Harrisburg School District

District Wide Facility Study

June 12, 2023

Crabtree, Rohrbaugh & Associates
Architects
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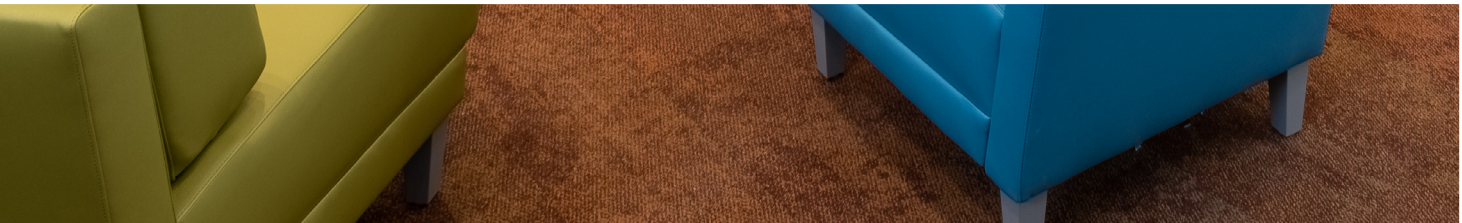
EXECUTIVE SUMMARY



1 | Executive Summary

Forward

Crabtree, Rohrbaugh & Associates is pleased to present this Facilities Study Report to the Harrisburg School District. This report has been developed to assist the Board of School Directors, staff, and community in the decision-making process regarding the utilization and disposition of its educational facilities.

This study is designed to be utilized as a comprehensive planning tool for school boards and administrators. The study provides decision makers with comprehensive analysis and information which they can use to make operational, financial, and most importantly educational decisions related to facilities.

The primary goal is to help the district best assure that their buildings and grounds are a physical representation of a district's educational vision, a reflection of what is best about the community they serve and are a sound investment for taxpayers. In pursuit of this goal this study documents existing conditions and pertinent information, analyzes the data and information, establishes needs within the district facilities, and generates options to meet those needs. The components of the study are as follows:

- General overview of the district
- Overview of the Educational Program
- Analysis of each facilities ability to adequately accommodate the educational program, functional operations, and student enrollment
- Analysis of the anticipated growth/decline in enrollment in the district and at each school and its impact to each facility
- Analysis of the existing conditions of the buildings and grounds for each facility
- Cost to upgrade each facility to current standards
- Embedded Options for limited scope projects within the cost to upgrade facilities section

This study includes all the elements required by the Pennsylvania Department of Education (PDE) to meet the criteria established in the PlanCon district-wide facility study guidelines. Adhering to these guidelines is necessary for submittal to PDE if the district is pursuing reimbursement from the Commonwealth. The full requirements to meet PlanCon district-wide facility study guidelines is found in *Appendix A: Department of Education Requirements* at the end of the study.

Crabtree, Rohrbaugh & Associates Report Team:

R. Jeffrey Straub AIA, LEED Fellow, ALEP, CPD, Principal / Studio Director

Sean R. Douty AIA, LEED AP, Project Manager

Fredrick Withum III, Ed.D., Director of Educational Planning

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"Society is changing rapidly, and education is being challenged to follow suit. As we expand our knowledge of how we learn, we must also expand our concept of what constitutes a stimulating and creative learning"

environment. The single most challenging task in this transformative process is that of altering the public's image of a school facility. Expanding the planning and design process to involve all of the stakeholders and incorporate the societal issues of today makes sense."

"At Crabtree, Rohrbaugh & Associates, we believe in a transparent educational facility design process, with a learner-centered focus and client driven, collaborative approach, one which builds and supports community linkages, a crucial step in the transformation process."

"As such, the information contained within this report is to be considered as preliminary information, providing a benchmark from which more detailed planning and informed decision-making can begin."

Executive Summary

In the summer of 2022 Crabtree, Rohrbaugh & Associates (CRA) was engaged to conduct a District Wide Facility Study by Harrisburg School District (HSD). A series of meetings between Crabtree, Rohrbaugh & Associates' Report Team with HSD's administrators discussed and evaluated the school district's facilities based on both educational programming and facility conditions. At the same time, the project team including architects, educational planers and engineers surveyed the schools on multiple occasions to verify existing conditions. This culminated in preliminary meetings with the HSD's administrative team and presentations to the HSD Board of School Directors in January through late spring of 2023.

It should be noted that Pennsylvania's Planning & Construction (PlanCON) Department recommends completing or updating a District Wide Facility Study every three to five years, not that a school district should immediately move forward with a construction project, but to be able to complete long range planning to maintain its facilities. In this case, so that HSD has a five to ten year plan to maintain its facilities.

Through the evaluation of key facility data including existing data, facility conditions, educational program, capacity, and enrollment it was determined two major concerns were affecting the district related to their facilities:

1. First, and foremost, Harrisburg School District's (HSD) majority of current educational facilities were renovated 20 years ago. This is creating a unique challenge to HSD, in that due to this time period, many, if not most of the facilities now have systems and finishes that are at end of life or approaching this time period requiring replacement in either the next few years or 5-10 years at most.
2. Second, Harrisburg School District is in process of converting their elementary schools to kindergarten through fifth grades. With Steele Elementary School being renovated currently, educational space is adequate in the elementary schools. In addition, it appears that space will be available at the secondary schools. HSD, is evaluating further realignment of programs and building which may necessitate expansion at the middle schools. This evaluation is beyond the current study that focuses on existing conditions, but can be utilized to evaluate space utiliazation in the secondary buildings, elementaries and specialty educational buildings within HSD.
3. Last, enrollment has increased by approximately 180 students over the past ten years, which represents a 3% increase in population. It does not appear from enrollment projections that enrollment will continue to increase, and may see a slight decrease in the coming 5-10 years. Based on this information, decisions should likely be more focused around maintaining facilities, realignment of buildings for educational opportunities and maximizing efficiency space wise throughout HSD.

Further detail is provided in subsequent sections of the report including detailed potential construction costs.

Contributors:

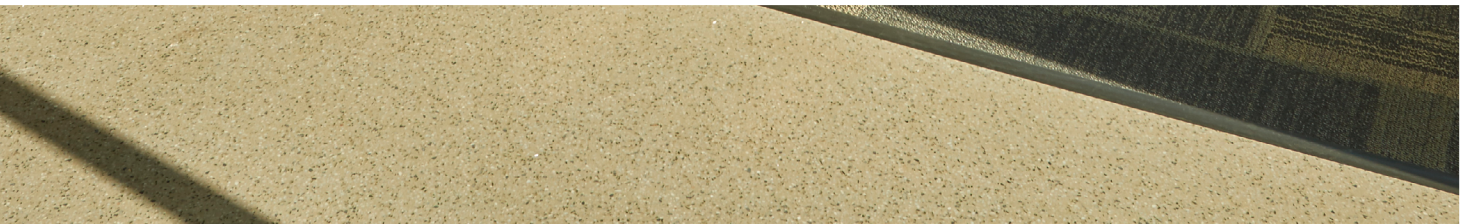
Crabtree, Rohrbaugh & Associates is grateful for the support of the administration, staff, and members of the Board of School Directors who partnered with our team to complete this analysis. That team included, but was not limited to guidance and input from:

Eric Turman | Superintendent	Dr. Marcia Stokes | Business Administrator
John Reedy | Chief Operations Administrator	Craig Glass | Director of Facilities
Nicole Snook | Principal, Ben Franklin Elementary	Rhonda Eckenroth | Principal, Downey Elementary
William Hicks | Principal, Foose Elementary	Michelle Archie | Principal, Melrose Elementary
Jenifer Branca | Assistant Principal, Scott Elementary	Jennifer Jenkins | Principal, Cougar Academy
Eugene Spells | Principal, Camp Curtin Academy	Ryan Jones | Principal, Marshall Math Science Academy
Melissa Floyd | Principal, Rowland Academy	Michelle Felton | Principal, HHS John Harris Campus
Dr. Sieta Achampong | Principal, HHS SciTech Campus	

Board of School Directors:

Mr. Brian Carter	Board President
Ms. Roslyn Copeland	Board Vice-President
Mr. Steven Williams	Board Member
Mr. James Thompson	Board Member
Ms. Terricia Radcliff	Board Member
Mr. Doug Thompson Leader	Board Member
Ms. Jaime Johnsen	Board Member
Ms. Danielle Robinson	Board Member
Mr. Ellis Roy	Board Member

DISTRICT OVERVIEW



2 | Geographic and Demographic Overview

Summary of Findings:

- An examination of enrollment given the demographics of the school district reveals the complicated nature of facility planning in the Harrisburg School District.
- Between 2010 and 2021 the total population of the Harrisburg School District has increased by 1400 residents and the median age of the population dropped from 33.3 to 31.6. In addition, the percent of school children in the population increased slightly (+0.22%). However, during that same time period, enrollment in school district schools have dropped by 1643 students. As a result, it can be assumed that the decrease in enrollment is not the result of demographic shifts in the population.
- Population projections based on the 2020 Federal Census indicates that while the population is expected to increase by over 700 residents over the next 5 years, the age profile of residents only anticipated to change slightly. Residents ages birth to nineteen is projected to decline by 0.2%, adults ages 25 to 59 is projected to increase by 1.1%, and residents over the age of sixty are projected to decline by 1.4%.
- The US Census estimates 11,185 residents in the Harrisburg School District are between the ages of five and nineteen but a district enrollment of 6500 students the difference of over 4600 students are school aged residents that:
    - recently graduated or graduated early.
    - attend one of the four charter schools or nine private/parochial schools operating in the school district.
    - Attend private/parochial schools operating just outside district boundaries.
    - reached the age of seventeen and are no longer required to attend school under compulsory attendance laws and chose not to do so.
- Planning is complicated by the transiency of residents. The U.S. Census reports that Harrisburg School District residents have 1.5 times the rate of mobility than Dauphin County and more than double the rate for Pennsylvania with 25.9% of the population changing residences between 2019 and 2020.
- The large inventory of residential units available to rent support population mobility. 65% of occupied properties are renter-occupied.
- An examination of enrollment trends in a neighboring school district can demonstrate the mobility of school age children back and forth between the two districts.

District Geography & Distinguishing Characteristics

The Harrisburg School District is a large, urban, public school district based in Harrisburg, Pennsylvania. The school district boundaries are contiguous with those of the city of Harrisburg. The Harrisburg School District encompasses approximately eleven square miles. According to federal census data, the district serves a resident population of 50,000.

Harrisburg public schools provide education for the city's youth, beginning with preschool through twelfth grade. The district also operates the Cougar Academy, a K-12 blended learning program. The district is also the home to charter, parochial, and private schools.

Properties in Harrisburg School District

The Harrisburg School District serves approximately 6500 students in five elementary schools, three middle schools, two high schools, and a cyber school.

The school's names, addresses, enrollments, and grade alignments are shown in the tables below.

ELEMENTARY SCHOOLS

Ben Franklin Elementary School	
Grade Alignment:	Pre-K-5
Current Enrollment:	607
Total Educational Capacity:	845
Functional Capacity:	718
Street Address of District:	1205 North Sixth Street
City, State, and Zip Code	Harrisburg, PA 17102

Downey Elementary School	
Grade Alignment:	K-5
Current Enrollment:	420
Total Educational Capacity:	530
Functional Capacity:	451
Street Address of District:	1313 Monroe Street
City, State, and Zip Code	Harrisburg, PA 17103

Foose Elementary School	
Grade Alignment:	Pre-K-5
Current Enrollment:	532
Total Educational Capacity:	725
Functional Capacity:	616
Street Address of District:	1301 Sycamore Street
City, State, and Zip Code	Harrisburg, PA 17104

Melrose Elementary School	
Grade Alignment:	K-5
Current Enrollment:	532
Total Educational Capacity:	605
Functional Capacity:	514
Street Address of District:	2041 Berryhill Street
City, State, and Zip Code	Harrisburg, PA 17104

Scott Elementary School	
Grade Alignment:	K-5
Current Enrollment:	532
Total Educational Capacity:	480
Functional Capacity:	408
Street Address of District:	1900 Derry Street
City, State, and Zip Code	Harrisburg, PA 17104

Cougar Academy	
Grade Alignment:	K-12
Current Enrollment:	305
Total Educational Capacity:	495
Functional Capacity:	421
Street Address of District:	1601 State Street
City, State, and Zip Code	Harrisburg, PA 17103

Steele Elementary School (currently vacant)	
Grade Alignment:	K-5
Current Enrollment:	0
Total Educational Capacity:	455
Functional Capacity:	387
Street Address of District:	2537 North Fifth Street
City, State, and Zip Code	Harrisburg, PA 17110

Hamilton Elementary School	
Grade Alignment:	K-12
Current Enrollment:	
Total Educational Capacity:	495
Functional Capacity:	421
Street Address of District:	1601 State Street
City, State, and Zip Code	Harrisburg, PA 17103

SECONDARY SCHOOLS	

Marshall Math Science Academy	
Grade Alignment:	5-8
Current Enrollment:	816
Total Educational Capacity:	700
Functional Capacity:	560
Street Address of District:	301 Hale Avenue
City, State, and Zip Code	Harrisburg, PA 17104

Rowland Academy	
Grade Alignment:	6-8
Current Enrollment:	812
Total Educational Capacity:	1250
Functional Capacity:	1000
Street Address of District:	1842 Derry Street
City, State, and Zip Code	Harrisburg, PA 17104

Camp Curtin Academy	
Grade Alignment:	6-8
Current Enrollment:	532
Total Educational Capacity:	1300
Functional Capacity:	1040
Street Address of District:	2900 North Sixth Street
City, State, and Zip Code	Harrisburg, PA 17110

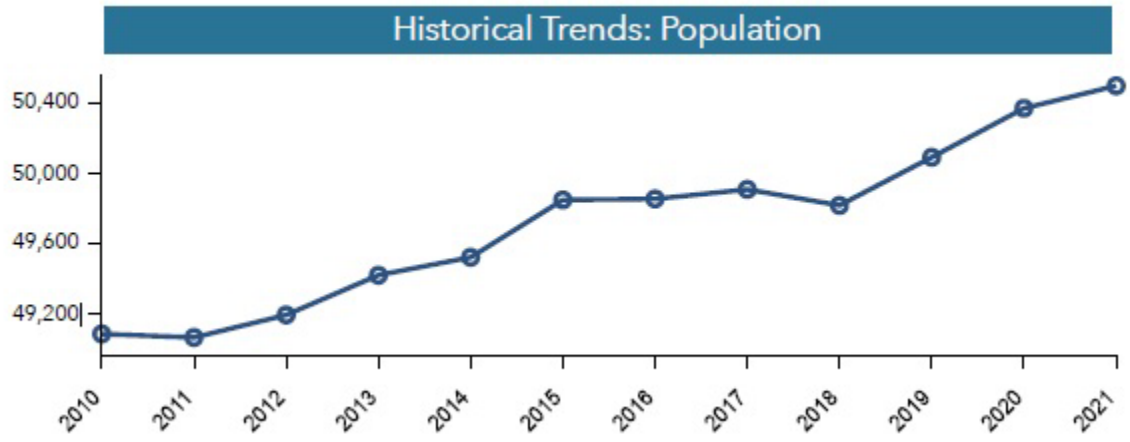
Harrisburg High School SciTech Campus	
Grade Alignment:	9-12
Current Enrollment:	468
Total Educational Capacity:	550
Functional Capacity:	440
Street Address of District:	215 Market Street
City, State, and Zip Code	Harrisburg, PA 17101

Harrisburg High School John Harris Campus	
Grade Alignment:	9-12
Current Enrollment:	816
Total Educational Capacity:	1815
Functional Capacity:	1452
Street Address of District:	2451 Market Street
City, State, and Zip Code	Harrisburg, PA 17103

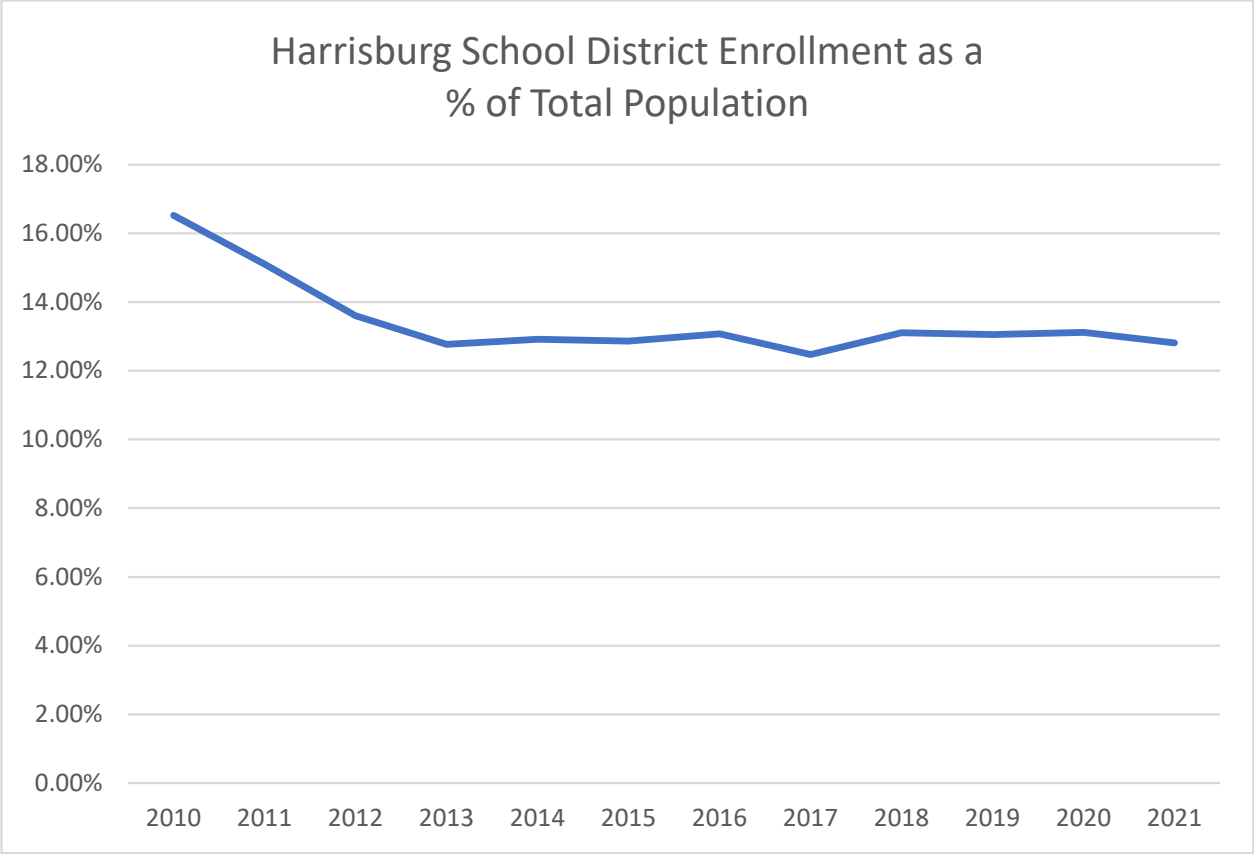
District Population Statistics

Population Size, Median Age, and Growth

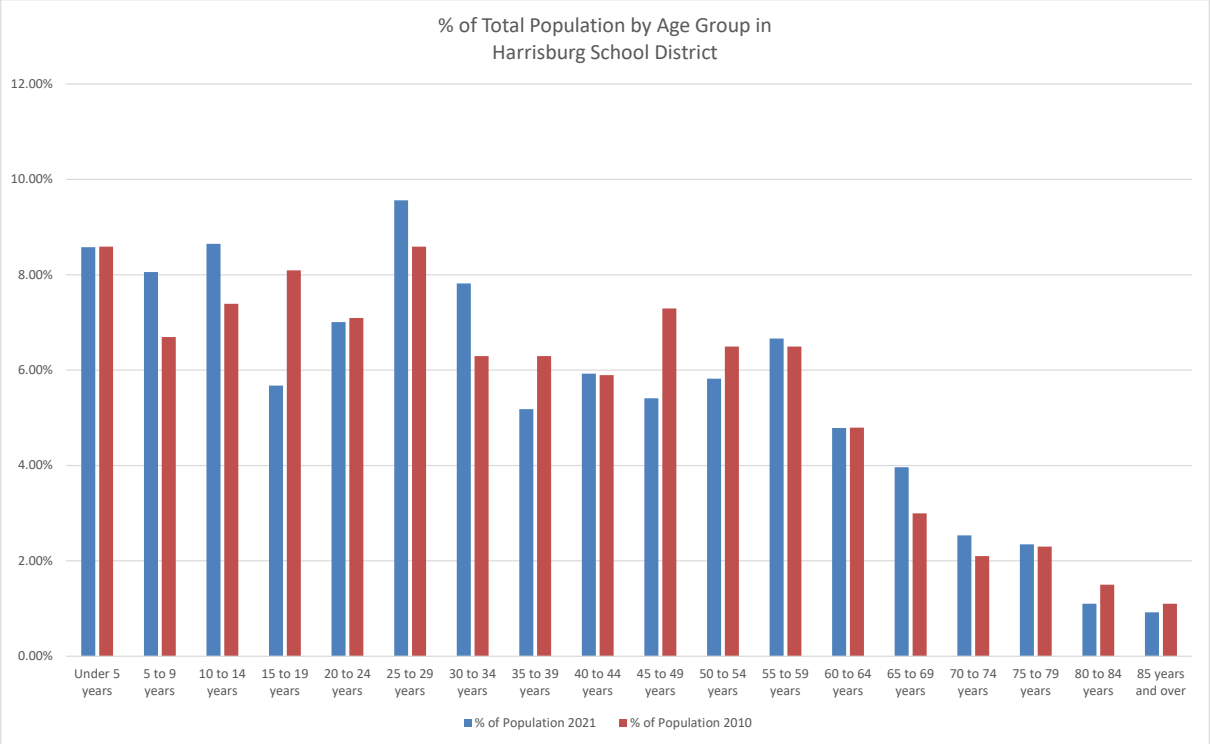
The U.S Census estimates that in 2021 the total population of the Harrisburg School District was 50,495 residents. That is approximately 1341 more residents than in 2010.



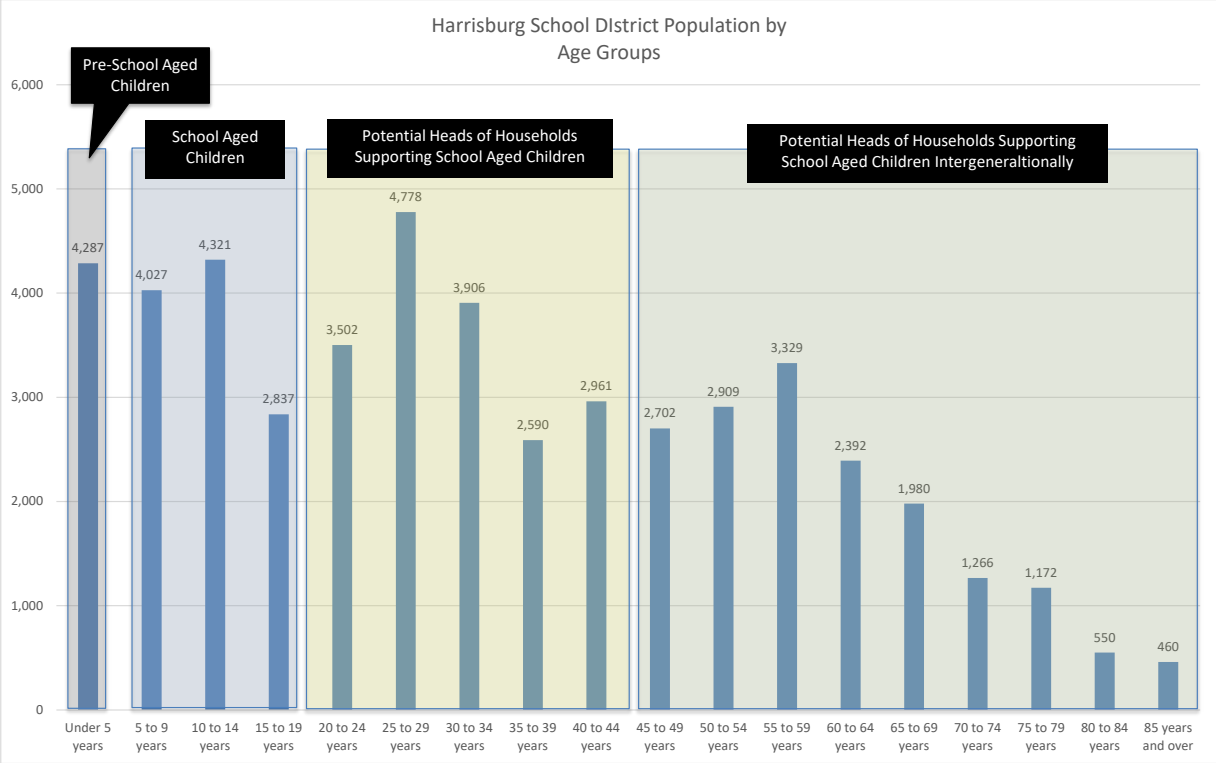
As shown in the graph below, while the total population of the school district has increased, the percent of the population enrolled in the Harrisburg School District has declined by 3.71%. This decrease is not the result of demographic shifts in the population.



As shown in the bar graph below, from 2010-2021 the median age of residents in the school district has decreased from a median age of 33.3 in 2010 to a median age 31.6 of in 2021. In 2021 the percent of total residents ages birth to 4 years of age are within 0.01% of the percent of total population in 2010. Residents ages 5 to 19 have increased by 0.21%. Residents ages 20-44 have increased by 1.3%, and the % of population 45 years and older has declined by 1.53% since 2010.



According to the US census the population of the school district includes 4287 pre-school aged children and 11,185 residents between the ages of 5 and 19 that are potential students or very recent graduates of the school district. There are 17,737 residents ages 20-44, and 17,3156 residents over 45 years of age.



Enrollment projections completed by Environmental Systems Research Institute, Inc. (ESRI) based on the 2020 Federal Census indicates that while the population is expected to increase by over 700 residents over the next 5 years, the age profile of residents only anticipated to change slightly. Residents ages birth to nineteen is projected to decline by 0.2%, adults ages 25 to 59 is projected to increase by 1.1%, and residents over the age of sixty are projected to decline by 1.4%.

2021 HARRISBURG SCHOOL DISTRICT AGE DISTRIBUTION		
2021 School District Population: 50,495		Age Bands
Distribution	% of Population	% of Population
Under 5 years	7.90%	% of Children Potentially Attending Public Schools
5 to 9 years	7.40%	
10 to 14 years	6.60%	
15 to 19 years	5.80%	27.7%
20 to 24 years	7.20%	% of Adults Potentially in Households with Students Attending Public Schools
25 to 34 years	16.30%	
35 to 44 years	12.50%	
45 to 54 years	10.90%	
55 to 59 years	6.00%	52.9%
60 to 64 years	6.00%	% of Adults in Households Supporting Public Schools Intergenerationally
65 to 74 years	8.80%	
75 to 84 years	3.50%	
85 years +	1.30%	19.6%
ESRI, 2022		

2026 HARRISBURG SCHOOL DISTRICT AGE DISTRIBUTION		
Projected School District Population: 51,201		Age Bands
Distribution	% of Population	% of Population
Under 5 years	7.90%	% of Children Potentially Attending Public Schools
5 to 9 years	7.10%	
10 to 14 years	6.50%	
15 to 19 years	6.00%	27.5%
20 to 24 years	7.20%	% of Adults Potentially in Households with Students Attending Public Schools
25 to 34 years	15.40%	
35 to 44 years	13.20%	
45 to 54 years	10.80%	
55 to 59 years	5.20%	51.8%
60 to 64 years	5.50%	% of Adults in Households Supporting Public Schools Intergenerationally
65 to 74 years	9.60%	
75 to 84 years	4.60%	
85 years +	1.30%	21.0%
ESRI, 2022		

Given that the percent of the total population of residents ages birth to nineteen have only risen by 0.22% since 2010 and enrollment as a percent of population enrolled in the school district has decreased by 3.71% during that same time period, there is an increased of school aged children eligible, but not attending Harrisburg School District,

School Aged Residents Not Attending Harrisburg School District

With 11,185 residents between the ages of 5 and 19 but a district enrollment of 6500 students the difference of over 4600 students are children who attend one of the charter schools or private and parochial schools operating in the school district. In addition, there are several private and parochial schools operating just outside district boundaries, readily accessible, that also accept students from within the school district. There are also students in this age bracket who no longer attend school once they reach the age of seventeen and are no longer compelled to do so by compulsory attendance laws. The U.S. Department of Education recognizes the following charter schools or private and parochial schools operating in the school district.

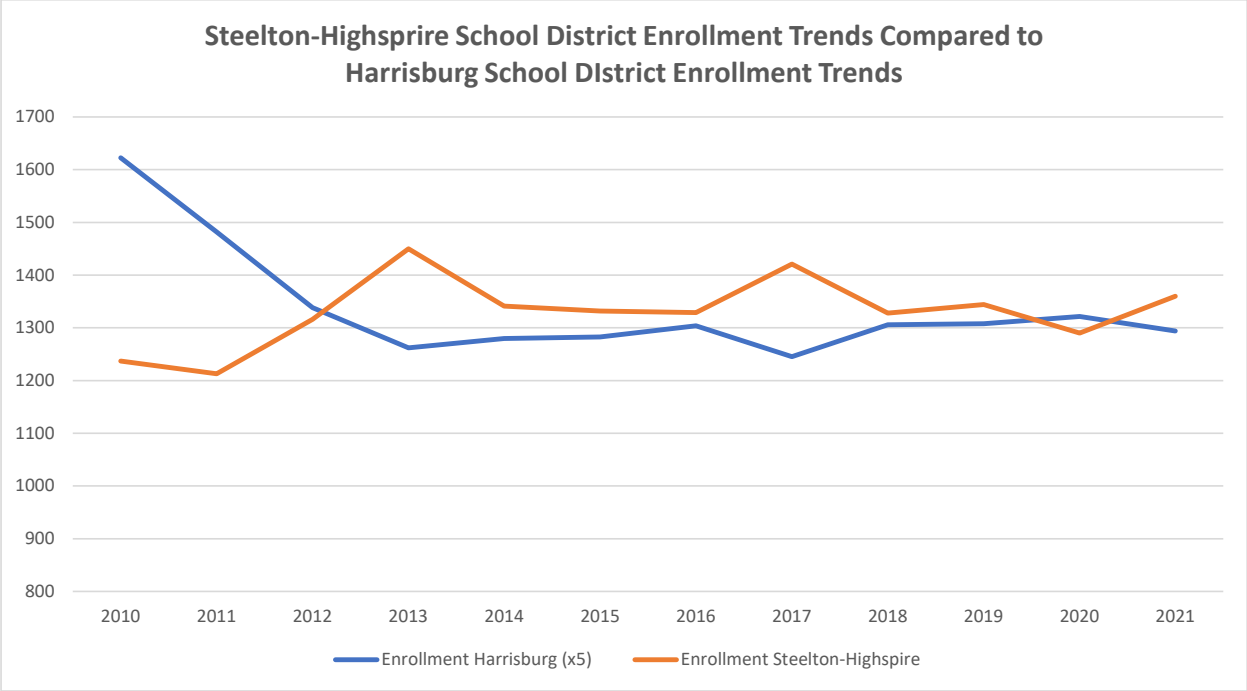
NAME
Bishop McDevitt High School
Capital Academy
Capital Area School For The Arts CS
Commonwealth Charter Academy CS
Cornell Abraxas Group
Follow Me Christian Early Education Center
Goddard School
Hansel & Gretel Early Learning Center
Harrisburg Adventist School
Harrisburg Catholic Elementary School
Harrisburg Catholic Elementary School
Harrisburg Christian School
Hildebrandt Learning Center
Hillside Seventh-Day Adventist School
Holy Name Of Jesus School
Infinity CS

Kindercare Learning Center 1282
Lighthouse Christian Academy
Little Learners Child Development Center
Pennsylvania Steam Academy
Premier Arts and Science CS
Rabbi David L Silver Yeshiva Academy
Reach Cyber CS
St Catherine Laboure School
St Margaret Mary School
St Stephen's Episcopal School
Sylvan Heights Science CS
The Circle School
The Nativity School of Harrisburg
The Samuel School

Transiency

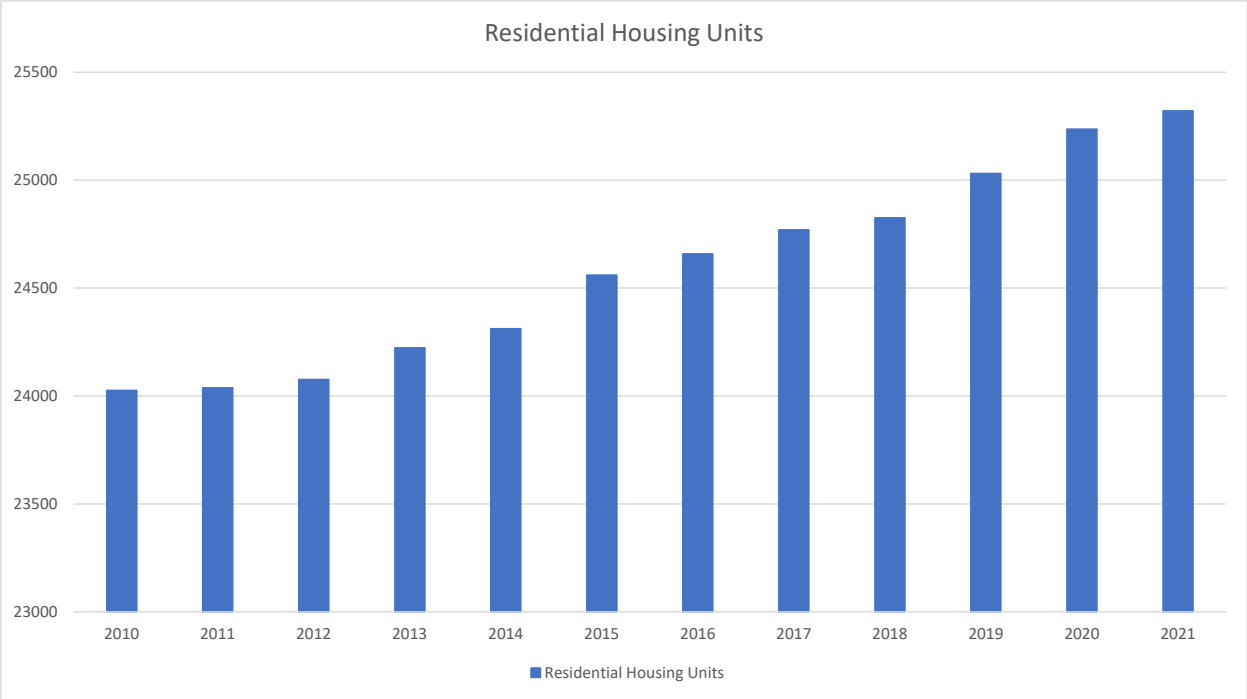
The U.S. Census reports that Harrisburg School District residents have 1.5 times the rate of mobility than Dauphin County and more than double the rate for Pennsylvania with 25.9% of the population changing residences between 2019 and 2020.

Residents of the Harrisburg School District and their children are mobile for a variety of reasons. Many residents move into and out of the district on a regular basis. Often, they are not moving far. Shown in the chart below is an examination of enrollment trends in the Steelton-Highspire School District, the closest school district to the center of Harrisburg's population, shows a mirror image to Harrisburg School District enrollment trends.

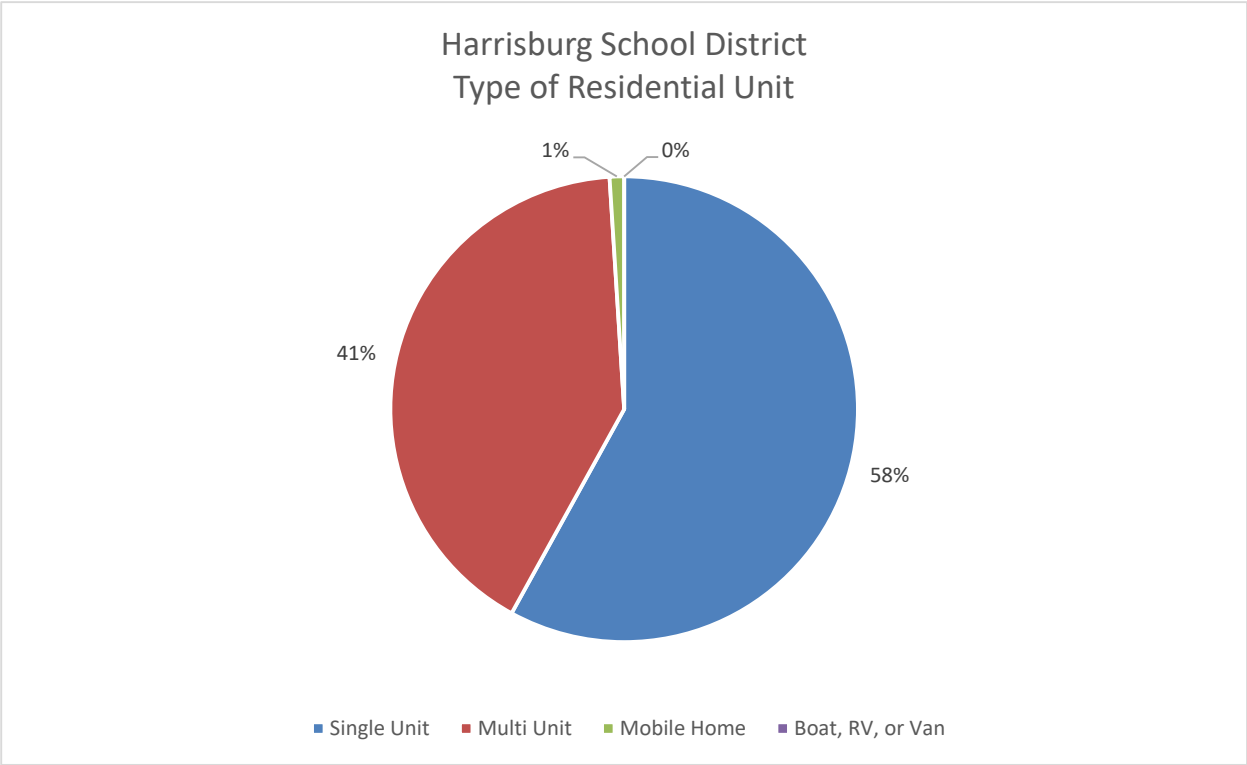


Housing Units

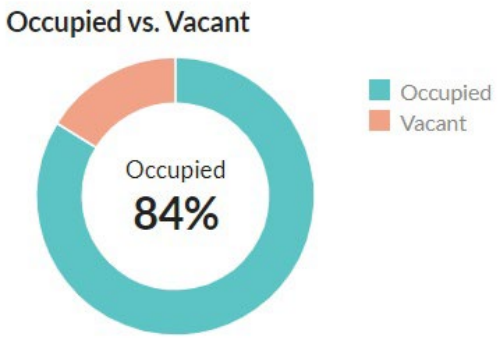
Between 2010 and 2021 the number of residential housing units in the school district increased by 1296.

