom	229	857	General Classroom	310
233 Classroom	233	905	General Classroom	313
Classroom	3	909	General Classroom	713
Classroom 3 /	3	912	General Classroom	701
O-Classroom	4.5	1,886	General Classroom	712
O-Classroom /	6.7	1,886	General Classroom	711
Classroom /	8	887	General Classroom	710
Classroom /	9	950	General Classroom	709
[redacted] **Classroom**		1,392	General Classroom	409
[redacted] **Classroom**		768	General Classroom	410
Reading		245	General Classroom	719
Food - Kitchen (2)		**1,900**		
Kitchen - 177	177	845	Food - Kitchen	117
Kitchen /		1,055	Food - Kitchen	398
Administrative (23)		**7,110**		
100-1	100-1	703	Administrative	221
xConf	100-7	255	Administrative	405
108 Office	108	190	Administrative	226
110 Office	110	194	Administrative	225
Cafeteria / Auditorium	111	174	Administrative	406
137 Office	137	103	Administrative	224
Gen Off. - 168	168	423	Administrative	120
200 Resource	200	159	Administrative	217
202 Office	202	899	Administrative	218
213 Office	213	240	Administrative	214
214 Office	214	500	Administrative	213
218 Conf	218	179	Administrative	403
219 Resources	219	852	Administrative	215
230 Office	230	207	Administrative	216
232 Office	232	196	Administrative	219
Gymnasium Office /	29	162	Administrative	706
Main Office /		400	Administrative	722
Media Center Office		308	Administrative	718
Principal's Office /		285	Administrative	123
x100-2		145	Administrative	220
x100-8		175	Administrative	223
x100-9		265	Administrative	222
x107 Office		96	Administrative	227
Special Education (4)		**1,986**		
110 Spec Ed	110	864	Special Education	424
Speech and Hearing - 164	164	168	Special Education	99
225 Spec Ed	225	852	Special Education	423
Speech		102	Special Education	724
Food - Cafeteria (1)		**3,017**		
Cafeteria Student Dining		3,017	Food - Cafeteria	271
Career and Tech Ed (1)		**341**		
133 Periodicals	133	341	Career and Tech Ed	274

	Room #	SF	Type	ID
Workspace/Lounge (13)		**4,045**		
116 Lounge	116	244	Workspace/Lounge	278
117 Lounge	117	491	Workspace/Lounge	277
Faculty - 123	123	710	Workspace/Lounge	126
Workroom - 128	128	372	Workspace/Lounge	127
Conf - 161	161	143	Workspace/Lounge	124
Workroom - 165	165	234	Workspace/Lounge	121
Conference - 170	170	139	Workspace/Lounge	118
Counselor's Office /		234	Workspace/Lounge	125
Lounge /		850	Workspace/Lounge	716
Staff Development /		172	Workspace/Lounge	720
Workroom /		236	Workspace/Lounge	721
x100-2		148	Workspace/Lounge	275
x100-4		72	Workspace/Lounge	276
Fine Arts (2)		**1,551**		
130 Music	130	771	Fine Arts	295
131 Art	131	780	Fine Arts	294
Science (2)		**1,745**		
234 Laboratory	234	865	Science	412
235 Laboratory	235	880	Science	413
Technology and Computer Science (1)		**778**		
138 Computer	138	778	Technology and Computer Science	427
Library/Media Center (8)		**4,229**		
114 Bookroom	114	193	Library/Media Center	436
203 Bookroom	203	196	Library/Media Center	432
204 Bookroom	204	252	Library/Media Center	433
212 Bookroom	212	191	Library/Media Center	434
215 Bookroom	215	191	Library/Media Center	431
221 Bookroom	221	191	Library/Media Center	430
Library Library		1,436	Library/Media Center	435
Media Center /		1,579	Library/Media Center	717

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Ser...	Dining_Sp...
Totals			**0**	**104250**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	0	778	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	0	0	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	0	7110	-	-	-6960	-	-	-	-	-	-
Building 1 - [redacted]	Career Development	[redacted]	0	341	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Dining	[redacted]	0	3017	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Fine Arts	[redacted]	0	1551	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	0	69219	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	0	7440	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Health Services	[redacted]	0	669	-	-	-	-	-	-	-	-369	-
Building 1 - [redacted]	Kitchen	[redacted]	0	1900	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Library/Media Center	[redacted]	0	4229	-	-	-	-4229	-	-	-	-	-
Building 1 - [redacted]	Science	[redacted]	0	1745	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Special Education	[redacted]	0	1986	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	0	4045	-	-	-	-	-3895	-	-	-	-

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	3
Total SF	[redacted]
Year Built	1950
Last Major Renovation	1978
GPS	[redacted]
Assessed Date	2020-10-27
FCI	0.41
MDCI	

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] school was originally constructed in 1950 and renovated in 1978.

MAJOR RENOVATION DATES:

Ages of the major building systems vary. Major building system ages are listed below:

• Building façade is mostly original

• Roofing system components were replaced circa 1995 & 2015

• HVAC system components replaced circa 2010s

• Electrical system components had renovations circa 1995 & 2005

• Plumbing system components are mostly original

• Life Safety Systems had renovations circa 2005

• Site pavement finishes had renovations circa 2005 & 2015

HIGH-LEVEL RECOMMENDATIONS:

Based on the age and observed conditions of the facility, the following major building systems show near-term lifecycle considerations:

• Replacement / Renovations on the Building Facade

• Replacement / Renovations of the Roofing System

• Replacement / Renovations of the HVAC System components

• Replacement / Renovations of the Electrical System components

• Replacement / Renovations of the Plumbing System components

• Replacement / Renovations of the Life Safety components

• Replacement / Renovations of the Interior Finish components

• Replacement / Renovations of the Pavement / Site components

SUFFICIENCY ANALYSIS:

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

• There are no students in grades 3 or below in relocatables.

Demographics

Current Staff/Students	[redacted]														**TOTAL**
Total FTE Students by Grade											387	321	311	292	**1311**
Total FTE Teachers (non-administrative) by Grade															**0**

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20***	**Growth Factor (%)**	**Projected 2025 Enrollment**
Historical Enrollment	1248	1209	1222	1271	1311	0	1.3	1,415

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs [1]

		[redacted]													**TOTAL**
Special Education	Students														**0**
	Teachers														**0**

/

Buildings and Relocatable Classrooms 2

	Construction/Installation Year	Square Footage	Comments
Main building	1950	[redacted]	
New Building	1990	1200	Test

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Conveyance					
Elevators	Add Elevator/Lift to accommodate ADA		1995	0	2 STOP
Site					
Site	Athletic Surfaces & Courts	Basketball/General, Asphalt Pavement	2000	5	35,000 SF
Site	Asphalt Pavement	Parking Lot	2005	10	142,441 SF
Site	Asphalt Pavement	Parking Lot	2015	20	14,244 SF
Site	Concrete Pavement	Parking Lot	1978	8	24,500 SF
Site	G2-04 - Playing Field		2010	-10	1,400 -
Site	Sports Courts & Play Surfaces		2015	10	39,200 SF
Site	Lawn Area Only		2010	15	300,000 SF
Site	Lawn Area w/Plantings and Trees		2010	15	477,526 SF
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2014	9	[redacted] GSF
HVAC	Boiler(s) - Gas		2015	25	16,000 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Air Sourced		2016	21	590 Ton
HVAC	Package Units (RTUs)		2015	15	200 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	2015	25	[redacted] GSF
Electrical Distribution	Switchgear/board w/Sub Panels - Medium Density		1978	3	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2005	5	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1978	3	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	1978	5	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, Office (per SF)	2010	10	[redacted] GSF
Conveyances	Hydraulic Machine/Controller/Cab		1992	3	7 STOP
Program Support Equipment	Masonry Bearing Walls		1950	24	216,321 GSF
Program Support Equipment	Commercial Kitchen Equipment - Warming Only		2000	5	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	2000	5	472 LF
Building Exterior					
Skin	Metal/Insulated Sandwich Panels	Exterior, 2" Thick	1978	3	2,092 SF
Skin	Brick Wall		1978	20	39,740 SF
Skin	Window	Metal-Frame	2000	10	7,171 SF
Skin	Storefront		1978	3	1,500 SF
Skin	Storefront		1978	5	797 SF
Skin	Service Door		2000	20	53 EA
Skin	Door	Fully Glazed, Exterior Door	1978	5	41 EA
Skin	Overhead Door	144 SF	1978	3	1 EA
Skin	Overhead Door	144 SF	1978	5	9 EA
Roofs	Built-Up		2000	5	142,157 SF
Roofs	Built-Up		2015	20	34,500 SF

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1950	24	3,320 LF
Structural	Basement Wall		1950	24	4,500 SF
Structural	Slab-on-Grade	Concrete	1950	24	176,657 -
Building Interior					
Interior Construction	Concrete Block (CMU) Wall		1950	24	84,955 SF
Interior Construction	Gypsum Board/Plaster	Interior Wall	2000	30	10,000 SF
Interior Construction	Concrete Block (CMU)		1950	24	169,910 SF
Interior Construction	Concrete Block (CMU)		1978	24	169,910 SF
Flooring	Vinyl Composition Tile (VCT)		2000	5	141,592 SF
Flooring	Terrazzo		1978	15	70,796 SF
Flooring	Wood Sports Floor		2000	10	23,598 SF
Wall Finishes	Ceramic Wall Tile	Interior Wall Finish	1978	15	5,000 SF
Ceilings	Suspended Acoustical Tile (ACT)		2000	5	212,387 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2000	30	23,599 SF
Interior Doors and Hardware	Wood Solid-Core	Interior Door	2000	20	165 EA
Interior Doors and Hardware	Steel	Interior Door	2000	20	71 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	Yes
Does the school have an AHERA report?	Yes
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	Yes
How many parking spaces exist at the site, total?	368
How many standard ADA parking spaces exist at the site?	7
How many van-accessible ADA parking spaces exist at the site?	9
Is there at least one hard surface court present (e.g. basketball court or similar)?	Yes
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	Yes

Room Inventory 108

	Room #	SF	Type	ID
Administrative (14)		**10,519**		
Office	03	220	Administrative	861
Office	116	222	Administrative	900
Welcome center	130	276	Administrative	190
Main office	136	3,990	Administrative	882

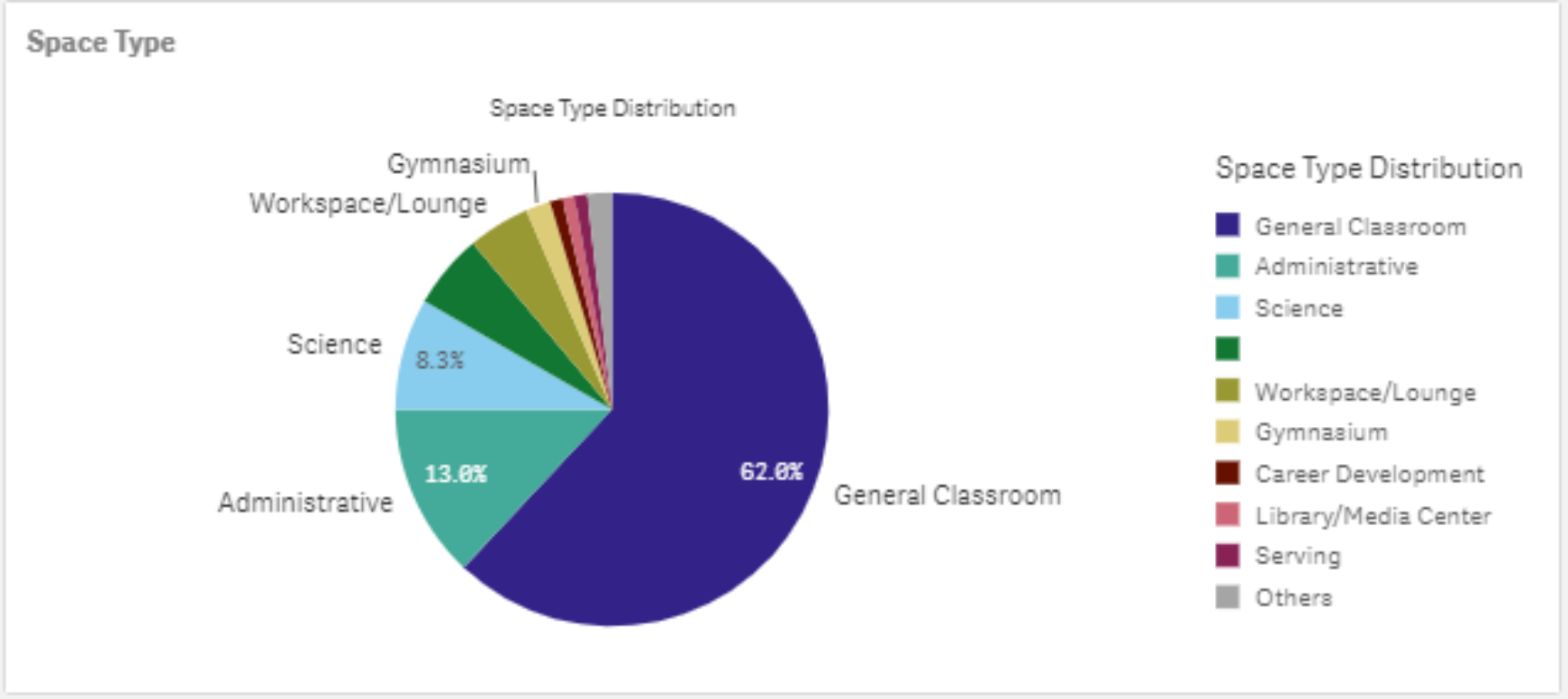
	Room #	SF	Type	ID
Counseling and registrars office	137	1,770	Administrative	884
Business office	141	1,200	Administrative	877
Building service / receiving	143	635	Administrative	876
Office	148	225	Administrative	874
Office	178	620	Administrative	896
Office	180	175	Administrative	897
Off.	202	414	Administrative	192
Off.	203	277	Administrative	186
Office	215	360	Administrative	848
Off.	220	135	Administrative	193
Workspace/Lounge (5)		**1,421**		
Off.	222	223	Workspace/Lounge	195
Off.	225	425	Workspace/Lounge	196
Office	234	328	Workspace/Lounge	200
Office	237	295	Workspace/Lounge	201
Office IDFS Room (no access)	239	150	Workspace/Lounge	202
Science (9)		**10,150**		
Science Classroom	213	888	Science	847
Science Classroom	231	1,137	Science	129
Science Classroom	232	1,170	Science	169
Science Classroom	236	1,435	Science	131
Science Classroom	238	1,177	Science	168
Science Classroom	240	1,256	Science	134
Science Classroom	242	1,292	Science	149
Science Classroom	244	1,170	Science	148
Bio prep room		625	Science	133
Technology and Computer Science (2)		**2,095**		
Computer lab	142	1,050	Technology and Computer Science	878
Comp classroom	144	1,045	Technology and Computer Science	130
General Classroom (67)		**65,674**		
Classroom	01	800	General Classroom	860
Classroom	02	790	General Classroom	859
Classroom	04	790	General Classroom	858
Classroom	05	790	General Classroom	857
Classroom	07	790	General Classroom	856
Classroom	08	775	General Classroom	855
Classroom	09	790	General Classroom	854
Classroom	10	872	General Classroom	853
Classroom	103	2,040	General Classroom	902
Classroom	104	4,350	General Classroom	903
Classroom	105	935	General Classroom	904
Classroom	108	1,886	General Classroom	901
Classroom	11	780	General Classroom	852
Classroom	111	1,650	General Classroom	907
Classroom	112	1,250	General Classroom	908
Classroom	113	1,306	General Classroom	909
Classroom	114	308	General Classroom	910
Classroom	115	1,810	General Classroom	911
Classroom	118	1,515	General Classroom	899
Classroom	119	1,472	General Classroom	898

	Room #	SF	Type	ID
Classroom / Office	12	696	General Classroom	851
Classroom	120	1,610	General Classroom	915
Classroom	121	1,890	General Classroom	914
Classroom	131	715	General Classroom	886
Classroom	132	665	General Classroom	887
Classroom	134	705	General Classroom	888
Classroom	138	705	General Classroom	881
Classroom	140	845	General Classroom	880
Classroom	145	1,174	General Classroom	873
Classroom	146	800	General Classroom	875
Classroom	147	1,170	General Classroom	872
Classroom	149	1,160	General Classroom	871
Classroom	151	970	General Classroom	870
Classroom	155	932	General Classroom	868
Classroom	157	950	General Classroom	869
Classroom	159	780	General Classroom	863
Classroom	161	815	General Classroom	864
Classroom	165	825	General Classroom	866
Classroom	170	535	General Classroom	890
Classroom	172	500	General Classroom	891
Classroom	173	400	General Classroom	895
Classroom	174	530	General Classroom	892
Classroom	175	735	General Classroom	894
Classroom	176	530	General Classroom	893
Foreign Lang Classroom	201	792	General Classroom	159
Foreign Lang Classroom	204	745	General Classroom	156
Foreign Lang Classroom	205	880	General Classroom	157
Foreign Lang Classroom	206	753	General Classroom	155
Foreign Lang Classroom	207	876	General Classroom	158
English Classroom	209	695	General Classroom	152
English Classroom	210	842	General Classroom	142
English Classroom	211	960	General Classroom	151
English Classroom	212	774	General Classroom	146
English Classroom	214	900	General Classroom	153
English Classroom	216	350	General Classroom	154
Science Classroom	217	766	General Classroom	849
English Classroom	218	863	General Classroom	162
Science Classroom	219	926	General Classroom	850
Social Studies Classroom	221	717	General Classroom	140
Social Studies classroom	223	804	General Classroom	139
Social Studies classroom	224	750	General Classroom	135
Social Studies classroom	226	705	General Classroom	136
Social Studies classroom	227	825	General Classroom	138
Social Studies classroom	229	865	General Classroom	137
Science Classroom	233	1,180	General Classroom	143
Science Classroom	235	1,205	General Classroom	144
Science Classroom	246	1,165	General Classroom	145
Food - Kitchen (1)		**3,000**		
Kitchen	0	3,000	Food - Kitchen	181
Library/Media Center (1)		**4,730**		

	Room #	SF	Type	ID
Media Center	171	4,730	Library/Media Center	183
Storage (Non-Classroom) (4)		**825**		
Storage	06	120	Storage (Non-Classroom)	862
Storage	109	205	Storage (Non-Classroom)	905
Storage	110	150	Storage (Non-Classroom)	906
Storage	163	350	Storage (Non-Classroom)	865
Food - Cafeteria (1)		**5,000**		
Cafeteria	00	5,000	Food - Cafeteria	913
Gymnasium (2)		**16,000**		
Aux Gym	000	6,000	Gymnasium	917
Main Gymnasium	0000	10,000	Gymnasium	207
Career and Tech Ed (1)		**620**		
College Career Center	133	620	Career and Tech Ed	885
Fine Arts (1)		**1,565**		
Dance Studio	183	1,565	Fine Arts	916

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Ser...	Dining_Sp...
Totals			**1311**	**121740**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	1311	3438	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	1311	0	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	1311	10519	-	-	-8979.34	-	-	-	-	-	-
Building 1 - [redacted]	Career Development	[redacted]	1311	620	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Fine Arts	[redacted]	1311	1565	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	1311	65297	-32522	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	1311	16000	-	-7276.544	-	-	-	-	-	-	-
Building 1 - [redacted]	Kitchen	[redacted]	1311	3000	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Library/Media Center	[redacted]	1311	4730	-	-	-	-561.02	-	-	-	-	-
Building 1 - [redacted]	Science	[redacted]	1311	10150	-	-	-	-	-	-4906	-	-	-
Building 1 - [redacted]	Serving	[redacted]	1311	5000	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	1311	1421	-	-	-	-	-1271	-	-	-	-

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	2
Total SF	[redacted]
Year Built	1979
Last Major Renovation	1979
GPS	[redacted]
Assessed Date	2020-10-25
FCI	0.42
MDCI	

Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] school was originally constructed in 1979.

MAJOR RENOVATION DATES:

There have been no major system-wide renovations since the facility was originally constructed. Architectural finish and limited MEPF component replacements have been performed on an as-needed basis.

HIGH-LEVEL RECOMMENDATIONS:

Based on the age and observed conditions of the facility, the following major building systems have near-term lifecycle concerns:

• Replacement / Renovations of the HVAC System components

• Replacement / Renovations of the Electrical System components

• Replacement / Renovations of the Plumbing System components

• Replacement / Renovations of the Life Safety components

• Replacement / Renovations of the Interior Finish components

SUFFICIENCY ANALYSIS:

There are no major issues regarding the educational sufficiency of this school.

Demographics

Current Staff/Students	[redacted]														**TOTAL**
Total FTE Students by Grade	23	39	44	49	43	49	48								**295**
Total FTE Teachers (non-administrative) by Grade	1	2	2	2	2	2	2								**13**

	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20***	**Growth Factor (%)**	**Projected 2025 Enrollment**

Obsolete Test Data

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment	376	400	347	327	295		-5.6	209

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs 1

		[redacted]													TOTAL
Playworks	Students	0.14	0.14	0.14	0.14	0.14	0.14	0.14							1.00002
	Teachers														0

Buildings and Relocatable Classrooms 4

	Construction/Installation Year	Square Footage	Comments
Main building	1979	[redacted]	Masonry Bearing Walls
Storage Portable 1	1995	2490	Wood Frame, Pier Construc
Storage Portable 2	1995	2490	Wood Frame, Pier Construc
Storage Portable 3	1995	2490	Wood Frame, Pier Construc

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Building Equipment & Systems					
Electrical Distr bution	Security & Low Voltage Systems - Average		2017	12	[redacted] GSF
HVAC	Boiler(s) - Gas		2009	19	3,654 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Air Sourced		1980	3	100 Ton
HVAC	Even Mix of Package Units & Split Systems		1980	3	50 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	1979	3	[redacted] GSF
Electrical Distr bution	Switchgear/board w/Sub Panels and Generator/UPS - Medium Density		1980	5	[redacted] GSF
Electrical Distr bution	Lighting System	Interior	2005	5	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1979	5	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	1979	5	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, Office (per SF)	2011	11	[redacted] GSF
Conveyances	Hydraulic Machine/Controller/Cab		1979	3	2 STOP
Program Support Equipment	Masonry Bearing Walls		1979	34	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Cooking		2012	7	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	1979	12	180 LF
Site					
Site	Add Hard Surface Court		1979	2	5,500 SF
Site	Asphalt Pavement	Parking Lot	2000	5	7,600 SF
Site	Concrete Pavement	Parking Lot	1979	9	2,440 SF
Site	Add Playing Field		2000	10	1,300 SF
Site	Add Unpaved Recreation Area		2000	10	8,000 SF
Site	Lawn Area w/Plantings and Trees		2000	10	63,250 SF
Building Exterior					

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Skin	Brick		1979	20	[redacted] SF
Skin	Window	Metal-Frame	1979	3	1,695 SF
Skin	Door	Exterior Door	1979	3	4 EA
Skin	Service Door		1979	3	11 EA
Roofs	Modified Bitumen		2010	10	22,150 SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1979	34	22,150 LF
Structural	Concrete Slab		1979	34	22,150 SF
Building Interior					
Interior Construction	Concrete Block (CMU)		1980	20	62,000 SF
Flooring	Ceramic Tile		1979	10	3,000 SF
Flooring	Vinyl Composition Tile (VCT)		2000	5	36,500 SF
Flooring	Carpet	Standard Commercial, Medium Traffic	2015	5	1,000 SF
Wall Finishes	Ceramic Wall Tile	Interior Wall Finish	1979	10	3,240 SF
Ceilings	Suspended Acoustical Tile (ACT)		1979	3	39,500 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	1979	15	1,000 -
Interior Doors and Hardware	Wood Solid-Core	Interior Door	1979	3	65 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	No
Does the school have an AHERA report?	No
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	No
How many parking spaces exist at the site, total?	20
How many standard ADA parking spaces exist at the site?	2
How many van-accessible ADA parking spaces exist at the site?	0
Is there at least one hard surface court present (e.g. basketball court or similar)?	Yes
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	No