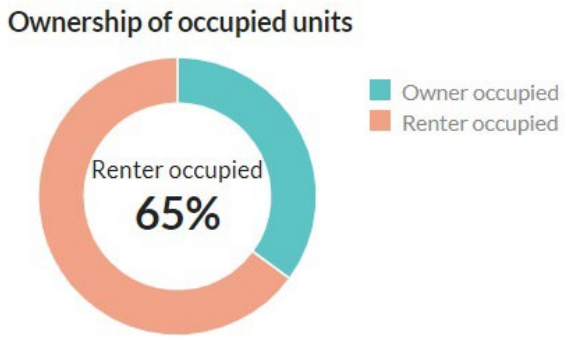


As shown in the table below, 59% of the residential units in the Harrisburg School District are single family dwellings. That is 80% of the rate of the county and 76% of the rate for the state. 41% of the residential units are multi-unit dwellings more than 1.5 times the rate of Dauphin County and about double the rate of the state. Only 1% of the residential units are mobile homes which is about one-quarter the rate of the county and one-fifth the rate of the state.

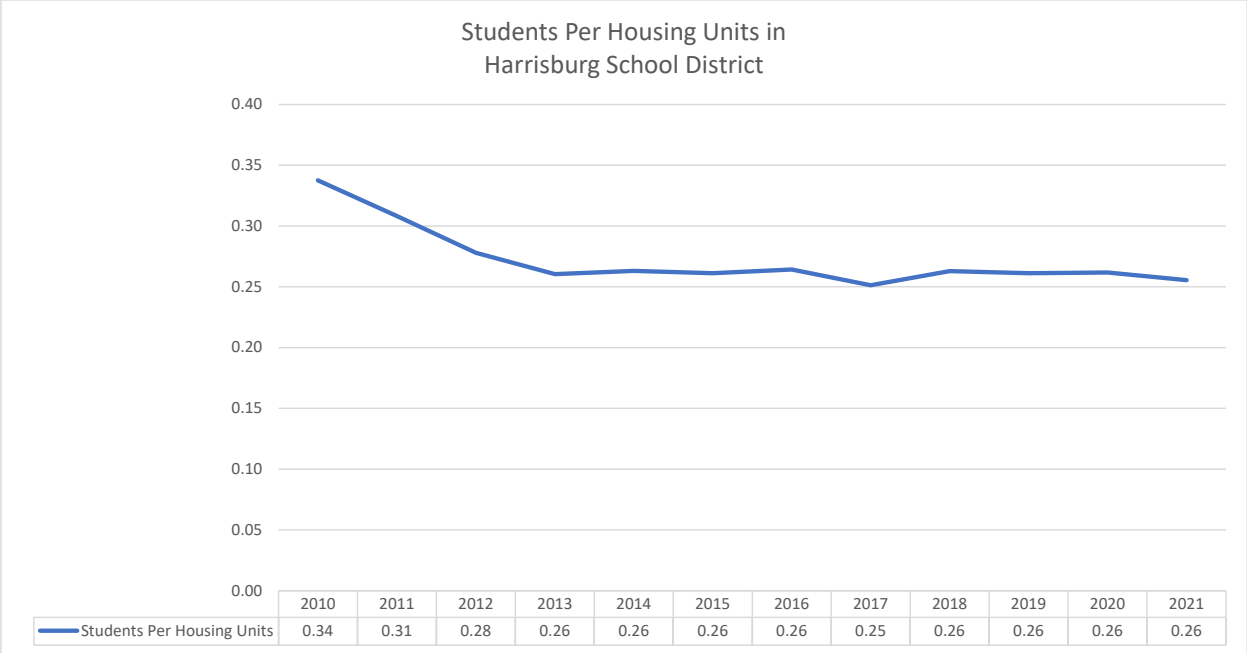


In 2020 the US Census estimates that 16% of residential units are vacant and of the 84% occupied, 65% are renter occupied. Given the population mobility this is not a surprising statistic.





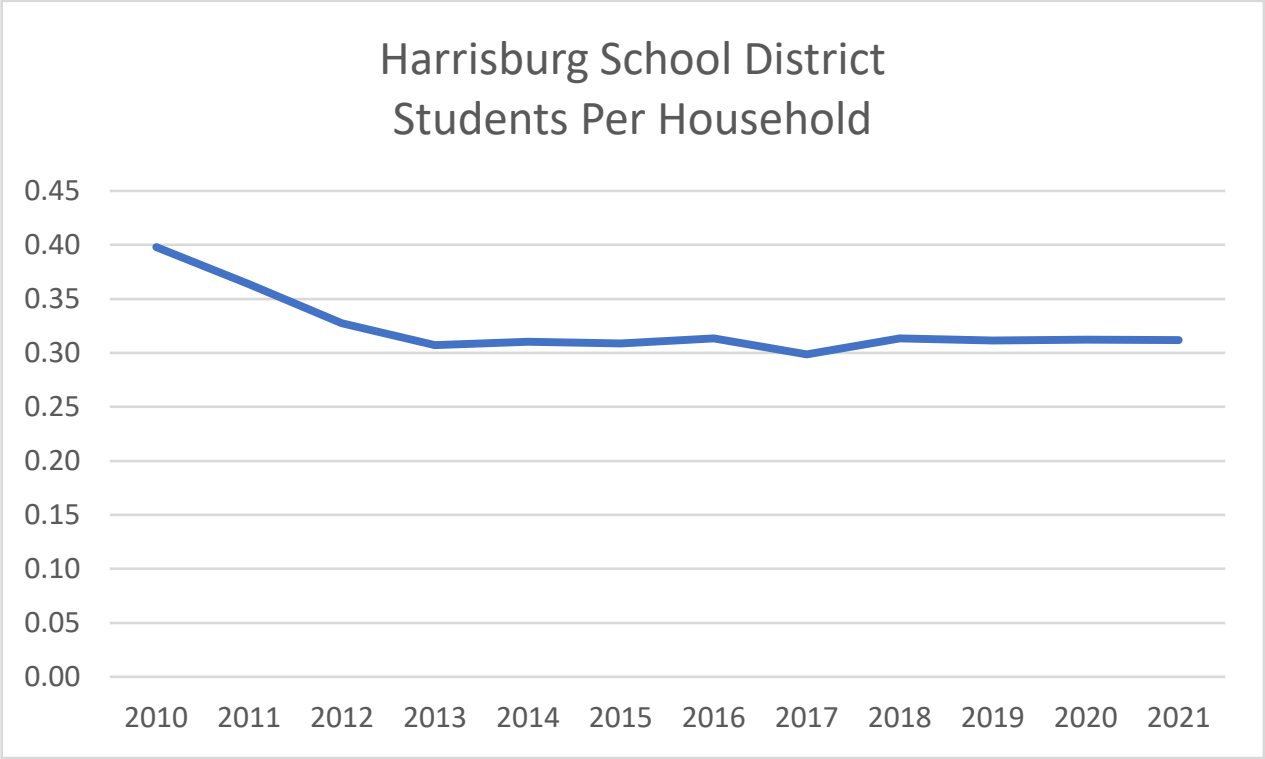
As shown in the table below, while the number of residential units is increasing the average number of students per residential housing unit has decreased over that same time period. From 2010 to 2021, students per residential unit dropped from 0.34 to 0.26 students per residential unit. While a 0.08 difference in students per residential unit may not appear to a large decline, given the number of residential units today that equals over an additional two thousand students.



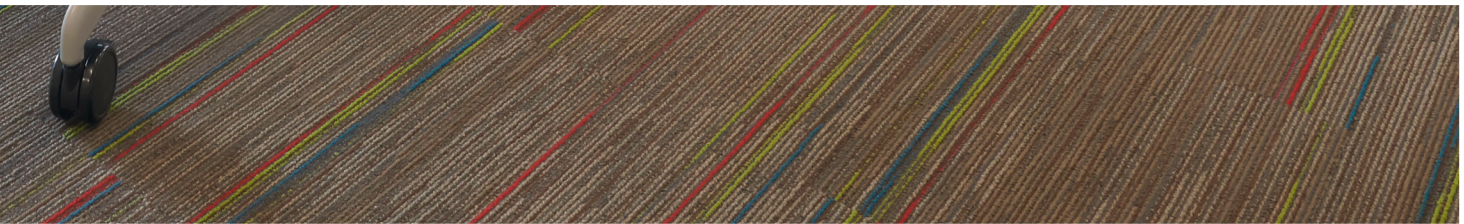
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Students Per Housing Units	0.34	0.31	0.28	0.26	0.26	0.26	0.26	0.25	0.26	0.26	0.26	0.26

Households

The number of households has not risen as quickly as the number of housing units. Between 2010 and 2021 the US Census reports an increase of 357 households. In addition, the number of students enrolled the Harrisburg School District per household has declined from 0.4 students per household in 2010 to 0.31 students per household in 2021. Like students per housing unit a change of 0.09 students per household may not seem to be large, but given the number of households in 2021, a 0.09 change represents the equivalent of 1867 students. It is important to keep in mind that this is the number of enrolled students per household. When you consider the US Census estimates in 2021 there are 15,472 residents ages birth to nineteen and 20,474 households the number of school age children per household is 0.75; more than double the number of enrolled school-aged children per household.



EDUCATIONAL PROGRAM OVERVIEW



3 | Educational Program Overview

Overview

The Harrisburg School District is a large, urban, public school district based in Harrisburg, Pennsylvania. The school district boundaries are coterminous with the city of Harrisburg. The Harrisburg City School District encompasses approximately 11 square miles. It operates the following schools: Benjamin Franklin Elementary (K-5), Camp Curtin Academy (6-8), Cougar Academy (K-12), Downey Elementary (K-5), Foose Elementary (K-5), Hamilton (K-12), Harrisburg High School (9-12), Harrisburg High School Science and Technology (9-12), Marshall Academy (5-8), Marshall Math and Science Academy (5-8), Melrose Elementary (K-5), Roland Academy (6-8), Scott Elementary (K-5).

The table below contains data collected by the Pennsylvania Department of Education during the 2019/2020 school year providing a profile of the district's student body:

Student Body Profile				
Grade Alignment and District Enrollment	Elementary	Middle	High School	District
	K-5	6-8	9-12	K-12
	3119	1679	1,678	6,476
Unique Populations		Race and Ethnicity		
Economically Disadvantaged	94.10%	White		3.30%
English Language Learner	20.60%	Black or African American		51.60%
Special Education	16.20%	American Indian and Alaska Native		0.00%
Percent of Gifted Students	0.20%	Asian		1.80%
Students in Foster Care	1.00%	Islander		0.00%
Homeless Students	5.50%	Hispanic or Latino		39.70%
Military Connected Students	0.10%	Two or More Races		3.50%
% HS Enrollment in Career/Technical	11.98%			
Graduation Rates				
Four Year Graduation Rate	67.50%	Five Year Graduation Rate		69.10%
Pennsylvania Department of Education		*2021/22 School Year*		

District Vision:

In pursuit of educational excellence, our District aims to empower ALL students to become high academic achievers and lifelong learners who understand the need for a rigorous and diversified education and who are motivated and prepared to compete and succeed beyond high school graduation in 21st Century global markets.

District Mission Statement:

The Harrisburg School District is committed to providing a rigorous and relevant education to ALL students in a learning environment that fosters high expectations and data driven and standards aligned instruction provided by committed, highly qualified teachers. We endeavor to provide a culturally responsive, safe, and positive school environment to enhance, empower, and promote the value of lifelong learning for our students. Families and the Harrisburg community are active partners in the educational process.

Shared Values and Core Beliefs:

The Harrisburg School District believes in the inherent value of each individual student and is committed to a set of core beliefs that guide our work. These beliefs frame our goals, program development, and support systems -- and focus on instruction, curriculum, and assessment to ensure that ALL students achieve at high levels and strive to reach their potential. Specifically, we believe:

Expectations Matter
Maintaining high expectations leads to higher levels of student achievement. Teachers maintain high expectations for all students through continual encouragement, specific and timely feedback, tenacity in providing targeted support, and through communicating that all students have the capacity to meet rigorous standards.

Effort Matters
Increasing effort leads to higher levels of student achievement. Students in the Harrisburg School District succeed at high levels through their own efforts and the collective efforts of their parents, educators, and the community. It is through students' own hard work and dedication to the pursuit of excellence that they will succeed.

Instruction Matters
Effective instruction leads to higher levels of student achievement. Teachers refine their teaching skills through ongoing study and action research, observation of instruction, and collaboration with colleagues. Teachers are actively engaged and committed to applying proven instructional strategies to reach every student.

Relationships Matter
Developing caring and supportive relationships between and among educators, students, and parents leads to higher levels of student achievement. All staff members create and maintain an environment that promotes respect, trust, and understanding, and fosters communication and problem-solving.

Results Matter
Sharing and using results to inform our decisions about instruction, resources, curriculum, and program development leads to higher levels of student achievement. Administrators, teachers, and students measure progress toward meeting and exceeding defined standards and goals. Through the ongoing and collaborative analysis of student work and data, we hold students and each other accountable for continuous improvement.

Curriculum Overview

The Harrisburg School District offers a Pennsylvania standard aligned curriculum differentiated to meet the needs of all learners. The curriculum is focused on preparing all students for graduation and post-secondary college and career opportunities. The curriculum aligned with state standards, is regularly reviewed and updated, and available to all parents and the community.

The curriculum is comprehensive, providing students with an education in the arts, business education, computer science, English, family and consumer sciences, foreign languages, health, language arts, mathematics, physical education, the sciences, and social studies. Technology instruction has been integrated throughout the K-12 curriculum and all high school students are required to take a credit in computer science for graduation.

With the help of a supportive community, ample resources, a strong staff, curriculum, and instruction to meet the needs of diverse learners, and many supplemental programs, the Harrisburg School District is clearly proud of the educational opportunities that it provides for students.

Elementary

The Harrisburg School District strives to ensure equity and access across its elementary schools. At the elementary level the district works to strengthen connections with families and partner with the families in order to bridge the gap between school and home. The district hosts monthly parent events, PTA, literacy and math nights, science fair, and volunteer opportunities. The district reports they are "very blessed to have a wonderful parent community and your support makes the difference as our students grow and learn."

At the elementary level the English language arts, math, social studies, and science ground the core curriculum. In addition, classes are provided in music, art, library, guidance and physical education by full-time certified teachers. Students with special needs are provided with the resources necessary to succeed. Additional support in reading/language arts is provided through Title I teachers and programs. Remedial and enrichment programs are offered during the school day.

Middle School

The Harrisburg facilities serve the middle school level in grades 6 through 8, except for Marshall Math and Science Academy which is currently grades 5 through 8. The professional staff are committed to high expectations in academic and personal growth to prepare our students to become lifelong learners and productive citizens.

At middle school level, the curriculum, instruction, activities, and social events are all designed for young adolescents. English language arts, math, social studies, and science comprise the core curriculum. Opportunities exist within the core curriculum for students who demonstrate readiness to advance into high school level work. In addition to core academics, classes are provided in music, visual arts, technology education, library, guidance, health and physical education, and skills classes for the adolescent learner. The goal of the special education program is to motivate students to strive to reach their maximum potential, utilizing their own abilities and support services provided by the educational community of the Harrisburg School District.

High School

Harrisburg High School and SciTech, Cougar Academy, Harrisburg Virtual Learning Academy, and Dauphin County Career and Technology Center collectively offer a continuum of educational opportunities through traditional, vocational, science, and technology-based programs, as well as learning opportunities in a blended or fully digital environment.

The goal of the special education program is to motivate students to strive to reach their maximum potential, utilizing their own abilities and support services provided by the educational community of the Harrisburg School District.

Co-curricular offerings provide a comprehensive program of inter-scholastic and recreational sports for boys and girls. Many students participate in multiple activities, including music organizations, such as bands and choruses; drama opportunities; school yearbook and newspaper; and a number of clubs, service organizations, and booster groups.

Virtual and Blended Schools

The Cougar Academy is a blended learning program that offers full-day, half-day or 100% cyber learning, serving students in kindergarten thru 12th grade. Cougar Academy provides free student laptops, tech support, and more.

Harrisburg Virtual Learning Academy/HVLA is a free 100% full time virtual learning academy offering customized learning pathways and online educational opportunities, serving students in K thru 12th grade. HVLA provides free student laptops, tech support, and more.

Instructional Practices

The district grounds its expectations for instructional strategies in research-based best practices. The district strives to integrate technology in a variety of ways in order to enhance learning and manage schools and classrooms. Assessment is on-going and utilized to make "real-time" instructional decisions with a focus on meeting the needs of individual learners. The District uses a combination of formative, summative, benchmark, and diagnostic assessments to make decisions regarding student achievement. The district also provides core, elective, enrichment, and remediation courses through its Virtual Academy, a full-time online learning option. Parents/guardians have the opportunity to review instructional materials and have access to information about the curriculum, including academic standards to be achieved, instructional materials and assessment techniques.

EXISTING FACILITY CONSIDERATIONS

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Ben Franklin Elementary School	Grade Alignment:		Pre-K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	1	20	20
Kindergarten Classrooms (Full Day)	5	20	100
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	6	25	150
2nd Grade Classrooms +660 Sq. Ft.	5	25	125
3rd Grade Classrooms +660 Sq. Ft.	5	25	125
4th Grade Classrooms +660 Sq. Ft.	6	25	150
5th Grade Classrooms +660 Sq. Ft.	5	25	125
Open Classrooms +660 Sq. Ft (Includes Tutor)	2	25	50
Undersized Classrooms <660 Sq. Ft.	0	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft. (Efficient School Sol.)	1	0	0
Special Educ. Classroom +660 Sq. Ft.	5	0	0
Special Educ. Classroom +660 Sq. Ft. (ELD)	1	0	0
Special Educ. Classroom <660 Sq. Ft. (Title 1)	0	0	0
Special Educ. Classroom <660 Sq. Ft	6	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	0	0	0
Art and Music Classrooms			
Art Classrooms	1	0	0
Music Classrooms	1	0	0
Music Practice/ Instruction	1	0	0
Labs			
STEM Lab	1	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Cafeteria/Gymnasium)	1	0	0
Cafeteria	1	0	0
Gymnasium	0	0	0
Large Group Instruction	1	0	0

Total Educational Capacity	845
Utilization Rate	85%
Functional Building Capacity	718.25
Current Enrollment	607
PDE Reimbursement Factor	1412

4 | Cougar Academy

Capacity

The Cougar Academy offers full-day, half-day, or fully on-line cyber learning. As the enrollment fluctuates daily in the types of programs it is difficult to measure a utilization rate. However, if all classrooms were occupied to PDE capacity the school the capacity the building would seat 495 students with a functional capacity for 421 students. Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Cougar Academy	Grade Alignment:		K-12
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
See General Classrooms below			
General Classrooms			
K-12 Grade Classrooms +660 Sq. Ft.	14	25	350
Undersized Classrooms <660 Sq. Ft.	0	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support/Small Group Instruction Rooms	8	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft. (Professional Developm	0	0	0
Special Educ. Classroom +660 Sq. Ft.	0	0	0
Special Educ. SGI <660 Sq. Ft. (Speech)	0	0	0
Special Educ. SGI <660 Sq. Ft. (Reading)	0	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	0	0	0
Art and Music Classrooms			
Art Classroom	1	25	25
(Capacity assigned due to secondary use)			
Music Classrooms	1	25	25
(Capacity assigned due to secondary use)			
Music Practice/ Instruction	1	0	0
Labs			
Science Labs	1	25	25
Computer Lab	1	20	20
Support Spaces			
Library	1	0	0
Multipurpose (Cafeteria/Gymnasium)	0	0	0
Cafeteria	1	0	0
Gymnasium (capacity assigned due to secondary use)	1	50	50
Auditorium	0	0	0

Total Educational Capacity	495
Utilization Rate	85%
Functional Building Capacity	420.75
Current Enrollment	0
PDE Reimbursement Factor	0

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Downey Elementary School	Grade Alignment:		K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	0	20	0
Kindergarten Classrooms (Full Day)	4	20	80
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	4	25	100
2nd Grade Classrooms +660 Sq. Ft.	3	25	75
2nd Grade Classrooms +660 Sq. Ft. (vacant)	1	25	25
3rd Grade Classrooms +660 Sq. Ft.	3	25	75
3rd Grade Classrooms +660 Sq. Ft. (vacant)	1	25	25
4th Grade Classrooms +660 Sq. Ft.	3	25	75
5th Grade Classrooms +660 Sq. Ft.	3	25	75
5th Grade Classrooms +660 Sq. Ft.	0	25	0
Undersized Classrooms <660 Sq. Ft.	4	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	1	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	1	0	0
Special Educ. Classroom +660 Sq. Ft. (Efficient School Sol.)	2	0	0
Special Educ. Classroom +660 Sq. Ft. (Math Intervention)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (Life Skills)	2	0	0
Special Educ. Classroom +660 Sq. Ft. (Mental Health)	0	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	1	0	0
Art and Music Classrooms			
Art Classrooms	1	0	0
Music Classrooms	2	0	0
Music Practice/ Instruction	1	0	0
Labs			
STEM Lab	1	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Cafeteria/Gymnasium)	1	0	0
Cafeteria	1	0	0
Gymnasium	0	0	0
Large Group Instruction	0	0	0

Total Educational Capacity	530
Utilization Rate	85%
Functional Building Capacity	**450.5**
Current Enrollment	**420**
PDE Reimbursement Factor	1030

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Foose Elementary School	Grade Alignment:		Pre-K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	0	20	0
Kindergarten Classrooms (Full Day)	5	20	100
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	5	25	125
2nd Grade Classrooms +660 Sq. Ft.	6	25	150
3rd Grade Classrooms +660 Sq. Ft.	4	25	100
4th Grade Classrooms +660 Sq. Ft.	5	25	125
5th Grade Classrooms +660 Sq. Ft.	5	25	125
Undersized Classrooms <660 Sq. Ft.	0	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	1	0	0
Learning Support Small Group Instruction Rooms	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	7	0	0
Special Educ. Classroom +660 Sq. Ft. (OT/PT)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (ESL)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (IU)	2	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	6	0	0
Art and Music Classrooms			
Art Classrooms	1	0	0
Music Classrooms	1	0	0
Music Practice/ Instruction	1	0	0
Labs			
STEM Lab	2	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Cafeteria/Gymnasium)	0	0	0
Cafeteria	1	0	0
Gymnasium	1	0	0
Auditorium	1	0	0

Total Educational Capacity	725
Utilization Rate	85%
Functional Building Capacity	616.25
Current Enrollment	532
PDE Reimbursement Factor	1410

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Melrose Elementary School	Grade Alignment:		K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	0	20	0
Kindergarten Classrooms (Full Day)	4	20	80
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	5	25	125
2nd Grade Classrooms +660 Sq. Ft.	5	25	125
3rd Grade Classrooms +660 Sq. Ft.	4	25	100
4th Grade Classrooms +660 Sq. Ft.	4	25	100
5th Grade Classrooms +660 Sq. Ft.	3	25	75
Undersized Classrooms <660 Sq. Ft.	0	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	1	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	0	0	0
Special Educ. Classroom +660 Sq. Ft. (Title 1)	0	0	0
Special Educ. SGI <660 Sq. Ft. (Speech)	0	0	0
Alternative Education Classroom	0	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	12	0	0
Art and Music Classrooms			
Art Classrooms	1	0	0
Music Classrooms	1	0	0
Music Practice/ Instruction	1	0	0
Labs			
STEM Lab	1	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Cafeteria/Gymnasium)	1	0	0
Cafeteria	0	0	0
Gymnasium	1	0	0
Large Group Instruction	1	0	0

Total Educational Capacity	605
Utilization Rate	85%
Functional Building Capacity	514.25
Current Enrollment	0
PDE Reimbursement Factor	0

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Scott Elementary School	Grade Alignment:		K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	0	20	0
Kindergarten Classrooms (Full Day)	4	20	80
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	4	25	100
2nd Grade Classrooms +660 Sq. Ft.	3	25	75
3rd Grade Classrooms +660 Sq. Ft.	2	25	50
4th Grade Classrooms +660 Sq. Ft.	4	25	100
5th Grade Classrooms +660 Sq. Ft.	3	25	75
Undersized Classrooms <660 Sq. Ft.	0	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	1	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	2	0	0
Special Educ. Classroom +660 Sq. Ft. (Reading Specialist)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (RS/BS/ELD)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (Family Engagement)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (Bookroom Coach)	1	0	0
Special Educ. Classroom +660 Sq. Ft. (Efficient School Sol.)	1	0	0
	0	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	4	0	0
Art and Music Classrooms			
Art Classrooms	2	0	0
Music Classrooms	1	0	0
Music Practice/ Instruction	0	0	0
Labs			
STEM Lab	3	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Auditoirum/Gymnasium)	1	0	0
Cafeteria	1	0	0
Gymnasium	0	0	0
Large Group Instruction	0	0	0

Total Educational Capacity	480
Utilization Rate	85%
Functional Building Capacity	**408**
Current Enrollment	**0**
PDE Reimbursement Factor	0

4 | Steele Elementary School

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Steele Elementary School (currently vacant)	Grade Alignment:		K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	1	20	20
Kindergarten Classrooms (Full Day)	3	20	60
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	3	25	75
2nd Grade Classrooms +660 Sq. Ft.	3	25	75
3rd Grade Classrooms +660 Sq. Ft.	3	25	75
4th Grade Classrooms +660 Sq. Ft.	3	25	75
5th Grade Classrooms +660 Sq. Ft.	3	25	75
Undersized Classrooms <660 Sq. Ft.	6	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	1	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	2	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	0	0	0
Art and Music Classrooms			
Art Classrooms	1	0	0
Music Classrooms	1	0	0
Music Practice/ Instruction	0	0	0
Labs			
STEM Lab	3	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Auditoirum/Gymnasium)	1	0	0
Cafeteria	1	0	0
Gymnasium	0	0	0
Large Group Instruction	0	0	0

Total Educational Capacity	455
Utilization Rate	85%
Functional Building Capacity	386.75
Current Enrollment	0
PDE Reimbursement Factor	0

4 | Hamilton School

Capacity

Only core classrooms are being utilized for building capacity, support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 85% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania.

Harrisburg School District

Hamilton Elementary	Grade Alignment:		K-5
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
Pre-K/Kindergarten Classrooms			
Head Start/Pre-K Classrooms	0	20	0
Kindergarten Classrooms (Full Day)	1	20	20
General Classrooms			
1st Grade Classrooms +660 Sq. Ft.	4	25	100
2nd Grade Classrooms +660 Sq. Ft.	4	25	100
3rd Grade Classrooms +660 Sq. Ft.	4	25	100
4th Grade Classrooms +660 Sq. Ft.	4	25	100
5th Grade Classrooms +660 Sq. Ft.	3	25	75
Undersized Classrooms <660 Sq. Ft.	1	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	3	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	1	0	0
Art and Music Classrooms			
Art Classrooms	1	0	0
Music Classrooms	1	0	0
Computer Classroom	2	0	0
Labs			
STEM Lab	3	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Auditoirum/Gymnasium)	1	0	0
Cafeteria	1	0	0
Gymnasium	0	0	0
Large Group Instruction	0	0	0

Total Educational Capacity	495
Utilization Rate	85%
Functional Building Capacity	420.75
Current Enrollment	0
PDE Reimbursement Factor	0

4 | Marshall Academy

Capacity

Core classrooms along with science, art, music, tech programs that have the ability to be core classrooms at the secondary level for building capacity. Support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 80% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania. Note, a lower utilization rate is used at the secondary level due to the increased movement of students throughout the school day.

Harrisburg School District

Marshall Math Science Academy	Grade Alignment:		5-8
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
General Classrooms			
5th - 8th Grade Classrooms +660 Sq. Ft.	20	25	500
Undersized Classrooms <600 SF	9	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classroom +660 Sq. Ft. (Resource)	0	0	0
Learning Support Classrooms +660 Sq. Ft. (Reading)	0	0	0
Learning Support Classrooms +660 Sq. Ft. (Sched. Success)	0	0	0
Learning Support Classrooms +660 Sq. Ft. (7th/8th ELA)	0	0	0
Study Hall +660 Sq. Ft.	0	0	0
In School Suspension	0	0	0
Learning Support / Resource Small Group Instruction	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	1	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	4	0	0
Art and Music Classrooms			
Art Classrooms +660 Sq. Ft.	1	25	25
Music Classroom +660 Sq. Ft.	1	25	25
Band Room +660 Sq. Ft.	0	25	0
Vocal/Chorus Room +660 Sq. Ft.	0	25	0
Orchestra Room +660 Sq. Ft.	0	25	0
Labs			
Science Labs	2	25	50
Computer Labs +660 Sq. Ft.	2	25	50
Family & Consumer Science Lab +660 Sq. Ft.	0	0	0

Career & Tech-Ed			
Tech Ed Lab and Classroom <1800 Sq. Ft.	0	20	0
Media Center			
Media Center	1	0	0
Physical Education			
Gymnasium +6500 Sq. Ft.	0	0	0
Gymnasium +2500 Sq. Ft.	1	50	50
Cardio / Weight Room	0	0	0
Wrestling Room	0	0	0
Support Spaces:			
Auditorium	1	0	0
Stage	1	0	0
Cafeteria	1	0	0
Large Group Instruction	0	0	0

Total Educational Capacity	700
Utilization Rate	80%
Functional Building Capacity	**560**
Current Enrollment	**816**
PDE Reimbursement Factor	850

4 | Camp Curtin Academy

Capacity

Core classrooms along with science, art, music, tech programs that have the ability to be core classrooms at the secondary level for building capacity. Support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 80% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania. Note, a lower utilization rate is used at the secondary level due to the increased movement of students throughout the school day.

Harrisburg School District

Camp Curtin	Grade Alignment:		6-8
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
General Classrooms			
6th - 8th Grade Classrooms +660 Sq. Ft.	37	25	925
Open Classrooms +660 Sq. Ft.	0	25	0
Undersized Classrooms <660 Sq. Ft.	4	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classrooms +660 Sq. Ft.	0	0	0
Learning Support Small Group Instruction Rooms	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft. (Professional Development)	1	0	0
Special Educ. Classroom +660 Sq. Ft.	0	0	0
Special Educ. SGI <660 Sq. Ft. (Speech)	2	0	0
Special Educ. SGI <660 Sq. Ft. (Reading)	1	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	1	0	0
Art and Music Classrooms			
Art Classroom (5th Grade)	1	25	25
Art Classroom (6th-8th Grade)	1	25	25
Music Classrooms (5th Grade)	1	25	25
Music Classroom (6th-8th Grade)	1	25	25
Music Practice/ Instruction	1	25	25
Labs			
STEM Lab (5th Grade)	2	25	50
STEM Lab (6th-8th Grade)	6	25	150
Media Center			
Media Center	1	0	0
Physical Education			
Gymnasium +6500 Sq. Ft.	1	50	50
Gymnasium +2500 Sq. Ft.	0	0	0
Cardio / Weight Room	0	0	0
Wrestling Room	0	0	0
Support Spaces			
Library	1	0	0
Multipurpose (Cafeteria/Gymnasium)	0	0	0
Cafeteria	1	0	0
Gymnasium	1	0	0
Auditorium	1	0	0

Total Educational Capacity	1300
Utilization Rate	80%
Functional Building Capacity	1040
Current Enrollment	0
PDE Reimbursement Factor	0

4 | Rowland Academy

Capacity

Core classrooms along with science, art, music, tech programs that have the ability to be core classrooms at the secondary level for building capacity. Support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 80% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania. Note, a lower utilization rate is used at the secondary level due to the increased movement of students throughout the school day.

Harrisburg School District

Rowland Academy	Grade Alignment:		6-8
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
General Classrooms			
6th - 8th Grade Classrooms +660 Sq. Ft.	34	25	850
Undersized Classrooms <600 SF			
Learning Support Classrooms and Small Group Instruction			
Learning Support Classroom +660 Sq. Ft. (Resource)	1	25	25
Learning Support Classrooms +660 Sq. Ft. (Sched. Success)	1	25	25
Speech <660 Sq. Ft.	1	0	0
Study Hall +660 Sq. Ft.	1	0	0
In School Suspension	1	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	3	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	3	0	0
Art and Music Classrooms			
Art Classrooms +660 Sq. Ft.	1	25	25
Music Classroom +660 Sq. Ft.	1	25	25
Drama Classroom +660 Sq. Ft.	0	25	0
Chorus Room +660 Sq. Ft.	1	25	25
Labs			
Science Labs	5	25	125
Computer Labs +660 Sq. Ft.	3	25	75

Career & Tech-Ed			
Tech Ed Lab +1800 Sq. Ft.	0	25	0
Tech Ed Lab <1800 Sq. Ft.	1	25	25
Media Center			
Media Center	1	0	0
Physical Education			
Gymnasium +6500 Sq. Ft.	1	50	50
Auxiliary Gymnasium +2500 Sq. Ft.	0	0	0
Fitness Rooms (Weight and Cardio)	0	0	0
Wrestling Room	0	0	0
Natatorium	0	0	0
Support Spaces:			
Auditorium	0	0	0
Stage	0	0	0
Cafeteria	1	0	0
Large Group Instruction	0	0	0

Total Educational Capacity	1250
Utilization Rate	80%
Functional Building Capacity	1000
Current Enrollment	812
PDE Reimbursement Factor	1130

4 | Harrisburg High School – John Harris Campus

Capacity

Core classrooms along with science, art, music, tech programs that have the ability to be core classrooms at the secondary level for building capacity. Support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 80% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania. Note, a lower utilization rate is used at the secondary level due to the increased movement of students throughout the school day.

Harrisburg School District

Harrisburg High School John Harris Campus	Grade Alignment:		9-12
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
General Classrooms			
General Classrooms +660 Sq. Ft.	49	25	1225
Undersized Classrooms <600 SF	11	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classroom +660 Sq. Ft. (Resource)	0	0	0
Learning Support Classrooms +660 Sq. Ft. (Sched. Success)	0	0	0
Speech <660 Sq. Ft.	0	0	0
Study Hall +660 Sq. Ft.	0	0	0
In School Suspension	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	7	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	2	0	0
Art and Music Classrooms			
Art Classrooms +660 Sq. Ft.	3	25	75
Band Classroom +660 Sq. Ft.	1	25	25
Drama Classroom +660 Sq. Ft.	0	25	0
Chorus Room +660 Sq. Ft.	1	25	25
Labs			
Science Labs	10	20	200
Computer Lab	2	20	40
Greenhouse	0	0	0
Family & Consumer Science Lab +660 Sq. Ft.	2	20	40

Career & Tech-Ed			
Tech Ed Lab +1800 Sq. Ft.	0	20	0
Tech Ed Lab <1800 Sq. Ft.	1	25	25
TV Studio +660 Sq. Ft.	1	25	25
Business Classroom +660 Sq. Ft.	2	25	50
Media Center			
Media Center	1	0	0
Maker Space	0	0	0
Student Store	2	0	0
Physical Education			
Gymnasium +6500 Sq. Ft.	1	60	60
Auxiliary Gymnasium +2500 Sq. Ft.	1	25	25
Fitness Rooms (Weight and Cardio)	1	0	0
Wrestling Room	0	0	0
Natatorium	0	0	0
Support Spaces:			
Auditorium	1	0	0
Stage	1	0	0
Cafeteria	2	0	0
Large Group Instruction	1	0	0

Total Educational Capacity	1815
Utilization Rate	80%
Functional Building Capacity	1452
Current Enrollment	1678
PDE Reimbursement Factor	0

Capacity

Core classrooms along with science, art, music, tech programs that have the ability to be core classrooms at the secondary level for building capacity. Support classrooms/program are shared by the entire school and thus are increase capacity of the school. A utilization factor of 80% has been factored to the school to plan for an anticipated average class size of 21 students, common throughout Pennsylvania. Note, a lower utilization rate is used at the secondary level due to the increased movement of students throughout the school day.

Harrisburg School District

Harrisburg High School SciTech Campus	Grade Alignment:		9-12
Educational Spaces	No. of Rooms	Educational Capacity	Total Educ. Capacity
General Classrooms			
General Classrooms +660 Sq. Ft.	18	25	450
Undersized Classrooms <600 SF	2	0	0
Learning Support Classrooms and Small Group Instruction			
Learning Support Classroom +660 Sq. Ft. (Resource)	0	0	0
Learning Support Classrooms +660 Sq. Ft. (Sched. Success)	0	0	0
Speech <660 Sq. Ft.	0	0	0
Study Hall +660 Sq. Ft.	0	0	0
In School Suspension	0	0	0
Special/Alternative Education Classrooms and Small Group Instruction			
Special Educ. Classroom +660 Sq. Ft.	0	0	0
Special Ed. Small Group Instruction Rooms <660 Sq. Ft.	0	0	0
Art and Music Classrooms			
Art Classrooms +660 Sq. Ft.	0	0	0
Music Classroom +660 Sq. Ft.	0	0	0
Drama Classroom +660 Sq. Ft.	0	0	0
Chorus Room +660 Sq. Ft.	0	0	0
Labs			
Science Labs	5	20	100
Planetarium	0	20	0
Greenhouse	0	0	0
Family & Consumer Science Lab +660 Sq. Ft.	0	20	0

Career & Tech-Ed			
Tech Ed Lab +1800 Sq. Ft.	0	20	0
Tech Ed Lab <1800 Sq. Ft.	0	0	0
TV Studio+660 Sq. Ft.	0	20	0
Business Classroom +660 Sq. Ft.	0	25	0
Media Center			
Media Center	1	0	0
Maker Space	0	0	0
Student Store	0	0	0
Physical Education			
Gymnasium +6500 Sq. Ft.	0	0	0
Auxiliary Gymnasium +2500 Sq. Ft.	0	0	0
Fitness Rooms (Weight and Cardio)	0	0	0
Wrestling Room	0	0	0
Natatorium	0	0	0
Support Spaces:			
Auditorium	0	0	0
Stage	0	0	0
Cafeteria	1	0	0
Drop-By Center for On-Line Learners (Cyber Café)	0	0	0

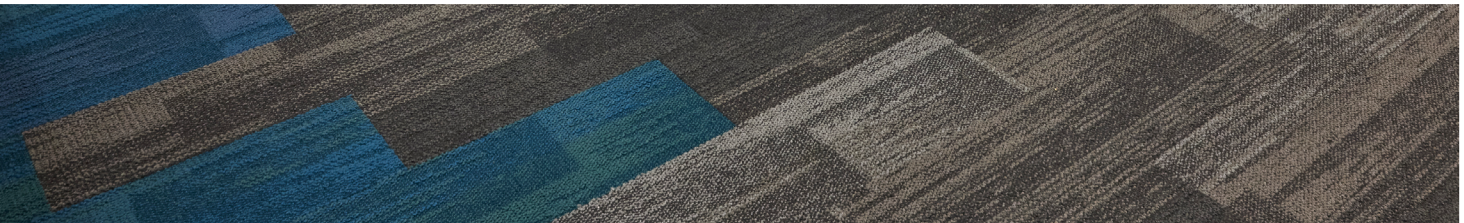
Total Educational Capacity	550
Utilization Rate	80%
Functional Building Capacity	**440**
Current Enrollment	**468**
PDE Reimbursement Factor	2079

4 | Other District-Owned Facilities

Summary

Other facilities owned by Harrisburg School District include the District Administration Office (shared with the Cougar Academy facility); Severance Stadium with associated field house; maintenance building; and William Penn High School. William Penn High School is abandoned, with no plans for future educational use. These existing facilities are not assigned capacity, since they are not being utilized by the School District for education.