Room Inventory 60

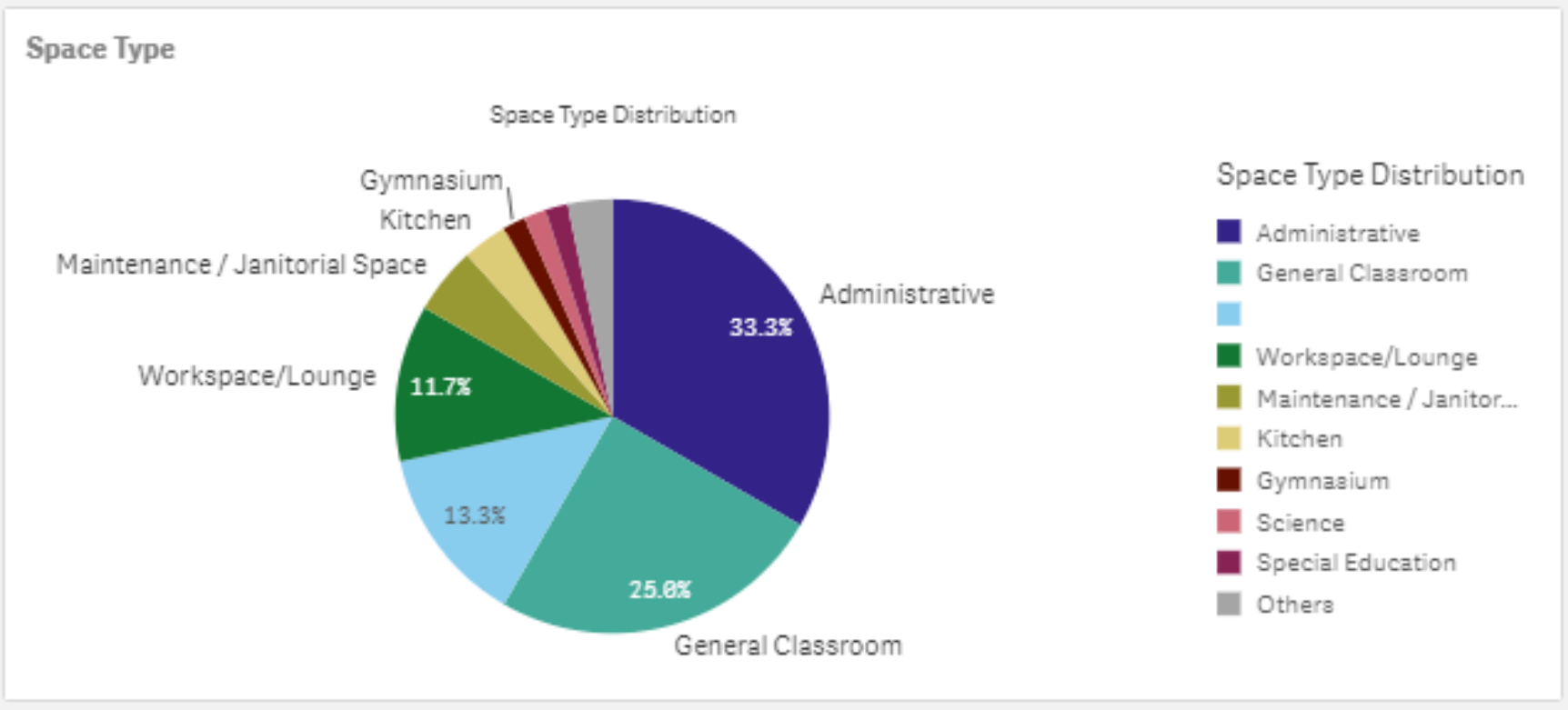
	Room #	SF	Type	ID
Administrative (20)		**3,302**		
Office	107	66	Administrative	237
Janitor Office	111	98	Administrative	475
Faculty	116	300	Administrative	466
121 Office	121	165	Administrative	238

	Room #	SF	Type	ID
121 Office	121	144	Administrative	239
Office	122	162	Administrative	465
Office	133	203	Administrative	236
136 Office	136	142	Administrative	235
Gym Office	136	156	Administrative	468
137 Secretary	137	51	Administrative	234
Gym Storage	144	135	Administrative	470
Gym Storage	145	145	Administrative	469
147 Office	147	361	Administrative	232
148 Conf	148	185	Administrative	233
Safe Room	149	38	Administrative	473
153 Secretary	153	113	Administrative	231
154 Principal	154	141	Administrative	230
202 Resource	202	168	Administrative	229
230 Office	230	374	Administrative	228
Office 1st floor x 133		155	Administrative	472
Gymnasium (1)		**3,398**		
Gym	146	3,398	Gymnasium	384
Health Services (2)		**238**		
140 Clinic	140	199	Health Services	391
141 Clinic	141	39	Health Services	390
General Classroom (14)		**11,257**		
Storage	114	435	General Classroom	476
126 Classroom	126	1,081	General Classroom	333
126A Classroom	126A	916	General Classroom	332
127 Classroom	127	768	General Classroom	396
128 Classroom	128	784	General Classroom	397
155 Classroom (not science fix gen classroom)	155	950	General Classroom	395
203 Classroom 205onplan	203	861	General Classroom	328
203aClassroom 205Bonplan	203aClassroom	716	General Classroom	327
206 Classroom	206	752	General Classroom	325
207 Classroom	207	844	General Classroom	326
216 Classroom	216	792	General Classroom	329
217A Group/Cluster	217A	757	General Classroom	407
218 Classroom	218	787	General Classroom	330
219 Classroom	219	814	General Classroom	331
Food - Cafeteria (1)		**1,955**		
129 Student Dining	129	1,955	Food - Cafeteria	272
Workspace/Lounge (10)		**1,552**		
113-1 Conf	113-1	260	Workspace/Lounge	287
123 Storage	123	187	Workspace/Lounge	288
134 Lounge	134	190	Workspace/Lounge	286
151 Planning	151	93	Workspace/Lounge	285
203 Prep/Wkrm	203	151	Workspace/Lounge	284
221-1 Prep/Wkrm	221-1	82	Workspace/Lounge	283
226-1 Prep/Wkrm	226-1	121	Workspace/Lounge	282
228-1 Prep/Wkrm	228-1	53	Workspace/Lounge	281
231 Lounge	231	359	Workspace/Lounge	279
233 Prep/Wkrm in rm 230	233	56	Workspace/Lounge	280
Food - Kitchen (1)		**726**		
Kitchen/Serving	100	726	Food - Kitchen	399

	Room #	SF	Type	ID
Science (1)		**748**		
01 Science	01	748	Science	414
Special Education (2)		**797**		
228 Spec Ed	228	492	Special Education	425
232 Spec ed	232	305	Special Education	426
Fine Arts (3)		**2,209**		
02 Art	02	660	Fine Arts	296
221 Music	221	716	Fine Arts	298
226 Art	226	833	Fine Arts	297
Library/Media Center (2)		**2,224**		
135 Bookroom	135	162	Library/Media Center	438
208 Library	208	2,062	Library/Media Center	437
Maintenance / Janitorial Space (3)		**406**		
Cafeteria Storage	130	153	Maintenance / Janitorial Space	474
Storage	143	228	Maintenance / Janitorial Space	467
Janitor Closet x 143		25	Maintenance / Janitorial Space	471

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Serv...	Dining_Sp...
Totals			**295**	**28812**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	295	2206	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	295	3518	-	-	-3073	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	295	165	-	-	**280**	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	295	11461	-105	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	295	3398	-	**2299.6**	-	-	-	-	-	-	-
Building 1 - [redacted]	Health Services	[redacted]	295	199	-	-	-	-	-	-	-	**301**	-
Building 1 - [redacted]	Kitchen	[redacted]	295	2681	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Library/Media Center	[redacted]	295	2062	-	-	-	-1177	-	-	-	-	-
Building 1 - [redacted]	Maintenance / Janitorial Space	[redacted]	295	406	-	-	-	-	-	-	-258.5	-	-
Building 1 - [redacted]	Science	[redacted]	295	757	-	-	-	-	-	-524	-	-	-
Building 1 - [redacted]	Special Education	[redacted]	295	950	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	295	1009	-	-	-	-	-859	-	-	-	-

[redacted] - Facility Assessment Overview

Facility Data

Address	[redacted]
Local Education Agency	[redacted]
School Type	[redacted]
Stories	1
Total SF	[redacted]
Year Built	1979
Last Major Renovation	1996
GPS	[redacted]
Assessed Date	2020-10-27
FCI	0.41
MDCI	

Executive Summary

EXECUTIVE SUMMARY: [redacted]

ORIGINAL CONSTRUCTION DATE & ADDITIONS:

The [redacted] school was originally constructed in 1969 and renovated in 1996.

MAJOR RENOVATION DATES:

The facility was renovated in 1996. Exceptions to the renovation include the structure of the buildings and part of the electrical and piping infrastructure.

HIGH-LEVEL RECOMMENDATIONS:

Due to the relatively comprehensive renovations, no major system-level replacements or rehabilitations are expected in the near-term.

Limited architectural and MEPF component replacements are anticipated on an as-needed basis.

SUFFICIENCY ANALYSIS:

• The schools has lead or lead paint. The school has a lead paint O&M manual.

• The schools has asbestos containing material. The school has an AHERA report.

• There are no students in grades 3 or below in relocatables.

Demographics

Current Staff/Students	[redacted]														**TOTAL**
Total FTE Students by Grade								159	176	173					**508**
Total FTE Teachers (non-administrative) by Grade														60	**60**

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*	Growth Factor (%)	Projected 2025 Enrollment
Historical Enrollment	505	476	475	473	508		0.3	516

* 2019-20 enrollment data is not being used in calculations due to COVID-19

Additional Educational Programs 1

		[redacted]													TOTAL
Technology Education (Indu	Students									1					1
	Teachers										1				1

Buildings and Relocatable Classrooms 1

	Construction/Installation Year	Square Footage	Comments
Main building	1979	[redacted]	

Building Systems

Category/Subcategory	Component	Details	Est. Year in Service	RUL	Est. Quantity
Building Equipment & Systems					
Electrical Distribution	Security & Low Voltage Systems - Average		2015	10	[redacted] GSF
HVAC	Boiler(s) - Gas		1979	5	4,334 MBH
HVAC	Chiller(s) / Cooling Tower(s) - Air Sourced		1995	5	175 Ton
HVAC	Even Mix of Package Units & Split Systems		1995	5	4 Ton
HVAC	Forced Air System (AHUs	Ductwork, VAVs)	1979	5	[redacted] GSF
Electrical Distribution	Switchgear/board w/Sub Panels and Generator/UPS - Medium Density		1979	5	[redacted] GSF
Electrical Distribution	Lighting System	Interior	2010	10	[redacted] GSF
Plumbing Fixtures	Supply & Sanitary		1979	15	[redacted] GSF
Life Safety	Sprinkler System	Full Retrofit, Multi-Family (per SF)	1979	3	[redacted] GSF
Life Safety	Fire Alarm System	Full Upgrade/Install, Office (per SF)	2000	3	[redacted] GSF
Program Support Equipment	Masonry Bearing Walls		1979	34	[redacted] GSF
Program Support Equipment	Commercial Kitchen Equipment - Warming Only		1996	5	1 LS
Program Support Equipment	Casework/Cabinetry - Standard	Base and Wall Section, Wood	1996	10	300 LF
Site					
Site	Asphalt Pavement	Parking Lot	2005	10	65,000 SF
Site	Concrete Pavement	Parking Lot	1979	2	15,000 SF
Site	Sports Courts & Play Surfaces		1996	3	300 SF
Site	Lawn Area w/Plantings		1979	5	3,560 SF
Site	Lawn Area Only		1996	25	20,000 SF
Building Exterior					
Skin	Brick		1979	15	20,000 SF
Skin	Brick Wall		1979	20	16,000 SF
Skin	Curtain Wall		1996	26	1,000 SF
Skin	Window	Metal-Frame	1979	10	3,500 SF
Skin	Storefront		1996	10	1,000 SF
Skin	Service Door		1979	5	4 EA
Skin	Door	Fully Glazed, Exterior Door	2000	10	18 EA
Roofs	Metal Roof		1979	3	3,000 SF
Roofs	Built-Up		2000	5	[redacted] SF
Structural	Shallow - Foundation Wall	Concrete or CMU w/Continuous Footings	1979	34	[redacted] LF
Structural	Concrete Slab		1979	34	[redacted] SF

Obsolete Test Data

Category/Subcategory	Component	Details	Est. Year in Service	Est. RUL	Quantity
Building Interior					
Interior Construction	Concrete Block (CMU) Wall		1979	20	[redacted] SF
Flooring	Quarry Tile		1979	30	8,000 SF
Flooring	Vinyl Composition Tile (VCT)		1996	10	56,760 SF
Flooring	Carpet	Standard Commercial, Medium Traffic	2015	5	36,000 SF
Flooring	Wood Sports Floor		1979	10	5,500 SF
Ceilings	Suspended Acoustical Tile (ACT)		2010	15	80,000 SF
Ceilings	Gypsum Board/Plaster Ceiling	Ceiling	2010	10	22,000 SF
Ceilings	Textured Spray Coating		1979	15	4,260 SF
Interior Doors and Hardware	Aluminum-Framed Fully-Glazed	Fully Glazed, Interior Door	1996	16	10 EA
Interior Doors and Hardware	Wood Solid-Core	Solid Core, Painted/Stained, Interior Door	1996	16	236 EA

Sufficiency Standards

Does the school have a lead paint O&M Manual?	No
Does the school have an AHERA report?	Yes
Are the any students in grades 3 or below in the modulars?	No
Are there separate bus, cars, students drop off?	No
How many parking spaces exist at the site, total?	134
How many standard ADA parking spaces exist at the site?	11
How many van-accessible ADA parking spaces exist at the site?	9
Is there at least one hard surface court present (e.g. basketball court or similar)?	No
Is there at least one unpaved recreation area present (e.g. open field or rubber tile surface)?	Yes
Is there at least one play field (soccer, baseball, or football) present?	Yes

Room Inventory 65

	Room #	SF	Type	ID
General Classroom (39)		**33,245**		
Room 1	1	685	General Classroom	730
Room 10	10	1,225	General Classroom	736
Room 11	11	810	General Classroom	737
Room 12	12	580	General Classroom	738
Room 14	14	835	General Classroom	742
Room 16	16	940	General Classroom	744
Room 17	17	790	General Classroom	745
Room 18	18	940	General Classroom	746
Room 19	19	835	General Classroom	747

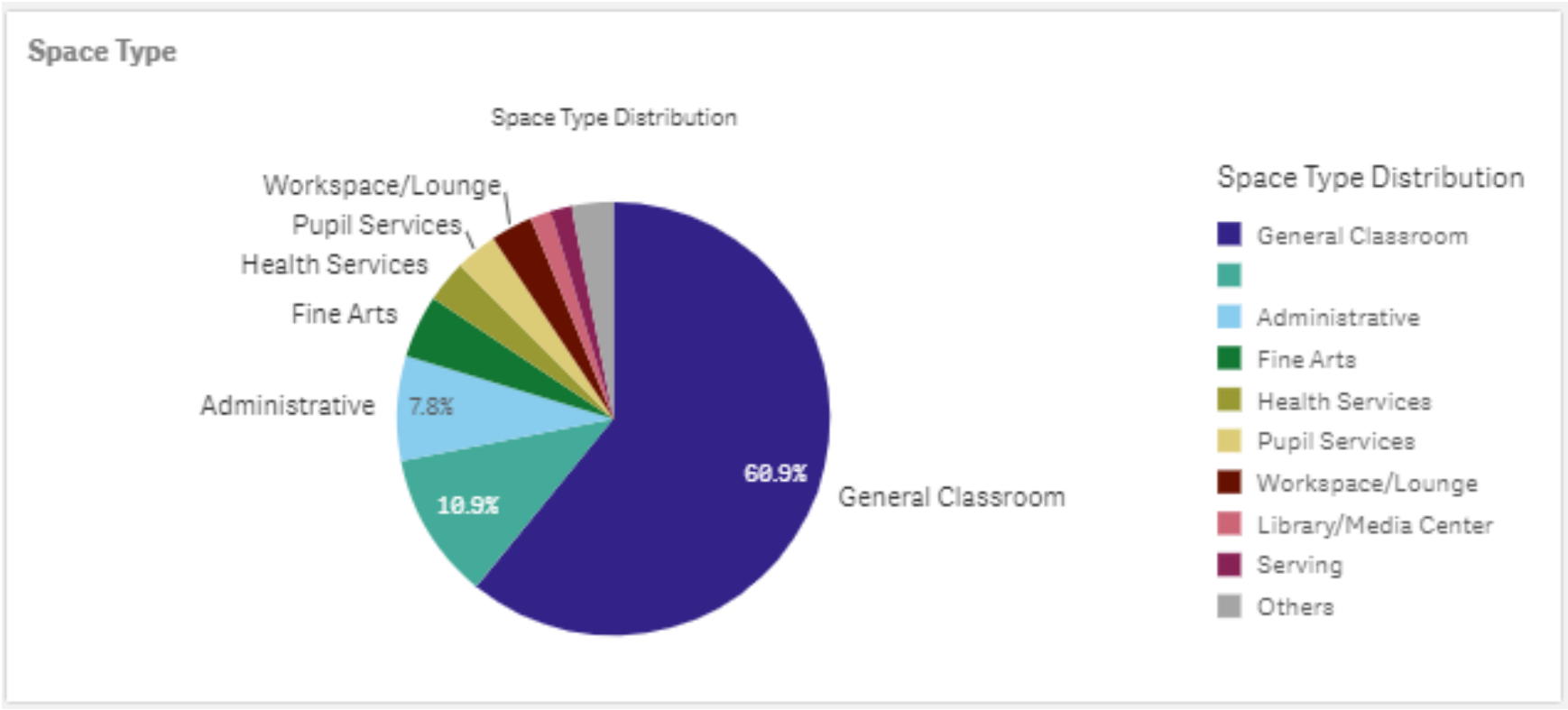
Obsolete Test Data

	Room #	SF	Type	ID
Room 2	2	685	General Classroom	729
Room 20	20	835	General Classroom	751
Room 21	21	835	General Classroom	750
Room 22	22	845	General Classroom	752
Room 23	23	835	General Classroom	758
Room 24	24	835	General Classroom	755
Room 25	25	830	General Classroom	756
Room 26	26	1,160	General Classroom	761
Room 26A	26A	325	General Classroom	760
Room 27	27	1,125	General Classroom	762
Room 27A	27A	205	General Classroom	763
Room 28	28	1,225	General Classroom	764
Room 3	3	1,170	General Classroom	726
Room 30	30	860	General Classroom	766
Room 31	31	825	General Classroom	767
Room 32	31	970	General Classroom	768
Room 33 (FACS)	33	1,660	General Classroom	769
Room 34 (music)	34	1,075	General Classroom	770
Room 36 (class room)	36	1,450	General Classroom	773
Room 37	37	655	General Classroom	776
Room 39	39	830	General Classroom	779
Room 4	4	780	General Classroom	728
Room 40	40	820	General Classroom	759
Room 41	41	320	General Classroom	777
Room 42	42	235	General Classroom	778
Room 5	5	860	General Classroom	727
Room 6	6	795	General Classroom	731
Room 7	7	855	General Classroom	732
Room 8	8	855	General Classroom	733
Room 9	9	850	General Classroom	734
Storage (Non-Classroom) (3)		**250**		
Storage 11		130	Storage (Non-Classroom)	735
Storage 6		60	Storage (Non-Classroom)	754
Storage 8		60	Storage (Non-Classroom)	749
Workspace/Lounge (3)		**735**		
Workroom 7		0	Workspace/Lounge	740
Staff lounge		540	Workspace/Lounge	794
Work room 4		195	Workspace/Lounge	748
Technology and Computer Science (4)		**3,235**		
Room 29 (2x100sf storage rooms)	29	810	Technology and Computer Science	765
Computer Lab A		835	Technology and Computer Science	741
Computer lab B		885	Technology and Computer Science	743
Computer Lab C		705	Technology and Computer Science	772
Fine Arts (3)		**4,750**		
Room 38 (band room)	38	1,500	Fine Arts	775
Room 35 (sewing)		1,175	Fine Arts	771
Room 36 (workshop)		2,075	Fine Arts	774
Library/Media Center (1)		**3,250**		
Media Center		3,250	L brary/Media Center	780
Gymnasium (1)		**5,508**		

	Room #	SF	Type	ID
Gymnasium		5,508	Gymnasium	781
Food - Cafeteria (1)		**8,000**		
Cafeteria		8,000	Food - Cafeteria	782
Food - Kitchen (1)		**1,100**		
Kitchen		1,100	Food - Kitchen	783
Administrative (5)		**1,835**		
Assistant principal office		335	Administrative	785
Counseling office		380	Administrative	791
Deans office		200	Administrative	787
Main office		630	Administrative	784
Principal office		290	Administrative	786
Health Services (2)		**315**		
Healthroom		175	Health Services	790
Nurse		140	Health Services	789
Pupil Services (2)		**273**		
Counselor A-K		135	Pupil Services	793
School counselor L-Z		138	Pupil Services	792

Appendix

Breakdown of Space by Room Type



Appendix

Space Sufficiency by Room Type

SF Requierements

Building	Space Type	Highest Grade	Curren...	Sum_SF	General_Cla...	Gymnasiu...	Administrat...	Library_S...	WorkSpac...	Science_S...	Maintenance/...	Health_Serv...	Dining_Sp...
Totals			**0**	**62496**	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	0	3485	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]		[redacted]	0	0	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Administrative	[redacted]	0	1835	-	-	-1685	-	-	-	-	-	-
Building 1 - [redacted]	Fine Arts	[redacted]	0	4750	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	General Classroom	[redacted]	0	33245	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Gymnasium	[redacted]	0	5508	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Health Services	[redacted]	0	315	-	-	-	-	-	-	-	185	-
Building 1 - [redacted]	Kitchen	[redacted]	0	1100	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Library/Media Center	[redacted]	0	3250	-	-	-	-3250	-	-	-	-	-
Building 1 - [redacted]	Pupil Services	[redacted]	0	273	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Serving	[redacted]	0	8000	-	-	-	-	-	-	-	-	-
Building 1 - [redacted]	Workspace/Lounge	[redacted]	0	735	-	-	-	-	-585	-	-	-	-

MARYLAND PUBLIC SCHOOL FACILITIES
EDUCATIONAL SUFFICIENCY STANDARDS

I. PURPOSE. The purpose of Maryland Public School Facilities Educational Sufficiency Standards *(COMAR 13A.01.02.04)* is to establish acceptable minimum levels for the physical attributes, capacity, and educational suitability of existing public K–12 school facilities. The application of these standards shall be limited to space and attributes needed to support educational programs and curricula—defined by the Maryland State Board of Education—that are sustainable within the operational budgets of the school systems for staffing, maintenance, and full utilization of the facilities. The Educational Sufficiency Standards are dynamic. The Interagency Committee on School Construction (IAC), and includes its successor organization, the Interagency Commission on School Construction, shall periodically review the Standards and recommend changes to the Standards as time and circumstances require.