DISTRICT ENROLLMENT STUDY



5 | Projected Enrollment Analysis

Overview

Enrollment projections through mathematical modeling are a critical part of developing, prioritizing, efficiently operating, and maintaining funding for school buildings and grounds. Regardless if a school district is increasing, decreasing, or maintaining enrollment, establishing and planning for an anticipated number of students at each grade level, grade alignment, in each attendance unit, and the district as a whole critical. The purpose of the enrollment modeling process is to:

1. Determine the most likely future enrollment for a school district, school, grade alignment, and/or attendance unit in order to compare the anticipated size of a student body against school(s) capacity given the district's educational program and objectives.

2. Provide the Board and administration data to develop a capital improvement plan necessary to meet the on-going physical needs of the students they serve and the community that supports them.

Summary

- In order to remove fifth grade from the middle schools and return the grade level to the elementary schools, including Steele Elementary School, approximately 530 seats will be required. With the addition of the seats at Steele Elementary School, the district has adequate space to realign elementary schools from K-4 to K-5.

- When Steele Elementary School reopens some redistricting may be necessary to balance enrollments in the elementary schools.

- The middle schools serving grades 5-8 have a combined capacity of 2468 seats with an educational capacity to efficiently schedule of 2098 students. The planned capacity of 2450 is 18 students fewer than the total capacity. As a result, the district has the capacity to maintain the middle schools as a 5-8 grade alignment if it wishes to do so.

- If the district wishes to realign the middle schools to 6-8 by moving the fifth grade from the middle to the elementary schools, the district can anticipate more than adequate space to maintain the instructional program.

- Enrollment projections indicate that in 5-years the high schools will be operating at 88% of capacity. That represents the equivalent of being 5.2 classrooms short of meeting the 80% target. However, there are 13 undersized classroom (<660 sq./ft.) classrooms given PDE standards that are not included in the capacity. Many of these classrooms, while undersized by state standards, are more than adequate to house smaller high school classes. In addition, annually there are 50-100 students or the equivalent of 2 to 4 classrooms being scheduled at the Cougar Academy. When these two facts are taken into consideration, there is likely more than adequate space to operate the Board adopted instructional programs at the high school level.

The Pennsylvania Department of Education (PDE) Projections

PDE provides School Districts with enrollment projections based on recent historic trends in births and trends in the progression of students form one grade to the next. The PDE model uses enrollment data reported annually through the Pennsylvania Information Management System (PIMS) and resident live birth data provided by the Pennsylvania Department of Health. Grade progression is determined by calculating retention rates for grades 2 to 12 using the most recent five years of enrollment data. Retention rates for kindergarten are determined by births five years earlier and for first grade from births six years earlier. These rates are evaluated to determine if a pattern is discernable, or if any retention rates are unusual. If a pattern is found, the pattern is continued in making the projections. Unusual retention rates are discarded, and the average of the remaining rates is used in making the projections. Information does not include Pre-Kindergarten figures. Every study must include and consider enrollment projections provided by PDE if district is pursuing reimbursement from the Commonwealth.

Crabtree, Rohrbaugh & Associates (CRA) Projections

CRA provides enrollment projections based on the concept that the recent progression of students through the district's different grade bands best represent the progression of students through the district over the next five to ten years. This model uses enrollment data reported by grade alignment, determines a three- and five-year average rate of growth within each grade band, and projects the size of the student body based on current enrollments. Rather than utilize live birth rates six years prior, this model assumes that the three and five-year average rate of growth of incoming kindergarten classes will continue into the near future. If an anomaly exists in number of incoming kindergarten classes within the past three or five years, the average rate of growth for the elementary program or district is applied as the growth rate of incoming kindergarten classes. If an anomaly exists in grades 1-12 it is omitted as an outlier. This model is much more sensitive to changes to in- and out-migration, changes in policy, program, and state and federal statutes than models that utilize birth and cohort retention rates.

Best Fit Projections

CRA further analyzes our enrollment projections against modeling provided by the Pennsylvania Department of Education to develop "Best Fit Modeling". This modeling is based on the concept that each of the different methodologies represent a legitimate mathematic possibility and that an "average" of those models can represent the most likely of all possibilities.

APPENDIX C: LIMITATIONS OF ENROLLMENT MODELING USED IN STUDY provides a listing of the limitations of each of the methodologies utilized for enrollment projections.

Planning for Future Capacity

CRA strives to provide the data and recommendations necessary for each client to establish capacity based on the following standards:

Renovations, additions, or new construction of educational space typically takes 36 to 60 months to move through planning, approvals, financing, permitting, construction, and opening. Given that lead time school districts with elementary enrollments trending upward should begin to plan when a student body surpasses 90% of a school's utilization capacity or when critical infrastructure is reaching five years to end of life use.

- Enrollment projections have the highest degree of validity within 60 months of being calculated; beyond 60 months their margin of error increases greatly.

- As a baseline the capacity of an educational facility should be planned for 100% of the projected enrollment five years from point planning begins plus an additional 10% at the elementary level and 15% at the secondary level as a baseline to allow for:
    1. scheduling efficiencies,
    2. future growth, and
    3. PDE will not reimburse a district for work on that school for 20 years.

- The baseline applied to capacity is often adjusted based on (1) on how aggressively enrollment is trending and the historical experiences of a school district, (2) districts that have residential and commercial developments on the horizon that do not yet reflect mathematically in enrollment projections, (3) districts that have larger developmental grade spans within a building(s), (4) district's with growing numbers of special education and students who require small group support services, (5) district's that cannot easily accomplish a better balance through redistricting, and (6) combinations of these reasons Depending on these factors utilization rates are adjusted by 5% to 15% beyond projected at the elementary level and to 5% to 20% at the secondary level. **In this study CRA has assigned a utilization rate of 85% to the elementary schools and 80% at that the secondary level in the Harrisburg School District.** While the District does exhibit many of the reasons that warrant a greater adjustment, the stability and consistency of the projections across the enrollment models does not warrant a more aggressive stance.

- The allowance for scheduling efficiencies and future growth is referred to as the utilization rate.

Planned Capacity is the anticipated size of a school measured by the number of seats required given the projected increase/decrease in enrollment, grade alignment, academic programs being delivered (current and intended), and the utilization rate. It is the anticipated educational capacity of a school after renovations, additions, new construction, realignment, or consolidation.

Harrisburg School District Projections

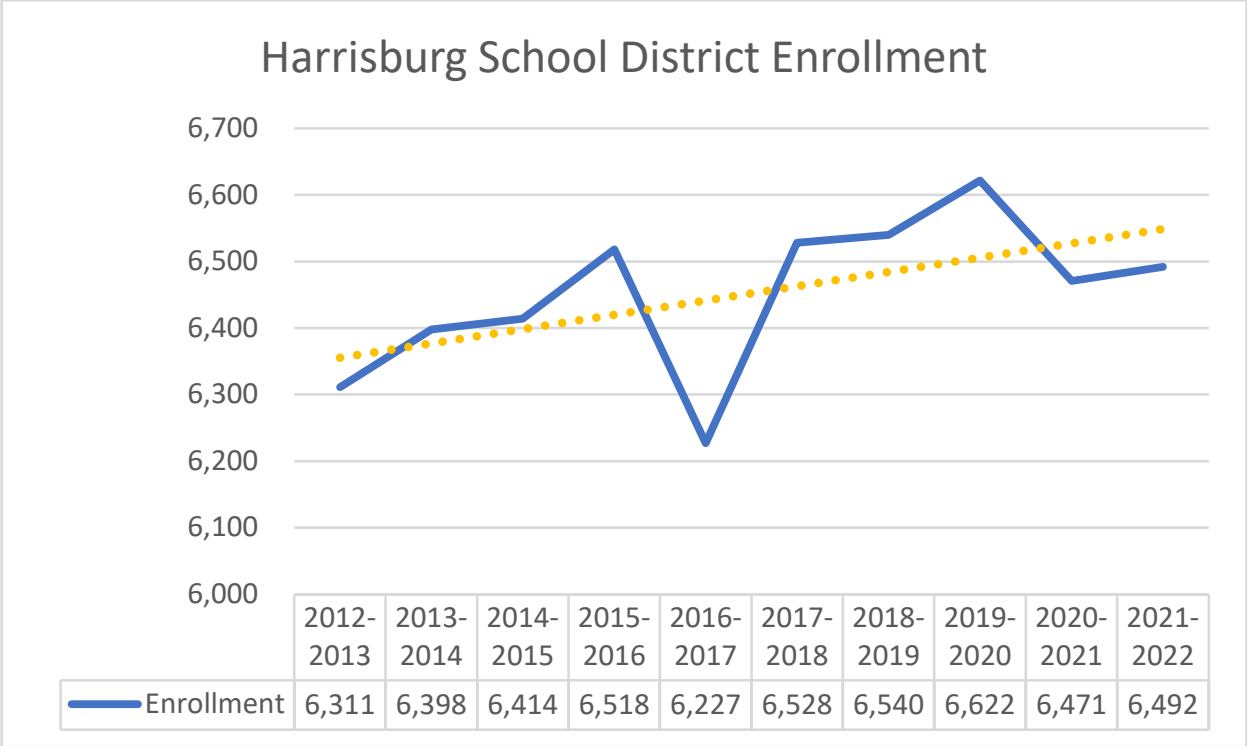
In order to more accurately project enrollment utilizing CRA's methodology two adjustments were made to the modeling. First, as shown in the table below in 2016/17 enrollment is reported by the Pennsylvania Department of Education to have dropped by 291 students only to increase by 301 students in 2017/18 brining it 10 students above 2015/16 enrollment. No explanation was available for this sudden dip and return. As a result, 2016/17 was considered an outlier and dropped from the projections.

Grade/Enrollment	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
K	603	636	567	584	580	608	592	398	469
1	596	669	657	573	613	600	630	587	445
2	586	561	651	595	566	598	604	592	544
3	500	546	544	606	581	550	566	581	563
4	522	472	517	509	610	532	557	546	554
5	524	514	516	513	544	592	571	556	544
6	514	483	485	516	562	541	574	563	553
7	520	506	479	447	517	525	518	547	577
8	477	487	530	417	425	477	506	489	549
9	559	502	570	521	511	489	506	474	601
10	423	422	364	392	433	393	389	447	410
11	274	303	299	249	301	314	287	347	350
12	300	313	339	305	285	321	308	342	317
Total	6398	6414	6518	6227	6528	6540	6608	6469	6476
Year to Year Change:		16	104	-291	301	12	68	-139	7

Second, high school enrollment changes substantially from ninth to twelfth grade. An average of the four years does not adequately represent the enrollment pattern. As a result, CRA's projections calculated each year separately in their projections.

Historic Enrollments in the Harrisburg School District

Overall enrollments in Harrisburg School District have been on the rise with 181 more students than a decade ago. However, enrollment growth has not been even. Enrollments reported to the Pennsylvania Department of Education indicate single year gains and losses of more than 275 students.



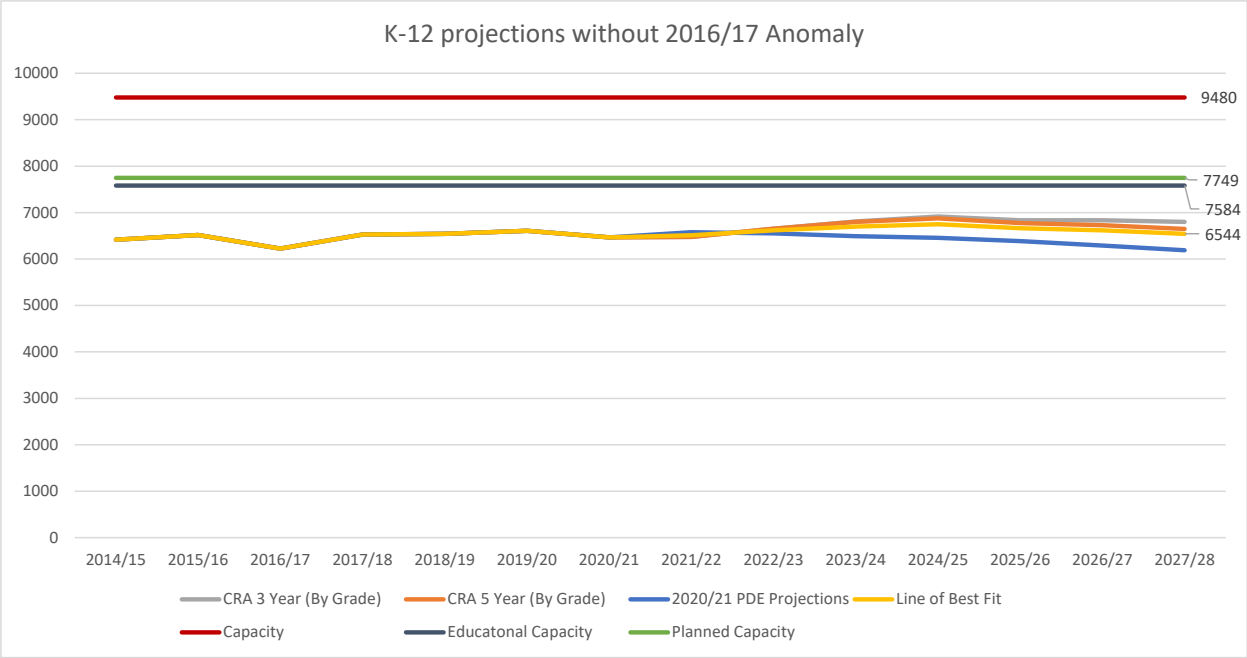
	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Enrollment	6,311	6,398	6,414	6,518	6,227	6,528	6,540	6,622	6,471	6,492

Harrisburg School District Projections (K-12)

The Harrisburg School District has a total seating capacity of 9480 seats with an educational capacity to efficiently schedule of 7584 students. This includes the seats utilized in the preschool program but does not include the physical seats at the Cougar Academy. The breakdown by level is shown in the table below:

District Capacity	Total Capacity	Educational Capacity
Elementary	4630	3936
Middle School	3250	2600
High School	2365	1892
District Total	10245	8428

The average of the enrollment projections indicates that the district will peak in enrollment at 6811 students in the 2024/25 school year and then decline to 6638 students by 2027/28. Based on these projections and including the capacity at Steele Elementary School the district has the instructional space necessary to manage the student body. However, that space is not evenly distributed across the elementary, middle, and high schools.

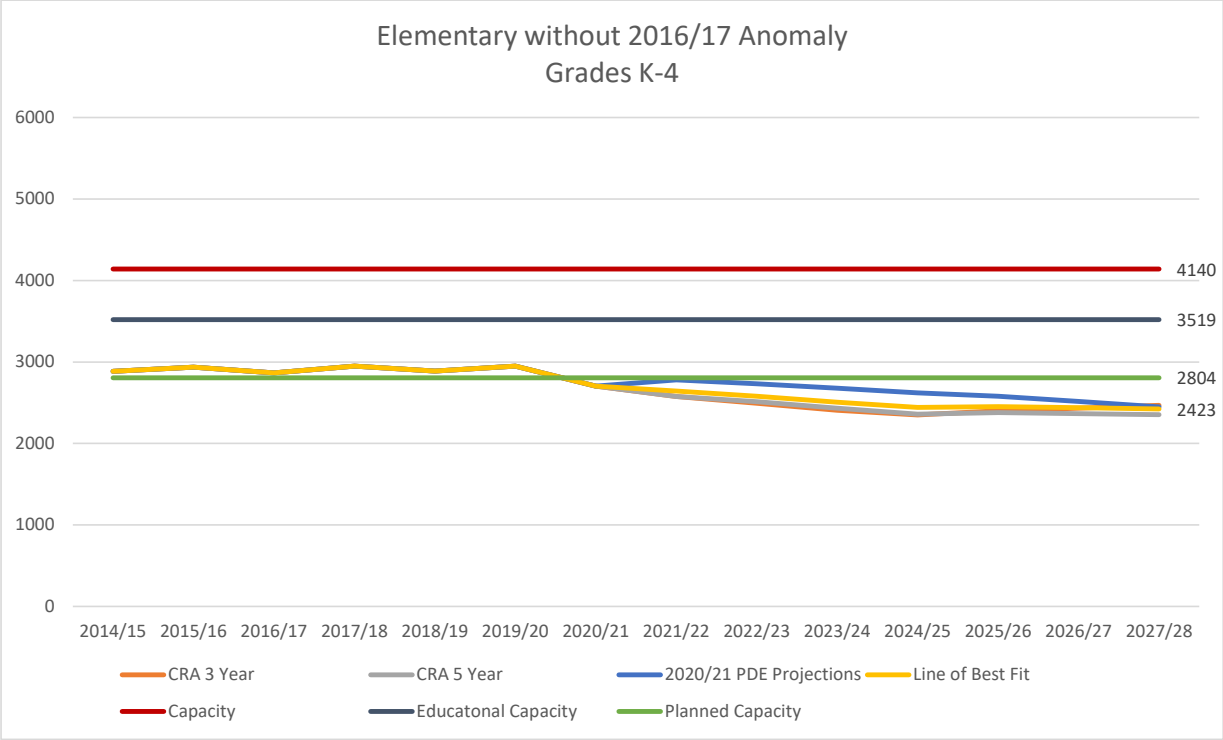


Elementary Projections (K-4 and K-5)

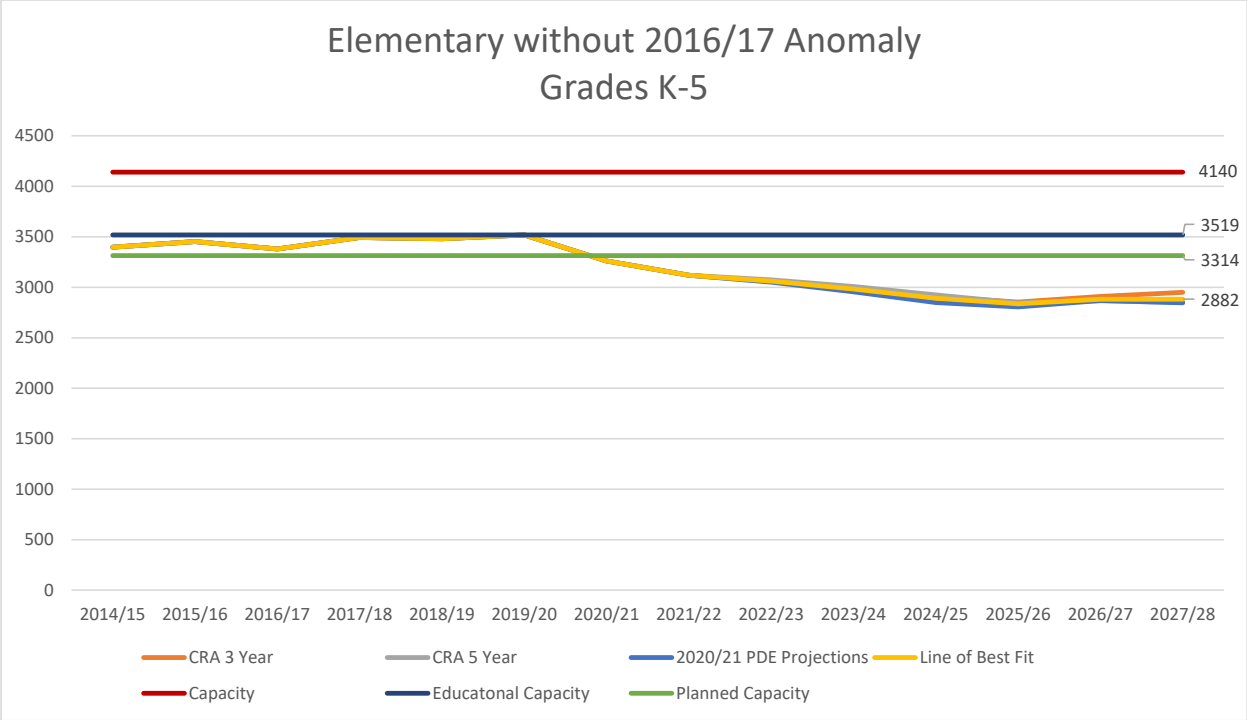
The Harrisburg School District has a total elementary seating capacity of 3865 seats with an educational capacity to efficiently schedule of 3092 students. This includes the seats utilized in the preschool program but does not include the physical seats at the Cougar Academy. The breakdown by building is shown in the table below:

Elementary School Capacity	Total Capacity	Educational Capacity
Ben Franklin ES	845	718
Downey ES	530	451
Foose ES	725	616
Hamilton ES	495	421
Melrose ES	605	514
Scott ES	480	408
Steele ES	455	387
Cougar Academy	495	421
Elementary Total:	4630	3936

With the introduction of the seats at Steele and Hamilton Elementary Schools back into the elementary inventory, the district has more seats than is required to house grades K-4 in the elementary schools.



In order to remove fifth grade from the middle schools and return the grade level to the elementary schools, approximately 530 seats will be required. With the addition of the seats at Steele and Hamilton Elementary Schools into the inventory, the district has adequate space to realign elementary schools from K-4 to K-5.



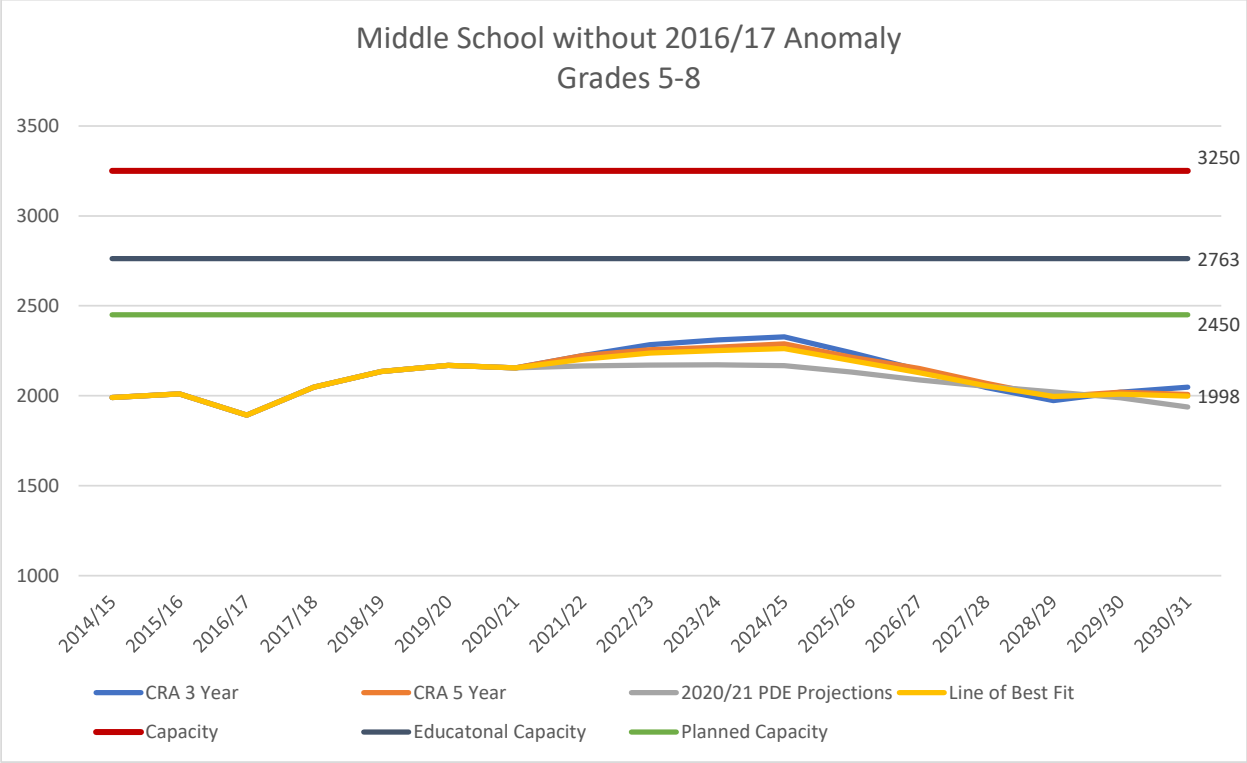
With the opening of Steel and Hamilton Elementary Schools and moving 5th grade into the elementary grades, given the target utilization and projected enrollment there are approximately 200 additional seats available that if filled would bring the utilization to 90% of capacity. Initially that may appear to be large, but when considering those seats would be distributed across 6 elementary schools and 6 grade levels, it is the equivalent of 15 seats per grade level per school. These extra seats are well within the attendance swings that the district experiences.

Middle Level Projections (Grades 5-8 and 6-8)

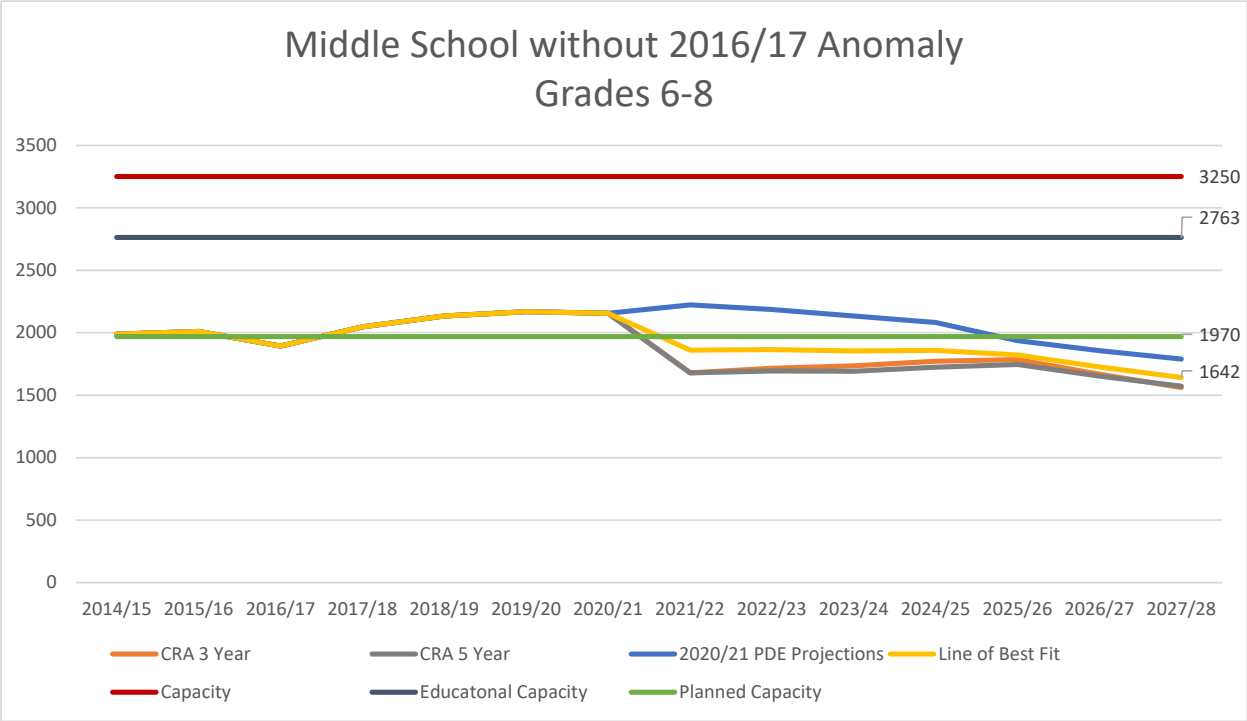
The Harrisburg School District has a total middle school seating capacity of 3250 seats with an educational capacity to efficiently schedule of 2600 students. This does not include the physical seats at the Cougar Academy. The breakdown by building is shown in the table below:

Secondary School Capacity	Total Capacity	Educational Capacity
Camp Curtin Academy	1300	1040
Marshall M/S Academy	700	560
Rowland Academy	1250	1000
Middle School Total:	3250	2600

Given this analysis, the district has the capacity to maintain the middle schools as a 5-8 grade alignment if it wishes to do so.



If the district realigns the middle schools to 6-8 by moving the 5th grade from the middle to the elementary schools, the district can anticipate that this grade realignment the bulk of the district's available seats will be in the middle schools.

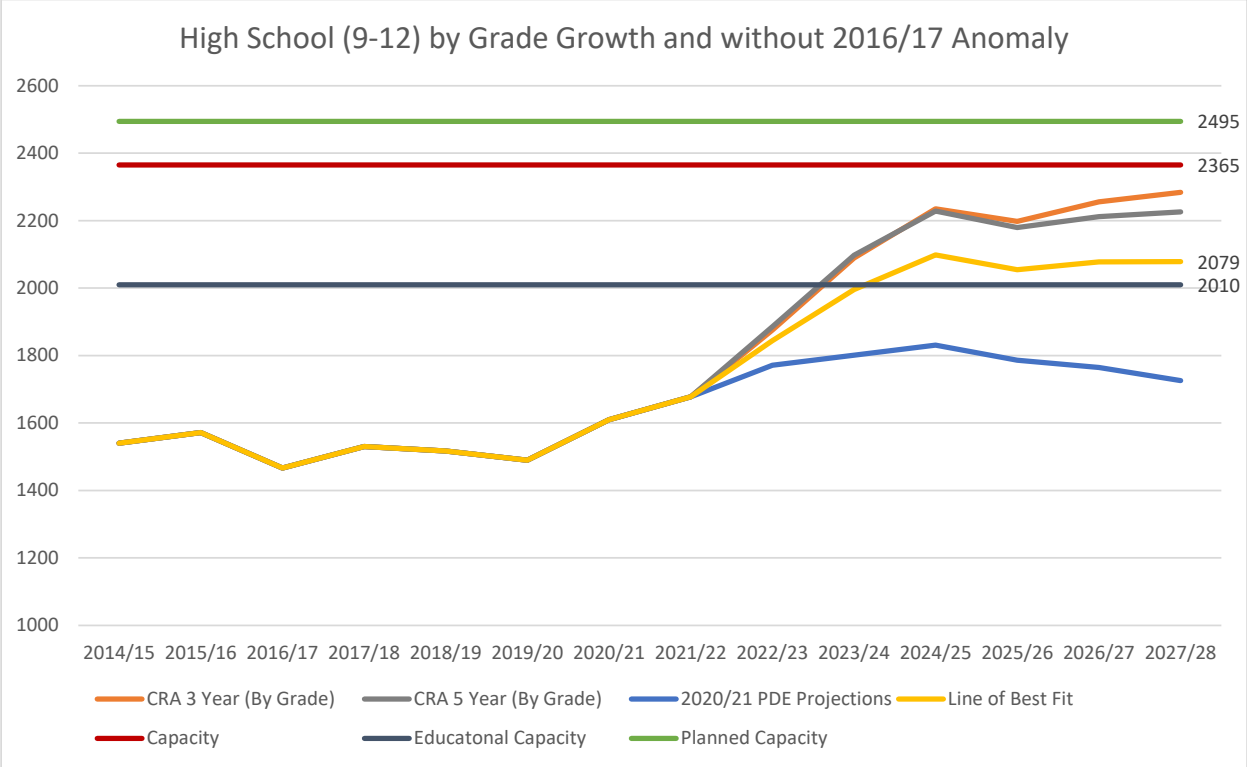


High School Projections (9-12)

The Harrisburg School District has a total high school seating capacity of 2365 seats with an educational capacity to efficiently schedule of 1892 students. This does not include the physical seats at the Cougar Academy. The breakdown by building is shown in the table below:

Secondary School Capacity	Total Capacity	Educational Capacity
John Harris HS	1815	1452
SciTech HS	550	440
High School Total:	2365	1892
Secondary Total:	5615	4492

Enrollment projections indicate that in 5-years the high schools will be operating at 88%. That represents the equivalent of being 5.2 classrooms short of meeting the 80% target. However, there are 13 undersized classroom (<660 sq./ft.) classrooms given PDE standards that are not included in the capacity. Many of these classrooms, while undersized by state standards, are more than adequate to house smaller classes. In addition, annually there are 50-100 students or the equivalent of 2 to 4 classrooms being scheduled at the Cougar Academy. When these two facts are taken into consideration, there is likely more than adequate space to operate the Board adopted instructional programs at the high school level.



EXISTING FACILITY CONDITIONS ANALYSIS

6 | Existing Facility Conditions Analysis

Overview

The Facility Condition assessment is used to understand the condition of existing components of the site and building and determine what upgrades to the existing are needed to meet today's standards. It is conducted by a team of architects and engineers of various disciplines. The evaluation is performed using existing data, facility staff interviews, facility walk-through assessments, and analysis.

The following categories were used to assess each building:

- Site
- Interior Building
- Exterior Building
- Systems – Electrical
- Systems – Plumbing & Fire Protection
- Systems – HVAC

Evaluation Methodology and Approach

In order to adequately assess the district facilities, it is imperative that a baseline, or benchmark be established, from which evaluations and any subsequent recommendations are based upon. In completing the facilities assessment and evaluation, Crabtree, Rohrbaugh & Associates, working with School District staff, developed and utilized several tools to assist in the process. They include the following:

- Building surveys and documentation
- Meetings with staff
- Use of an Evaluation Criteria as a benchmarking tool
- Lifespan of Building Components

The criteria are based on the educational program needs as well as life cycle costs and life span expectations, maintenance needs, energy efficiency, and current applicable accessibility, life safety and building code considerations. The following building codes are applicable:

1. International Building Code of 2015
2. International Existing Building Code of 2015
3. Chapter 11 of the International Building Code of 2018
4. International Mechanical Code of 2015
5. International Fuel Gas Code of 2015
6. International Plumbing Code of 2015
7. International Fire Code of 2015
8. International Energy Conservation Code of 2015
9. Accessible and Usable Buildings and Facilities - ICC / ANSI A117.1 of 2009
10. International Electrical Code of 2014
11. ASHRAE 90.1
12. PA Uniform Construction Code Amendments to the above listed model codes
13. Local municipal amendments, if any, to the above listed model codes

NOTE: Existing facilities meet codes applicable at the time of their construction. Code issues identified in this report are those that would be required to meet current codes. Some of the code required upgrades are considered safety issues and should be addressed by the school district.

Building Condition Criteria

Site	
Paving	Asphalt paving should be in good condition, showing no signs of deterioration or cracking. Storm water should be diverted to drainage inlets with no ponding.
Walkways	Concrete sidewalks should be in good condition, showing no signs of deterioration, major cracks or tripping hazards.
Play Equipment	Play equipment should be located in a safe area of the site with no broken or rusted equipment. It should be age appropriate.
Service Area	The service area should be properly located near food services, mechanical rooms and receiving/ storage areas. The service area should be separate from pedestrian and play areas, with trash and recycling containers away from the building and properly screened.
Student Loading	Adequate space should be provided for bus loading, as well as staff and visitor parking. Vehicular and pedestrian traffic are to be separated as much as possible.
Landscaping	Landscaping should be attractive, conducive to activity and well- maintained.
Exterior Building Envelope	
Foundations	All footings shall bear on suitable soil; concrete slabs on compact grade.
Structural System	Structural systems should be intact with no uncertified modifications. There should be no evidence of cracking or settling of structural components.
Energy	Buildings should meet or exceed ASHRAE 90.1 Standards.
Roofing System	Roofing systems should be in maintainable condition with adequate slope to roof drains or gutters and no ponding, roof leaks or visible damage.
Exterior Envelope	Exterior walls should be masonry cavity wall on masonry backup with adequate insulation or masonry cavity wall on metal stud and reinforced gypsum drywall with adequate insulation.
Exterior Trim	Exterior trim should be heavy gauge metal or wood with no rotted areas, completely painted and properly fastened.
Windows	Windows should be clear or tinted glass units, in thermally broken aluminum frames, or aluminum clad wood with undamaged finish. Windows should be easily operable and have proper caulking.
Exterior Doors	Exterior doors and frames should be galvanized hollow metal or finished aluminum. In addition, they must swing in the direction of egress travel, and be accessible.
Interior Walls	Interior partitions should be structurally sound, free of finish defects and have adequate acoustical properties.
Interior Doors	Interior doors should be solid core wood in painted metal frames. Doors should have undamaged finish and swing in the direction of egress.
Interior Glass	Interior glass should be 1/4' tempered or safety glass, or wire glass where required.

Kitchen Equipment	Equipment should be properly located to accommodate both safety and traffic. Equipment should be stainless steel in good working condition and in compliance with all applicable codes.
Athletic Equipment	Athletic equipment and bleachers should be in good working condition and meet the minimum code safety requirements. Basketball backstops and related equipment should be in good working condition with appropriate safety measures for operation.
Terrazzo	Floors should contain no large cracks and have smooth transition to adjacent floor surfaces with no stains or deteriorated areas.
Resilient Flooring	Resilient floor surfaces should be free of defects, with no cracks, open seams or missing tiles. Asbestos containing floor tiles should be identified and be included in the School District's operation and maintenance plan.
Carpeting	Carpet should have tight seams, with no unraveling or exposed/frayed ends. They should have anti-microbial treatment and be stain resistant where applicable. Area rugs should be non-slip type with no tripping hazards.
Ceramic Tile	Ceramic tile should be free of cracked, loose, missing or broken tiles with adequate waterproof grout.
Wood Flooring	Wood floors should have appropriate finish and smooth transition to adjacent floor surfaces. They must allow for movement without buckling or spreading. There should be no squeaky or soft spots.
Ceiling Tile	Ceilings should contain no stained, broken or warped tiles, and the grid should be adequately tied to structure.
Gypsum Wallboard	Wallboard should have smooth, clean surface with no damage or stains and appropriate transition to adjacent ceiling materials. Wallboard should not be used in areas subject to high student use or abuse.
Paint	Painted surfaces should have a smooth finish, with no peeling or stains. Appropriate colors should be chosen for reduction of glare, for light reflectivity and overall compatibility with use of space. Lead based paint should not be present.
Casework	Cabinets should have a solid wood or particleboard core with a high-density plastic laminate finish. Chemical resistant countertops should be provided in science labs where appropriate. Surfaces should be undamaged with properly functioning hardware.
Toilet Partitions	Partitions should be painted, galvanized metal or solid phenolic construction. Partitions should be floor supported or overhead braced. Panel surfaces should not be dented, bent or rusted and all hardware should be present and in good working condition.
Lockers	Lockers should be heavy gauge metal with painted finish. Athletic lockers should be extra-heavy duty or all welded construction, property vented. Lockers should be in good physical condition with no dents or rust and all hardware should be present and in good operating condition.
Operable Partitions	Partitions should be secured properly to the building structure. They should be easy and safe to operate. The sound transmission rating is to be suitable for its intended use.
Acoustics	Acoustic separation should be provided between assembly spaces and instructional areas. Large assembly areas, such as gymnasiums, multi-purpose rooms, cafeterias, music

<table>
<tr><td></td><td>rooms and libraries should be designed to properly attenuate and distribute sound in order to reinforce the program use.</td></tr>
<tr><td colspan="2">Systems – Plumbing & Fire Protection</td></tr>
<tr><td>Distribution</td><td>Sanitary drainage, domestic water and gas piping should be in good condition and operating within system design. Hot water supply shall be provided to every hand sink within classrooms and restrooms.</td></tr>
<tr><td>Plumbing Fixtures</td><td>Plumbing fixtures should be well maintained and in good working condition to operate within the system design. They shall accommodate the adult or child dimensions and anthropometrics, respectively for their users.</td></tr>
<tr><td>Equipment</td><td>Plumbing equipment should be well maintained and in good working condition to operate within the system design.</td></tr>
<tr><td colspan="2">Systems – Electrical</td></tr>
<tr><td>Interior Fixtures</td><td>Light fixtures should have energy efficient long life lamps with non-PCB ballasts. Fixtures should have undamaged finishes and lens with no cracked or discolored items.