These Standards are intended for use in the evaluation of existing public school facilities with projected five-year future student counts and are not intended to limit the flexibility of design solutions for new construction and renovation projects. A companion document is the Facilities Planning Guide, which provides guidelines and recommendations for use in the programming and design of new schools, replacement schools, and renovations of existing schools. The Facilities Planning Guide is incorporated by reference into these standards and may be amended by the IAC with adequate notice to and input from the public. *[Code of Maryland (COMAR) references in this document are to certain Title 13A regulations of the State Board of Education for State School Administration, General Instructional Programs, Specific Subjects, Special Instructional Programs, and Supporting Programs.]*

II. GENERAL REQUIREMENTS. These standards are not intended to supersede or omit compliance with applicable building and fire codes or any other code, regulation, law, or standard that has been adopted by State agencies. At the same time, these Standards will not restate the requirements of other codes.

A. Building condition. A school facility must be safe *(COMAR 13A.01.04.03)* and capable of being maintained.

1. Structural. A school facility must be structurally sound. A school facility shall be considered structurally sound and safe if the building presents no imminent danger or major visible signs of decay or distress and the building's structural systems support the loads imposed on them.

2. Exterior envelope. An exterior envelope is safe and capable of being maintained if:

a) Walls and roof are weather tight under normal conditions with routine upkeep; and

b) Doors and windows are weather tight under normal conditions with routine upkeep.

3. Interior surfaces. An interior surface is safe and capable of being maintained if it is:

a) Structurally sound;

b) Capable of supporting a finish; and

c) Capable of continuing in its intended use with normal maintenance and repair.

4. Interior finishes. An interior finish is safe and capable of being maintained if it is:

a) Free of exposed lead paint;

b) Free of exposed friable asbestos; and

c) Capable of continuing in its intended use with normal maintenance and repair.

B. Building systems. Where present, building systems in a school facility must be in working order and capable of being properly maintained. Building systems include roof, plumbing, telephone, electrical, and heating and cooling systems, as well as fire alarm, two-way internal communication, technological infrastructure, and security systems.

1. General. A building system shall be considered to be in working order and capable of being maintained if all of the following apply:

a) The system is capable of being operated as intended and maintained.

b) Newly manufactured or cost-effective refurbished replacement parts are available.

c) The system is capable of supporting the standards established in this rule.

d) Components of the system present no imminent danger of personal injury.

2. Sanitary facilities. Fixtures shall include, but are not limited to, water closets, urinals, lavatories, and drinking fountains. Restrooms shall be available for general classrooms for grades 3 and below and special needs classrooms without having to exit the building, wherever possible within reasonable cost constraints.

3. Fire alarm and emergency-notification system. A school facility shall have a fire alarm and emergency-notification system as required by applicable State fire codes and emergency procedures.

4. Two-way communication system. A school facility shall have a two-way internal communication system between a central location and each classroom, isolated office space, library media center, physical education space, cafeteria, and other regularly occupied spaces.

III. CLASSIFICATION OF PUBLIC SCHOOLS. The classifications for public schools under these standards are:

A. Elementary school (PK–5 or any subset thereof)

B. Middle school (6–8)

C. High school (9–12)

D. Combination school (a combination of any grade levels)

E. Other school (includes early-childhood-education centers, special-education centers, career-technology centers, alternative-education schools, etc.)

IV. SCHOOL SITE. A school site shall be of sufficient size to accommodate safe access, parking, drainage, and security *(COMAR 13A.01.04.03)*. Additionally, the site shall be provided with an adequate source of water and appropriate means of effluent disposal.

A. Safe access. A school site shall be configured for safe and controlled access that separates pedestrian from vehicular traffic. If buses are used to transport students, then bus loading/unloading areas shall be separated from vehicular-traffic areas wherever possible. Dedicated student drop-off and pickup areas shall be provided for safe use by student passengers arriving or departing by automobile.

B. Parking. A school site shall include a maintainable surfaced area that is stable, firm, and slip resistant and is large enough to accommodate 1.5 parking spaces/staff FTE and one student space /ten high school students. If this standard is not met, alternative parking may be approved after the sufficiency of parking at the site is reviewed by the IAC using the following criteria:

1. Availability of street parking around the school;

2. Availability of any nearby parking lots;

3. Availability of public transit;

4. Number of staff who drive to work on a daily basis; and

5. Average number of visitors on a daily basis.

C. Drainage. A school site shall be configured such that runoff does not undermine the structural integrity of the school buildings located on the site or create flooding, ponding, or erosion resulting in a threat to health, safety, or welfare.

D. Security.

1. All schools shall have safe and secure site fencing or other barriers with accommodations for safe passage through openings to protect students from the hazards of traffic, railroad tracks, animal nuisance, and steep slopes.

V. SITE RECREATION AND OUTDOOR PHYSICAL EDUCATION. A school facility shall have area, space and fixtures, in accordance with the standard equipment necessary to meet the educational requirements of the public education department, for physical education activity. *(COMAR 13A.01.02.05 and 13A.04.13, Physical Education only)*

A. Elementary school. Safe play area(s) and playground(s) including hard surfaced court(s) and unpaved recreation area(s) shall be conveniently accessible to the students. Play area(s) and appropriate equipment for physical education and school recreational purposes shall be provided based on the planned school program capacity. For schools that serve students in grade 5 and below, a protected play area shall be provided. Play-equipment areas shall have surfacing materials that meet or exceed safety specifications for shock-absorbing qualities as outlined by the U.S. Consumer Product Safety Commission.

B. Middle school. Hard surfaced court(s) and playing field(s) for physical education activities shall be provided. Playing field(s) and equipment shall be based on the planned school program capacity.

C. High school. A playing field for physical education activities shall be provided. Playing fields and equipment shall be based on the planned school program capacity.

D. Combination school. A combination school shall provide the elements of the grades served by Subsections A, B and C above without duplication, but shall meet the highest standard.

E. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

VI. ACADEMIC CLASSROOM SPACE. All classroom space shall meet or exceed the requirements listed below:

A. Area of classroom spaces. Classroom spaces, including those for physical education, shall be sufficient for educational programs that are appropriate for the class-level needs.

B. Classroom fixtures and equipment

1. With the exception of physical-education spaces, each general and specialty classroom shall contain a work surface and seat for each student in the classroom. The work surface and seat shall be appropriate for the normal activity of the class conducted in the room.

2. Each general and specialty classroom shall have an erasable surface and a surface suitable for projection purposes, appropriate for group classroom instruction, and a display surface. A single surface may meet one or more of these purposes.

3. Each general and specialty classroom shall have storage for classroom materials or access to conveniently located storage.

4. With the exception of physical-education spaces and music-education spaces, each general and specialty classroom shall have a work surface and seat for the teacher and for any aide assigned to the classroom. The classroom shall have secure storage for student records that is located in the classroom or is conveniently accessible to the classroom.

C. Classroom lighting

1. Each general and specialty classroom shall have a light system capable of maintaining at least 50 foot-candles of well-distributed light. Provide appropriate task lighting in specialty classrooms where enhanced visibility is required.

2. The light level shall be measured at a work surface located in the approximate center of the classroom, between clean light fixtures.

D. Classroom temperature and relative humidity

1. Each general and specialty classroom shall have a heating, ventilation and air conditioning (HVAC) system capable of maintaining a temperature between 68 and 75 degrees Fahrenheit and a relative humidity between 30 and 60% at full occupancy.

2. The temperature and humidity shall be measured at a work surface in the approximate center of the classroom.

E. Classroom acoustics

1. With the exception of physical-education spaces, each general and specialty classroom shall be maintainable at a sustained background sound level of less than 55 decibels.

2. The sound level shall be measured at a work surface in the approximate center of the classroom.

F. Classroom air quality

1. Each general, science, and fine arts classroom shall have an HVAC system that continually moves air and is capable of maintaining a CO2 level of not more than 1,200 parts per million.

2. The air quality shall be measured at a work surface in the approximate center of the classroom.

VII. GENERAL USE CLASSROOMS. (ENGLISH LANGUAGE ARTS/LITERACY, MATHEMATICS, SOCIAL STUDIES AND WORLD LANGUAGES *(COMAR 13A.03, General Instructional Programs and 13A.04, Specific Subjects)*).

A. Cumulative classroom net square foot (sf) requirements, excluding in-classroom storage space and any in-classroom toilet rooms, shall be at least:

1.	Prekindergarten	50 net sf/student
2.	Kindergarten	50 net sf/student
3.	Grades 1 – 8	32 net sf/student
4.	Grades 9 – 12	25 net sf/student

B. At least 2 net sf/student shall be available for dedicated, in-classroom storage and may be provided vertically to avoid the need for additional floor area.

C. Sufficient number of classrooms shall be provided to meet state and local board mandated student/staff ratio requirements.

VIII. SPECIALTY CLASSROOMS.

A. Special education *(COMAR 13A.05.01, 13A.05.02)* Maryland assures a free appropriate public education for all students with disabilities, birth through the end of the school year in which the student turns 21 years old, in accordance with the student's Individualized Education Program. Early Intervention Services for children from birth through two years is typically provided through the Maryland Infants and Toddlers Program. To the maximum extent appropriate, students with disabilities are educated in the least restrictive environment with students who are not disabled. A continuum of alternative placements shall be provided.

1. If a special-education space for pull-out purposes other than calming is provided and the space is required to support educational programs, services, and curricula, the space shall not be smaller than 450 net sf.

2. When the need is demonstrated by the LEA, additional space in the classroom shall be provided with, or students shall have an accessible route to: an accessible unisex restroom with one toilet, sink, washer/dryer, and shower stall/tub, as needed, and at least 15 net sf of storage.

3. When the need is demonstrated by the LEA, in 6th grade classrooms and above, a kitchenette of least 30 net sf shall be provided.

B. Science *(COMAR 13A.04.09)*

1. For grades PK through 5, no additional space is required beyond the classroom requirement.

2. For grades 6 through 12, 4 net sf/student of the specialty program capacity for science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction. The space shall have science fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Science Content Standards.

3. For grades 9 through 12 only, at least 40 net sf of space is provided for securable, well-ventilated storage/prep space for each science room having science fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.

C. Fine-Arts Education. *(COMAR 13A.04.16)* A school facility shall have classroom space to deliver fine-arts education programs. Fine arts subjects include art, music, dance, and theater. Classroom space(s) for fine-arts education shall not be smaller than the average classroom at the facility. Fine-arts education classroom space(s) may be included in the academic-classroom requirement and may be used for other instruction.

1. Elementary school. Fine-arts education programs may be accommodated within a general use or dedicated arts classroom. Provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full time fine-arts teacher. Provide additional dedicated fine-arts program storage of at least 60 net sf for each subject area per facility.

2. Middle school. Classroom space(s) for fine-arts education programs shall have no less than 4 net sf/student of the specialty program capacity for fine-arts subjects. Provide one dedicated classroom for each fine-arts subject area staffed with greater than 0.5 full time fine-arts teacher. Provide additional 60 net sf of storage for each fine-arts program subject.

3. High school. Classroom space(s) for fine-arts education programs shall have no less than 5 net sf/student of the specialty program capacity for fine-arts subjects.

4. Combination school. A combination school shall provide the elements of the grades served by paragraphs (1), (2) and (3) above without duplication but meeting the higher standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

D. Technology Education and Computer Science *(COMAR 13A.04.01)*

1. For grades K through 5, no additional space is required beyond the classroom requirement.

2. For grades 6 through 8, 3 net sf/student, and 4 net sf/student for grades 9 through 12, of the specialty program capacity for technology education and family and consumer science is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction.

3. The space shall have technology fixtures and equipment, in accordance with the standard equipment necessary to meet the educational requirements of the Maryland Technology Education Content Standards, and in high school, the requirements of Maryland Advanced Technology Education electives where such electives are offered.

4. Provide at least 80 net sf for securable, well-ventilated storage/prep space for each technology education room having technology fixtures and equipment. Storage/prep room(s) may be combined and shared between more than one classroom.

E. Career and Technology Education *(COMAR 13A.04.02 and 13A.04.10)*

1. Elementary school. No requirement.

2. Middle school. Space shall be provided for career-development and career-exploration activities. Each program lab or classroom space shall be no smaller than 650 net sf.

3. High school. Career and technology education programs space shall be provided with no less than 4 net sf/student of the specialty program capacity of the school for career education. Each program lab or classroom space shall be no smaller than 650 net sf. Spaces for programs requiring licensing, certification, or accreditation by a state board or agency shall meet all applicable health and safety standards. Cosmetology and barber programs shall comply with the sanitation requirements of the State Board of Cosmetologists and the State Board of Barbers, respectively.

4. Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

IX. SCHOOL LIBRARY/MEDIA CENTER. *(COMAR 13A.05.04)* A school facility shall have a unified school library/media program for the use of all students which shall include an organized and centrally managed collection of instructional materials and technologies and direct instruction. Provide space for collections, reference, circulation, instruction, workroom for staff, and storage.

A. Elementary school. The area for stacks and seating space shall be at least 3 net sf/student of the planned school program capacity. The instructional space shall not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

B. Middle or high school. The area for stacks and seating shall be at least 3 net sf/student of the planned school program capacity. The space shall not be smaller than the average classroom at the facility. In addition, office/workroom space and secure storage shall be provided.

C. Combination school. Provide the elements of the grades set out in Paragraphs (A) and (B) above without duplication, but meeting the higher standards.

D. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

X. PHYSICAL EDUCATION. *(COMAR 13A.01.02.05,13A.04.13, and 13A.06.04)*

A. General requirements. Each school shall provide an instructional program in physical education each year for all students in grades PK-8. Each school shall offer a physical-education program in grades 9–12 which shall enable students to meet graduation requirements and to select physical education electives. The following minimum spaces are required: gymnasium, teacher office or planning area, equipment storage, and outdoor instructional playing field.

1. Elementary school. Provide a gymnasium with at least 2,200 net sf. This space may have multi-purpose use in accommodating other educational program activities such as art program performances.

2. Middle school. Provide a gymnasium with a minimum of 5,200 net sf plus an additional 4 net sf times 40% of the enrollment of the school devoted to bleacher seating.

3. High school. Provide a gymnasium with at least 6,500 net sf plus an additional 4 net sf times 40% of the enrollment of the school devoted to bleacher seating..

4. Combination school. Provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher net sf standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

B. Additional physical education requirements in addition to space requirements in Subsection A:

1. Elementary school. One office shall be provided. Separate physical education equipment storage shall be provided.

2. Middle school. One office shall be provided. Separate physical education equipment storage space shall be provided.

3. High school. Two dressing rooms shall be provided, with lockers, showers and restroom fixtures. Two offices shall be provided. Separate physical education equipment storage space shall be provided.

4. Combination school. A combination school shall provide the elements of the grades served by Paragraphs (1), (2) and (3) above without duplication, but meeting the higher standards.

5. Other school. Other schools shall provide the elements above necessary to meet the educational requirements of the specific programs and capacity of the schools.

XI. FOOD SERVICES *(COMAR 13A.06.01)*

A. Dining. A school facility shall have a space to permit students to eat within the school outside of general classrooms. This space may have more than one function and may fulfill more than one sufficiency standards requirement. Schools are encouraged to provide sufficient lunch periods that are long enough to give all students enough time to be served and to eat their lunches. The dining area shall be sized to accommodate no less than one third of the planned school program capacity of the school. The dining area shall have no less than 15 net sf/seated student.

B. A serving area shall be provided in addition to a dining area.

C. Kitchen. A kitchen shall have a telephone, plumbing providing potable water, a sink suitable for use both in preparing food and washing utensils, and a separate hand-washing sink. Kitchen and equipment shall comply with either the food preparation kitchen or the serving kitchen standards defined as follows:

1. Food preparation kitchen. Provide at least the greater of 1) a minimum of 2 net sf/meal served during the single largest serving period or 2) no fewer than 2 sf per enrolled student eligible for free or reduced-price meals.

2. Serving kitchen. Where food is not prepared, there shall be a minimum of 200 net sf.

XII. OTHER FACILITY AREAS.

A. Administrative space. A school facility shall have space to be used for the administration of the school. The space shall consist of a minimum of 150 net sf, plus 1 net sf/student of the planned school program capacity.

B. Faculty workroom/lounge. A school facility shall have workspace/lounge available to the faculty. This space is in addition to any workspace/lounge available to a teacher in or near a classroom. The space shall consist of 1 net sf/student of the planned school program capacity with no less than 150 net sf. The space may consist of more than one room and may have more than one function. This space shall include a break area with a sink.

C. Health services. *(COMAR 13A.01.02.05 and 13A.05.05.10A)* A school facility shall have a dedicated health services space with areas for waiting, examination and treatment, resting, storage, and an accessible toilet room. There shall be a separate room for private consultations and for use as a health service professional's office. Provide lockable cabinets for medical records and medications and at least one sink in addition to the sink in the toilet room. All sinks must provide both hot and cold water. Provide a minimum of 500 net sf.

D. Pupil services. *(COMAR 13A.05.05)* A school shall provide a coordinated program of pupil services for all students which shall include, but not be limited to, school counseling, pupil personnel, school psychology, and health services. The school facility shall provide a minimum of 120 net sf for each discipline, except school health services, staffed with greater than a 0.5 full time professional.

XIII. GENERAL STORAGE (EXCLUDES LOCKERS, JANITORIAL, KITCHEN, GENERAL CLASSROOM, SPECIALTY CLASSROOMS, AND ADMINISTRATIVE STORAGE). For storage, at least 1 net sf/student of the planned school program capacity may be distributed in or throughout any type of room or space, but may not count toward required room square footages. General storage must be securable and include textbook storage.

XIV. MAINTENANCE AND JANITORIAL SPACE. Each school shall designate 0.5 net sf per student of the planned school program capacity for maintenance and janitorial space. Janitorial space shall include a janitorial sink.

XV. STANDARDS VARIANCE.

A. The IAC may grant a variance from any of the Sufficiency Standards if it determines that the intent of the standard can be met by the school system in an alternate manner or if a variance is required for appropriate programmatic needs as demonstrated by the school system. If the IAC grants the variance, the school system shall be deemed to have met the standard.

B. The IAC's Facilities Planning Guide includes the appropriate Sufficiency Standard in each functional section defining design minimums, and the State maximum funding participation is included as the State Funding Participation Goals provided by the total gross square footage per student by enrollment level. Additional State funding above the Funding Participation Goals will be granted only pursuant to a project-specific variance granted by the IAC.

End of Standards

Assessing System Level Assets

EXAMPLE

List of Systems/Assets

v 09/24/20

EXAMPLE

Structure	A1	A1-00.1	Foundation System
		A2-01.1	Basement Wall
	A2	A2-02.1	Slab on Grade
	B1	B1-00.1	Superstructure
Envelope	B2	B2-00.1	Exterior Wall - 1, 2, & 3
	B2	B2-01.1	Exterior Glazing - 1, 2, & 3
		B2-02.1	Entrance Door (No Storefront)
		B2-03.1	Service Door
		B2-04.1	Overhead Door
		B2-05.1	Other Door
	B3	B3-00.1	Roofing System - 1, 2, & 3
Interiors	C1	C1-01.1	Interior Door (Office/Classroom)
		C1-01.2	Interior Door (Service/Egress)
		C1-01.3	Interior Door - Other
	C2	C2-01.1	Interior Wall - 1, 2, & 3
		C2-02.1	Floor - 1, 2, 3, & 4
		C2-03.1	Ceiling - 1, 2, & 3
	C3	C3-01.1	Casework
	C4	C4-01.1	Commercial Kitchen Equipment
Systems	D1	D1-00.1	Conveyance
	D2	D2-00.1	Plumbing Infrastructure & Hot Water
	D3	D3-01.1	Central Cooling Systems
		D3-02.1	Central Heating Systems
★		D3-03.1	HVAC Distribution & Terminal Units
		D3-04.1	HVAC Package Units & Split Systems
	D4	D4-00.1	Fire Suppression System - Sprinkler
	D5	D5-00.1	Fire Alarm / Life Safety System
	D5	D5-01.1	Electrical Infrastructure
		D5-02.1	Lighting
	D9	D9-00.1	Other Systems
Pools	G2	G2-01.1	Swimming Pool
Site		G2-02.1	Landscaping
		G2-03.1	Hardscape (Vehicular)
		G2-03.2	Hardscape (Pedestrian)
		G2-03.3	Hardscape - 3 & 4
	G9	G9-00.1	Other Site Item

CSM (Client Provided Material)

- BVNA will Pre-Populate Data based on Prior Report, Google Earth, and Assumptions/Calculations
- Client Representative (LEA)s will review and provide comments and then "Acknowledge" as such.
- PMs are to use CSM data and comments as a guide but should be assessing reality, e.g.
  - ✓ If an LEA comment says "Boiler Failed" - PM will need to confirm this, address in the System Level YiS & RUL, and likely include a deficiency tagged photo.
  - ✓ If an LEA comments say "Active Roof Leak" - and PM does not find one and the POC says there is not one, then PM will need to address with comments in one of the roof assets, e.g. "POC indicated no active leaks and none observed"
  - ✓ If the LEA does NOT comment about a failed boiler, PM will need to catch that miss.
  - ✓ If the LEA does NOT comment about the Building GSF not including the 100K GSF integrated addition, PM will need to address/revise the GSF accordingly and all assets that tie into that GSF quantity.

D3 D3-03.1 HVAC Distribution & Terminal Units

Line Item System Asset Includes

- **AHUs & Fans (Supply, Return, Exhaust, Hood)**
- **Ductwork and Hydronic Piping** AND
- **VAVs, Fan-Coil Units, Unit Ventilators** AND
- **Unit Heaters, Cabinet Heaters, Radiators** AND
- **BAS / DDC / Other Controls**

System YiS and RUL are averaged/aggregated based on data provided, field observations, and site-contact interviews

Standardized Basis
For Evaluation of System Components

D3041 - Air Handling Unit (AHU), Interior (> 4,000 CFM)

EUL 20 Years

Excellent

RUL 20 to 19 (>95%+ of EUL)

- New (or indistinguishable from new)

Regular cleaning, filter changes, and motor lubrication recommended as part of routine maintenance.

Good

RUL 18 to 14 (>66% EUL left)

- Aside from age there is little directly observable that will show degradation of the AHU

Regular cleaning, filter changes, and motor lubrication recommended as part of routine maintenance.

Fair

RUL 13 to 3

- Motors and Fans make more noise than expected
- Filters, motors, fans, belts, coils, plenum areas are dirty
- Minor corrosion observed at housing, motors, fans

Regular cleaning, filter changes, and motor lubrication recommended as part of routine maintenance.

No photo

Poor

RUL 2 to 1

- Motors and Fans make excessive noise, AND/OR
- Filters, motors, fans, belts, coils, plenum areas are excessively dirty, AND/OR
- Corrosion observed at housing, motors, fans
- Observed/reported decreased performance and functional issues

Anticipate refurbishment of Air Handling Unit..

Failed

RUL 0

- Filters, motors, fans, belts, coils, plenum areas are excessively dirty, AND/OR
- Excessive corrosion observed at housing, motors, fans
- Observed/reported NON-performance

Replace OR refurbish Air Handling Unit.

Air handlers are installed in mechanical rooms, ceiling plenums, attics, basements, outdoors at grade, or on a roof. Just because it's on a roof, don't assume it's a Packaged unit. Isolated instances of a missing belt, minor condensate leaking, minor corrosion, excessive dirt, or a rough running motor, would NOT necessarily lower the overall condition of the Asset. These instances would just need to be addressed as separate repair "Actions.