Illumination levels should meet the minimum criteria based on foot-candle (fc) levels established by the Illuminating Engineers Society (IES). Applicable parameters are as follows:
<table>
<tr><td>Space</td><td>Foot Candles</td></tr>
<tr><td>Classrooms</td><td>50 – 100 fc</td></tr>
<tr><td>Libraries</td><td>20 – 50 fc</td></tr>
<tr><td>Offices</td><td>20 – 50 fc</td></tr>
<tr><td>Office Task</td><td>50 – 100 fc</td></tr>
<tr><td>Toilets</td><td>10 – 20 fc</td></tr>
<tr><td>Corridors</td><td>10 – 20 fc</td></tr>
<tr><td>Cafeterias</td><td>10 – 20 fc</td></tr>
<tr><td>Kitchens</td><td>50 – 100 fc</td></tr>
<tr><td>Laboratories</td><td>50 – 100 fc</td></tr>
<tr><td>M.P. Rooms</td><td>30 fc</td></tr>
<tr><td>Parking</td><td>1 – 2 fc</td></tr>
</table></td></tr>
<tr><td>Exterior Lighting</td><td>There should be LED wall mounted lights around the perimeter of building and the lights should be photocell or time clock controlled.

There should be lights mounted on 35' high light poles providing 1 to fc to all parking areas.</td></tr>
</table>

Power Supply	Power supply should be 480/277 volts, 3 phase, 4 wire from power company. The transformer should be located in a safe isolated area.
Service	Service box should have a functional panel cover and lock, available replacement branch devices and expansion capacity.
Distribution	Equipment should have functional panel covers and locks with 480 volts, 3 phase for power to HVAC and other heavy equipment; 277 volts, 3 phase for interior or lighting distribution; available replacement parts. All panel schedules shall be accurately labeled.
Transformers	There should be 480 120/208 volts, 3 phase step-down transformers for power to receptacles and other small 12 volt equipment.
Wiring	There should be no signs of deteriorating insulation or loose connections.
Receptacles	Receptacles should be grounded type with no broken covers. They should be appropriately located for program needs. Shutter type safety receptacles should be provided in play areas; Ground fault interrupters are required at wet areas.
Emergency Generator / Battery Packs	Emergency generators should be property located and sized to meet desired emergency load requirements
Public Address System	System should be fully automatic; main power should control all speakers and provides signals to bell system for fire drills and alarms.
Speakers/ Call Intercom System	Speakers should be provided in every classroom for two-way communications and safety.
Clocks/ Bells	Analog or digital clocks should be installed in each instructional space and should also be connected to the master clock system. Clocks and bells should be on the automatic system.
Telephone System	A telephone system should be provided and available within the capabilities of the Public Address System. Specific functioning and use of the system should be programmed from the central control unit.
Television/ AV CATV System	There should be empty conduits or cable trays to instructional areas to allow for television cables. Wiring and installation of a television system should be per the educational specifications. Every instructional space should be served by the system.
Data Transfer System	Data systems should be implemented to meet the educational needs of the facilities and a long-range technology plan. Systems should be flexible and adaptable for future technological changes. A building-wide cable distribution system should be provided for installation of present and future low voltage special systems cable. Provide racks for LAN distribution equipment at designated network hub locations.
Systems – Heating, Ventilation and Air Conditioning (HVAC)	
System Design	HVAC System installed should be one that is the most ideal and current for the type of building. Equipment and air distribution should contain fire protection devices such as fire dampers and duct smoke detectors to meet current local code and life safety requirements.
Ventilation	Outside air quantities should be designed per local code requirements.

Exhaust	Proper quantities of exhaust air should be provided in toilet rooms, science rooms, mechanical rooms, kitchen, maintenance closets, storage rooms and copy rooms.
Distribution	HVAC piping and ductwork should be in good condition.
Equipment	HVAC equipment should be well maintained and in good working condition to operate within the system design. Equipment should be designed to meet local building code requirements.
Energy	Automatic temperature control systems should be current and have energy management capabilities

Accessibility and Building Code Criteria

Recommendations in this report regarding upgrades related to the Americans with Disabilities Act are made when buildings or areas of a building can be made accessible without "undue burden". "Section 35.150 requires that each service, program, or activity conducted by a public entity, when viewed in its entirety, be readily accessible to and usable by individuals with disabilities." ADA Regulation for Title II, as printed in the Federal Register (7/26/91).

Site		
Vehicular Circulation	Safe drop-off facilities should be provided for each bus, automobile, and service vehicle traffic. Cross traffic between vehicles and pedestrians should be eliminated or minimized.	
Parking	Vehicular parking shall be designed to meet local municipal authority requirements. An adequate amount of parking should be available for students, staff and visitors.	
Drainage	Storm water management shall be designed to meet local municipal authority requirements. Walks and drives shall be properly drained.	
Pedestrian Circulation	At least one accessible route shall be provided within the boundary of the site from accessible parking spaces, passenger loading areas and public streets and walks to an accessible building entrance.	
Parking	Property configured and marked accessible parking spaces shall be provided per code requirements.	
	Total Parking in Lot	Required Minimum Number of Accessible Spaces
	1 to 25	1
	26 to 50	2
	51 to 75	3
	76 to 100	4
	101 to 150	5
	151 to 200	6
	201 to 300	7

	301 to 400	8
	401 to 500	9
	501 to 1000	2 Percent of Total
Exterior Signage	Proper signage shall be provided on-site to designate handicapped accessible route(s) to the building and related facilities.	
Interior Code Compliance		
Means of Egress	Interior elements comprising *means of egress* shall be continuous and unobstructed from any space within the building to the *exit discharge* in accordance with local building codes.	
Fire Extinguishers	Fire extinguishers shall be an approved type to meet local building code criteria for number and spacing and shall be mounted at the proper height. Fire extinguishers shall be annually serviced by licensed personnel and inspected monthly by building operations employees.	
Interior Accessibility		
Interior Routes	At least one accessible route shall connect accessible building or facility entrances with available programs within the building. The path of travel to an altered area and the restrooms, telephones, and drinking fountains serving the altered area, shall be readily accessible to and usable by individuals with disabilities.	
Railings	Handrails and railings on stairs and/or ramps shall be designed to meet code requirements. Ramps shall have a maximum slope of 1 to 12.	
Elevator	One passenger elevator shall serve each level providing programs to the public including mezzanines, in all multi-story buildings.	
Doors	At each accessible entrance to a building, at least one door shall meet code width and maneuvering clearances. Door openings are to be a minimum clear width of 32” and a minimum clearance of 4’-0” shall exist between pairs of entrance doors in vestibules. Each door that is an element of an accessible route or means of egress shall meet the width and maneuvering clearances per code requirements.	
Egress/ Area of Rescue Assistance	Areas of Rescue Assistance shall be provided where there is no direct egress to grade. The total number of areas per story shall be not less than 1 for every 200 persons of calculated occupant load served by the area of rescue assistance. Area of Rescue Assistance may not be required if the building is fully sprinklered.	
Interior Signage	Proper signage shall be placed throughout the building to adequately identify accessible routes and areas of rescue assistance. Room identification signs throughout the building shall be in compliance with ADA.	
Hardware	Door locksets to all accessible spaces should be lever-type accessible units. Door closers should meet pull load requirements.	
Toilet Rooms	Existing toilet room facilities on each level of a building shall be accessible or an accessible toilet room shall be provided near the existing facilities. Additional toilet facilities shall be accessible when required by the program or service provided.	

<table>
<tr><td>Drinking Fountains</td><td colspan="2">At least one accessible drinking fountain should be provided on each level of a building and 50% of the total number of drinking fountains provided shall be accessible. Two drinking fountains mounted side by side or on a single post, are usable by people with disabilities and people who find it difficult to bend over. Knee clearances shall not be required at units used primarily by children ages 12 and younger where clear floor space for a parallel approach is provided and where the spout is no higher than 30 in, measured from the floor or ground surface to the spout outlet.</td></tr>
<tr><td>Seating</td><td colspan="2">In places of assembly with fixed seating, accessible wheelchair locations shall be provided. At least one companion fixed seat shall be provided next to each wheelchair seating area. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location.</td></tr>
<tr><td></td><td>Capacity of Seating in Assembly Area</td><td>Number of Required Wheelchair Locations</td></tr>
<tr><td></td><td>4 to 25</td><td>1</td></tr>
<tr><td></td><td>26 to 50</td><td>2</td></tr>
<tr><td></td><td>51 to 300</td><td>4</td></tr>
<tr><td></td><td>301 to 500</td><td>6</td></tr>
<tr><td></td><td>over 500</td><td>6 plus 1 additional space for each total seating capacity increase of 100</td></tr>
<tr><td>Workstations</td><td colspan="2">Accessible workstations in core spaces in the elementary school level such as art rooms, the library/media center, computer labs and other core subject spaces in the secondary level should be provided.</td></tr>
<tr><td>Performance Areas</td><td colspan="2">An accessible route shall connect wheelchair-seating locations with performing areas, including stages and spaces used by the performers such as dressing rooms or locker rooms. An Assistive Listening System (ALS) should be provided and located within 50 feet viewing distance of the stage or performing area and shall have a complete view of the stage.</td></tr>
<tr><td colspan="3">Systems Code Compliance</td></tr>
<tr><td>Fire Alarm System</td><td colspan="2">There should be a NFPA 70 panel, connected to the local fire department for alarm with localized alarm stations as required with available spare parts and maintenance service.</td></tr>
<tr><td>Annunciator</td><td colspan="2">There should be a NFPA 70 remote panel in an easily accessed area, well protected, with available parts and maintenance service.</td></tr>
<tr><td>Fire Suppression System</td><td colspan="2">An automatic fire suppression system shall be installed throughout all buildings in accordance with local building codes.</td></tr>
<tr><td colspan="3">Systems Accessibility</td></tr>
<tr><td>Fire Alarm</td><td colspan="2">Visual strobe alarms are to be provided in toilet rooms and other general use areas. (Meeting rooms, lobbies, corridors and common use areas.)</td></tr>
</table>

Typical Life Expectancy of Building Materials & Components

The below timeframes represent typical average life expectancy of building components. These will vary based on use of the building, maintenance procedures, and other factors specific to a certain facility.

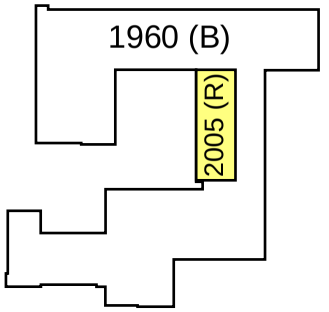
General Building Systems	Range of Years						Range of Years				
	10 - 20	20 - 30	30 - 40	40 - 50	50 +		10 - 20	20 - 30	30 - 40	40 - 50	50 +
Site Work											
Concrete pads & sidewalks	■	■				Site sewage system	■				
Bituminous paving	■	■				Site electrical lines	■	■	■		
Site water lines	■	■	■			Fencing	■				
Site sewer lines	■	■	■			Playground equipment	■				
Site stormwater systems	■	■									
Foundations & Structure											
Foundation walls / footings	■	■	■	■	■	Steel floor structure	■	■	■	■	■
Concrete slab on grade	■	■	■	■	■	Steel roof structure	■	■	■	■	■
Concrete floor/metal deck	■	■	■	■	■						
Building Envelope Systems											
Exterior wall - masonry	■	■	■	■	■	Rainwater downspouts	■	■			
Exterior wall - wood clad	■	■				Rainwater gutters / spouting	■	■	■		
Aluminum windows	■	■				Skylights	■	■			
Aluminum / metal doors	■					Roofing - seamed metal	■	■			
Trim - soffit, fascia, etc.	■	■				Roofing - asphalt shingles	■				
Roofing - build-up system	■	■				Roofing - single-ply EPDM	■	■			
Interiors											
Walls - masonry	■	■	■	■	■	Ceilings - drywall / plaster	■	■	■	■	
Walls - drywall / plaster	■	■	■	■	■	Ceilings - acoustical tile	■				
Floors - terrazzo	■	■	■	■	■	Wall / ceiling paint	■				
Floors - wood	■	■	■			Doors - wood w/metal frame	■	■			
Floors - vinyl	■					Interior door hardware	■				
Floors - ceramic	■	■	■	■		Operable partitions	■	■			
Floors - carpet	■										
Specialty Equipment											
Casework - wood	■	■	■			Toilet partitions	■				
Casework - plastic laminate	■	■				Toilet accessories	■				
Chalkboards & tackboards	■	■	■			Cafeteria tables	■				
Projection screens	■					Auditorium seating	■	■			
Lockers	■					Library furniture	■	■			
Kitchen equipment	■					Gymnasium bleachers	■	■			

Mechanical, Plumbing & Electrical	Range of Years						Range of Years				
	10 - 20	20 - 30	30 - 40	40 - 50	50 +		10 - 20	20 - 30	30 - 40	40 - 50	50 +
Mechanical											
Steel Boilers						Expansion tanks					
Cast Iron Boilers						Rooftop air conditioners					
Unit ventilators						Hot water unit heaters					
Fan coil units						VAV boxes					
Steam heat system						Centrifugal exhaust fans					
Gas heat system						Water cooled centrifugal chillers					
Oil heat system						Air cooled chillers					
Central air conditioning						Galvanized cooling towers					
Local (window) air conditioning system						Water source / geothermal heat pumps					
Ductwork, diffusers, grilles						Evaporative coolers					
Dampers						HVAC insulation					
Burners						Base mounted pumps					
Controls						In-line pumps					
Valve actuators											
Plumbing											
Water piping - copper						Water piping - PVC					
Sanitary piping - cast iron						Sanitary piping - PVC					
Gas-fired tanks						Expansion loops					
Electric-fired tanks						Mixing valves					
Steam-fired tanks						Gas piping (low pressure)					
Backflow preventers						Gas meter / regulator					
Pumps - constant pressure						Sprinklers					
Pumps - recirculation						Standpipe					
Pumps - sewer						Neutralization tanks					
Fixtures - water coolers, drinking fountains						Fixtures - toilets, urinals, lavatories					
Electrical											
Power Supply						Public address system					
Power service						Fire alarm panel					
Distribution panels						Smoke / heat detection					
Wiring, receptacles, switches						Fire alarm - graphic annunciator					
Transformers						Telephone system					
Lighting - exterior						Television system					
Lighting - interior						Security system					
Generator						Clock / bell system					
Exit signs						Speakers					
Communication wiring						Electric motors					
Motor starters											

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

Grades:	| K - 5
Address:	| 1205 North 6th Street
	| Harrisburg, PA 17102
Year Built:	| 1960
Add/Reno:	| 2005
	| 2001
Square Footage:	| 97,609 SF
Functional Capacity:	| 707 Students (96% Utilization)
Current Enrollment:	| 679 Students
Site Acreage:	| 5 Acres



CONSTRUCTION HISTORY

NORTH ARROW

First Floor Plan

Second Floor Plan

First and Second Floor Plan

6 | Ben Franklin Elementary School

Address:	1205 North Sixth Street Harrisburg, PA 17102
Construction Timeline:	Originally constructed in 1961; additions/renovations 2001/2005
Building Square Footage:	97,590 Square Feet
Site Acreage:	5.02 Acres

Building Summary

Ben Franklin Elementary School is a 2-story building, plus a partial basement, located in Midtown neighborhood of Harrisburg, PA. The School currently houses grades Pre-K-5. The property is served by public water, sewer and natural gas. The building was originally constructed in 1960, with most recent significant additions/renovations completed in 2004.

Site Conditions

The School structure occupies most of the property, with parking along parallel to N. 6th Street to the southwest as well as along the property line to the southeast. The eastern corner of the site has two fence-enclosed basketball courts. There is a public pool, Jackson Lick Pool, on the property to the northeast. The school can be accessed by walking paths connected to the City's sidewalks.

The site drains from southwest to northeast, sloping down gradually toward the pool and basketball courts. Generally, the site is well drained.

Paving & Walkways:

Vehicular access to the site is from N. 6th Street. Buses pick up and drop off students along the loop in front of the School. There are approximately 9-10 buses and 2-3 vans that transport students to the School. Parents form two lanes of traffic through the parking lot to pick up and drop off. The amount of queuing space is inadequate to support the number of cars at pick up and drop off time.

There are approximately 85 on-site parking spaces. The number of parking spaces is not adequate for the school's needs. Additional vehicles park in areas of the lot not designated for parking. The service/loading areas for the kitchen and school receiving are part of the parking lot on the southeast side of the site. Dumpsters are not enclosed, however are not prominently located.

Painted metal railings are due for new coats of paint.

Asphalt pavement is in relatively good condition. The drive areas should be re-sealed.Concrete sidewalks are in fair condition, with some areas in need of repair, particularly at a stair to one of the building's exit points.

Accessible parking spaces are provided and appear to be ADA compliant, with an accessible route to the main entrance.

Recommendations:

- Seal Coat asphalt paving as part of ongoing maintenance.
- Repair concrete stair.
- Repaint railings which were previously painted.

Play Areas & Equipment:

Within the courtyard defined by the U-shaped building is a play area with playground equipment. The Play area is enclosed from the adjacent drive and parking lot along N. 6th Street with a gated aluminum picket fence with masonry piers. The playground equipment appears to be in good condition.

On the east corner of the site are two fence-enclosed basketball courts, on asphalt paving.

Recommendations:

- Repaint hard surface play area.

Exterior Building Conditions

Exterior Walls:

The building exterior consists of masonry walls with modular brick veneers. Older areas of the building are not cavity walls, and therefore insulation has been added to the interior sides of these walls over time. Newer areas of the building have insulated masonry cavity walls with brick and split face CMU veneers. Window stools are precast. The masonry veneer is generally in good condition, although it is stained at a small storage room in the service area of the building, where no means for its roof to drain except to shed down the side of the building. There is also some staining on the north-facing parts of the structure which do not get much sun exposure.

Recommendations:

- Brick veneer should be cleaned around stained areas, including precast sills. Repointing should be done as required.
- Joints should be re-caulked.

Roofing:

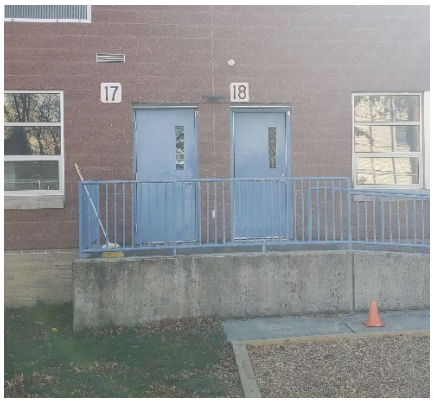
The School has a flat membrane roof, which was recently replaced, and is in good condition. There is a small portion of roof over the mechanical and receiving areas which was not replaced and is approaching the end of its useful life. Rainwater is conveyed off the building through roof drains and rainwater conductors. There are sloped metal soffits below the roof trim which are in poor condition, presumably in part due to water run-off

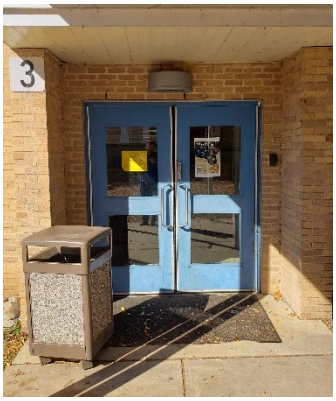
Recommendations:

- Replace metal soffits.

Doors & Windows:

Typical window and entrance systems throughout the building are operable, awning-style aluminum storefront windows. The multi-purpose room has four curtain wall frame systems. Windows are generally in good condition. The door hardware at double door entrances/exits should be replaced so that doors cannot be chained together – a security concern.





Recommendations:

- Scrape and paint hollow metal doors and frames.
- Replace door hardware at exterior doors.

Interior Building Conditions

Structure:

The building is a 2-story steel framed structure with CMU backup. The basement/ground floor level is slab on grade. The first and second floors are concrete slab on steel deck supported by steel joists and beams. The building structure appears to be sound, with no apparent deficiencies.

Recommendations:

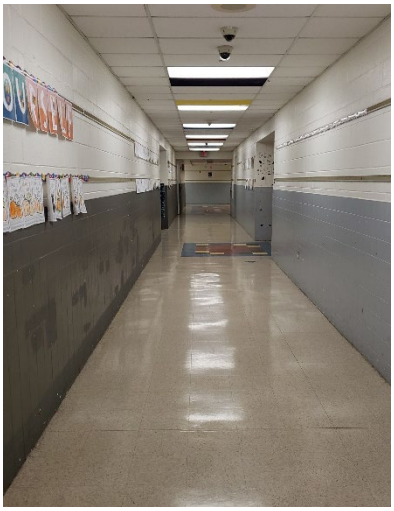
- None at this time.

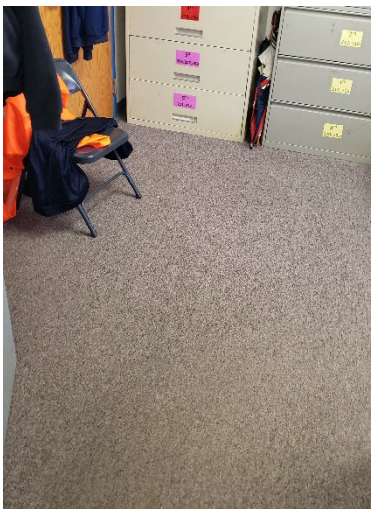
Finishes:

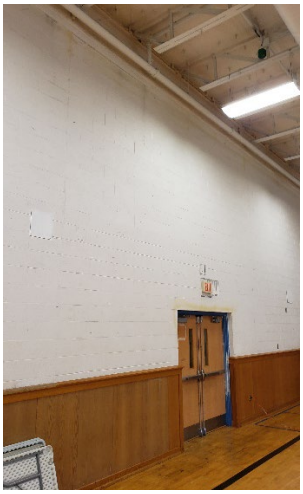
The building has vinyl composition tile (VCT) in the corridors and classrooms, which is in fair condition, although very dirty, and cracking or popping in some areas. VCT in the main office is especially poor. There are also terrazzo floors through the corridors in the original portions of the building. Flooring in toilet rooms is porcelain tile, while in the kitchen the flooring is quarry tile, all in good condition. The wood floor in the multi-purpose room/stage is in fair condition. Office areas have carpeting in fair condition. Transition strips are often missing throughout the building, resulting in VCT getting chipped at flooring changes.

Interior walls are mostly painted GWB, while the corridors have a ceramic tile wainscot, which has been subsequently painted over. Many corridors do not have a cove base which results in dirty corners where the wall meets the floor. Some walls have been painted on an ad-hoc basis by teachers. Many walls are due for cleaning and re-paint. The multi-purpose room walls are painted CMU with a wood panel wainscot and stage surround which shows a lot of wear throughout. Ceramic tile wainscots are in the toilet rooms. These wainscots often have stained grout and residual drywall mounting anchors from toilet accessories since removed.

Ceilings throughout most of the building are either 2'x2' or 2'x4' suspended ACT. Many ceilings are dirty, stained due to leaks, or slightly warped.







Recommendations:

- Replace ceiling tile throughout the entire building.
- Install wall base where missing.
- Replace VCT throughout the entire building.
- Replace carpeting in offices.
- Sand and refinish gymnasium floor if suitable to do so.
- Re-paint the entire building.

Code & Accessibility:

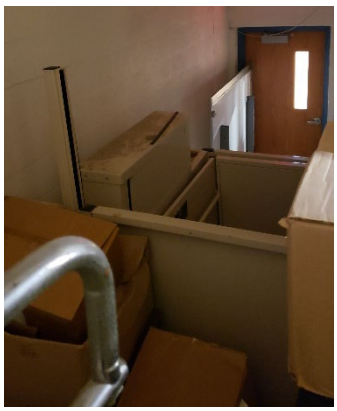
The building has two elevators serving the two unconnected second floor areas. One was installed during the 2004 addition while the other is original to 1981. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

Guard and handrail assemblies in stairs are not designed to appropriate heights, and handrails lack continuity for length of stair runs.

The stage has a wheelchair lift access, although it is not able to be accessed due to stored items blocking it off. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

Water closets in accessible toilet stalls do not have the required fixture clearances around them. Grab bars do not meet current ADA requirements, and accessories are not installed within reach range. Faculty toilet rooms are not accessible.

Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.

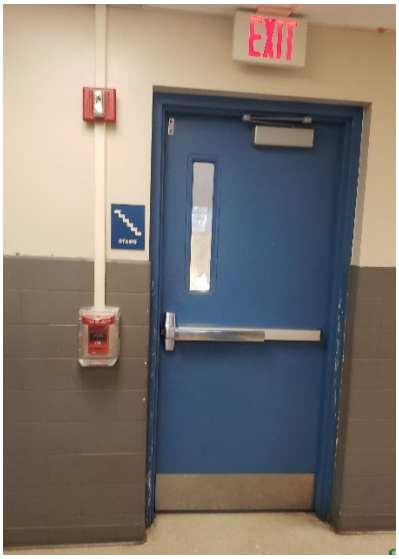


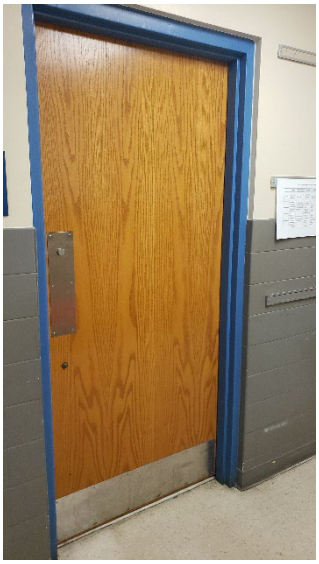
Recommendations:

- Evaluate elevators for any necessary upgrades. Replace communications systems.
- Replace original elevator in its entirety.
- Replace the guard/handrail around the stairs with a new guard and handrail that is compliant with current code.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by providing ample clearance at water closets, moving accessories within reach range, and providing ADA compliant grab bars.

Doors:

Most interior doors are wood with ADA-compliant hardware in fair condition, with hollow metal frames. Many doors have scratches and residue which remains from items being hung/taped to them over the years. Hollow metal doors and frames are in fair condition, most requiring painting.





Recommendations:

- Replace all interior doors and hardware throughout the building.
- Scrape and repaint hollow metal frames.

Casework & Built-in Equipment:

Most of the casework dates from the 2004 renovation. While generally in fair condition, appearances are dated, and cabinets are often scratched and/or dirty.

Typical classrooms have built-in shelving along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

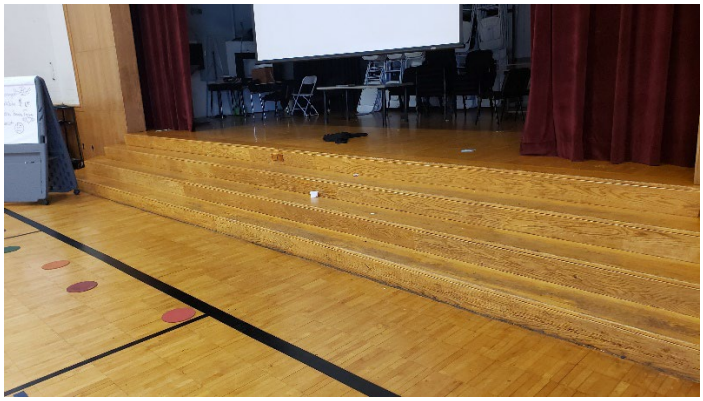
Recommendations:

- Replace casework throughout the building.

Specialty Equipment:

The movable partition in the multipurpose room is at the end of its useful life. The multipurpose room has (1) main basketball court with front-folding backstops at each end. The backstops were replaced since the original construction and are in good condition. There are no wall pads in the space.

The theatrical equipment (curtains, lighting, projection screen) is in good condition. The stage and risers show wear.

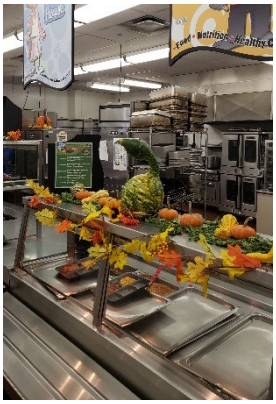


Recommendations:

- Provide wall pads around the basketball court, particularly at the end opposite the stage.
- Consider sanding and refinishing the stage floor and risers.

Food Service Equipment:

The cooking for Benjamin Franklin Elementary School is done on site. Cold storage space at this school is inadequate, with only reach-in refrigerator/freezer units. The food service equipment was replaced in 2004 and is approaching the end of its useful life. Dry storage space is also limited.


Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

Visitors are buzzed in through a security vestibule and must first enter the office for clearance before being granted access to the rest of the facility. However, the main office line of site to the entrance area is very limited.

Recommendations:

- Consider reconfiguring the office location as part of a major renovation project.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- 5 roof top units (DX cooling and gas heat) are approaching the end of their useful lives.
- Exhaust fans are approaching the end of their useful lives.
- The hot water distribution system pumps P2 and P2a are beyond their useful lives.
- The chilled water distribution system return pumps are beyond serviceable; base is rotted.
- 3 air-handling units are beyond their useful life with 2 pipe systems that need to be manually isolated from chilled water in cooling system.
- The air distribution, heating and cooling air-handling unit is beyond its useful life of 20 years.
- The cold water distribution system chilled water pumps are past their nominal useful life; its motors have been replaced in recent past.
- The air distribution, heating and cooling units are approaching the end of their useful lives. One unit is leaking refrigerant. The refrigerant has been phased out of production and is no longer readily available.
- The hot water boilers B1 and B2 are nearing the end of their useful lives in 3-6 years.
- The direct expansion system unit is approaching the end of its useful life.
- Unit ventilators are approaching the end of their useful lives.
- Fan coils are approaching the end of their useful lives.
- Second floor air-handler is beyond its useful life.

Recommendations:

- Replace the 5 roof top units (DX cooling and gas heat) that are approaching the end of their useful lives.
- Replace exhaust fans.
- Replace the hot water distribution system pumps within 4 years.
- Replace the chilled water distribution system pumps.
- 3 air-handling units are beyond their useful life and 2 pipe systems need to be manually isolated from chilled water in cooling season. If not, drain pan mold.
- Replace the air distribution, heating and cooling air-handling unit.
- Replace the cold water distribution system chilled water pumps.
- Replace the air distribution, heating and cooling units.
- Replace the hot water boilers in 3-6 years.
- Replace the direct expansion system unit.
- Replace unit ventilators in phases.
- Replace fan coils in phases.
- Replace second floor air-handler.

Electrical

Emergency Power

- The 100 kW emergency generator is approaching the end of its useful life.

Recommendation:

- Engage the vendor to assess the emergency generator's condition and remaining service life.

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

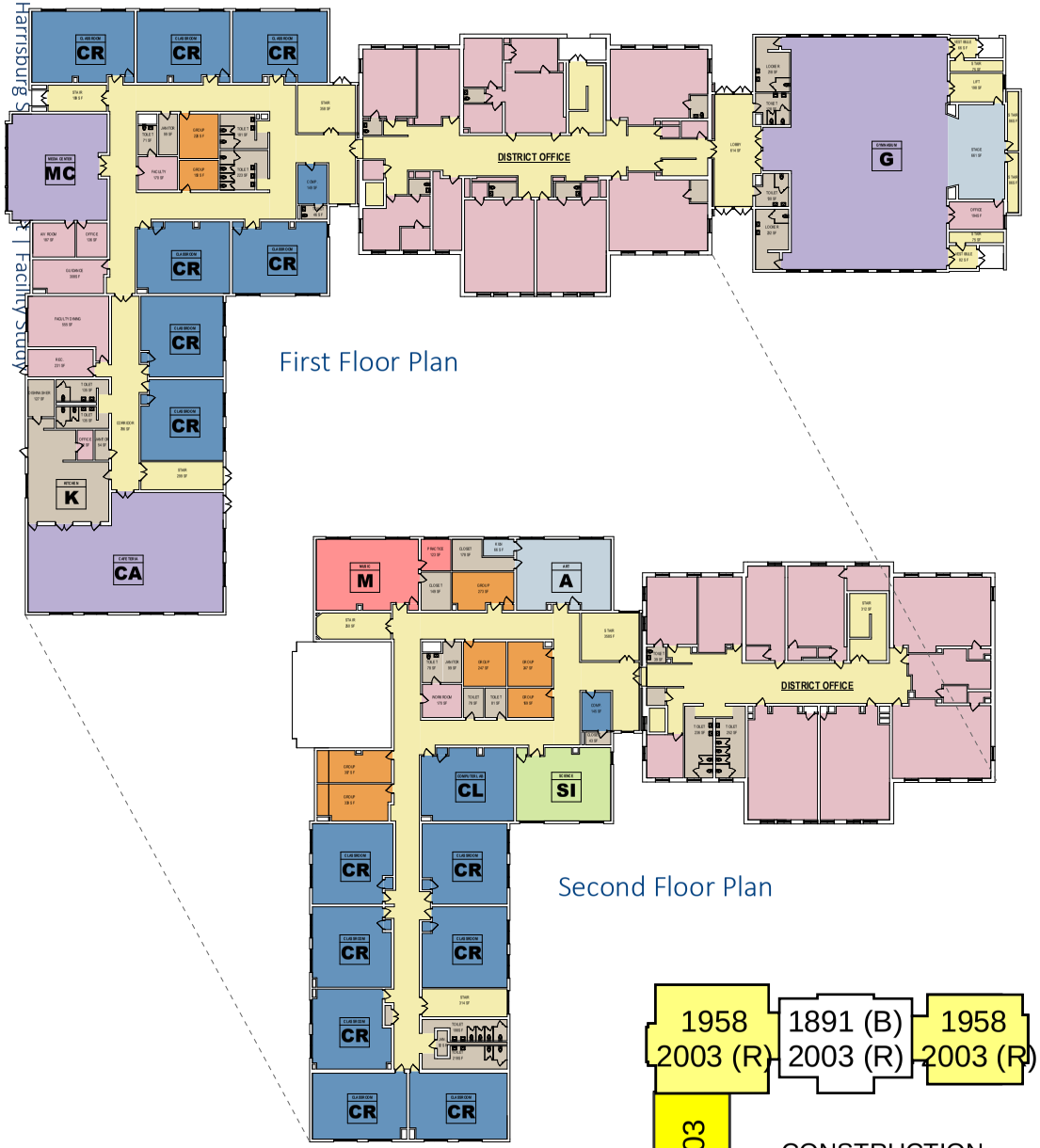
- Replace lighting with LED fixtures.

Fire Alarm

- The fire alarm system is approaching the end of its useful life.

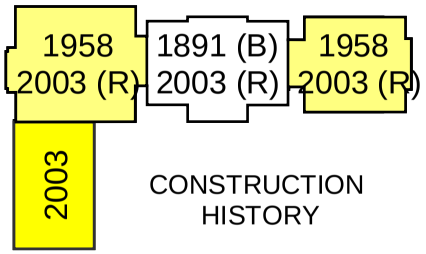
Recommendation:

- Replace the Edwards model EST-22x SLC fire alarm system.



First Floor Plan

Second Floor Plan



CONSTRUCTION HISTORY

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

Grades:	| K - 12 (Virtual?)
Address:	| 1601 State Street
	| Harrisburg, PA 17103
Year Built:	| 1891
Add/Reno:	| 2003
	| 1958 Addition
Square Footage:	| 69,463 SF
Functional Capacity:	| 319 Students (85% Cap.)
Current Enrollment:	| 305 Students
Site Acreage:	| 1.6 Acres

NORTH ARROW

First and Second Floor Plan

6 | Cougar Academy (Lincoln Elementary School)

Address:	1601 State Street Harrisburg, PA 17103
Construction Timeline:	Originally constructed in 1891, Additions in 1958 and 2003
Building Square Footage:	91,680 sf
Site Acreage:	1.12 acres

Building Summary

Cougar Academy is the physical home of Harrisburg School District's K-12 blended learning program. In addition to fully-cyber learning, it also offers in-person class to students on half day or full day bases. The property also currently houses the District's Administrative Offices. The property is served by public water, sewer and natural gas.

Site Conditions

The School is located on a site on the south side of State Street.

The site slopes gradually westward, although it is known to flood in the building due to backed up storm and/or sanitary sewers.

Paving & Walkways:

Vehicular access to the site is from North 17th Street and Elm Street, to a parking lot in the rear of the building. There is no dedicated bus or parent drop-off area.

There is sufficient space to park approximately 65 vehicles. Additional staff and visitors are reliant on the on-street parking in the neighborhood. The on-site parking does not include any accessible parking spaces. The refuse and service area is off North 16th Street.

Asphalt pavement is in good condition. Concrete sidewalks are in fair condition, with some areas in need of repair/replacement.

Recommendations:

- Reconfigure parking lot to include accessible parking with a clear accessible path to the entrance.

Play Areas & Equipment:

There is a small, gated soft-surface play area with playground equipment in the southwest corner of the site. The hard surface playground has been repurposed for parking. The playground equipment has faded from sunlight but appears to be otherwise in good condition.

Recommendations:

- None at this time.

Exterior Building Conditions

Exterior Walls:

The building exterior consists of a modular brick veneer construction in the original and 1950's addition areas. The 2003 addition has split face CMU veneer on insulated cavity walls with CMU backups. Brownstone stools are included with window embellishments. Masonry walls are in good condition, with a couple areas of staining due to water running down the façade from overflowing gutters.

Recommendations:

- Brick and CMU veneer with stone around the entire façade should be cleaned. Repointing should be done as required.
- Joints should be re-caulked.

Roofing:

The building has three distinct roofing areas which developed as the building was expanded. The original portion of the building has a Mansard roof. The shingled portion of the mansard roof was recently replaced and is in good condition. The remainder roof, including the flat portion of the Mansard roof is primarily membrane roofing, all coming due for replacement. There are a couple of dormers projecting out from the sloped Mansard roof which have metal roofs which also are due for replacement.

Recommendations:

- Replace membrane and metal roofs.

Doors & Windows:

Windows are operable awning style aluminum windows with insulated glass, and were replaced in 2000 along with the additions. Entrances are aluminum storefront glazing systems. Aluminum entrances around the building are in good condition. Hollow metal doors at service areas are due for painting. The doors to the parking lot from the basement are significantly worn and due for replacement. Door pulls at double doors should be replaced with hardware which does not allow double doors to be chained together – a safety and security concern.

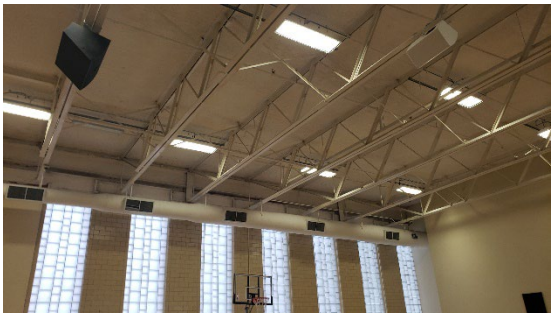
Recommendations:

- Paint hollow metal doors and frame to service areas.
- Replace hollow metal doors accessing the basement.
- Replace exterior door hardware.

Interior Building Conditions

Structure:

The building is a 2-story masonry load bearing with CMU backup. The basement/ground floor level is slab on grade. The first and second floors are concrete slab on steel deck supported by steel joists and beams. The building structure appears to be sound, with no apparent deficiencies.



Recommendations:

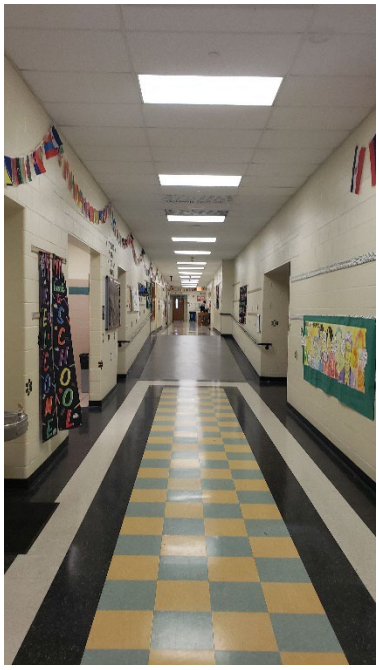
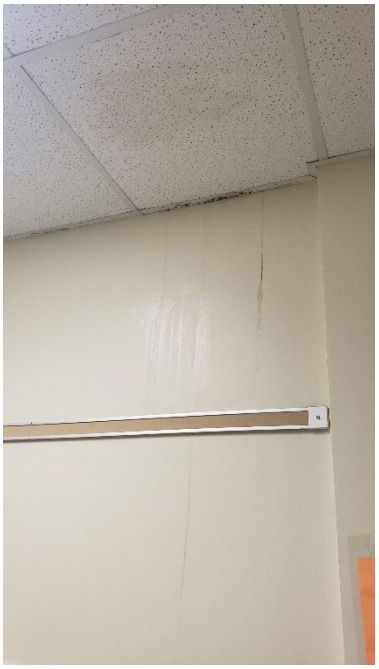
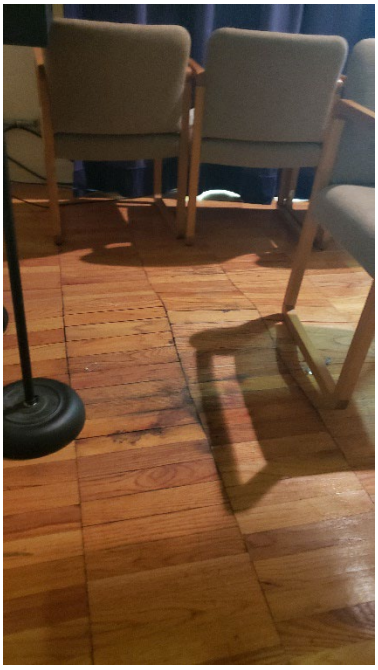
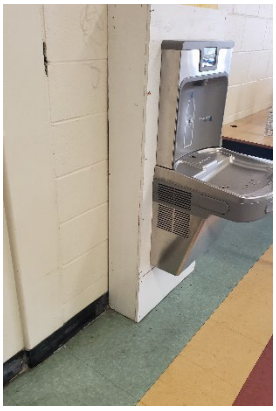
- None at this time.

Finishes:

The building has vinyl composition tile (VCT) in the corridors, classrooms, cafeteria and some office areas which is in fair condition with minor wear throughout. The main office area and library are both carpeted – the office carpet is due for replacement. Toilet rooms have ceramic tile floors in good condition. The kitchen floor is quarry tile in good condition. The multi-purpose room floor is a floated wood flooring system which is in good condition, but the stage floor and risers are also wood and due for replacement due to water damage. The multi-purpose room lobby has terrazzo floors in good condition.

Interior partitions are a combination of painted CMU as well as painted GWB/plaster, while toilet rooms are finished with glazed ceramic tile. Most wall finishes are in good condition, with only a few instances of missing wall base, and occasional instances of water damage observed.

Ceilings are generally systems of suspended acoustical ceiling tiles in fair condition, beginning to sag.


Recommendations:

- Replace wood stage in multi-purpose room.
- Replace missing or damaged wall base as required as part of ongoing maintenance.
- Replace carpeting in DAO offices.
- Repair plaster/GWB walls and ceilings damaged from water leaks as required.
- Clean and touch up walls as required.
- Replace ceilings as part of a comprehensive lighting and HVAC replacement.

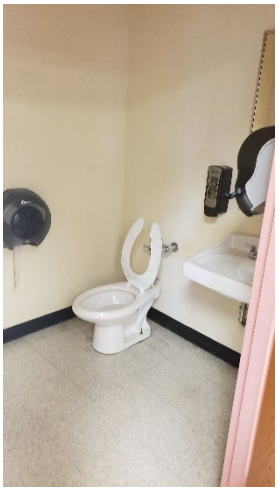
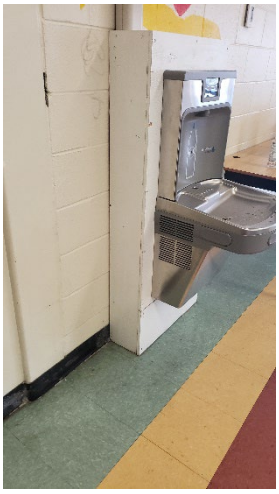
Code & Accessibility:

The building has an elevator which was installed in 2000, as well as wheelchair lifts to negotiate other stairs where elevators aren't feasible. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

The stage has a wheelchair lift to access the stage. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

Water closets in accessible toilet stalls do not have the required grab bars for current ADA requirements, and accessories are not installed within reach range. Faculty toilet rooms are not accessible. Individual toilet rooms where they occur in classrooms are not accessible. Many of these single-occupant toilet rooms would need to be enlarged to accommodate the wheelchair clearances required.

Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.

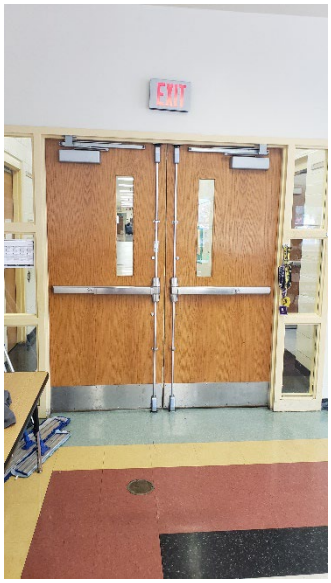




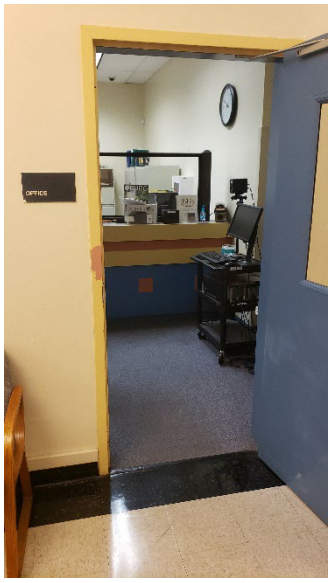

Recommendations:

- Replace elevator communications system, and consider a cab upgrade with any renovation project. Replace elevator controller and pump.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by moving accessories within reach range, and providing ADA compliant grab bars.

Doors:

Interior doors are primarily wood set in hollow metal frames. Doors and frames are generally in fair to good condition.



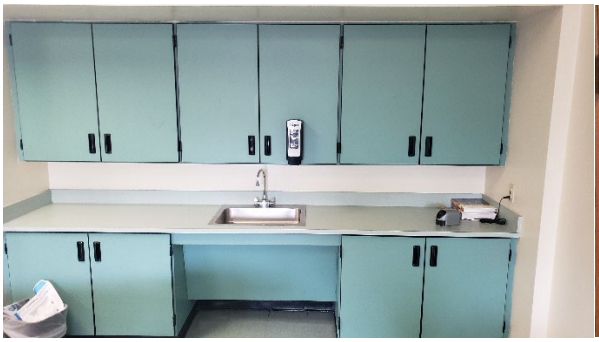
Recommendations:

- None at this time.

Casework & Built-in Equipment:

Most of the casework dates from the additions and renovations project in 2000. Casework is in good condition.

Typical classrooms have built-in shelving along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

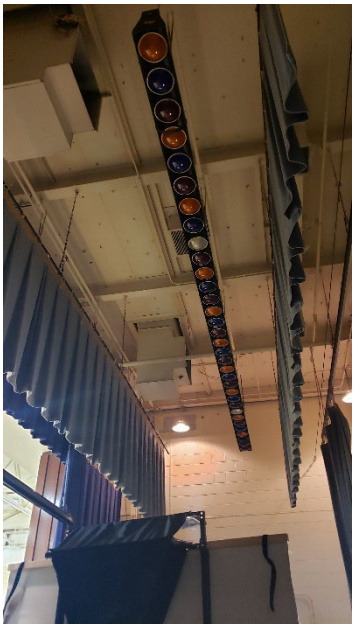


Recommendations:

- None at this time.

Specialty Equipment:

Theatrical equipment and curtains in the multi-purpose room appears to be in good condition.

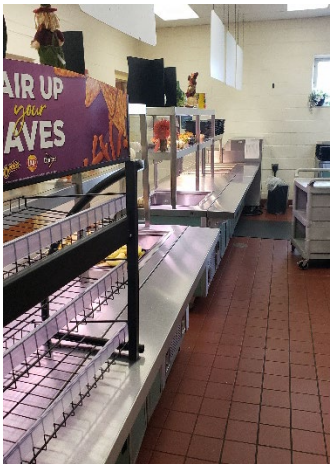


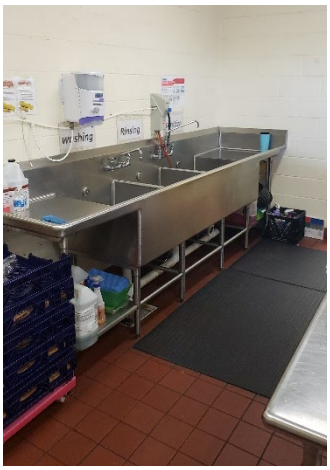
Recommendations:

- None at this time.

Food Service Equipment:

The cooking for Cougar Academy is done on site. Cold storage space at this school is inadequate, with small refrigerator/freezer units located separate from one another within the kitchen. The food service equipment was replaced in 2000 and is approaching the end of its useful life.





Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

This facility does not have a secure vestibule. Visitors are granted access to the building before checking in at a security desk in the hallway at the first floor. There is no direct line of sight from the Administration area to the building entrance.

Recommendations:

- Create a secure vestibule tied to Administrative suite at front entrance for visitors entering the building.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- There are 4 roof top units (DX cooling and gas heat) approaching the end of their useful life.
- The hot water distribution system pumps have not been replaced but the motors have. The motor bases are rotting.
- The cold water distribution system is reaching the end of its useful life. The base has rotted as well.

Recommendation:

- Replace the 4 roof top units that are approaching the end of their useful lives.
- Replace the hot water distribution system pumps which are beyond their nominal useful life of 25 years. The motor bases will also require replacement.
- Replace the cold water distribution system pump.

Electrical

Emergency Power

- The 85 kW emergency generator has failed.

Recommendation:

- Replace the failed emergency generator.

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

Fire Alarm

- The fire alarm system is approaching the end of its useful life.

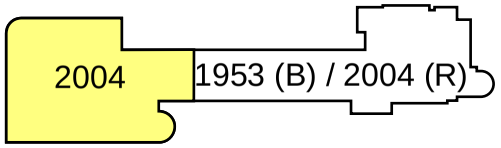
Recommendation:

- Replace the Simplex model 4010 fire alarm system.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

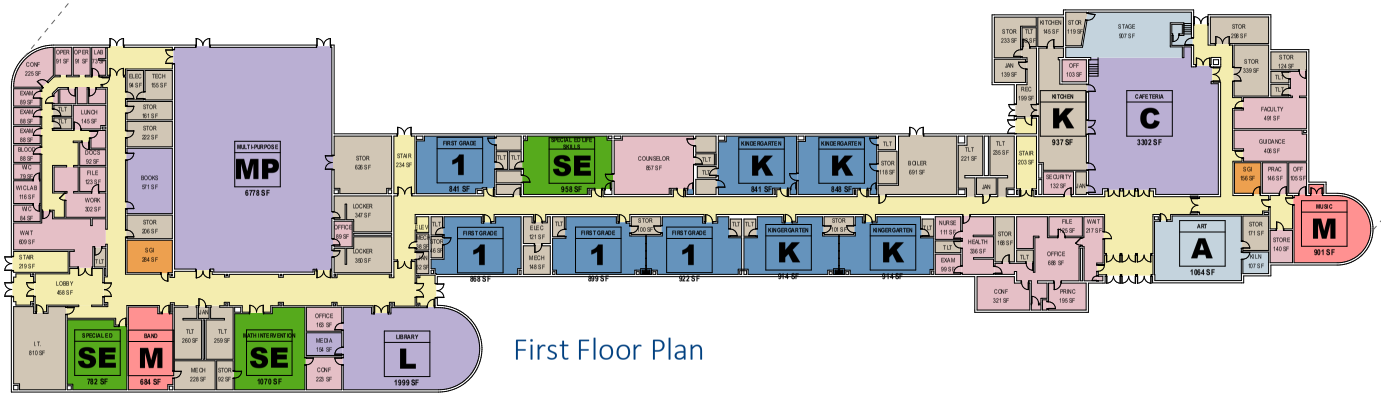
Grades:	| K - 5
Address:	| 1313 Monroe Street
	| Harrisburg, PA 17103
Year Built:	| 1953
Add/Reno:	| 2004
	| 1960 Renovation
Square Footage:	| 93,561 SF
Functional Capacity:	| 492 Students (73% Utilization)
Current Enrollment:	| 359 Students
Site Acreage:	| 2.1 Acres



CONSTRUCTION HISTORY

NORTH ARROW

Second Floor Plan



First Floor Plan

First and Second Floor Plan

6 | Downey Elementary School

Address:	1313 Monroe Street Harrisburg, PA 17103
Construction Timeline:	Originally constructed in 1953; Additions in 1960/2004; Renovations in 2004.
Building Square Footage:	93,475 Square Feet
Site Acreage:	3.89 acres (over three parcels)

Building Summary

Downey Elementary School is a 2-story building located off of the Cameron Street corridor of Harrisburg, PA. The School currently houses grades Pre-K-5. The property is served by public water, sewer and natural gas. The building was originally constructed in 1952, with most recent significant additions/renovations completed in 2003.

Site Conditions

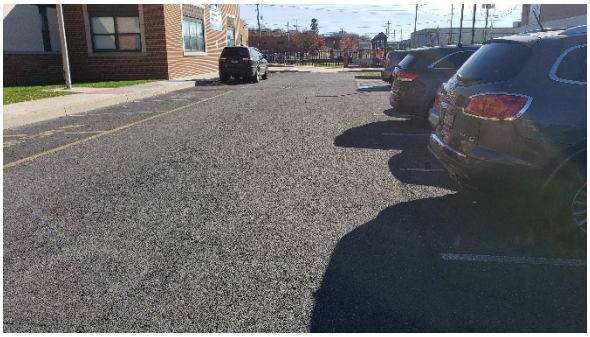
The School structure occupies most of the property, with parking taking the majority of the balance of site area, except for play areas in the north and south corners. There is parking on a drive off Monroe Street as well as parking on the east side of the building off North 12th Street. This parking is often filled to capacity. The school can be accessed by walking paths connected to the City's sidewalks. There is aluminum decorative fencing with masonry piers on the corner of the site bordering Monroe and Cumberland Streets. The aluminum fence is damaged in some areas and has graffiti, while the masonry piers and precast caps are cracking and damaged.

The site drains from east to west, sloping down gradually toward the pool and basketball courts. Generally, the site is well drained.

Paving & Walkways:

Vehicular access to the site is from N. 6th Street. Buses pick up and drop off students along the loop in front of the School. There are approximately 9-10 buses and 2-3 vans that transport students to the School. Parents form two lanes of traffic through the parking lot to pick up and drop off. The amount of queuing space is inadequate to support the number of cars at pick up and drop off time.

There are approximately 61 on-site parking spaces, with 16 on the west side off Monroe Street and 45 in the west lot off of North 12th Street. The parking is often filled to capacity and is not adequate for the school's needs. Additional vehicles park on the adjacent streets. The service/loading areas for the kitchen and school receiving are part of the parking lot on the east side of the site. There is a chain link enclosure for one dumpster, although the school utilizes more than one dumpster.



Asphalt pavement is cracking throughout the site and is due for repaving. Concrete sidewalks are in good condition.

Accessible parking spaces are provided and appear to be ADA compliant, with an accessible route to the main entrance.

Recommendations:

- Mill and overlay parking areas.
- Consider replacement of the decorative fence at the corner of Monroe and Cumberland Streets.

Play Areas & Equipment:

There are two playground/soft surface play areas, both within fence enclosures – one at the south corner and one at the north corner of the school site. The playground equipment at the south end of the building is older, but still in useful condition. The north playground equipment is newer and in good condition. There is also a hard surface play area on the east side of the building adjacent to the north playground.

On the east corner of the site are two fence-enclosed basketball courts, on asphalt paving.

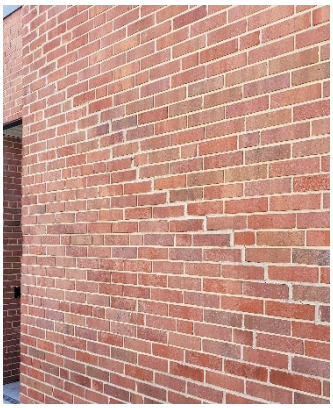
Recommendations:

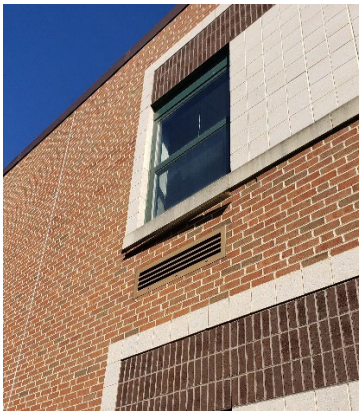
- None at this time.

Exterior Building Conditions

Exterior Walls:

The building exterior consists of masonry walls with modular brick veneers. Older areas of the building are not cavity walls, while newer areas of the building have insulated masonry cavity walls with brick and split face CMU veneers. Portions of the walls in the older areas were replaced on the interior to include insulation and air barriers. Windows are surrounded with precast concrete trim, which is often stained especially on the north- and east-facing sides. The masonry veneer is generally in good condition, although there are areas where it is apparent that cracking has been repaired in the past and should be retreated, particularly in the older portions of the building. There is also some staining on the north- and east-facing parts of the structure which do not get much sun exposure. There are also some locations where the flashing below windows is popping out from the wall.





Recommendations:

- Brick veneer should be cleaned around stained areas. Repointing should be done as required.
- Joints should be re-caulked.
- Repair flashing where it has popped out from the wall.

Roofing:

The School has a flat white membrane roof over the entire structure, with the exception of the entrance canopy at the north end of the building. The entrance canopy has a sloped standing seam metal roof which is in poor to fair condition due to weathering over time. The entrance canopy roof should be replaced.

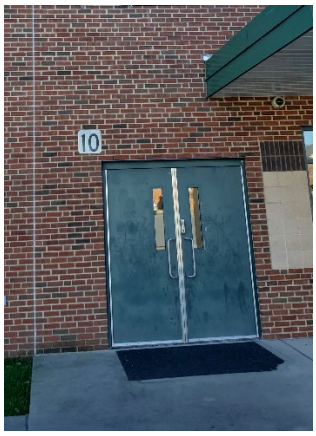
Recommendations:

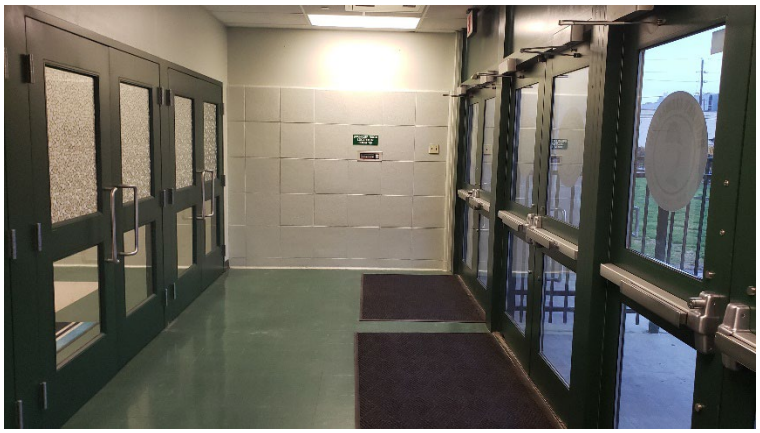
- Replace standing seam metal entrance canopy roof.

Doors & Windows:

Typical window systems throughout the building are operable, awning-style aluminum projecting windows. The multi-purpose room has four curtain wall frame systems. Windows are generally in good condition.

Exterior doors are either set in aluminum storefront systems or hollow metal. The door pulls in the entrance doors should be replaced at double doors, so that doors cannot be chained together from the outside. Hollow metal doors and frames are due for new paint coatings.





Recommendations:

- Scrape and paint hollow metal doors and frames.
- Replace door pulls at double doors so doors cannot be chained together from the outside.

Interior Building Conditions

Structure:

The older portion of the building is a 2-story steel framed structure with CMU backup, although some portions of the wall were replaced to have GWB finishes on the interior, concealing insulation and air barriers. The 2003 addition has load-bearing masonry walls. The basement/ground floor level is slab on grade. The first and second floors are concrete slab on steel deck supported by steel joists and beams. The building structure appears to be sound, with no apparent deficiencies.

Recommendations:

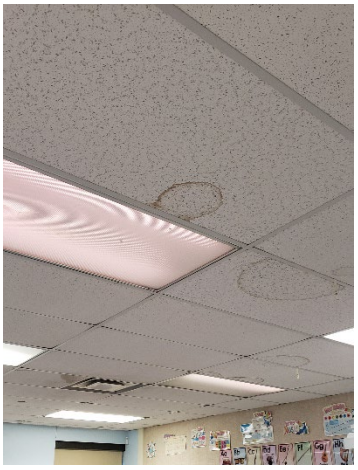
- None at this time.

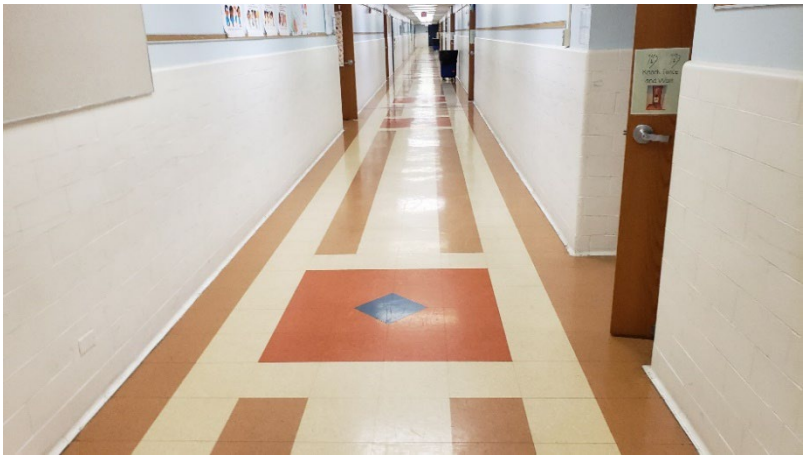
Finishes:

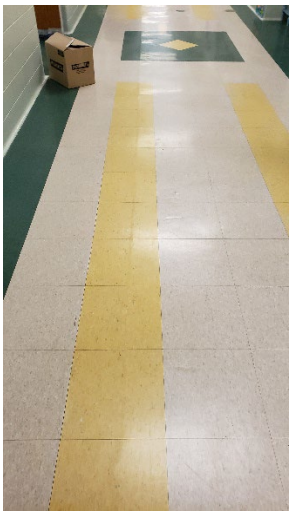
The building has vinyl composition tile (VCT) in the corridors and classrooms, which is in poor condition, being very dirty, and cracking or popping in many areas. VCT in the main office is especially poor. There are also terrazzo floors through the corridors in the original portions of the building. Flooring in toilet rooms is porcelain tile, while in the kitchen the flooring is quarry tile, all in fair condition but often with stained grout. The wood floor in the multi-purpose room/stage is in fair condition, but inappropriate for the room usage, particularly since a new gymnasium was added in 2003. Office areas and the library have carpeting in poor condition. Transition strips are often missing throughout the building, resulting in VCT getting chipped at flooring changes. The library and offices have carpet in poor condition.

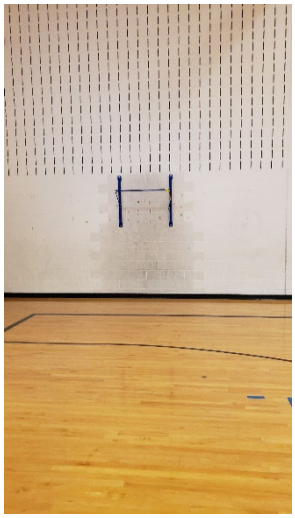
Interior walls are mostly painted GWB or plaster, while the corridors have a ceramic tile wainscot, which has been subsequently painted over in some areas. GWB and plaster walls are heavily marked or damaged and due for cleaning, patching and re-paint. Ceramic tile wainscots are in the toilet rooms, sometimes with residual wall anchors from removed accessories.

Ceilings throughout most of the building are 2’x4’ suspended ACT. Many ceilings are damaged or stained from various leaks or other causes.









Recommendations:

- Replace ceiling tile throughout the entire building.
- Replace VCT throughout the entire building.
- Replace carpeting in offices and library.
- Replace the multi-purpose room wood floor with a more appropriate material for the space.
- Re-paint the entire building.

Code & Accessibility:

The building has one elevator installed during the 2003 addition. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

Guard and handrail assemblies in the older stair are not designed to appropriate heights and should have separate handrails.

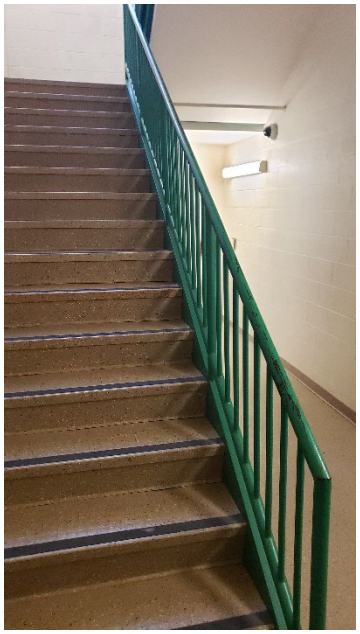
The stage has a wheelchair lift access, although it is not able to be accessed due to stored items blocking it off. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

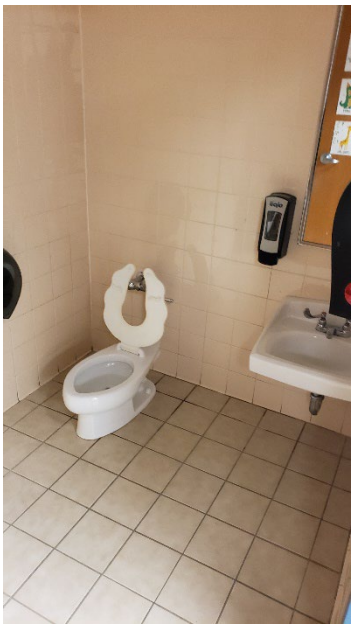
Water closets in accessible toilet stalls do not have the required fixture clearances around them. Grab bars do not meet current ADA requirements, and accessories are not installed within reach range. Faculty toilet rooms are not accessible.

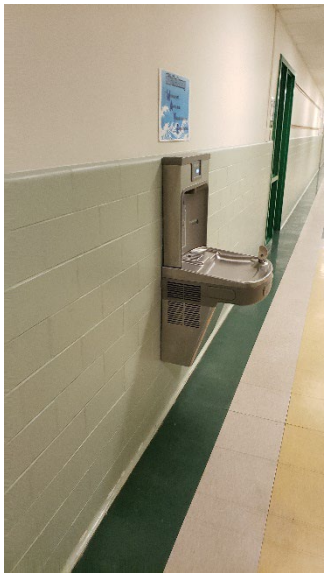
Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.

There are doors set in frames that are too deep to accommodate required push/pull clearances adjacent to the door as required by accessibility codes.

Stairs providing access to the stage from the multipurpose room do not have proper clearance / landing area at the top.





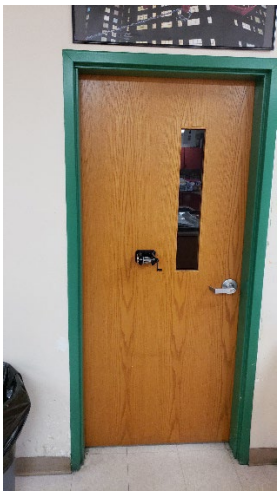
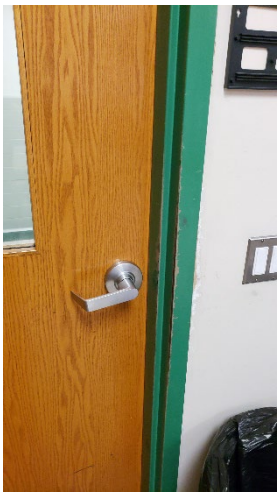



Recommendations:

- Evaluate elevator for any necessary upgrades. Replace elevator communications system.
- Replace the guard/handrail around stair with a new guard and handrail that is compliant with current code.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by providing ample clearance at water closets, moving accessories within reach range, and providing ADA compliant grab bars.
- Reconfigure doorways that do not meet accessibility requirements.
- Reconfigure access to stage in multipurpose room.

Doors:

Most interior doors are wood with ADA-compliant hardware in fair condition, with hollow metal frames. Many doors have scratches and residue which remains from items being hung/taped to them over the years. Hollow metal doors and frames are in fair condition, most requiring scraping and painting. The vision panels that view down to the gymnasium should be replaced with masonry infill.

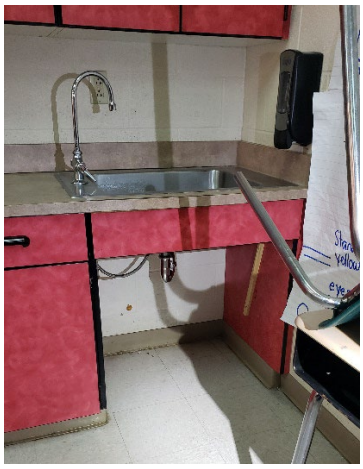
Recommendations:

- Replace all interior doors and hardware throughout the building.
- Scrape and repaint hollow metal frames.
- Replace glazing in gymnasium with masonry infill.

Casework & Built-in Equipment:

Most of the casework dates from the 2003 renovation. Many units are missing portions of laminates and are due for replacement.

Typical classrooms have built-in shelving along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

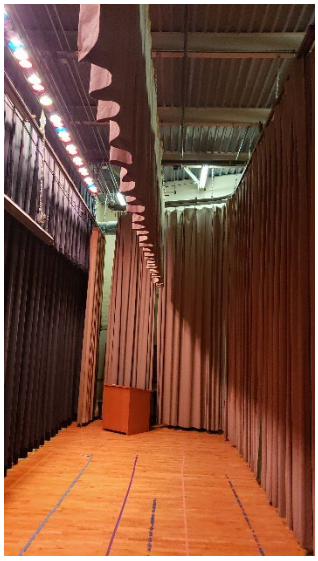


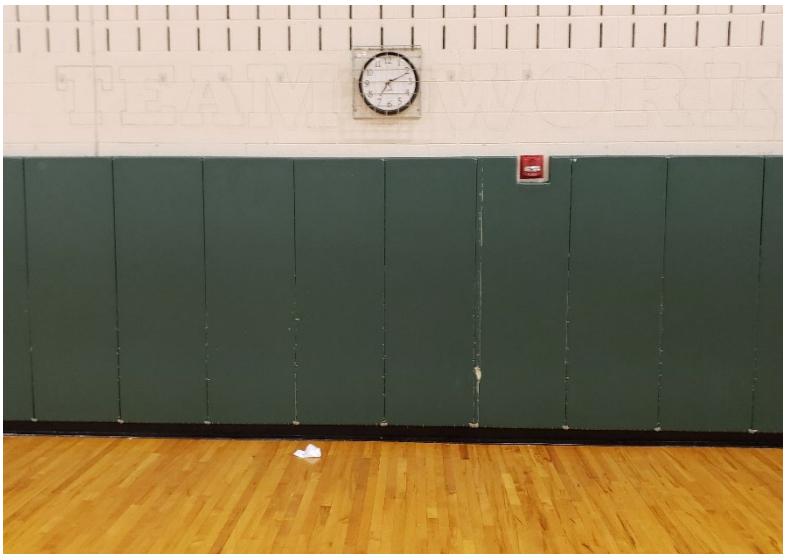

Recommendations:

- Replace casework throughout the building.

Specialty Equipment:

The theatrical equipment (curtains, lighting, projection screen) is in good condition. Most gymnasium equipment appears to be in good condition, however wall pads should be replaced.



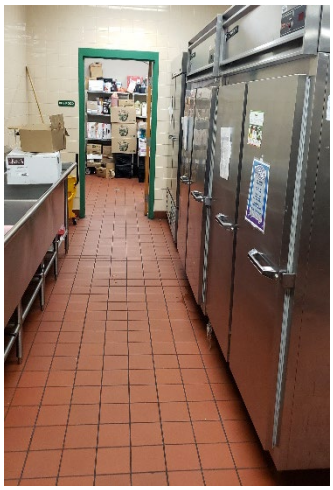


Recommendations:

- Replace wall pads in the gymnasium.

Food Service Equipment:

Since most of the cooking for the School is done on site. Cold storage space at this school is inadequate, with only reach-in refrigerator/freezer units. The food service equipment was replaced in 2004 and is approaching the end of its useful life.



Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

Visitors are buzzed in through a security vestibule and must first enter the office for clearance before being granted access to the rest of the facility. Exterior door hardware should be replaced so that double doors cannot be chained together, which is a safety and security concern.

Recommendations:

- Replace exterior door hardware.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- There are 2 chillers which have been recently replaced.
- There are 9 roof top units (gas heat and DX cooling) and 1 kitchen ventilation unit that are approaching the end of their useful life.
- Unit ventilators throughout the building are approaching the end of their useful life.
- Cabinet unit heaters approaching end of useful life.
- Unit heaters approaching end of useful life.
- Exhaust fans are approaching the end of their useful life.
- Heating hot water pump, chilled water pump, and air handling unit variable frequency drives (VFD) are nearing the end of the average expected service life.

Recommendations:

- Replace the 9 roof top units (gas heat and DX cooling) and 1 kitchen ventilation unit that are approaching the end of their useful life.
- Replace all classroom and ceiling mounted unit ventilators.
- Replace cabinet unit heaters.
- Replace unit heaters.
- Replace exhaust fans.
- Replace both heating hot water pump VFD's.
- Replace all three chilled water pump VFD's.
- Replace one air handling unit VFD.

Electrical

Lighting

- LED lighting could be due for an upgrade.

Recommendation:

- LED lighting upgrade.

Fire Alarm

- The fire alarm system is at the end of its useful life.

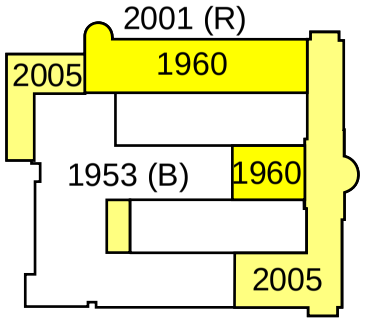
Recommendation:

- Replace Simplex model 4010 fire alarm system.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

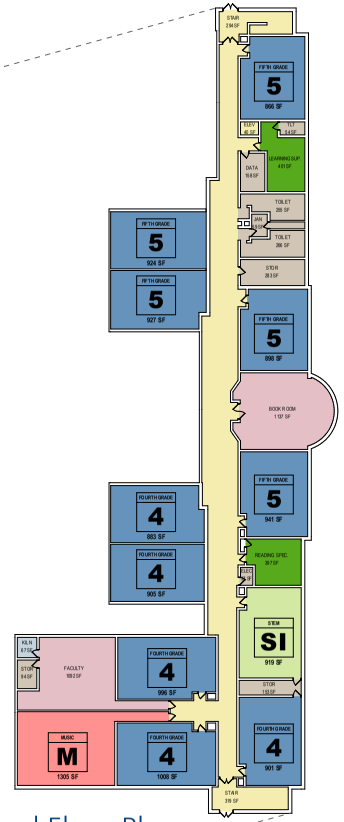
Grades:	| K - 5
Address:	| 1301 Sycamore Street
	| Harrisburg, PA 17104
Year Built:	| 1953
Add/Reno:	| 2005 Addition
	| 2001 Renovation
	| 1960 Addition
Square Footage:	| 109,974 SF
Functional Capacity:	| 721 Students (67% Utilization)
Current Enrollment:	| 480 Students
Site Acreage:	| 7 Acres



CONSTRUCTION HISTORY

NORTH ARROW

First Floor Plan



Second Floor Plan

First and Second Floor Plan

6 | Foose Elementary School

Address:	1301 Sycamore Street Harrisburg, PA 17104
Construction Timeline:	Originally constructed in 1953; Additions in 1960/2004; Renovations 2004
Building Square Footage:	122,400 square feet
Site Acreage:	9.39 acres

Building Summary

Foose Elementary School is a 2-story building located in Southern Harrisburg. The School currently houses grades Pre-K-5. The property is served by public water, sewer and natural gas. The building was originally constructed in 1952, with most recent significant additions/renovations completed in 2004.

Site Conditions

The School is situated at north end of the property, facing Sycamore Street. The south end of the property is undeveloped grass fields designated as Putnam Park. The school can be accessed by walking paths connected to the City's sidewalks.

The northeast corner of the site is the high point, sloping gradually southwest towards the intersection of South 13th Street and Lowell Street. There is a low point on the site along S. 13th Street where a storm inlet collects rainwater.

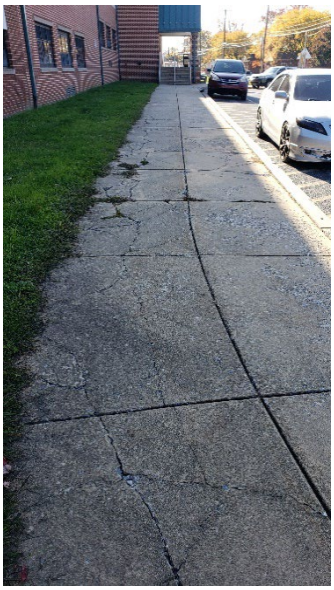
The service and refuse area, while inconspicuous from the street, includes a dumpster enclosure that is inadequate to house the dumpsters on site and therefore does not serve much purpose.