Unless marked on the unit, CFM is typically based on drawings if available, otherwise it is estimated: Estimate the cross-sectional area (W x H) of the AHU at the cooling coil and multiply by 500 feet/minute to come up with an estimated CFM of the AHU (Example: 4' x 4' = 16 SF; 16 SF x 500 FPM = 8,000 CFM). If the cooling coil cross-section is not able to be determined then estimate the cross-sectional SF of all the outgoing ductwork leaving the AHU, multiply by 1100 feet/minute to come up with a total CFM.

Date: 2018-04-20 ◊ Author: Andrew Lang ◊ Editor: TBD

D3041 - Fan, Axial Flow

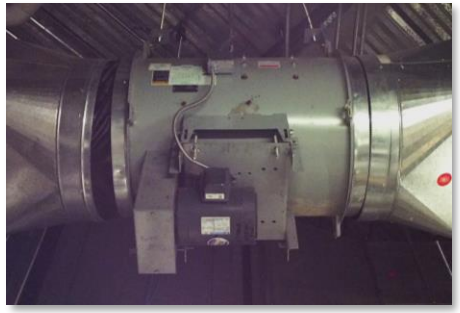
EUL 20 Years

Excellent

RUL 20 to 19 (>95%+ of EUL)

- New (or indistinguishable from new)

Regular cleaning and motor lubrication recommended as part of routine maintenance.



Good

RUL 18 to 14 (>66% EUL left)

- Aside from age there is little directly observable that will show degradation of the Asset

Regular cleaning and motor lubrication recommended as part of routine maintenance.

Fair

RUL 13 to 3

- Motors/fans make more noise than expected
- Housing, motors are dirty
- Housing has minor scratches/dents
- Minor corrosion observed at housing, motors, fans

Minor repairs may be required, usually as part of routine maintenance.

Poor

RUL 2 or 1

- Motors/fans make excessive noise/vibration
- Housing, motors are excessively dirty
- Significant corrosion observed at housing, motors, fans
- Observed/reported decreased performance and functional issues, recurring functional issues, or history of repairs

Anticipate replacement

Failed

RUL 0

- Unit needs repairs, is not functional, is beyond EUL, and (Repair $) ≥ (Replacement $)
- Fan/motor enclosure substantially damaged, misshapen, is no longer weathertight, or is perforated, deteriorated, or otherwise beyond repair
- Fatigued (stress cracked), or damaged fan wheel
- Observed/reported NON-performance

Replacement required

See the **20% Rule**

Minor dents and scratches and/or minor corrosion, would NOT necessarily lower the overall condition of the Asset if there isno impact on normal performance or integrity (or weathertightness if installed outdoors). The condition of the connected ductwork is NOT necessarily the condition to the fan.As possible, identify fans use, i.e. “Supply Fan”, “Exhaust Fan”, “Return Fan”, or “Relief Fan. EMG’s default is to recommend replacement of smaller fans, however very large central fans might be refurbished.

Date: 2018-05-01 ◊ Author: Ryan Peters ◊ Editor: Andrew Lang

D3042 - Exhaust Fan, Centrifugal

EUL 15 Years

Excellent

RUL 15 (>95% of EUL)

- New (or indistinguishable from new)

Regular cleaning, belt changes, lubrication recommended as part of routine maintenance.

Good

RUL 14 to 10 (>66% EUL left)

- Aside from age there is little directly observable that will show degradation of the asset from "Excellent" down to "Good" Condition

Regular cleaning, belt changes, lubrication recommended as part of routine maintenance.

Fair

RUL 9 to 3

- Motors/fans make more noise than expected
- Housing, motors are dirty
- Housing has minor scratches/dents
- Minor corrosion observed at housing, motors, fans

Minor repairs may be required, usually as part of routine maintenance.

Poor

RUL 2 to 1

- Motors/fans make excessive noise/vibration
- Housing, motors are excessively dirty
- Significant corrosion observed at housing, motors, fans
- Observed/reported decreased performance and functional issues, recurring functional issues, or history of repairs

Anticipate replacement.

Failed

RUL 0

- Unit needs repairs, is not functional, is beyond EUL, and (Repair $) ≥ (Replacement $)
- Fan/motor enclosure substantially damaged, misshapen, is no longer weathertight, or is perforated, deteriorated, or otherwise beyond repair
- NON- performance observed/reported

Replacement required.

See the **20% Rule**

Minor dents and scratches, and/or minor corrosion, would NOT necessarily lower the overall condition of the Asset if there is no impact on normal performance, integrity, or weathertightness. Centrifugal fans (sometimes referred to as "utility fan", "utility set", "blower") are found indoors or outdoor, may be base-mounted or suspended, and may have ducted or un-ducted air intake or discharge. The condition of the connected ductwork is NOT necessarily the condition to the fan. As possible, identify fans use, i.e. "Supply Fan", "Exhaust Fan", "Return Fan", or "Relief Fan". EMG's default is to recommend replacement of smaller fans, however very large central fans might be refurbished.

Date: 2018-05-01 ◊ Author: Ryan Peters ◊ Editor: Andrew Lang

D3059 - Exhaust Fan, Propeller

EUL 15 Years

Excellent

RUL 15 (>95% of EUL)

- New (or indistinguishable from new)

Regular cleaning and lubrication recommended as part of routine maintenance.

Good

RUL 14 to 10 (>66% EUL left)

- Aside from age there is little directly observable that will show degradation of the asset from "Excellent" down to "Good" Condition

Regular cleaning and lubrication recommended as part of routine maintenance.

Fair

RUL 9 to 3

- Motors/fans make more noise than expected
- Housing, motors are dirty
- Housing has minor scratches/dents
- Minor corrosion observed at housing, motors, fans

Minor repairs may be required, usually as part of routine maintenance.

Poor

RUL 2 or 1

- Motors/fans make excessive noise/vibration
- Housing, motors are excessively dirty
- Significant corrosion observed at housing, motors, fans
- Observed/reported decreased performance and functional issues, recurring functional issues, or history of repairs

Anticipate replacement.

No photo

Failed

RUL 0

- Unit needs repairs, is not functional, is beyond EUL, and (Repair $) ≥ (Replacement $)
- Fan/motor enclosure substantially damaged, misshapen, is no longer weathertight, or is perforated, deteriorated, or otherwise beyond repair
- NON- performance observed/reported

Replacement required.

See the **20% Rule.**

Minor dents and scratches, and/or minor corrosion, would NOT necessarily lower the overall condition of the Asset if there isno impact on normal performance, integrity, or weathertightness. Propeller type fans are found indoors or outdoor. As possible, identify fans use, i.e. "Supply Fan", "Exhaust Fan", "Return Fan", or "Relief Fan". EMG's default is to recommend replacement of smaller fans, however very large central fans might be refurbished.

Date: 2018-05-21 ◊ Author: Ryan Peters ◊ Editor: Andrew Lang

D3042 - Exhaust Fan, Roof or Wall Mounted

EUL 15 Years

Excellent

RUL 15 (>95%+ of EUL)

- New (or indistinguishable from new)

Regular cleaning and motor lubrication recommended as part of routine maintenance.

Good

RUL 14 to 10 (>66% EUL left)

- Aside from age there is little directly observable that will show degradation of the fan or curb

Regular cleaning and motor lubrication recommended as part of routine maintenance.

Fair

RUL 9 to 3

- Motors/fans make more noise than expected
- Housing, motors are dirty
- Housing has minor scratches/dents
- Minor corrosion observed at housing, motors, fans

Minor repairs may be required, usually as part of routine maintenance.

Poor

RUL 2 or 1

- Motors/fans make excessive noise/vibration
- Housing, motors are excessively dirty
- Significant corrosion observed at housing, motors, fans
- Observed/reported decreased performance and functional issues, recurring functional issues, or history of repairs

Anticipate replacement.

Failed

RUL 0

- Unit needs repairs, is not functional, is beyond EUL, and (Repair $) ≥ (Replacement $)
- Fan/motor enclosure or curb substantially damaged, misshapen, is no longer weathertight, or is perforated, deteriorated, or otherwise beyond repair
- Observed/reported NON-performance
- Evidence of animal infestation

Replacement required.

See the **20% Rule**

Minor dents and scratches and/or minor corrosion, would NOT necessarily lower the overall condition of the Asset if there isno impact on normal performance or weathertightness. The attribute “Roof Mounted“ (sometimes referred to as mushroom, downblast, or upblast) refers to the fan type (configuration), and is NOT limited to fans installed on a roof. As possible, identify fans use, i.e. “Supply Fan” as opposed to an “Exhaust Fan”.

Date: 2018-05-01 ◊ Author: Ryan Peters ◊ Editor: Andrew Lang

D3059 - Fan Coil Unit

EUL 20 Years

Horizontal Ceiling Mounted

Vertical - Concealed in Wall

No photo

Horizontal Cabinet Style

Excellent

RUL 20 to 19 (>95%+ of EUL)

- New (or indistinguishable from new)

Coil and fan inspection recommended as part of routine maintenance.

Good

RUL 18 to 13 (>66% EUL left)

- Aside from age there is little directly observable that will show degradation of the Asset from Excellent condition down to Good condition

Coil and fan inspection and cleaning recommended as part of routine maintenance.

Fair

RUL 12 to 3

- Motor/fan make more noise than expected
- Housing, fan, coil, are dirty
- Housing has minor scratches/dents
- Minor corrosion observed at housing, motor, fan
- Minor repairs or some component replacements may have already occurred

Minor repairs may be required, usually as part of routine maintenance.

Poor

RUL 2 or 1

- Motor/fan make excessive noise/vibration
- Fan, coil are excessively dirty
- Significant corrosion observed at housing, motor, fan
- Observed/reported decreased performance, recurring functional issues, or history of repairs

Anticipate replacement.

Failed

RUL 0

- Unit needs repairs, is not functional, is beyond EUL, and (Repair $) ≥ (Replacement $)
- Observed/reported NON-performance
- Known recurring refrigerant or water leaks (Not necessarily leaks from condensate)

Replacement required.

See the **20% Rule** for units < 5 Ton. Units > 5 Ton should be captured individually.
Fan Coil Units consist of two components, A fan and a coil. The coil may be refrigerant type for cooling, hydronic type for heating and/or cooling, a combination, or either for cooling with electric heat. FCUs do NOT have compressors and are found indoors. FCUs may be horizontal orientation and concealed above a ceiling, ceiling mounted, or floor mounted. They may also be vertical orientation and enclosed by walls with only an access panel. FCUs may be ducted, heating and/or cooling and part of a 2, 3, or 4-pipe system. Minor dents, scratches, or corrosion would NOT necessarily lower the overall condition of the Asset if there is no appreciable impact on performance or unit integrity.

Date: 2018-05-07 ◊ Author: Ryan Peters ◊ Editor: Andrew Lang

Photo Documentation of System Level Assets

- Listing of Components of a System Level Assets is provided within the Data Collection Tool and is orderered by Relevance/Cost - Highest to Lowest
- **Take Photo(s) of Principal Components**
- **Take Photo(s) of Major Supporting Components (Typical)**
- Photos should show the general condition of every type of Principle and Major Supporting Components that makes up a “System”, i.e. System Level Assets
- Photos should NOT be provided for every component.
- In general each Principal components should be photo-documented, although an individual photo may not be necessary, e.g. 1 photo of 4 boilers is better than 4 photos, 1 of each boiler.

Condition ratings typically have a direct correlation to RUL/EUL (% of Life Left). Below are verbal definitions.

Excellent	New or like new (at least **95%** of its Expected Useful Life (EUL) left)
Good	No signs of wear (at least **66%** of its Expected Useful Life (EUL) left)
Fair	Some signs of wear but no significant decrease in performance (at least **a 3 RUL**)
Poor	Observed (or reported) signs of decreased systemic performance (RUL = 1 or 2)
Failed	Not performing (**0%** of its Expected Useful Life (EUL) left, i.e. RUL = 0)
N/A	If there is nothing to observe then there is NO condition to record, e.g. a system that is recommended to be installed, or that is not yet installed.