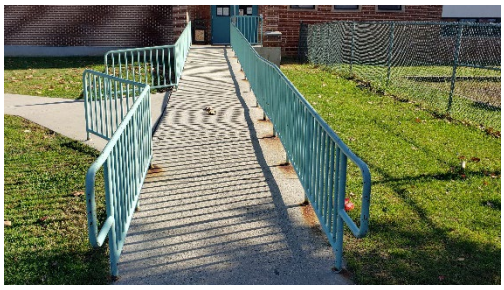
Paving & Walkways:

Vehicular access to the site occurs both along S. 13th Street where there is a small drop-off loop with parking for six vehicles. There are accessible parking spaces at this location. There is also access to the site along Sycamore Street, where an access loop feeds a larger parking lot with spaces striped for approximately 70 vehicles. This parking area is insufficient, and vehicles often park in areas not intended for parking. The service/loading areas and dumpsters for the kitchen and building operations are adjacent to the larger parking lot and is often used for parking space. Asphalt paving is in fair condition.

The school is generally a walking school, where students are not bussed. Parents pick-up and drop off from Sycamore Street, causing backlogs in street traffic. Sidewalks around the building vary in condition, with the sidewalks around the small drop-off loop in need of replacement.

Handrails at walkways are due for new paint.





Accessible parking spaces are provided and appear to be ADA compliant. However, access to the main entrance requires a long, meandering travel path (passing through the loading area), and is contingent on a fence separating the Sycamore Street access drive and parking lot from the main entrance being left open.

Recommendations:

- Vehicular circulation should be improved to more directly link accessible parking to the main entrance.
- Paint handrails.
- Replace sidewalks around S. 13th Street drop-off loop.
- Seal Coat asphalt paving areas.

Play Areas & Equipment:

There are two fenced-in play areas on site. The larger play area to the southeast corner includes both hard- and soft-surface play areas. The soft surface play area includes playground equipment in good condition. The hard-surface play area includes a basketball court and other game areas painted on the asphalt surface. These areas are due for re-painting. The other fenced-in play area is on the west side of the site along S. 13th Street. This is soft-surface play space only, which includes playground equipment in good condition.

Recommendations:

- Repaint hard surface play area.

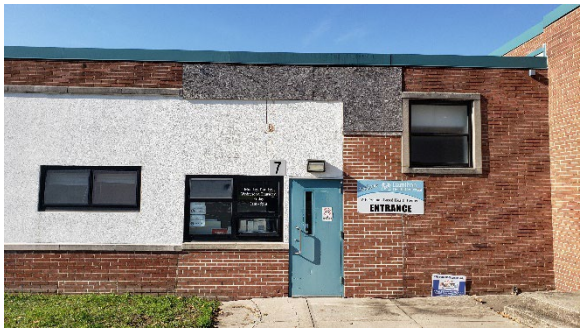
Exterior Building Conditions

Exterior Walls:

The building exterior consists of modular brick veneer over CMU back-up (no cavity) at the original areas and the 1960 addition areas. Insulated cavity walls with modular brick veneer and CMU back-ups make up the exterior walls in the 2004 additions. Window stools and heads are formed by precast concrete bands. In areas where the roof is drained by gutters and downspouts, the masonry is stained from leaks in the gutters above. Additionally, there is an area on the east side of the building where the wall has been boarded over.

Marks from graffiti with previous attempts at removal are occasionally visible.

Areas of EIFS are cracked and due for repair.



Recommendations:

- Brick veneer around the entire façade should be cleaned. Repointing should be done as required, particularly on the areas built pre-2004.
- Joints should be re-caulked.
- Replace or refinish EIFS.
- Repair boarded-up area of masonry, EIFS and precast trim on east side of building.
- Remove graffiti.

Roofing:

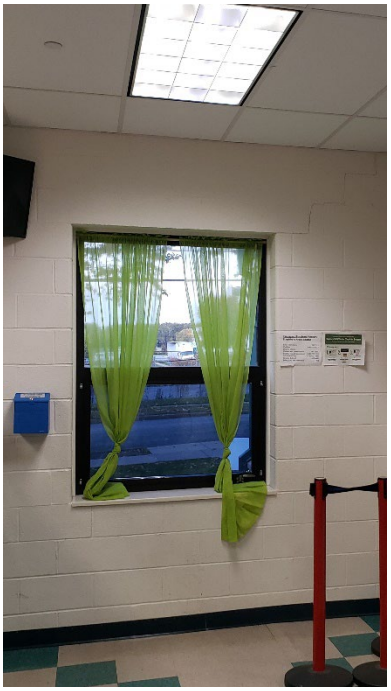
The School has an adhered EPDM roofing system. Parts of the roofing system, over the older portions of the building, date back to the 2004 renovation work. The newer portions of the building have had more recent roof replacements, including a black EPDM roof over classrooms and replacing the sloped, shingled roofs over the entrances and prominent architectural features with standing seam metal. Trim all around the building including gutters and downspouts shows indications of leaks and failures.

Recommendations:

- Replace the older membrane roof in its entirety.
- Replace all trim, gutters and downspouts.

Doors & Windows:

Windows are operable, awning- and hopper-style aluminum windows, which are generally in good condition. The front entrance aluminum entrance system is also in good condition, with only routine maintenance required. Hollow metal doors around the building are due for repainting. The building's entrance and exit doors have hardware which could allow doors to be chained together, which is a safety and security concern.



Recommendations:

- Replace sealants around window and entrance systems.
- Paint hollow metal doors.

Interior Building Conditions

Structure:

The building is a 1 and 2-story masonry load-bearing structure with CMU backup. The 2004 addition at the south side of the building comprises the 2-story area. The first floor level is slab on grade, with pipe trenches on the perimeters to serve the unit ventilators. The first and second floors are concrete slab on steel deck supported by steel joists. The building structure appears to be generally sound, however some cracking in the CMU backup was observed in the main office.

Recommendations:

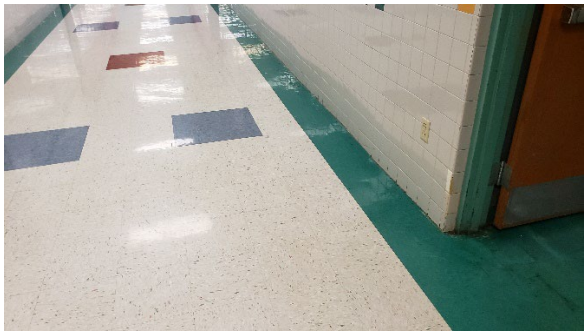
- None at this time.

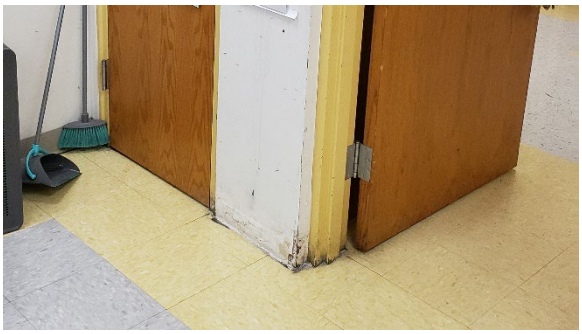
Finishes:

The building has vinyl composition tile (VCT) in the corridors and classrooms, which is in poor condition. The original lobby areas have squares of terrazzo which is in good condition. Toilet rooms have 2" mosaic ceramic tile floors while the Kitchen has quarry tile floors. The gymnasium has a wood floor. Some classrooms have areas of missing wall base.

Interior walls are primarily painted CMU, with some non-load-bearing partitions painted stud/GWB and occasional demountable partitions. Walls in bathrooms have residual mounting anchors from toilet accessories since removed. Most walls throughout are due for cleaning and new paint. Walls in the corridors have a ceramic tile wainscot, below painted GWB. This wainscot is often chipped, especially at corners. Additionally, the wainscot does not have a cove base which results in dirty corners where the wall meets the floor. Gymnasium walls have a glazed structural tile wainscot, which appears to have had previous wall openings infilled. Base trim is missing at most of these locations. The auditorium has paster walls with wood panel wainscot and stage surround.

Ceilings throughout most of the building are either 2'x2' or 2'x4' suspended ACT. Many ceilings are dirty, stained due to leaks, or slightly warped.



Recommendations:

- Replace ceiling tile throughout the entire building.
- Replace ceramic tile wainscot in corridors.
- Replace VCT and resilient base throughout the entire building.
- Replace carpeting in offices.
- Re-paint the entire building.

Code & Accessibility:

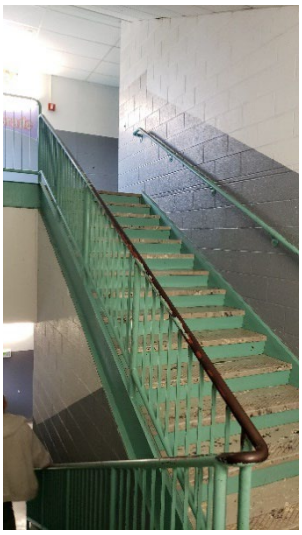
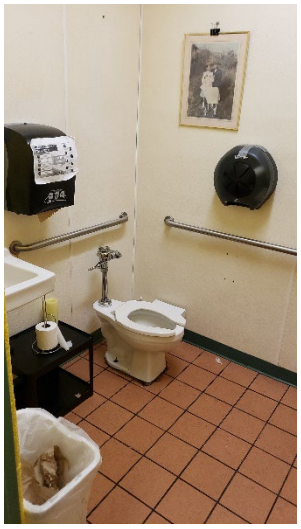
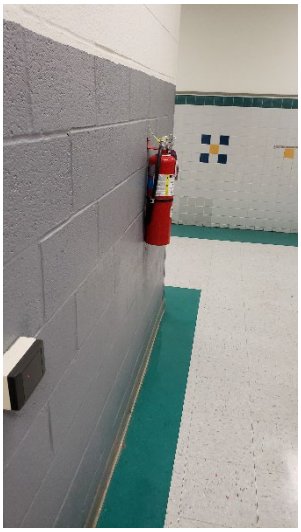
The building has an elevator which was installed with the two-story addition in the early 2000's. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

The guard rails around the stairs are 42 inches high.

The stage has a chairlift to access the stage which appears to be accessible. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

Water closets in single occupant toilet rooms do not have the required fixture clearances around them due to lavatories being installed directly adjacent to them. Grab bars do not meet current ADA requirements, and accessories are not installed within reach range. Faculty toilet rooms are not accessible.

Fire extinguishers are directly mounted to walls which project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence. Similarly, drinking fountains, while many recently replaced, are often located such that they also project into paths of travel.

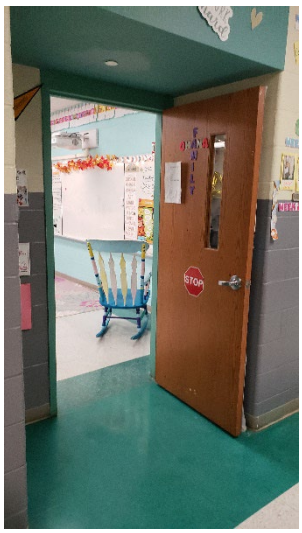




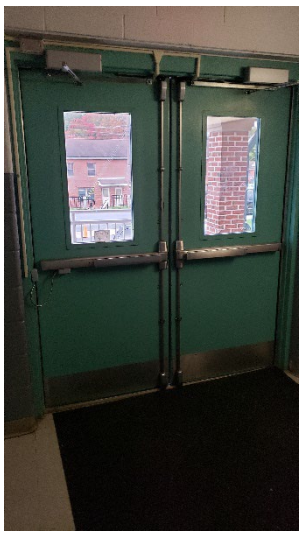

Recommendations:

- Evaluate elevator for any necessary upgrades. Replace elevator communications system.
- Replace steel guard rails/hand rails in stairs to be compliant with current Codes.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by moving accessories within reach range, and providing ADA compliant grab bars.
- Install semi-recessed fire extinguisher cabinets.

Doors:

Interior doors are wood, in fair to good condition – there are occasional doors with scratches and many have residue from taping items to the doors. The door hardware is ADA compliant, and in good condition. Stair tower doors and certain corridor doors have wire glass. Hollow metal frames are in need of new paint.





Recommendations:

- Replace stair tower and cross corridor doors and hardware.

Casework & Built-in Equipment:

Most of the casework dates from the renovations and additions from the early 2000's. Most casework is in good condition, however there were some areas where edge trim has fallen off. Panels underneath sinks which conceal piping are not present in some classrooms. The front desk in the main office is more worn.

Typical classrooms have built-in shelving along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

Recommendations:

- Repair casework throughout the building where required.
- Replace the main office front desk.
- Consider upgrading the educational casework with a major renovation project.

Specialty Equipment:

The auditorium seating is original to the building. While still in fair condition, it is near the end of its useful life. The auditorium stage lacks theatrical lighting for performances. The PA system is antiquated.

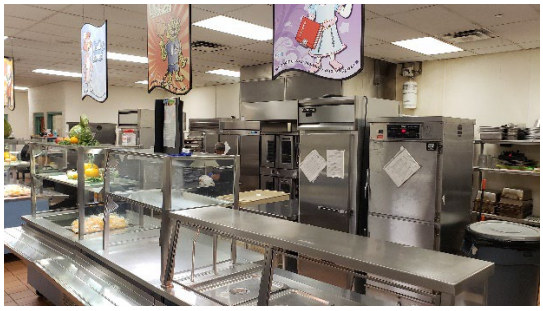
The gymnasium equipment is also original to the building. The basketball goals are fixed to the walls and not adjustable. Wall pads are due for replacement. Bleachers were removed during the renovations in the early 2000's.

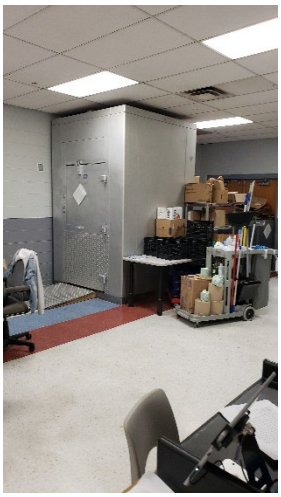
Recommendations:

- Install new auditorium theatrical lighting and audio systems.
- Replace gymnasium equipment.

Food Service Equipment:

The cooking for Foose Elementary is done on site. Cold storage space at this school is inadequate, with small refrigerator/freezer units located within the cafeteria area. The food service equipment was replaced in the early 2000's and is approaching the end of its useful life. Dry storage space is also limited.





Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

There is a secure vestibule and the office does have direct views to the front of the building. Pairs of double doors around the exterior have door pulls on each door, which should be modified (eliminated from one door at each pair) to prevent them from potentially being chained and locked.

Recommendations:

- Replace door hardware at pairs of exterior doors.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- 9 roof top units and 1 make-up air unit are approaching the end of their useful life. One auditorium unit is down with control alarm fault issue and one computer room unit has compressor issues.
- 3 rooftop air handling units, and 2 gym air handling units are approaching the end of their expected service life.
- Variable frequency drive for cold water pump 2 is approaching the end of its expected service life.
- The 3-ton air cooled DX condenser is nearing the midpoint of its average expected service life.
- There is an approximately 5-gallon chemical pot feeder associated with heating hot water loop that is approaching the end of service life.
- 4 in-wall hot water convectors are approaching the end of average expected service life.
- Classroom Nesbittaire brand cabinet unit ventilators are approaching the end of their average expected service life; parts for these units are no longer readily available.
- Classroom Trane brand cabinet unit ventilators are approaching the end of their average expected service life.
- Restroom ceiling-mounted exhaust fans are nearing the end of their average expected service life.
- Duct-mounted hot water reheat coils are nearing the end of their average expected service life.
- Ceiling-mounted hot water cabinet unit heaters are nearing the end of their average expected service life.

Recommendations:

- Replace the 9 roof top units and the one make-up air unit.
- Replace air handling units.
- Replace variable frequency drive for cold water pump 2.
- Replace air cooled DX condenser in 10 years.
- Replace chemical pot feeder in association with boiler replacement.
- Replace hot water convectors within 10 years.
- Replace Nesbittaire brand unit ventilators withing 2 years.
- Replace Trane brand unit ventilators withing 10 years.
- Replace restroom ceiling-mounted exhaust fans within 10 years.
- Replace duct-mounted hot water reheat coils withing 10 years.
- Replace ceiling-mounted hot water cabinet heaters within 10 years.

Plumbing

Domestic Water System:

- The domestic water booster pump is approaching the end of its useful life.

Recommendation:

- Replace domestic water booster pump.

Domestic Water Heater:

- The domestic hot water heater is nearing the end of the average expected service life.
- 1 expansion tank, 1 domestic hot water storage tank, and 3 domestic hot water thermostatic mixing valves were not replaced with all three associated hot water heaters installed in 2017 and are nearing the end of their average expected service life.

Recommendation:

- Replace the domestic hot water heater in approximately 10 years.
- Replace expansion tank, domestic hot water storage tank, and domestic hot water thermostatic mixing valves. Explore the option of each hot water heater having an associated expansion tank.

Electrical

Electrical Distribution System:

- The 480v switchboard "DSB" appears to have been installed in approximately 2000; it is showing signs of water infiltration via the utility service fed conduits, degradation, and rust; it will have a significantly shortened serviceable life span and should be immediately serviced and overhauled to extend maximum service life expectancy.

Recommendation:

- Replace switchboard and explore the option of major servicing/complete overhaul to potentially extend maximum service life.

Emergency Power

- The generator's battery and battery charger need to be serviced based on review with owner's representative.

Recommendation:

- Review generator's battery and battery charger.

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

Grades:	K - 5
Address:	2041 Berryhill Street
	Harrisburg, PA 17104
Year Built:	1961
Add/Reno:	2002
Square Footage:	81,895 SF
Functional Capacity:	533 Students (102% Utilization)
Current Enrollment:	542 Students
Site Acreage:	3.6 Acres

NORTH ARROW

CONSTRUCTION HISTORY

First Floor Plan

Second Floor Plan

Second and Third Floor Plan

Second Floor Plan

6 | Melrose Elementary School

Address:	2041 Berryhill Street Harrisburg, PA 17104
Construction Timeline:	Originally constructed in 1961; Additions and Renovations in 2002
Building Square Footage:	81,480 sf
Site Acreage:	3.17 acres

Building Summary

Melrose Elementary School is a 2-story building located in the Allison Hill neighborhood. The School currently houses grades K-5. The property is served by public water, sewer and natural gas. The building is a midcentury origin, which underwent a significant additions and renovations project in 2002.

Site Conditions

The School is located on a small site just off from Derry Street. The building is primarily a walking school, with limited parking and drop-off areas.

The site is mostly flat, except for where it slopes off at 20th Street. Entrance to the building is off Berryhill Street.

Paving & Walkways:

Vehicular access to the site is from Berryhill Street via a drive with small drop-off area and limited parking. Buses pick up and drop off students along the loop in front of the School. The drop-off area is about 150 feet long. The amount of queuing space is inadequate to support the number of cars at pick up and drop off time.

There are approximately 40 on-site parking spaces. The number of parking spaces is not adequate for the school's needs. Additional staff and visitors are reliant on the on-street parking in the neighborhood. The refuse area is off Thompson Street behind the school. Thompson street, a small alley, is in significant need of repaving, however it is a city street.

Asphalt pavement is in fair condition, with cracks appearing and ground settling where car wheels rest when parked. Lines are due to be restriped. Concrete sidewalks are in fair condition, with some areas in need of repair/replacement.

Accessible parking spaces are provided and appear to be ADA compliant, with an accessible route to the main entrance.

Recommendations:

- Mill and overlay, restripe parking area and drop off lane.
- Portions of concrete sidewalk should be replaced to eliminate tripping hazards.

Play Areas & Equipment:

At the southeast corner of the building there is soft and hard surface playground. The play equipment appears to be relatively new and in good condition. The playground is separated from other site elements with chain link fence.

Recommendations:

- None at this time.

Exterior Building Conditions

Exterior Walls:

The building exterior consists of an insulated masonry cavity wall with modular brick and split/ground face CMU veneers at areas constructed in 2002. Older areas are similar except walls are not cavity construction. Precast stone stools and water table trim are included with window embellishments. The brick veneer is stained and darkened in areas, particularly below the water table cast stone and at the 2nd floor window sills. This is indicative of the sills and cast stone not having proper drip edges to prevent water from running down the face of the building.

Recommendations:

- Brick and CMU veneer with cast stone around the entire façade should be cleaned. Repointing should be done as required.
- Joints should be re-caulked.

Roofing:

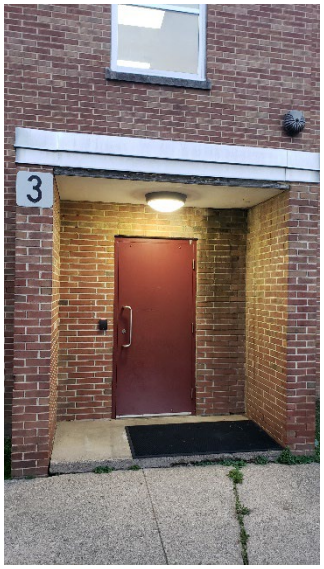
The roof is a flat black EPDM roof installed in 2001/2002 and is approaching the end of its useful life.

Recommendations:

- Replace roof in its entirety.

Doors & Windows:

Windows are operable awning style aluminum windows with insulated glass. Entrances are aluminum storefront glazing systems. Doors and windows appear to be in good condition, except for issues with the sill details previous mentioned. Exterior double doors at entrances/exits should have pulls replaced so that doors cannot be chained together – a safety/security concern.



Recommendations:

- Provide new sealant around windows.
- Replace exterior door hardware.

Interior Building Conditions

Structure:

The building is a 2-story masonry load bearing with CMU backup. The basement/ground floor level is slab on grade. The first and second floors are concrete slab on steel deck supported by steel joists and beams. The building structure appears to be sound, with no apparent deficiencies.

Recommendations:

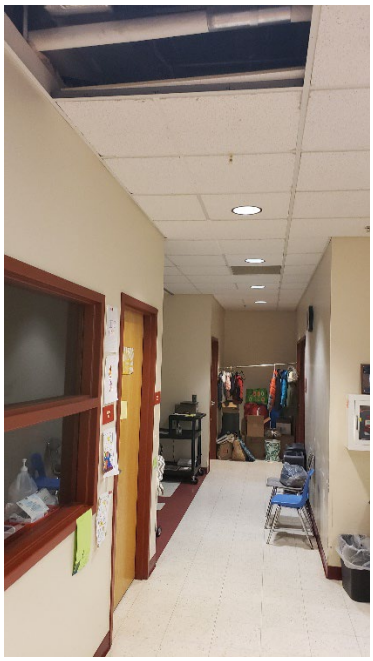
- None at this time.

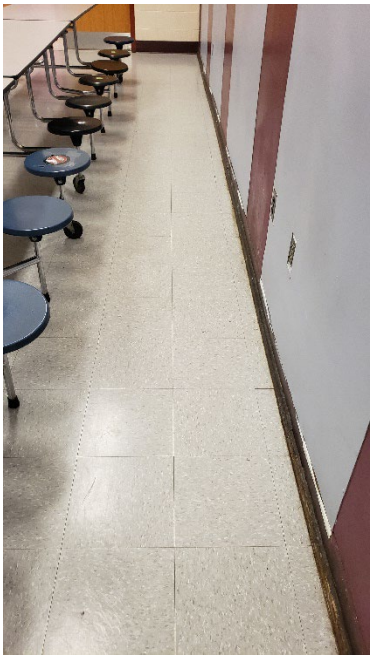
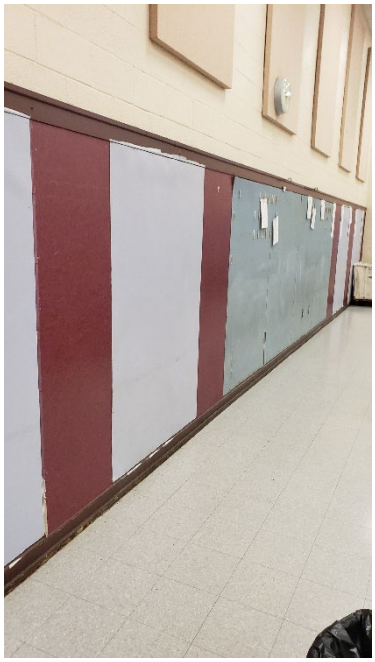
Finishes:

The building has vinyl composition tile (VCT) in the corridors, classrooms, multi-purpose room (cafeteria) and nurse's suite which is in poor condition. The main office area and library are both carpeted which is due for replacement. Toilet rooms have 2"x2" or 1"x1" ceramic mosaic tile. Rooms with the 1"x1" tile, in the older areas of the building, are in poor condition. The gymnasium floor is a floated wood flooring system which is also due for replacement, particularly due to some water damage from leaking mechanical units above. The stage floor is also wood and due for replacement.

Interior partitions are a combination of painted CMU as well as painted GWB/plaster, while toilet rooms are finished with either painted CMU or glazed ceramic tile. Toilet room walls have residual wall anchors from accessories since removed. Most corridors walls (painted CMU and painted-over tile) are very dirty and due for cleaning and repainting. Wood wall base and trim and wall panels in the multi-purpose room shows years of wear and should be removed/replaced. Wood floor in gymnasium has been damaged from HVAC equipment leaks.

Ceilings are generally systems of suspended acoustical ceiling tiles, of various styles. The library also has some wood trim at the ceilings. Ceilings are in fair condition, with the corridors and public areas and toilet rooms particularly dirty, damaged, or stained due to leaks.



Recommendations:

- Replace ceilings in conjunction with HVAC replacement
- Replace carpet flooring in library and office areas.
- Replace 1”x1” ceramic mosaic tile in bathrooms.
- Replace all VCT flooring throughout the entire building.
- Remove/replace base/trim and wall panels in the multi-purpose room
- Replace gymnasium wood floor.
- Clean and repaint all interior walls.

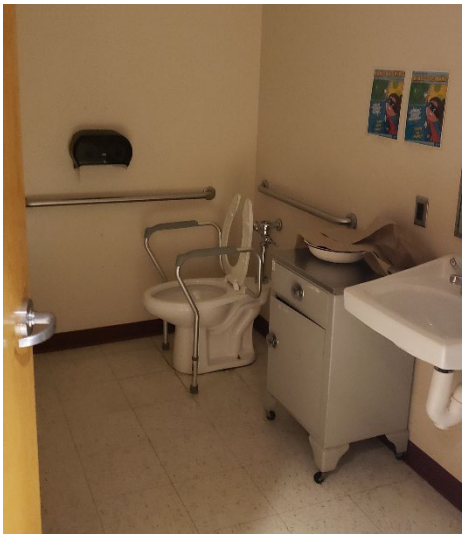
Code & Accessibility:

The building has an elevator which is original to 1981. The District’s elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

The stage has a wheelchair lift to access the stage. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

Water closets in accessible toilet stalls do not have the required grab bars for current ADA requirements, and accessories are not installed within reach range. Faculty toilet rooms are not accessible. Individual toilet rooms in kindergarten classrooms are not accessible.

Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.

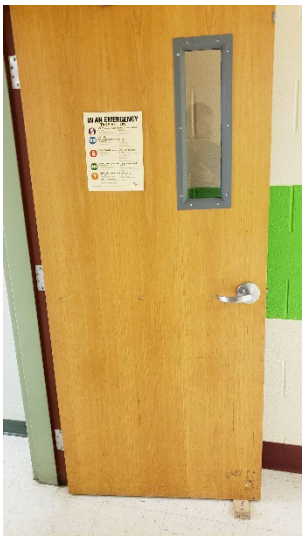


Recommendations:

- Evaluate elevator for any necessary upgrades. Replace elevator communications system.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by moving accessories within reach range, and providing ADA compliant grab bars.

Doors:

Interior doors are primarily wood set in hollow metal frames. Many frames are due for repainting. Doors generally are in fair to good condition.



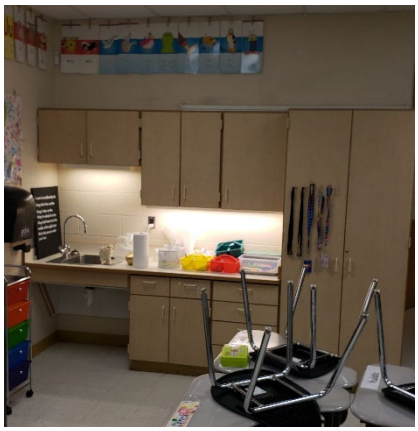
Recommendations:

- Repaint hollow metal doors and frames.

Casework & Built-in Equipment:

Most of the casework dates from the additions and renovations project in 2002. Casework is in good condition. Where sinks occur in classrooms, the sloped panel underneath the sink should be provided where missing.

Typical classrooms have built-in shelving along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

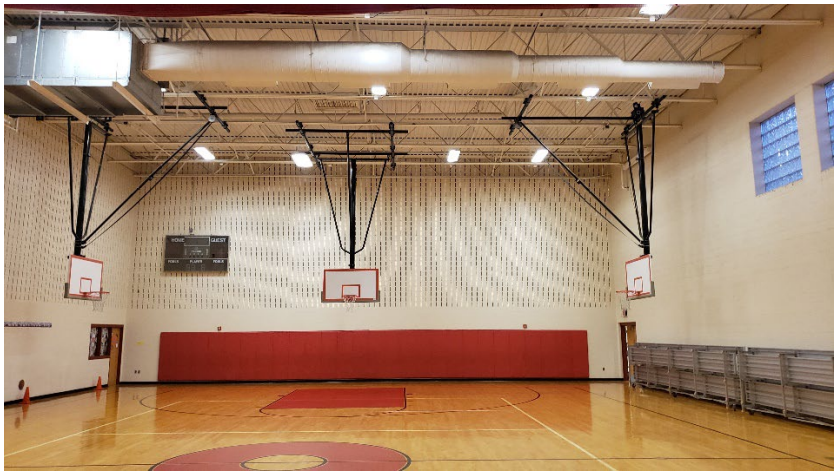


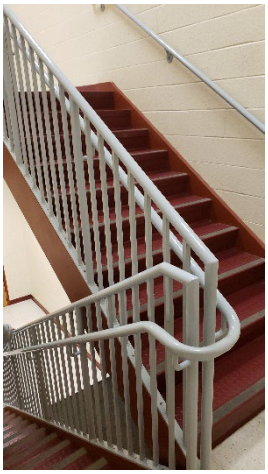
Recommendations:

- Replace sloped panels under classroom sinks where missing.

Specialty Equipment:

Acoustical wall pads in the multi-purpose room are heavily stained and should be replaced. The gymnasium has one main court and two side courts for a total of six basketball goals, which are in good condition. Wall pads in the gymnasium are in good condition. Corridor lockers are in good condition. Handrails and guard rails in stairways are due for repainting. Theatrical Equipment at the multi-purpose room stage is insufficient for performances. The stage floor is also in poor condition and should be replaced.





Recommendations:

- Replace the acoustical wall panels in the multipurpose room.
- Replace multi-purpose room stage floor and risers.
- Provide theatrical package for elementary performances.

Food Service Equipment:

Since most of the cooking for the School District's elementary schools is done at a remote facility, the kitchen at Melrose Elementary functions as a warming kitchen. Cold storage space at this school is inadequate, with small refrigerator/freezer units located separate from one another within the kitchen. The kitchen office shares space with the dry storage area. The food service equipment was replaced in 2002 and is approaching the end of its useful life.

Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

Visitors are buzzed in through a security vestibule and must first enter the office for clearance before being granted access to the rest of the facility. Exterior entrance and exit double doors have hardware which currently could be chained together, which is a safety/security concern.

Recommendations:

- Replace exterior door hardware.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- The secondary chilled water pump's variable frequency drives are nearing the end of their average expected service life.
- The variable frequency drives associated with air-handling units are nearing the end of their average expected service life.
- The ceiling-mounted cabinet unit heaters are approaching the end of their useful lives.
- Duct-mounted hot water reheat coils are nearing the end of their average expected service life.
- Chillers are approaching the end of their useful lives.
- Exhaust fans are approaching the end of their useful lives.

Recommendation:

- Replace the secondary chilled water pump's variable frequency drives withing 3-9 years.
- Replace the variable frequency drives associated with the air-handling units within 3-9 years.
- Replace the ceiling-mounted cabinet unit heaters within 10 years.
- Replace the duct-mounted hot water reheat coils within 10 years.
- Replace 2 Trane 100 ton air-cooled chillers.
- Replace exhaust fans.

Plumbing

Domestic Water System:

- The sump pump is approximately ¾ hp pump with float type activation but currently does not function and is near the average end of expected service life.

Recommendation:

- Replace sump pump.

Domestic Water Heater:

- The domestic hot water heaters are nearing the end of their average expected service life.

Recommendation:

- Replace the domestic hot water heaters in approximately 10 years.

Electrical

Emergency Power

- The 80 kW emergency generator is approaching the end of its useful life.

Recommendation:

- Engage the vendor to assess the emergency generator's condition and remaining service life.

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

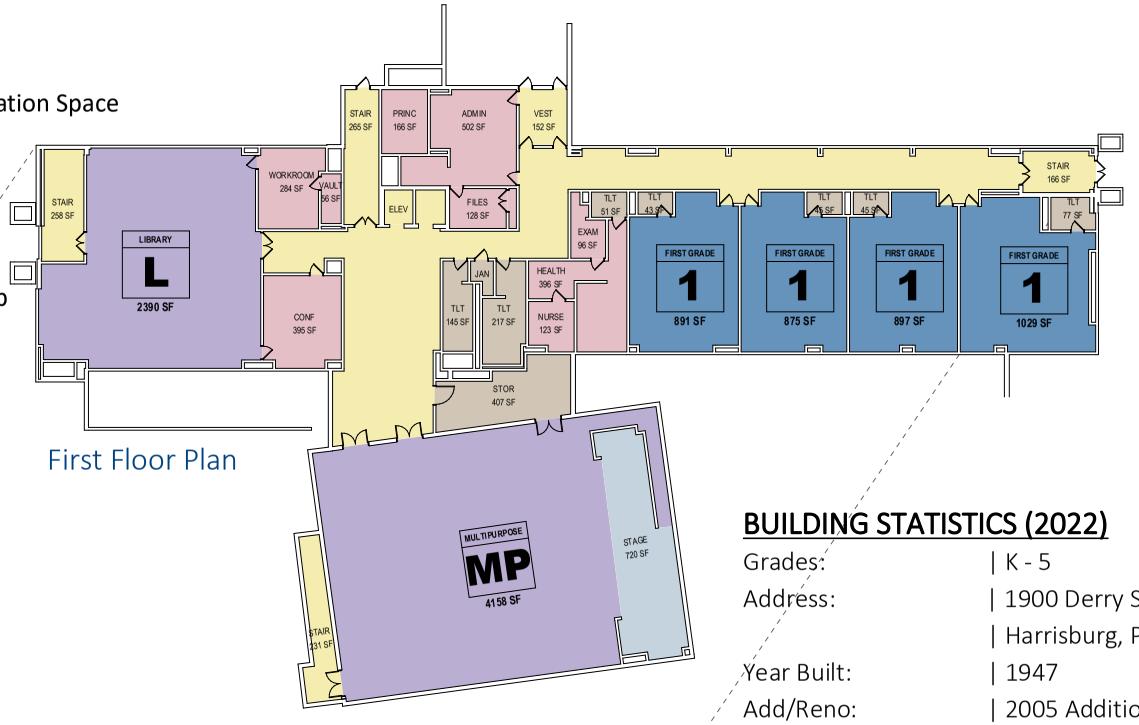
Fire Alarm

- The fire alarm is approaching the end of its useful life.

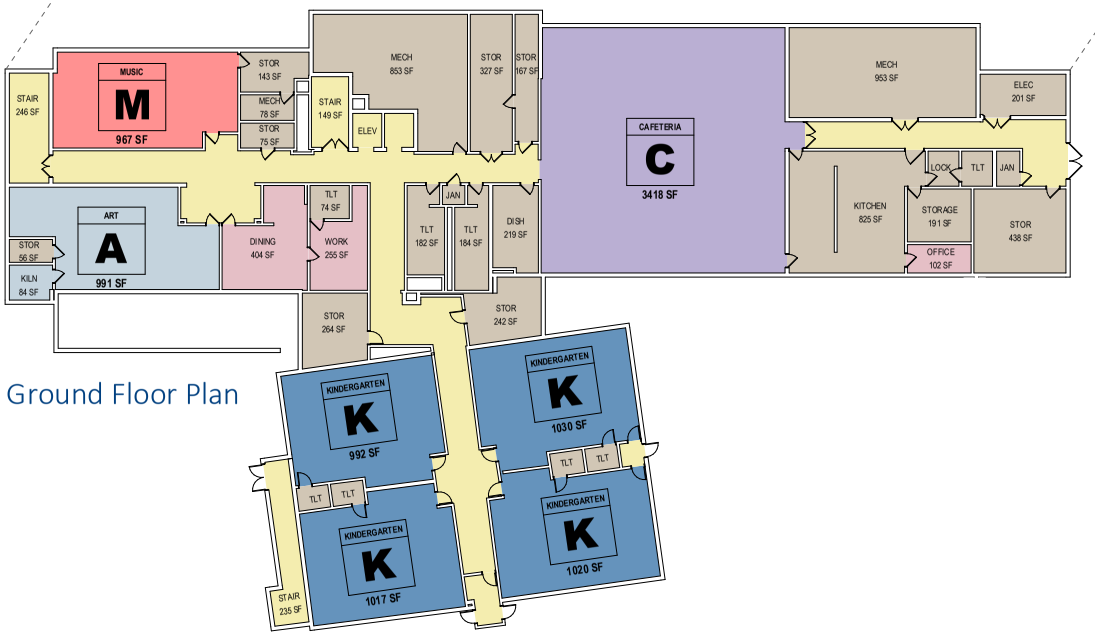
Recommendation:

- Replace the Edwards model EST 2 fire alarm system.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation



First Floor Plan



Ground Floor Plan

BUILDING STATISTICS (2022)

Grades:	K - 5
Address:	1900 Derry Street
	Harrisburg, PA 17104
Year Built:	1947
Add/Reno:	2005 Addition
	2000 Renovation
Square Footage:	80,715 SF
Functional Capacity:	428 Students (103% Utilization)
Current Enrollment:	439 Students
Site Acreage:	?

NORTH ARROW

1947 (B) / 2000 (R)

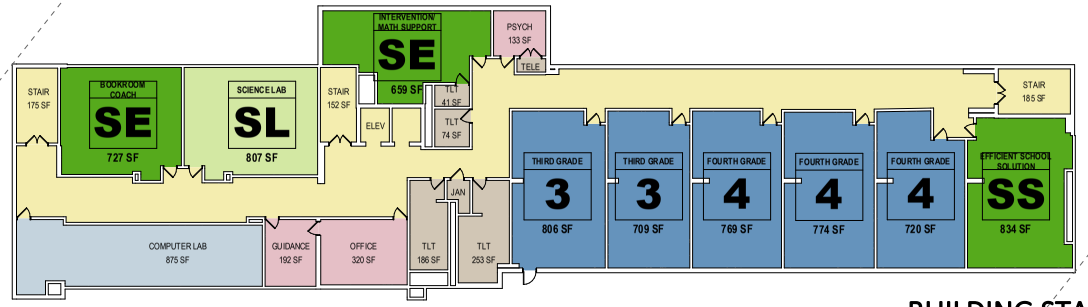
2005

CONSTRUCTION HISTORY

First and Ground Floor Plan

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

Fourth Floor Plan



Third Floor Plan

Second Floor Plan

1947 (B) / 2000 (R)

2005

CONSTRUCTION HISTORY

BUILDING STATISTICS (2022)

Grades:	| K - 5
Address:	| 1900 Derry Street
	| Harrisburg, PA 17104
Year Built:	| 1947
Add/Reno:	| 2005 Addition
	| 2000 Renovation
Square Footage:	| 80,715 SF
Functional Capacity:	| 428 Students (103% Utilization)
Current Enrollment:	| 439 Students
Site Acreage:	| ?

NORTH ARROW

Second, Third, and Fourth Floor Plan

6 | Scott Elementary School

Address:	1900 Derry Street Harrisburg, PA 17104
Construction Timeline:	Originally constructed in 1948; Additions in 2005; Renovations in 2000.
Building Square Footage:	78,960 sf
Site Acreage:	1.26 acres

Building Summary

Scott Elementary School is a 5-story building located in the Allison Hill neighborhood. The School currently houses grades K-5. The property is served by public water, sewer and natural gas. The building is a midcentury origin, with a classroom and multi-purpose room addition that was constructed in 2003.

Site Conditions

The School is situated on a small site along Derry Street. The building is primarily a walking school, with very limited parking and drop-off areas.

The site slopes off steeply from front to back, to the extent that the ground floor can be accessed from grade on the Derry Street side, while the first floor is accessed from grade on the Kensington Street side.

Paving & Walkways:

Vehicular access to the site is from Kensington Street via two small private drives. There is about 365 feet of drop-off area combined between the school's two drop-off loops.

There are three on-site parking spaces. Staff and visitors rely on on-street parking within the surrounding neighborhood. There is an adjacent property with hard and soft surface play area, in addition to a soft-surface play area on the school property along Derry Street. The service/loading and refuse areas for the kitchen and school are on the east side of the school off of Berryhill Street.

Asphalt pavement is cracking on the north drop-off area. Concrete sidewalks are in fair condition, with some areas in need of repair. There is no accessible parking.

Guard rails are due for new coats of paint, however should be replaced with 42” tall guard rails where they protect against falling over drops exceeding 30 inches.

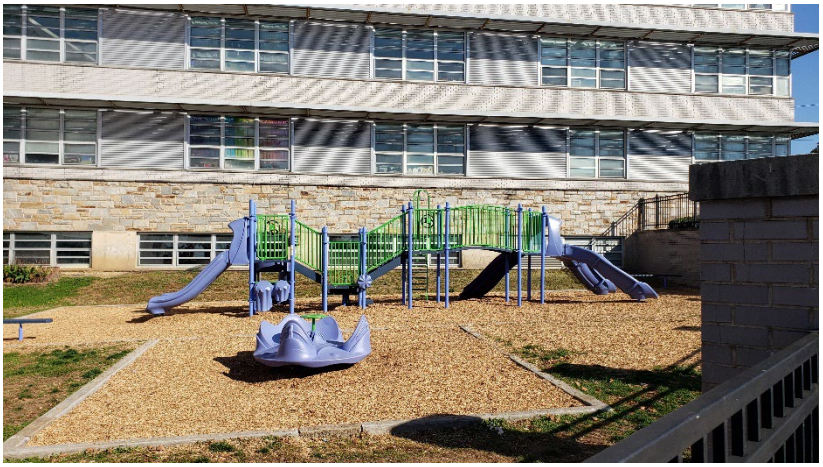
The drain at the bottom of the service drive is due for replacement with a vehicle grade drain.

Recommendations:

- Seal coat asphalt paving.
- Repair or replace damaged areas of concrete sidewalk.
- Paint guard rails, and consider replacement where required for fall protection.
- Replace drain at service drive with vehicle grade drain.

Play Areas & Equipment:

In the southeast corner of the building along Derry and Berryhill Streets is a soft surface playground. The play equipment appears to be relatively new and in good condition. The other soft-surface play area on the adjacent property also has relatively new equipment in good condition. The adjacent hard surface area with basketball goals is in fair condition with lines worn down.



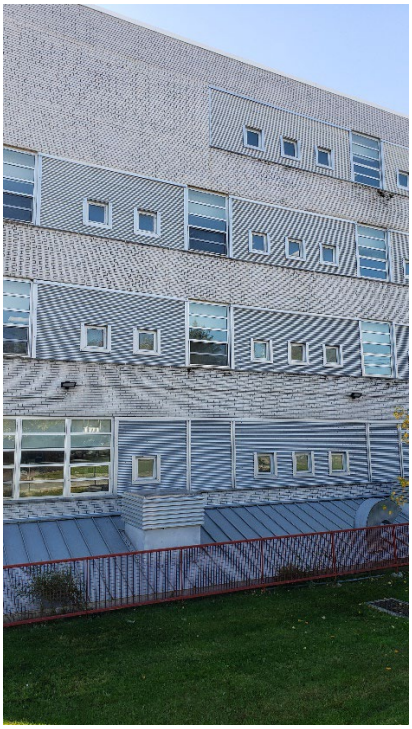
Recommendations:

- Re-stripe the hard surface play area.

Exterior Building Conditions

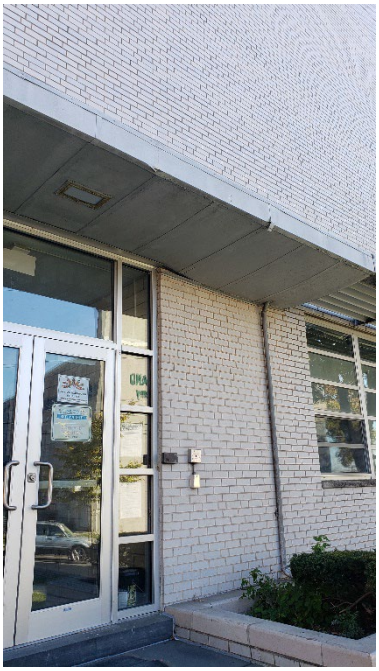
Exterior Walls:

The original building is a brick veneer façade but lacks a cavity and does not appear to be adequately flashed. The north side of the building is particularly weathered, showing dirt as well as growth of organic material on masonry and precast window sills. Brick is cracked and chipped in several areas. The original windows have been replaced and stretches of the façade replaced with metal panels. Sun shades on the south and east sides are showing signs of weathering, with the outriggers being significantly rusted. Sealants are cracked and due for replacement. The masonry piers that form the fence which encloses the soft-surface playground is significantly cracked, with veneers generally beyond repair.



Recommendations:

- Brick veneer at north ward facing sides should be cleaned. All precast elements should be cleaned. Repointing should be done as required.
- Joints should be re-caulked.
- Sun shades should be replaced with material not subject to oxidization.
- Masonry piers around playground should be replaced.



Roofing:

All of the membrane roofing is at the end of its useful life and is due for replacement.

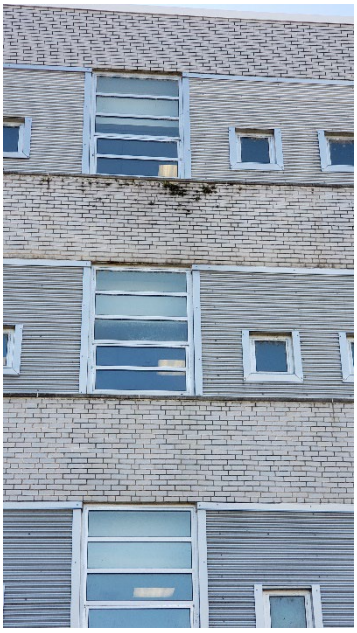
Canopies around the building show various levels of disrepair. The main entrance is in the best condition, with the supporting steel due for new paint. The canopies to the sides of the buildings have soffits which are sagging and fascia trim is due for replacement.

Recommendations:

- Replace roof in its entirety.
- Replace trim and soffits at side building canopies.

Doors & Windows:

Windows are operable, hopper style aluminum storefront windows in generally good condition. Service doors are aluminum and have been recently replaced. Aluminum entrances are also in good condition, with only routine maintenance required. Exterior door hardware could allow double doors to be chained together, which is a safety and security concern.



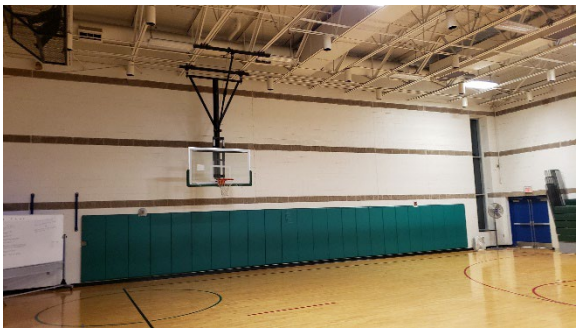
Recommendations:

- Replace sealants around window and entrance systems as part of routine maintenance.
- Replace all exterior door hardware.

Interior Building Conditions

Structure:

The building is a 5-story steel frame structure with CMU backup. The basement/ground floor level is slab on grade. The first through fourth floors are concrete slab on steel deck supported by steel joists and beams.



Recommendations:

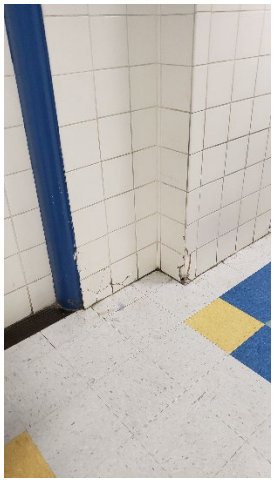
- None at this time.

Finishes:

The building has vinyl composition tile (VCT) in the corridors, classrooms, faculty work rooms and cafeteria which is in poor condition. Resilient wall base is missing in some areas. Carpet in the library was recently replaced. Toilet rooms have 2”x2” mosaic ceramic tile in fair condition.

Interior non-loadbearing walls are mainly painted GWB. Corridors and public areas have ceramic tile wainscots, which is cracked in many locations, particularly at the lower two courses of the 6” tiles. It also lacks a cove base where it meets the floor, resulting in dirty base joints.

Ceilings are primarily suspended ACT, although styles vary. Many ceilings are sagging, dirty, or damaged.



Recommendations:

- Replace ceiling tile throughout the entire building, and consolidate to a single system of ACT.
- Replace lower two courses of ceramic tile wainscot in hallways.
- Replace all VCT.

Code & Accessibility:

The building has an elevator which is original, but was refurbished in 1999. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

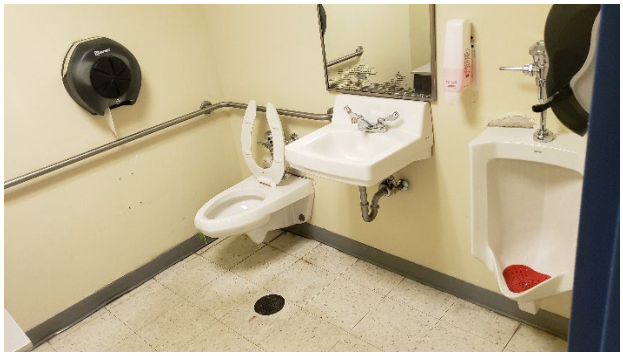
The wooden hand rails at stairs is not compliant with the requirements of the current accessibility code, although guard rails have been retrofitted to comply with current codes.

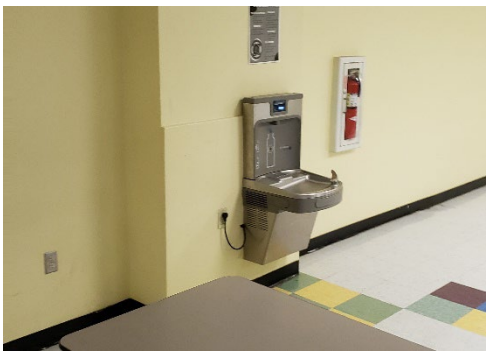
The stage has a ramp to access the stage which appears to be accessible. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

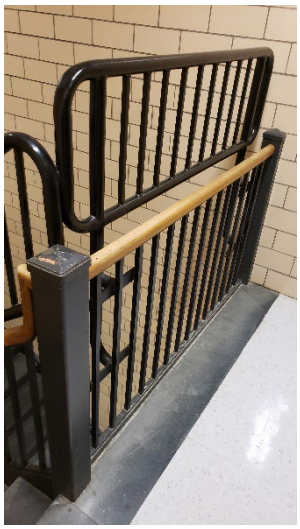
Water closets in single occupant toilet rooms do not have the required fixture clearances around them due to lavatories being installed directly adjacent to them. Grab bars do not meet current ADA requirements, and accessories are not installed within reach range. Many of the toilet rooms located within classrooms would require more extensive reconfiguration to provide the required clearances at doors and fixtures. Sinks in classroom casework are not accessible.

Drinking fountains, while many recently replaced, are often located such that they also project into paths of travel. This is an accessibility concern due to blind persons not being able to sense their presence.

Many glass vision panels and sidelights contain wire glass, which is no longer permitted by the Code. Cross-corridor and egress stair access double doors have equal leaves that are 30 inches wide. Accessibility requires that at least one leaf be 36 inches wide.





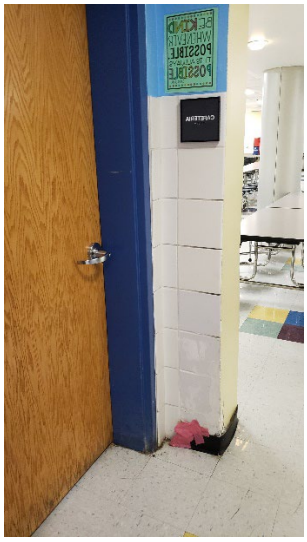


Recommendations:

- Evaluate elevator for any necessary upgrades. Replace elevator communications system.
- Replace the wooden guard/handrail around the stairs and landing at the main entrance with a new guard and handrail that is compliant with current code.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by removing the lavatories adjacent to the water closets to allow proper clearances at the water closets, moving accessories within reach range, and providing ADA compliant grab bars.
- Replace doors in rated stair towers with glazing to be safety glass (no wire glass).
- Replace cross corridor double doors smaller than 6’ in total width so that one leaf is at least 36 inches wide.

Doors:

Interior doors are either wood or hollow metal, all in hollow metal frames. Doors and frames are generally in good condition. Refer to Code and Accessibility section above regarding wire glass.



Recommendations:

- Paint hollow metal doors and frames as part of a building-wide finish upgrade project.

Casework & Built-in Equipment:

Most of the casework dates from the 1999 renovations and is in fair condition. Cabinets and countertops in classrooms are missing their veneer on their edges. Library furniture is in good condition.

Typical classrooms and corridor areas have built-in shelving / countertops along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

Recommendations:

- Replace educational casework throughout the building's classrooms.

Specialty Equipment:

The multipurpose room has (1) half main basketball courts and (1) side court and are in good condition. Bleachers also appear to be in good condition. The stage curtains are torn and due for replacement. Lockers are generally in good condition.

Recommendations:

- Replace the stage curtains.

Food Service Equipment:

The cooking for Scott Elementary is done on site. Cold storage space at this school is inadequate, with small refrigerator/freezer units located within the dry storage area. The food service equipment was replaced in the early 2000's and is approaching the end of its useful life.

Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

Visitors are buzzed in through a security vestibule and must first enter the office for clearance before being granted access to the rest of the facility.

Recommendations:

- None at this time.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- Exhaust fans are approaching the end of their useful lives.
- The cold water system tower runs and is in decent repair. The tower floor is rusted and thinning; unit is nearing the end of its useful life.
- The hot water boilers are nearing the end of their useful lives and are requiring nuisance trips throughout the day, taking time away from other issues.
- The existing ductwork utilizes a plenum return but should be ducted all the way to the ceiling grille for more efficient air usage.

Recommendation:

- Replace exhaust fans.
- Replace the cooling tower. The tower is 20 years old and within the 18-20 years nominal life range.
- Replace boilers within the next 5 to 8 years.
- New mechanical room piping replacement as required.
- Replace 3 make-up direct outside air units.
- Install return air ducts.

Electrical

Emergency Power

- The 20 kW emergency generator has passed its average expected service life.

Recommendation:

- Engage vendor to assess the emergency generator's condition and remaining service life.

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

Fire Alarm

- The fire alarm is approaching the end of its useful life.

Recommendation:

- Replace the Cerberus Pyrotronics MXL fire alarm system.

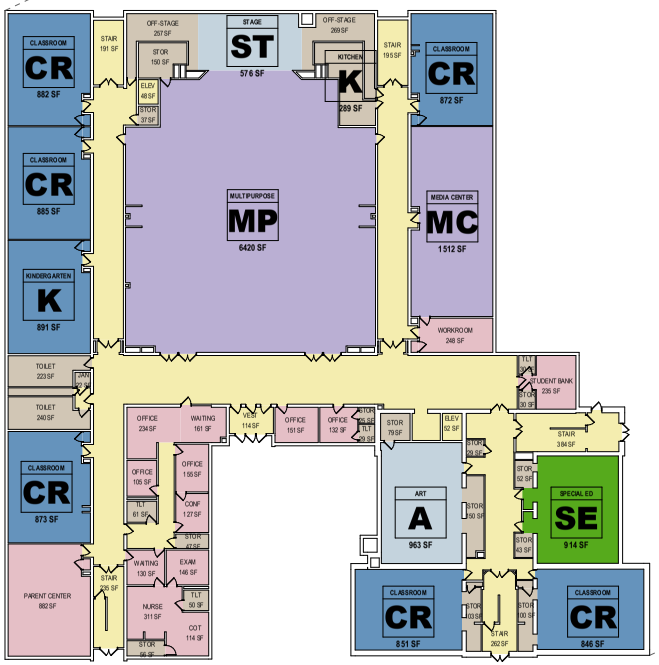
Hamilton Elementary School

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

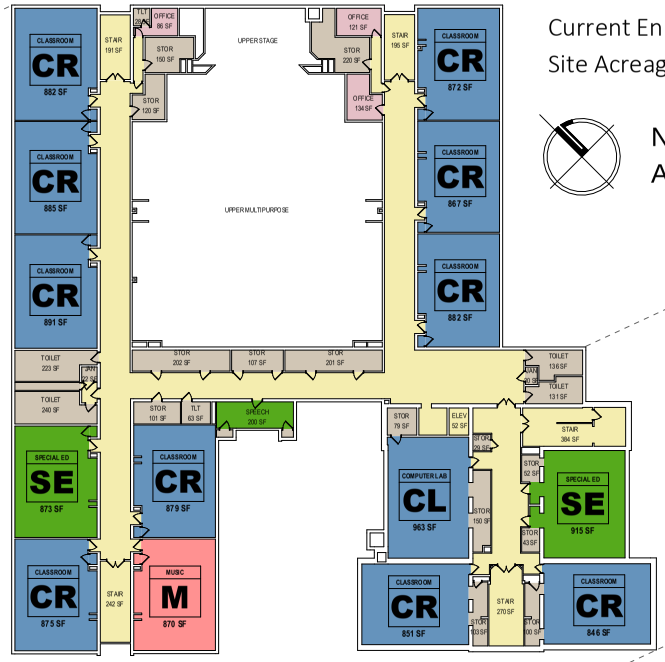
BUILDING STATISTICS (2022)

Grades:	| K - 5
Address:	| 1701 North 6th Street
	| Harrisburg, PA 17102
Year Built:	| 1904
Add/Reno:	| 1998 Renovation
	| 1954 Addition
Square Footage:	| 63,447 SF
Functional Capacity:	| 382 Students (85% Cap.)
Current Enrollment:	| ?
Site Acreage:	| 1.2 Acres

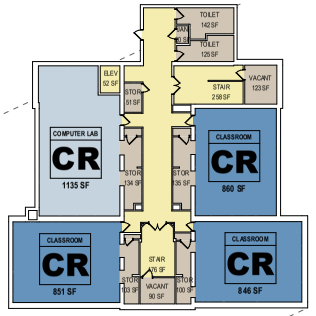
NORTH ARROW



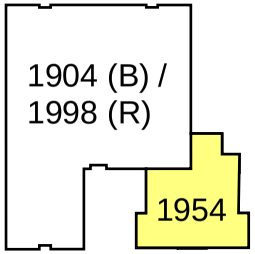
First Floor Plan



Second Floor Plan



Third Floor Plan



CONSTRUCTION HISTORY

First and Second Floor Plan

Crabtree, Rohrbaugh & Associates - Architects
CR

6 | Hamilton School

Address:	1701 North 6th Street Harrisburg, PA 17104
Construction Timeline:	Originally constructed in 1909, addition in 1954, renovation in 1998
Building Square Footage:	75,375 sf
Site Acreage:	0.90 acres

Building Summary

Hamilton Elementary School is a 3-story building located in the Midtown neighborhood. The School is a collaboration between Harrisburg School District and Specialized Education Services, Inc. and includes students from grades K-12. The property is served by public water, sewer and natural gas.

Site Conditions

The School is situated facing North 6th Street. The grade is relatively flat along North 6th Street, but slopes down towards Wallace Street behind the school. The first floor can be accessed from grade on the North 6th Street side, while the basement discharges to grade on the Wallace Street side.

Paving & Walkways:

There are no on site vehicular parking or drop-off areas. Parking is curbside on the streets only. Sidewalks around the building and exterior staircases are in poor condition and numerous areas require replacement. The stone retaining wall on the south side of the property requires mortar repair.

Recommendations:

- Replace damaged concrete sidewalks.
- Parge concrete stair risers.
- Repair mortar at stone retaining wall.

Play Areas & Equipment:

There is a play area across Wallace Street from the school, which is not fully fenced in. Additionally, the guard rails which are installed for fall protection should be replaced with a picketed guard rail with limited opening sizes compliant with current Codes. The playground equipment is in fair condition, with some pieces newer than others. There is a significant hard surface play area as well.

Reommendations:

- Replace guard rails with fence for better security and fall protection.

Exterior Building Conditions

Exterior Walls:

The original building is a brick veneer façade but lacks a cavity and does not appear to be adequately flashed. The north side of the building is particularly weathered, showing a need for repointing and weather proofing. Brick is cracked and chipped in several areas. Sealants are cracked and due for replacement. There is a known water leakage problem on the north side that is causing damage to interior finishes. On the east side, the chimney shows significant cracks in the brick veneer. Brick veneer corners are chipped. Precast concrete trim around entrances is dirty. Painted features in the original building are due for new coats.

Recommendations:

- Brick veneer around the entire façade should be cleaned. Repointing should be done as required, with particular attention paid to areas above windows.
- Repair Masonry around chimney.
- Joints should be re-caulked.
- Clean precast features.
- Apply new coats to painted areas.

Roofing:

The School has a black EPDM roof which is approaching the end of its useful life. It was last replaced in 1999.

Recommendations:

- Replace roof in its entirety.

Doors & Windows:

Windows are operable, awning style aluminum storefront windows. The windows have spandrel panels which are damaged in places and may be contributing to the interior leakage problems. Service doors are steel/hollow metal and require new finish coats. Aluminum entrances are also in good condition, with only routine maintenance required.

Recommendations:

- Consider a window replacement as part of a comprehensive renovation project.

Interior Building Conditions

Structure:

The building is a 2 and 3 story mixed steel frame with CMU backup and masonry load bearing structure. The basement/ground floor level is slab on grade with pipe trenches for unit ventilators.

Recommendations:

- None at this time.

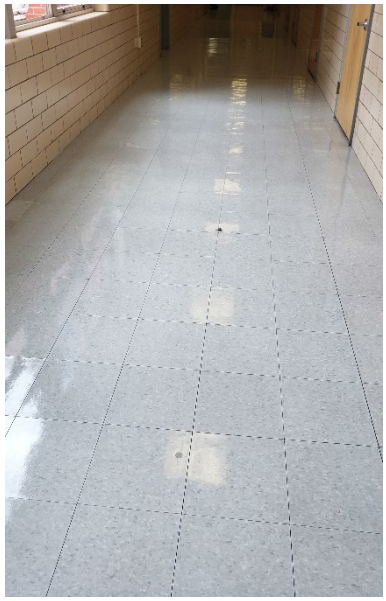
Finishes:

The building has vinyl composition tile (VCT) in the corridors, classrooms and kitchen which is in poor condition. There is also terrazzo in the lobby area. Some classrooms also have carpet in fair condition. Toilet rooms have mosaic ceramic tile in poor condition. Stair treads are also in poor condition.

Interior partitions are painted plaster, with structural facing tile and glazed ceramic tile wainscot in areas. Some walls are also painted CMU. Areas with the structural facing tile walls do not have cove bases which causes dirt build-up in the corners. Some areas with ceramic tile wainscot are splitting at the grout joints.

Ceilings are primarily suspended ACT, with some areas of painted plaster. The ceilings, regardless of type, are frequently damaged from water leaks – paint is peeling off of plaster and many ACT ceilings are sagging or stained.





Recommendations:

- Replace ceiling tile throughout the entire building, and consolidate to a single system of ACT.
- Replace all VCT.
- Standardize wall finishes – remove ceramic tile wainscots, add cove base to structural facing tile, and paint SFT and plaster to be a uniform finish.
- Repair plaster walls and ceilings where water damaged.
- Replace stair treads.

Code & Accessibility:

The building has a small elevator serving portions of the building, however several portions of the building are not accessible. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

The handrails at stairs are not compliant with the requirements of the current codes. Open space between pickets or ornamentation exceeds the maximum amount, Gripping surface is too large and non-continuous, and there are no guards up to 42 inches high.

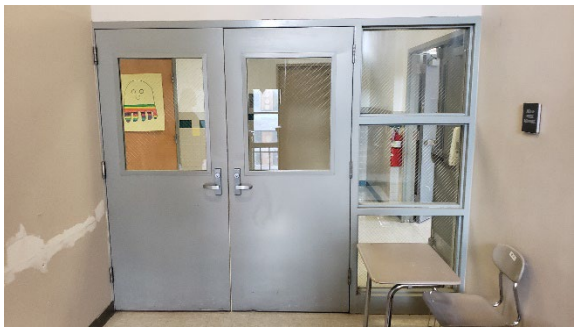
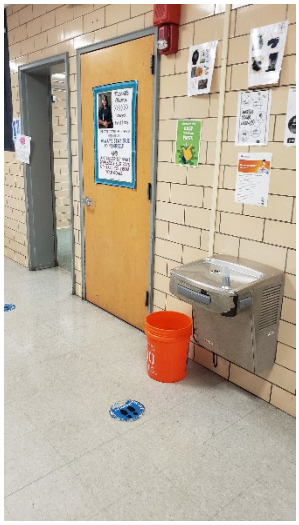
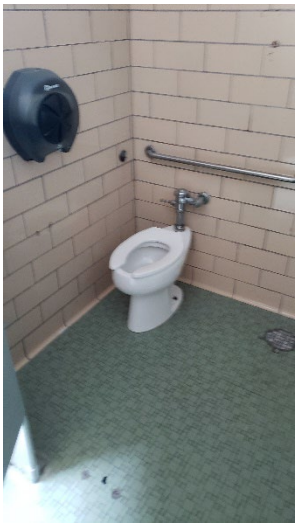
The stage has a ramp to access the stage which appears to be accessible. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

Toilet rooms are not accessible – clearances are not met, grab bars are not present, and accessories are not within required reach ranges. Some toilet rooms are located at areas where stairs have to be negotiated from the nearest point accessed by elevator.

Drinking fountains are often located such that they also project into paths of travel. This is an accessibility concern due to blind persons not being able to sense their presence.

Many glass vision panels and sidelights contain wire glass, which is no longer permitted by the Code.

The stage is not wheelchair accessible.

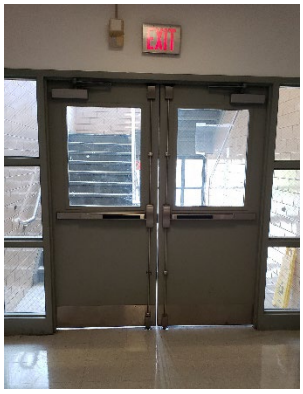






Recommendations:

- Evaluate elevator for any necessary upgrades. Replace elevator communications system.
- Replace the guard/handrail around the stairs and landing at the main entrance with a new guard and handrail that is compliant with current code.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls accessible by elevator to comply with current code by moving accessories within reach range, and providing ADA compliant grab bars.
- Provide accessible means to stage.
- Replace glazing to be safety glass (no wire glass) at stair tower doors.

Doors:

Interior doors are either wood or hollow metal, all in hollow metal frames, some with decorative trim. Doors and frames are generally in good condition. Refer to Code and Accessibility section above regarding wire glass.



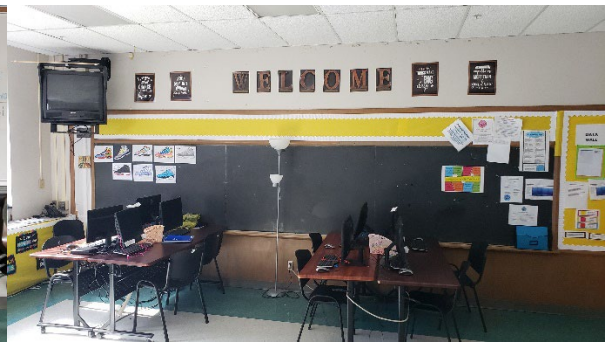
Recommendations:

- Paint hollow metal doors and frames as part of a building-wide finish upgrade project.

Casework & Built-in Equipment:

Most of the casework dates from the 1998 renovations and is in fair condition. Some hardware has been fitted with make-shift pulls, and units with sinks are not ADA compliant. There are also some rooms containing casework original to the building construction. There are also rooms that still have slate chalk boards.

Typical classrooms and corridor areas have built-in shelving / countertops along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

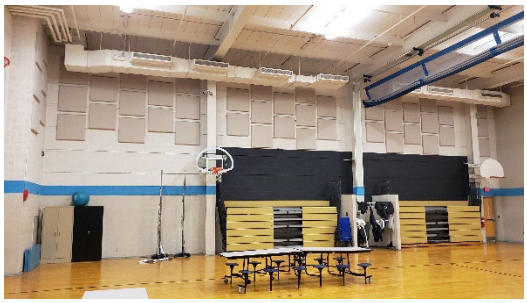


Recommendations:

- Replace educational casework throughout the building.

Specialty Equipment:

The multipurpose room has basketball goals, but the space is not well suited for basketball activity due to walls and columns in close proximity to court edges and backstops. The stage and stage equipment is in fair condition, but needs side curtains or cyclorama to limit views sidestage from the front of house.



Recommendations:

- Use of space for basketball should be reconsidered.

Food Service Equipment:

The cooking for Hamilton School is done on site. However, the entire Kitchen is extremely limited in size and equipment. The food service equipment was replaced in 1998 and is approaching the end of its useful life.

Recommendations:

- Replace food service equipment.
- Consider enlarging the kitchen as part of a major renovation project.

Safety & Security:

Visitors are buzzed in through a security vestibule and must first enter the office for clearance before being granted access to the rest of the facility. Exterior entrance and exit double doors have hardware which currently could be chained together, which is a safety/security concern.

Recommendations:

- Replace exterior door hardware.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- The chiller is approaching the end of its useful life; one of the chillers has not operated all year; need to determine if it is a control, refrigerant, or component.
- The building automation system is approaching the end of its useful life.
- The exhaust fans are approaching the end of their useful life.
- 5 air-handling units are approaching the end of their useful life.
- Unit ventilators are approaching the end of their useful life.
- The variable air volume and fan-powered boxes are approaching the end of their useful lives.
- Cold water pump is approaching the end of its useful life.
- Hot water pump is approaching the end of its useful life.

Recommendation:

- Replace 2 Trane 125-ton air cooled chiller.
- Replace aged 1997 pneumatic control with DDC controls within the building automation system.
- Replace exhaust fans.
- Replace air-handling units.
- Replace unit ventilators.
- Replace variable air volume and fan- powered boxes. Restoration can also be considered.
- Replace primary and secondary chilled water pumps.
- Replace heating hot water pumps.

Sprinkler System:

- The fire pump is approaching the end of its useful life.

Recommendation:

- Replace fire pump.

Electrical

Emergency Power

- The emergency generator is approaching the end of its useful life.

Recommendation:

- Replace the 60 kW emergency generator.

Lighting

- The existing lighting still use T8 fluorescent lighting.

Recommendation:

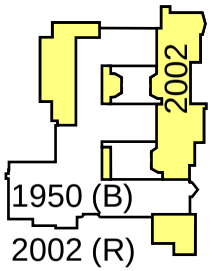
- Replace lighting with LED fixtures.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

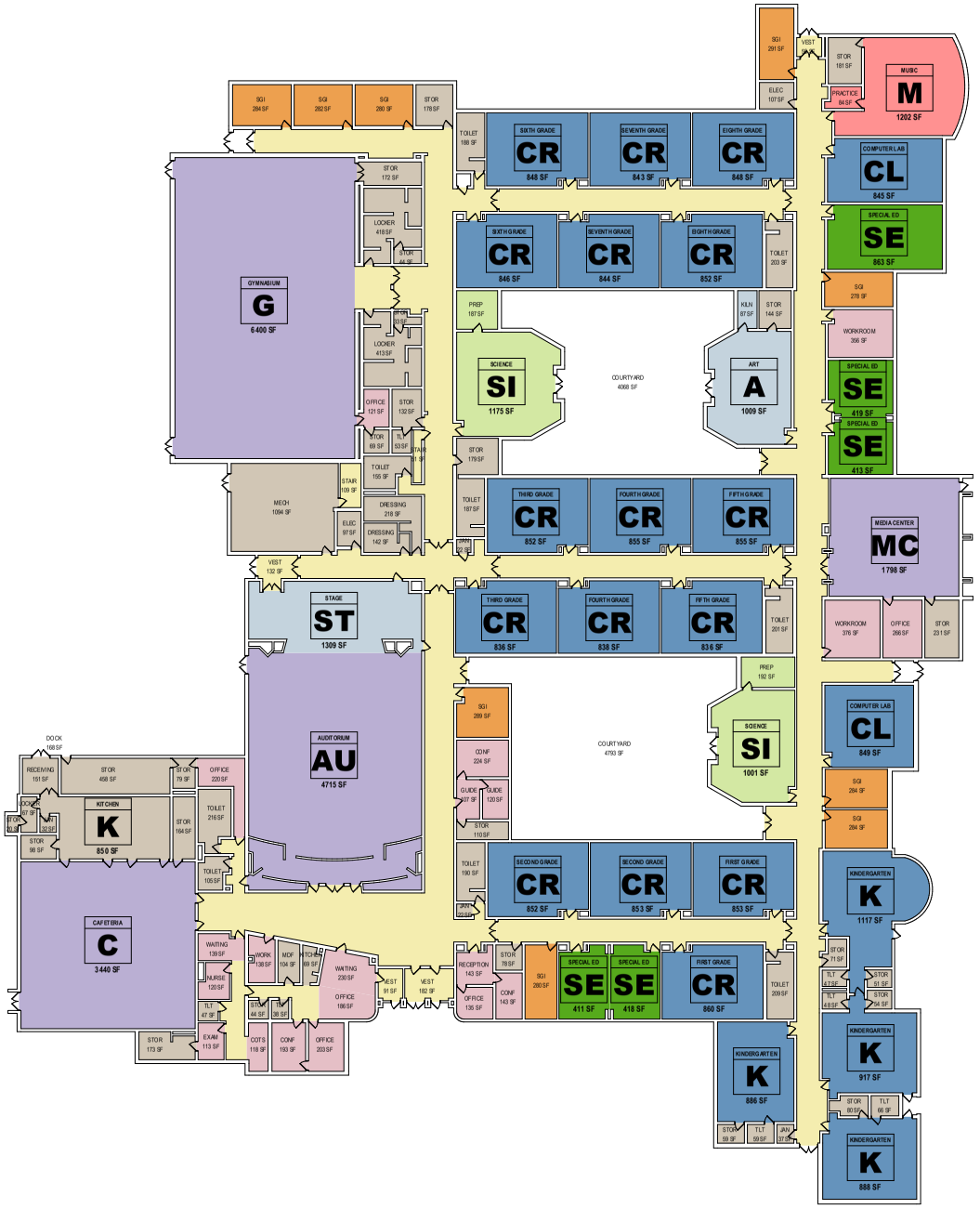
BUILDING STATISTICS (2022)

Grades:	6 - 8
Address:	Hale Ave &, Harris Terrace
	Harrisburg, PA 17104
Year Built:	1950
Add/Reno:	2002
Square Footage:	82,410 SF
Functional Capacity:	408 Students (85% Cap.)
Current Enrollment:	476 Students
Site Acreage:	?

NORTH ARROW



CONSTRUCTION HISTORY



First Floor Plan

6 | Marshall Math Science Academy

Address:	301 Hale Avenue Harrisburg, PA 17104
Construction Timeline:	Originally constructed in 1950; Additions and Renovations in 2002
Building Square Footage:	82,370 sf
Site Acreage:	13.80 acres

Building Summary

Marshall Math Science Academy is a 1-story building located off of the Market Street corridor of Harrisburg. The School currently houses grades 5-8. The campus is shared with Harrisburg High School John Harris Campus as well as Severance Stadium and Field House. The property is served by public water, sewer and natural gas.

Site Conditions

Paving & Walkways:

Accessible parking spaces are located in a small parking lot located off of Hale Avenue. The accessible spaces do not connect to the building's main entrance, but rather a back entrance with ramps. There is another parking lot connected to a bus loop between the School and the adjacent High School tennis courts. Total parking for both lots is approximately vehicles. Asphalt paving is in good condition

Sidewalks around the property are in good condition, however retaining walls around concrete stairs are deteriorating and should be replaced. Many galvanized handrails on site are also deteriorating and should be replaced.

Recommendations:

- Modify parking to permit accessible spaces to directly access main entrance.
- Seal coat other areas of asphalt paving as part of ongoing maintenance.
- Replace dilapidated retaining walls.
- Replace corroding steel handrails.

Athletic Facilities:

Athletic facilities are on campus serving Harrisburg High School – John Harris. There is also some playground equipment left over from the School's use as an elementary education facility. This equipment is no longer heavily used and should be considered for removal after completion of the elementary level realignment.

Recommendations:

- None at this time.

Exterior Building Conditions

Exterior Walls:

The exterior walls made up of a combination of modular brick and split face and ground face CMU. The entire façade is extremely dirty and due for cleaning all around.

Recommendations:

- Clean the exterior masonry all around.

Roofing:

The roof is comprised of both ballasted and adhered roofs, all due for replacement.

Recommendations:

- Replace all roofing material.