Interagency Commission on School Construction

Larry Hogan
Governor
Edward J. Kasemeyer
Chairperson
Bob Gorrell
Executive Director

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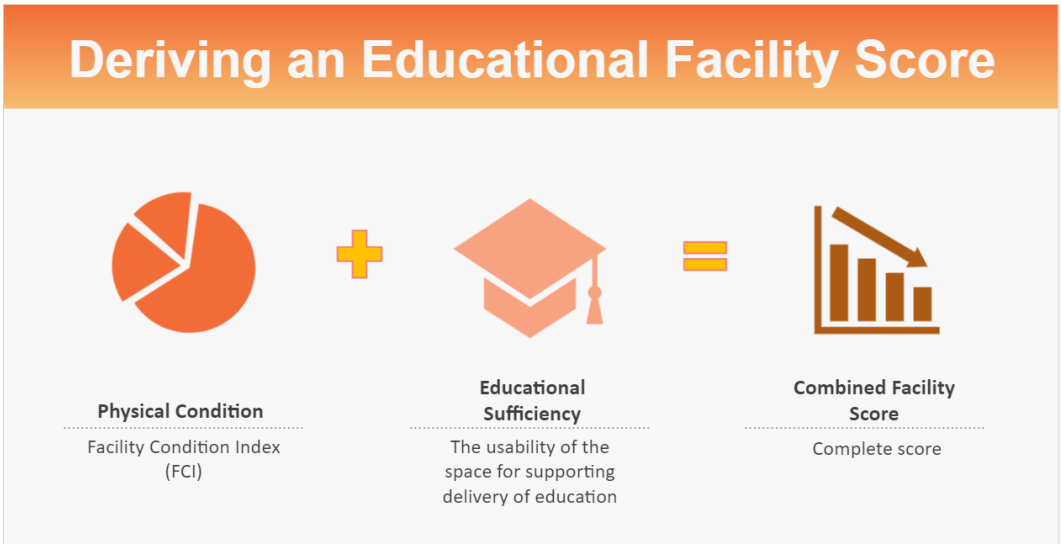
Attachment 4 - Letter Accompanying FCI

CORRESPONDENCE - August 20, 2021

Dear LEA Facility Planners,

As discussed previously, the IAC's Statewide Facilities Assessment has collected data on the condition and educational sufficiency of each of the nearly 1,400 public PK-12 active and holding school facilities in Maryland. The data on condition for each facility is derived from the observed remaining useful lifespan (RUL) for each major building system component in the facility. The building-system condition figures are then weighted by component cost and rolled up into a Facility Condition Index (FCI) score for that facility. The FCI score ***does not*** include educational-sufficiency factors. These will be added later to the FCI score when the combined facility score is generated.



It is essential to note that although an FCI score accurately represents the overall physical condition of a facility, it is blind to whether the facility is sufficient to support the delivery of the educational programs and services required by the State. For this reason, FCI scores alone do not provide an adequate basis for prioritizing a school's relative need or for allocation of resources for renewal or replacement and sometimes even for capital maintenance.

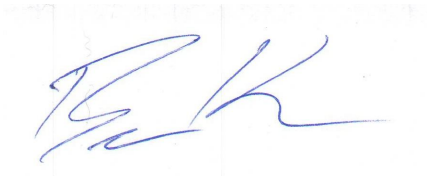
In light of this, the IAC is providing the attached preliminary FCI data for your schools for your review but does not at this time intend to publish this data unaccompanied by the relevant educational-sufficiency data as represented by combined facility scores. No relative need ranking implications from these FCI scores should be implied for prioritizing projects.

Interagency Commission on School Construction

To: LEA Facility Planners
Date: August 20, 2021

These FCI scores are preliminary scores from the baseline assessment and they will be updated continuously as additional new data about building-system condition is provided to the IAC. Updated information will be reported as average facility scores on an annual basis along with the combined facility scores. If, after reviewing the attached data, your staff identifies any substantial concerns or issues with the data, please contact me at benjamin.kaplan@maryland.gov.

Regards,



Ben Kaplan
Project Manager, IAC Statewide Facilities Assessment

Cc: LEA Superintendents
LEA Maintenance Directors

Summary of Condition & Sufficiency Rubric

IAC Statewide Facilities Assessment (SFA)

I. Scope of the IAC's Statewide Facilities Assessment (SFA)

Pursuant to the 21st Century School Facilities Act of 2018, the IAC contracted with Bureau Veritas (BV) to conduct a statewide assessment of the condition and educational sufficiency of each of Maryland's public PK-12 school facilities. The SFA was designed to generate a single score for each facility that reflects its combined condition and educational sufficiency and can be compared with that of each other facility in the state. To arrive at the combined facility score, the SFA combines data on physical condition with data on educational sufficiency.

II. Process and Rubric for Assessing Physical Condition

BV's qualified assessors performed field observations of the major components of each of sixteen major building systems to determine the system's Expected Useful Lifespan (EUL) according to industry standards and estimate its Remaining Useful Lifespan (RUL).

BV estimated each system's replacement cost based upon a unit cost and quantity or size for the system. Then, BV calculated the percentage of the system's expected lifespan that has been depleted. This is

referred to as the Facility Condition Index (FCI) score. FCI is calculated by dividing the difference between the EUL and RUL by the EUL.

$$FCI = (EUL-RUL) / EUL$$

Further, an FCI for each facility was calculated by dividing the sum of the cost-weighted system FCIs by the Current Replacement Value (CRV) for the facility.

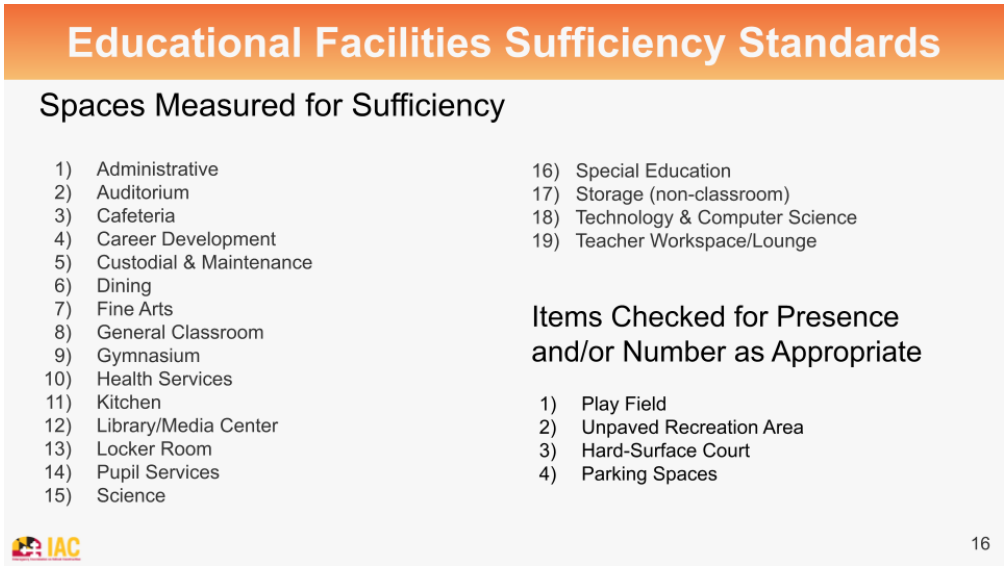
$$\text{Facility FCI} = \frac{(FCI_1 \times Cost_1) + (FCI_2 \times Cost_2) + \ldots + (FCI_n \times Cost_n)}{\text{Current Replacement Value}}$$

III. **Process and Rubric for Assessing Educational Sufficiency**

BV's assessors also performed field observations of the spaces within each facility and compared them against the IAC's Maryland Educational Facilities Sufficiency Standards (EFSS). The Standards state minimum requirements for all spaces in terms of specific attributes and, for some types of spaces, in terms of square footage per student.

Attribute
Lighting
Temperature & relative humidity
Acoustics
Air quality
Condition issues (especially those affecting the life, safety, or health of facility users)

Sample Space Type	Min. Net Square Feet (NSF) per Student
Gen. Classroom	25
Library/Media Center	3
Maint. & Janitorial	1



The assessors assessed the facility spaces against the attribute standards and logged any attribute deficiencies. The assessors also assessed the spaces against the space requirements. The room sizes were summed and compared to the minimum size requirements from the EFSS based on the number of students projected to attend the program five years in the future. Where the aggregate room sizes for each space type was less than is required by the EFSS, a "Sufficiency Deficiency" was logged to represent the value of the shortfall.

Each deficiency finding, whether related to a building system or to a space type, was then assigned to one of the following nine deficiency categories to allow for additional prioritization, weighting, or ranking as needed and to support the generation of a final combined facility score.

Summary of Condition & Sufficiency Rubric

IAC Statewide Facilities Assessment (SFA)

#	Category Title	Description	Examples	Sufficiency Standard(s)	Key Data
1	Threat to Life/Safety/Health	Critical issues that pose immediate or potential threats to the life, health, or safety of persons within the facility.	• Obvious friable asbestos • Electrical hazards • Exit doors inoperable • Insufficient fire alarm system • Failing load-bearing masonry • HVAC unable to consistently maintain comfort or ventilation • Mold issue from water infiltration, condensation, or leaks	• Standards II, IV ("[s]afe and capable of being maintained; . . . structurally sound.")	• Assessor viewed a system condition or attributes that pose an immediate or potential threat to the life, health, or safety of persons within the facility.
2	Space Deficiency	Space(s) insufficient as measured against Standards for that space type.	• High school with total gen. classroom space less than 25 net SF per student	• Standard VII.A	• Total measured space in a space type is less than the EFSS-required space total for the projected enrollment five years out.
3	Damaging Other Systems	Systems or deficiencies that require repairs to mitigate damage to other building systems.	• Leaking roof resulting in damaged interior finishes, flooring, lighting, and electrical systems	• Standards II, IV	• Assessor viewed a system with a RUL of 0 and condition that is visibly compromising the operation or condition of other building systems.
4	Degraded w/ Potential Mission Impact	Systems that are mission critical and are beyond expected lifespan OR systems currently 200% or more of expected lifespan.	• Functioning door hardware (EUL 7 years) that is 21-plus years old	• Standards II, IV	• Building system age is more than two times the original expected useful lifespan (EUL) or is a mission-critical system (e.g., roof or HVAC) and its age is beyond the EUL.
5	Beyond Expected Lifespan	Systems that are 100% to 200% of expected lifespan but show no signs of required repairs.	• Functioning plaster ceiling (EUL 30 years) that is 65 years old	• Standards II, IV	• Building system age is between one and two times the original expected useful lifespan (EUL).
6	Grandfathered Deficiencies	Deficiencies that are "grandfathered" code	• Flooring installed prior to and not meeting current State or	• Standards II, IV	• Assessor found facility components that do not meet modern codes or

		issues or specific to the local agency. Very rarely found.	local code		standards.
7	Sufficiency Deficiencies—Facility	Deficiencies related to sufficiency standards for ***fixed equipment and inherent parts of the facility***.	• Insufficient number of parking spaces • Kitchen lacking sinks or other needed fixed equipment • System for which essential replacement parts are not available	• Standards V; VI.C-F; XI.	• Assessor found facility components specified in the Standards to be missing or insufficient in or around the facility or assessed building-system components or configurations as obviously obsolete or non-maintainable.
8	Sufficiency Deficiencies—Equipment	Deficiencies related to sufficiency standards for ***non-fixed equipment***.	• Missing desks, chairs, whiteboards • Missing playground equipment	• Standards V; VI.B.	• Assessor found items specified in the Standards to be missing or insufficient in or around the facility.
9	Functioning & Within Expected Lifespan	Systems that are within their expected lifespan and do not require replacement.	• Hot-water boiler (EUL 30 years) that is 22 years old	• Not Standards-based	• Building system age is less than EUL and RUL is greater than zero.