Doors & Windows:

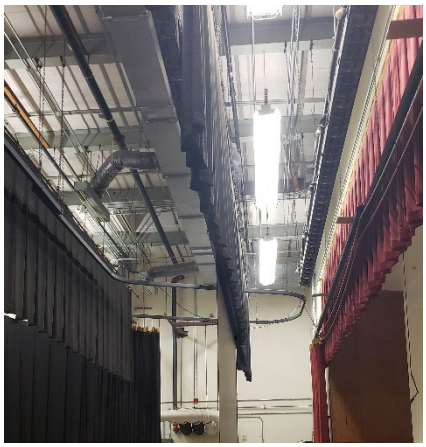
The main entrance is aluminum storefront. Elsewhere, exterior doors and entrance systems are mainly operable aluminum windows set into aluminum frames. The windows are in good condition.

In addition to the aluminum doors in the main entrance storefront, other doors around the perimeter of the building are painted hollow metal, mostly in good condition. Door hardware at exterior doors could allow double doors to be chained together which is a safety and security concern.

Recommendations:

- Replace door hardware on exterior doors which do not have levers.

Interior Building Conditions



Structure:

The original 1950 structure is a combination of load-bearing masonry and steel frame structure, appearing to be in sound condition. The floor is slab on grade. The 2002 addition area is masonry load-bearing structure with slab on grade also appearing to be in sound condition.

Recommendations:

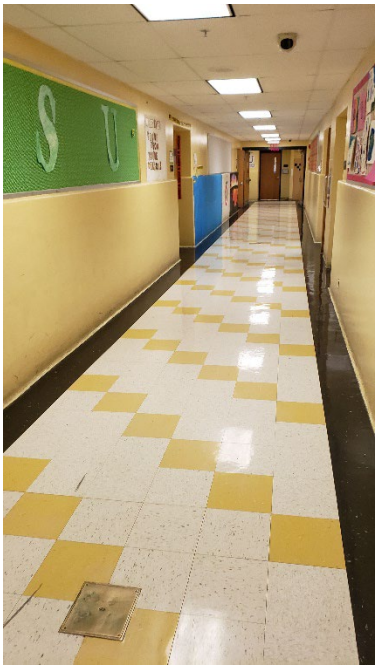
- None at this time.

Finishes:

Wall finishes throughout the building include painted CMU, painted plaster and GWB. Original hallways have a glazed tile wainscot which have been coated and painted over. Toilet rooms are finished with glazed ceramic tile, which need to be patched in some locations. The walls are dirty, with paint chipped off in many locations, especially in classrooms. The auditorium walls are plaster with wood panel wainscot and stage surround.

Floor finishes include terrazzo, VCT, sealed concrete, wood athletic flooring, and epoxy in the kitchen and locker rooms. There is carpet in the administration suite. Toilet rooms have mosaic ceramic tile floors, a couple in need of patching, while some single-user toilet rooms have VCT. Resilient wall base in several areas is damaged or missing and should be replaced. VCT in classrooms is dirty, often with large gaps between tiles and should be replaced.

The majority of the building has acoustical ceiling tile. Much of the lay-in tile is sagging from age or damaged from leaks. ACT in the cafeteria, auditorium and maker space is very dirty from the HVAC system. Additional ceiling finishes include painted plaster and exposed painted structure.



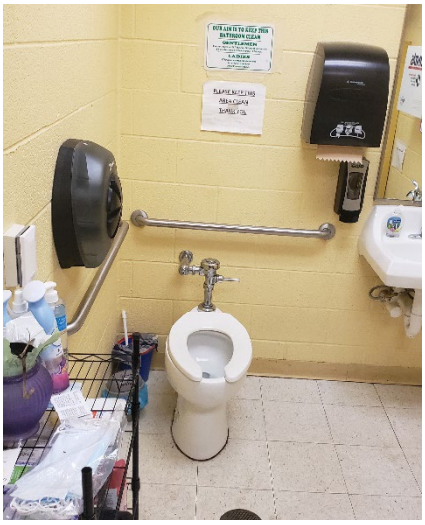


Recommendations:

- Replace all VCT throughout the building.
- Repair and repaint damaged areas of plaster where they occur.
- Repaint all interior walls.
- Replace Acoustical Ceiling Tile.
- Replace carpet in office.

Code & Accessibility:

Water closets in single occupant toilet rooms and multiple-occupant toilet rooms do not meet current ADA requirements due to insufficient grab bars and accessories not installed within reach range. Single occupant toilet rooms do not meet ADA requirements due to sinks being located directly next to toilets.

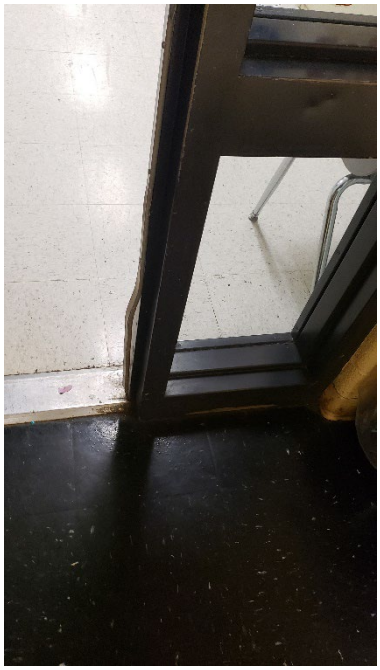


Recommendations:

- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by moving accessories within reach range, and providing ADA compliant grab bars.

Interior Doors:

The majority of classroom doors are solid wood doors in hollow metal frames. Doors are generally in good condition. Hollow metal frames need to be repainted.



Recommendations:

- Paint hollow metal frames along with building-wide interior painting.

Casework & Built-in Equipment:

Casework throughout the building was replaced in the 2002 additions and renovations. Most casework is in good condition however sinks in casework are not compliant with ADA.

Recommendations:

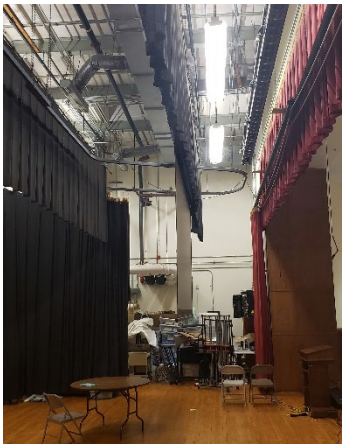
- Modify sink locations to be ADA compliant.

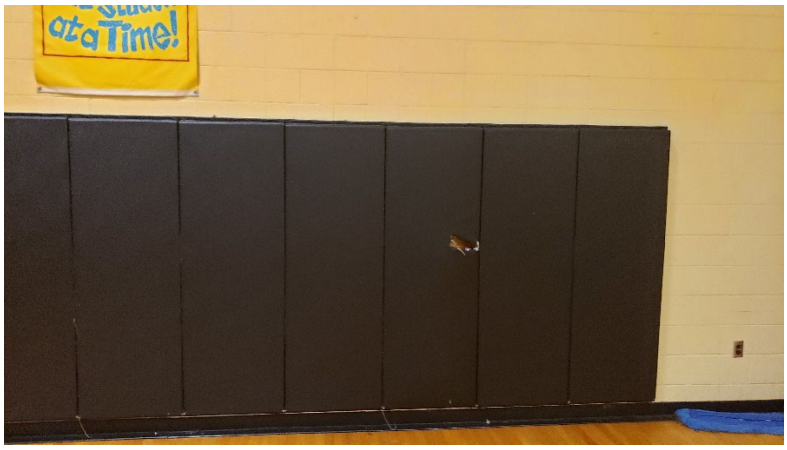
Specialty Equipment:

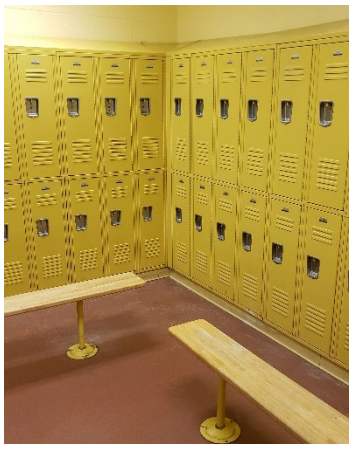
The theatrical equipment on the stage appears to be in good condition. The seating in the auditorium is original to the building an due for replacement.

Gymnasium equipment is in good condition, except for wall pads which are showing signs of wear and tear and should be replaced.

Lockers throughout the building are in good condition.







Recommendations:

- Replace the auditorium seating.
- Replace gymnasium wall pads.

Food Service Equipment:

The cooking for Marshall Academy is done on site. Cold storage space at this school is inadequate, with small refrigerator/freezer units located within the cafeteria area. The food service equipment was replaced in the early 2000's and is approaching the end of its useful life. Dry storage space is also limited.

Recommendations:

- Replace food service equipment.

Safety & Security:

There is a secure vestibule and the office does have direct views to the front of the building. Pairs of double doors around the exterior have door pulls on each door, which should be modified (eliminated from one door at each pair) to prevent them from potentially being chained and locked.

Recommendations:

- Replace door hardware at pairs of exterior doors.

Heating, Ventilation & Air Conditioning (HVAC)

HVAC System:

- Roof top unit is approaching the end of its useful life.
- The variable air volume and fan-powered boxes are approaching the end of their useful lives.
- Exhaust fans are approaching the end of their useful lives.
- The air distribution heating and cooling unit is beyond its useful life and is old and rusting.
- The auxiliary equipment's motors are old and their pumps have never been replaced.
- The hot water boiler is 25 years old and has reached the end of its useful life.

Recommendation:

- Replace the kitchen hood makeup roof top unit.
- Replace the variable air volume and fan-powered boxes. Restoration can also be considered.
- Replace exhaust fans.
- Replace the air distribution heating and cooling unit within the next 5-9 years.
- Replace the auxiliary equipment's motors and pumps.
- Replace the hot water boiler.

Electrical

Emergency Power

- The 100 kW emergency generator is approaching the end of its useful life.

Recommendation:

- Engage the vendor to assess the emergency generator's condition and remaining service life.

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

Fire Alarm

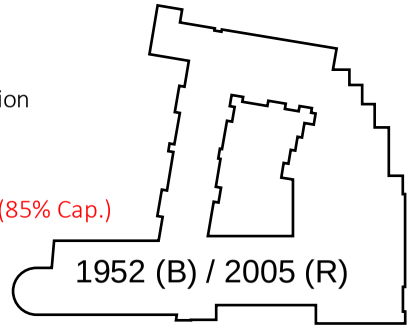
- The fire alarm system is approaching the end of its useful life.

Recommendation:

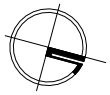
- Replace the Cerberus Pyrotronics model MXL fire alarm system.

BUILDING STATISTICS (2022)

Grades:	| 6 - 8
Address:	| 2900 North 6th Street
	| Harrisburg, PA 17110
Year Built:	| 1952
Add/Reno:	| 2005
	| 1990 Renovation
	| 1979 Addition
Square Footage:	| 154,902 SF
Functional Capacity:	| 829 Students (85% Cap.)
Current Enrollment:	| 745 Students
Site Acreage:	| 19 Acres

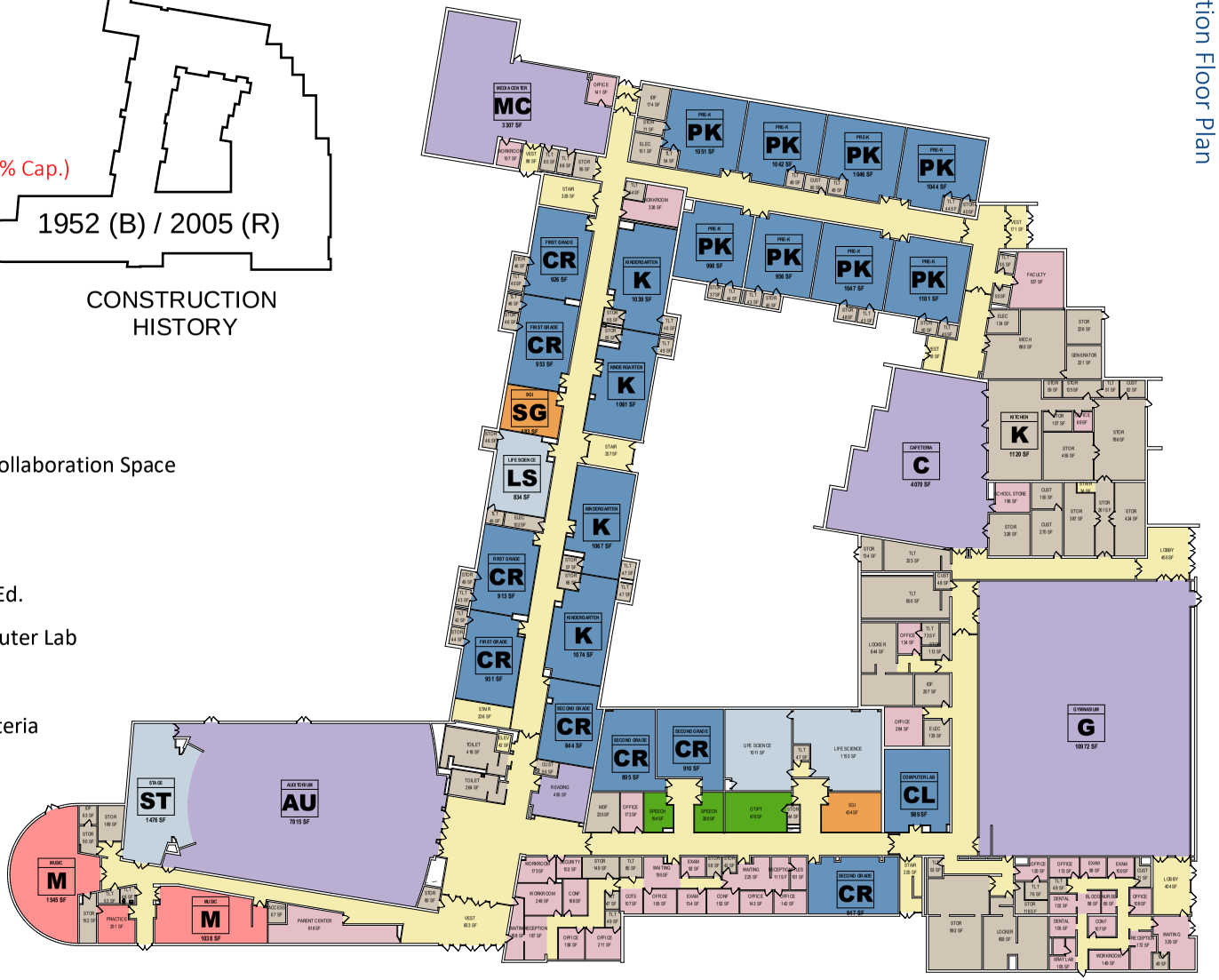


CONSTRUCTION HISTORY



NORTH ARROW

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation



First Floor Plan

Crabtree, Rohrbaugh & Associates - Architects

BUILDING STATISTICS (2022)

Grades:	| 6 - 8
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	| Harrisburg, PA 17110
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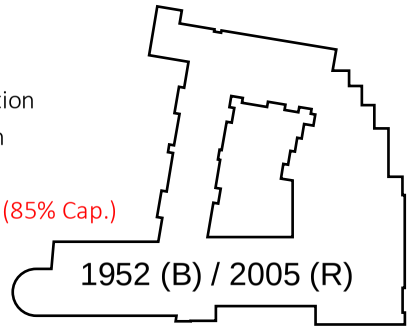

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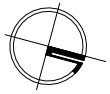

NORTH ARROW

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- Administration
- Service / Utility / Storage
- Circulation

Third Floor Plan

Second Floor Plan

Second and Third Floor Plan

Crabtree, Rohrbaugh & Associates - Architects

6 | Camp Curtin Academy

Address:	2900 North Sixth Street Harrisburg, PA 17110
Construction Timeline:	Originally constructed in 1952; Additions in 1979/2005; Renovations in 2001/2005.
Building Square Footage:	154,815 Square Feet
Site Acreage:	42.50 Acres (Site shared with William Penn High School and adjacent athletics fields)

Building Summary

Camp Curtain Academy is a 3-story building, plus a partial basement, located in the Uptown neighborhood of Harrisburg, PA, near Italian Lake. The School currently houses grades 6-8. The property is served by public water, sewer and natural gas. The building was originally constructed in 1965, with additions built subsequently.

Site Conditions

Camp Curtin Academy occupies the southeast corner of the property, with parking accessed via North 6th Street to the east. The remainder of the property is occupied by the William Penn High School structure to the west and fields to the north. There is an access drive that connects the school's parking area to the north to Division Street to the south, passing between the William Penn facility and Camp Curtin Academy. The school can be accessed by walking paths connected to the City's sidewalks.

The site slopes down gradually from north to south, with a local low point around Division Street at the southwest corner of the Camp Curtin facility, with no apparent drainage issues.

Paving & Walkways:

Vehicular access to the site is from N. 6th Street. Buses pick up and drop off students along the loop in front of the School. There are approximately 9-10 buses and 2-3 vans that transport students to the School. Parents form two lanes of traffic through the parking lot to pick up and drop off. The amount of queuing space is inadequate to support the number of cars at pick up and drop off time.

There are approximately 145 on-site parking spaces, split between the lots to the north of the building and the parking along the drop-off lane to the east of the building. Parking appears to be adequate for the school's needs. The service/loading areas for the kitchen and school receiving are part located near the north parking lots where they connect to the access drive between William Penn and Camp Curtin Academy. Dumpsters are located across the drive from the facility, in an enclosure.

Asphalt pavement is in fair to poor condition, with significant cracking and faded striping. Concrete sidewalks are in good condition, with occasional areas in need of repair, including at the curb cuts for wheelchair access. At the north entrance near the gymnasium, the asphalt drive and concrete sidewalk are level with the first floor elevation with bollards only partially blocking cars from driving onto the sidewalk. Additional bollards should be added.

Accessible parking spaces are provided and appear to be ADA compliant, with an accessible route to the main entrance.

Recommendations:

- Replace damaged portions of concrete sidewalk, including at curb cuts.
- Mill and overlay asphalt paving areas, and restripe.
- Add additional bollards outside the north (gymnasium) entrance.

Play Areas & Equipment:

Within the courtyard there is playground equipment which is in fair condition. There is also hard surface play area with basketball and other equipment just southeast of the facility within a mostly fence-enclosed area.

On the east corner of the site are two fence-enclosed basketball courts, on asphalt paving.

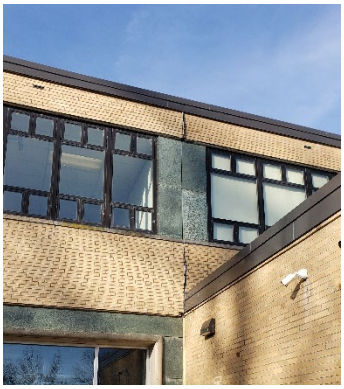
Recommendations:

- Depending on the District's long-term plans, consider removing the playground equipment within courtyard.

Exterior Building Conditions

Exterior Walls:

The building exterior consists of masonry walls with modular brick veneers. Walls in the 2006 addition are load-bearing masonry cavity walls. Portions around the main entrance and southward around the semi-circular music classroom are ashlar stone veneer. Some stone veneer, particularly near grade, has spalled off. Window stools are precast concrete, many of which are dirty or stained. The masonry veneer is generally in good condition, although it is stained from water run-off in a few areas, and older portions due for repointing.



Recommendations:

- Brick veneer should be cleaned around stained areas. Repointing should be done as required.
- Joints should be re-caulked.
- Repair or replace spalled stone veneer.

Roofing:

The School has a membrane roof throughout, of various ages as portions have been replaced or added to. The 2005 additions area is approaching the end of its useful life.

Most overhangs around the building have soffits which are water damaged and/or are in need of new finish layers due to the surface peeling away. Some of the fascia trim at a service bay is also damaged from being hit by larger trucks backing into it. Other trim at the semicircular music room is also damaged.

Recommendations:

- Clean all soffits, replace damaged areas and overcoat entire soffits with acrylic based coating or other suitable coating.
- Replace damaged fascia/trim.
- Replace 2005 era roof in 3-4 years time.

Doors & Windows:

Typical window systems throughout the building are operable, awning-style aluminum projection windows. The windows are supposed to have levers to allow operation but these levers have been generally removed over time. Windows all around the building are due for extensive cleaning. Sealants around windows should be replaced.

Entrance systems are aluminum storefront systems. Exterior double doors have pulls on each leaf which could result in being chained together from the outside – a safety and security concern.

Recommendations:

- Clean all windows as part of ongoing maintenance.
- Repair operable crank levers.
- Replace all sealants around windows.
- Replace exterior double door hardware/pulls.

Interior Building Conditions

Structure:

The original building is a 3-story steel framed structure with CMU backup. The ground floor level is slab on grade. The first and second floors are concrete slab on steel deck supported by steel joists and beams. The 2006 portion of the building is masonry-load-bearing. The building structure appears to be sound, with no apparent deficiencies.

Recommendations:

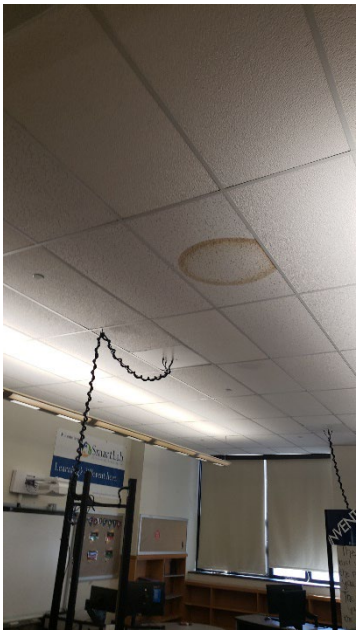
- None at this time.

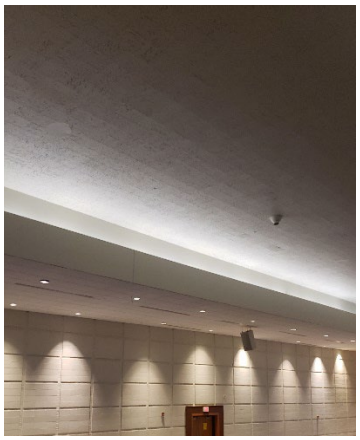
Finishes:

The building has vinyl composition tile (VCT) in the corridors and classrooms, which is in fair condition, although very dirty in some areas, and cracking in various locations. The lobby has porcelain tile flooring which is in fair condition, but cracked at expansion joints. Flooring in toilet rooms is ceramic mosaic tile, while in the kitchen the flooring is quarry tile, all in good condition. The wood floor in the multi-gymnasium is in good condition. Office areas and the media center have carpeting in fair to poor condition. Transition strips are often missing throughout the building, resulting in VCT getting chipped at flooring changes. Stairs and risers are missing their rubber coverings in corridors as well as in the semi-circular music classroom. The VCT flooring at the auditorium, and corridor ramps/stairs is particularly old and due for replacement.

Interior walls are a combination of mostly painted GWB/plaster and painted CMU, while the corridors have a ceramic tile wainscot. The GWB/plaster walls have chipped or are scuffed in numerous locations. The ceramic tile wainscot is damaged in some areas, particularly where door handles hit the wall and on outside corners. Many corridors do not have a cove base which results in dirty corners where the wall meets the floor. Many walls are due for cleaning and re-paint. Ceramic tile wainscots are in the toilet rooms. These wainscots often have stained grout and residual drywall mounting anchors from toilet accessories since removed.

Ceilings throughout most of the building are primarily 2’x4’ suspended ACT. Many ceilings are dirty, stained due to leaks, or slightly warped. The auditorium ceilings include concealed spline suspended ceiling tiles.




Recommendations:

- Replace ceiling tile throughout the entire building.
- Install wall base where missing/with VCT replacement.
- Replace VCT throughout the entire building.
- Replace carpeting in offices and library.
- Re-paint the entire building.

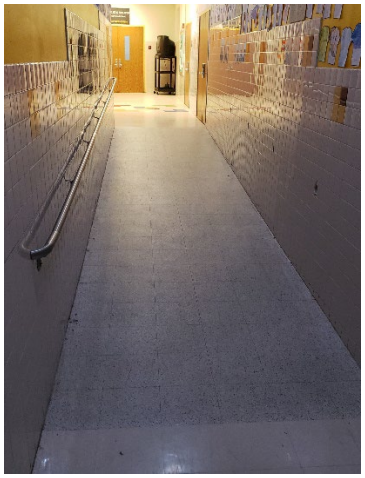
Code & Accessibility:

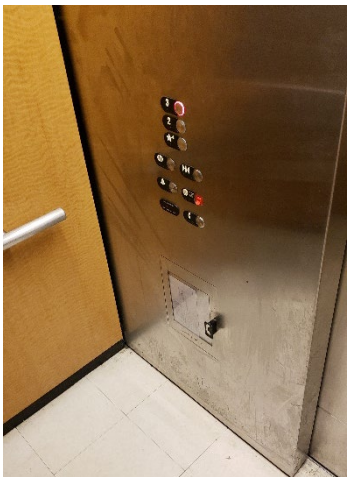
The building has one elevator serving the multi-story area. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

The stage does not have wheelchair lift access, requiring persons to go to the hallway to reach the stage if using a wheelchair. Furthermore, the ramps in the hallways are steeper than allowed by Code and missing handrails.

Water closets in single-user toilet rooms do not have the required fixture clearances around them. The accessible toilet stalls in multi-user toilet rooms do not have grab bars meeting current ADA requirements, and accessories are not installed within reach range. Multi-user toilet rooms with 6 or more toilet fixtures do not have an ambulatory-accessible stall.

Sinks in classrooms are not accessible – panels have been added which close off the wheelchair space and are locked closed.



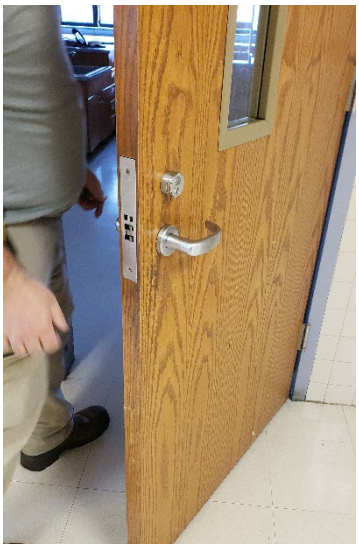


Recommendations:

- Evaluate elevator for any necessary upgrades and replace communications system.
- Replace missing handrails.
- Add wheelchair lift for direct stage access from the auditorium.
- Modify all ADA toilet stalls to comply with current code by providing ample clearance at water closets, moving accessories within reach range, and providing ADA compliant grab bars. This includes establishing ambulatory-accessible stalls where required.

Doors:

Most interior doors are wood with ADA-compliant hardware in fair to good condition, with hollow metal frames. Some doors have scratches and residue which remains from items being hung/taped to them over the years. Hollow metal doors and frames are in fair condition, most requiring painting.

Recommendations:

- Scrape and repaint hollow metal frames with building wide interior painting.

Casework & Built-in Equipment:

Most of the casework dates from the 2006 renovation. While generally in fair condition, countertops are often delaminating and should be replaced.

Typical classrooms have built-in shelving along the exterior wall adjacent to the unit ventilators. If the unit ventilators are removed as part of an HVAC upgrade, this casework would need to be infilled or removed and adjacent finishes patched and repaired.

Recommendations:

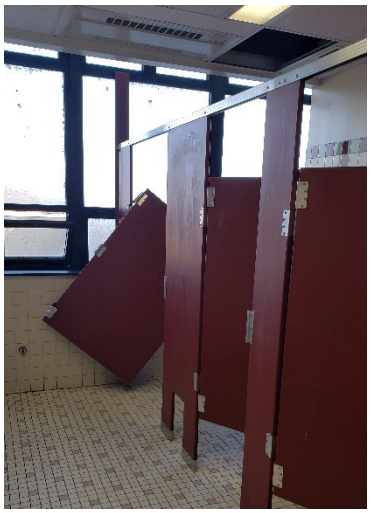
- Consider replacing countertops.
- Modify casework at sinks to be ADA compliant.

Specialty Equipment:

Display cabinets in corridors are missing their operable glass doors. Some fire extinguishers are missing the clear 'bubble' within their cabinet doors.

Toilet Partitions are damaged in areas and have markings/graffiti in numerous locations. Lockers are generally in good condition.

The theatrical equipment (curtains, lighting, projection screen) is in good condition. The stage and risers show are also in good condition. Seating in the auditorium is in good condition.



Recommendations:

- Replace toilet partitions.
- Replace fire extinguisher cabinets

Food Service Equipment:

The cooking for Camp Curtin Academy is done on site. The food service equipment was replaced in 2006 and is in fair to good condition, except for the coolers which requires more immediate replacement.

Recommendations:

- Replace refrigerator/freezer as needed.
- Replace kitchen equipment in 4-5 years.

Safety & Security:

Visitors are buzzed in through a security vestibule and must first enter the office for clearance before being granted access to the rest of the facility. Double-door entrance systems have door pulls on each door which could allow doors to be chained shut preventing safe egress.

Recommendations:

- Replace exterior double door hardware to prevent doors from being able to be chained together from the exterior.

Heating, Ventilation and Air Conditioning (HVAC)

HVAC System:

- The energy recovery unit in the distribution system is currently 17 years old with a life expectancy of 25 years. Units require R22 refrigerant which is no longer in production.
- Exhaust fans are approaching the end of their useful life.
- Air distribution heating and cooling equipment is past useful life or approaching the end of its useful life.
- The current chiller of the chilled water system is 20 years old approaching the end of its useful life at 25 years.
- The McQuay Air cooled series compressor is approaching the end of its useful life.
- Direct expansion (DX) units have suffered severe damage from the elements and storms; units were not mounted to the curbing, relying on the weight of the unit to keep it in place. Electromagnetic interference (EMI) insulation needs to be replaced.
- Unit ventilators are approaching the end of their useful life.

Recommendation:

- Replace distribution system.
- Replace exhaust fans.
- Replace chilled water system.
- Replace air-cooled compressor.
- Replace Direct Expansion (DX) system.
- Replace Unit ventilators.
- Replace air distribution heating and cooling equipment.

Electrical

Lighting

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

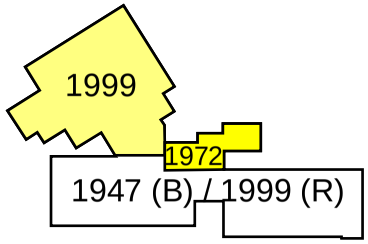
- Replace lighting with LED fixtures.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

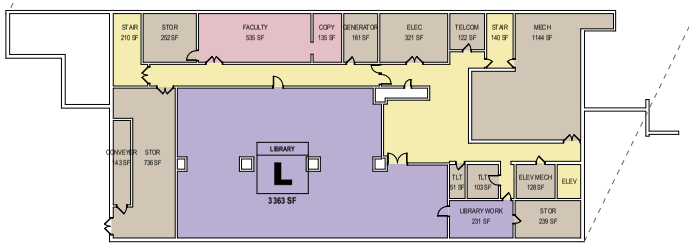
Grades:	6 - 8
Address:	1842 Derry Street
	Harrisburg, PA 17104
Year Built:	1947
Add/Reno:	1999
	1972 Addition
Square Footage:	120,373 SF
Functional Capacity:	658 Students (85% Cap.)
Current Enrollment:	817 Students
Site Acreage:	1.2 Acres

NORTH ARROW



CONSTRUCTION HISTORY

First Floor Plan



Ground Floor Plan

First and Ground Floor Plan

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
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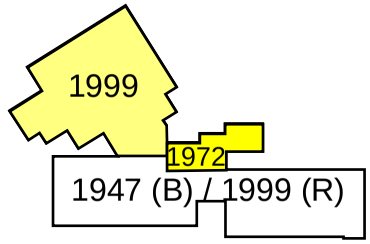

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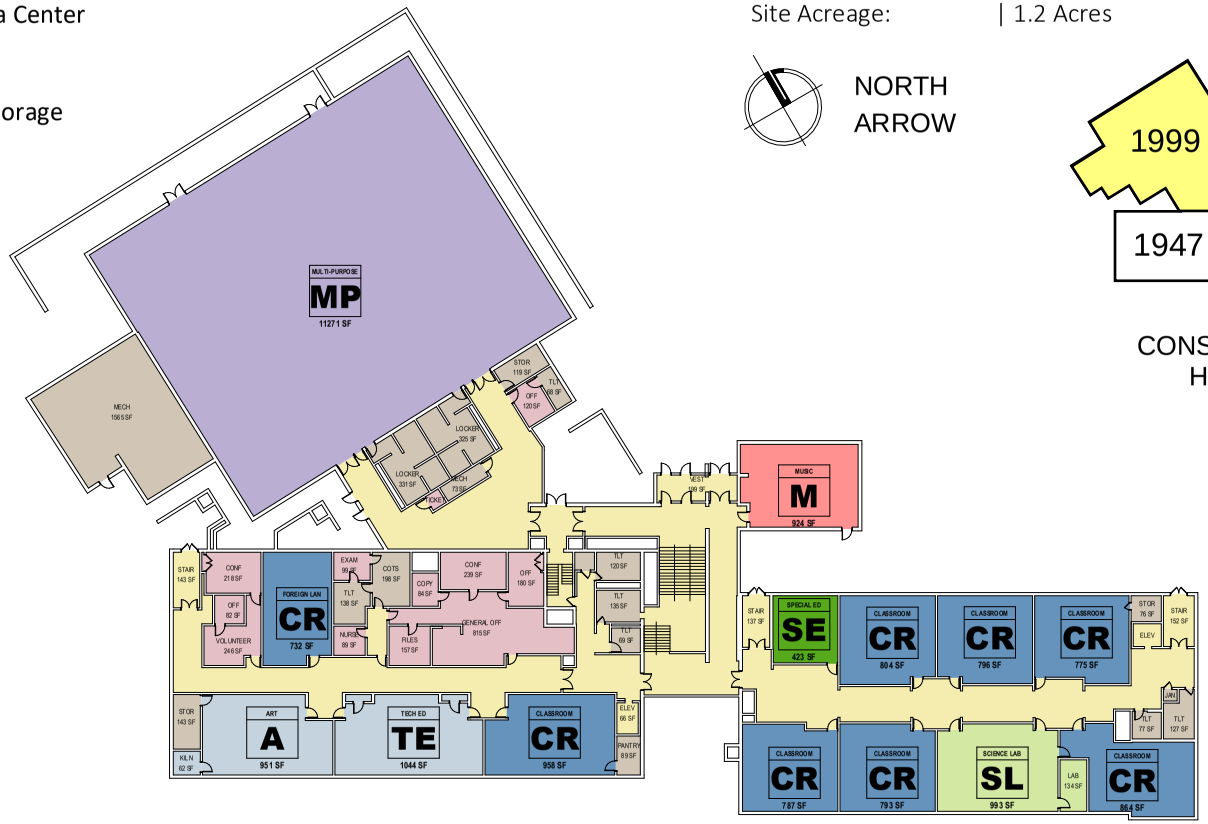

Second Floor Plan

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
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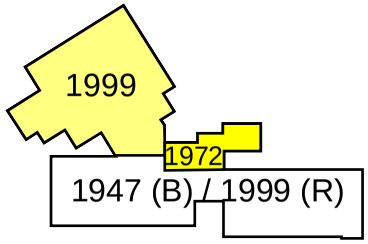

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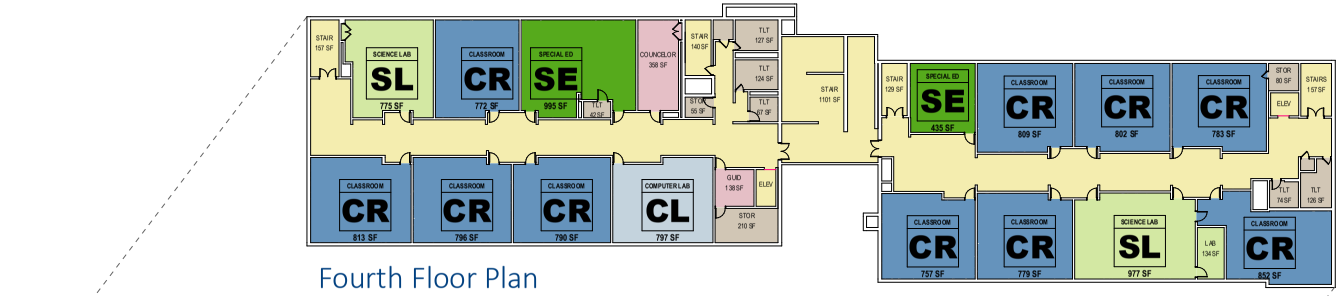
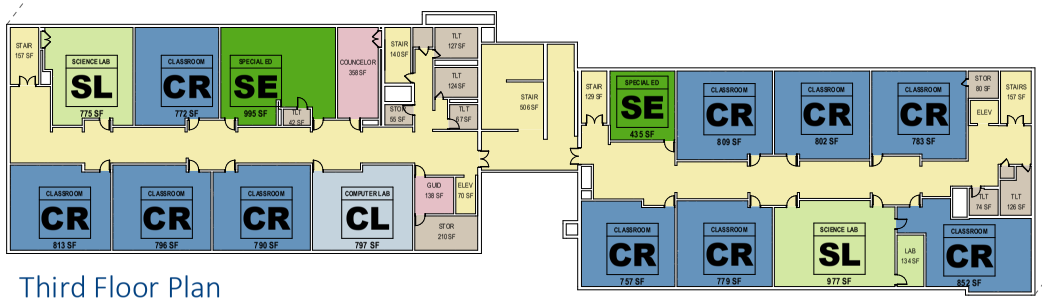


Fourth Floor Plan



Third Floor Plan

Third and Fourth Floor Plan

6 | Rowland Academy

Address:	1842 Derry Street Harrisburg, PA 17104
Construction Timeline:	Originally constructed in 1947; Additions in 1972/1999; Renovations in 1999
Building Square Footage:	118,775 sf
Site Acreage:	2.51 acres combined between two parcels

Building Summary

Rowland Academy is a 4-story building, plus basement, located in the Allison Hill neighborhood of Harrisburg. The School currently houses grades 6-8. The property is served by public water, sewer and natural gas.

Site Conditions

The school structure occupies most of the property, with the balance mostly taken by parking, service access and grassed areas. There is a small playground at the west end of the site. Parking is insufficient for all staff and visitors, so on-street parking is relied upon for the balance. The school can be accessed by walking paths connected to the City's sidewalks. The site drains from north to south. There may be some inadequate drainage in the small courtyards formed by the building's 1999 addition.

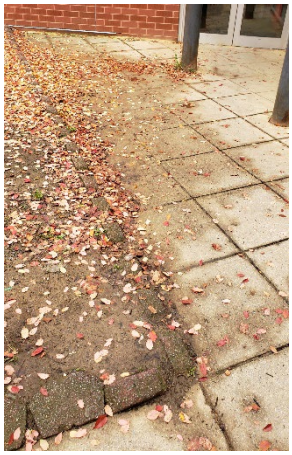
Recommendations:

- Improve drainage at small courtyard next to building entrance.

Paving & Walkways:

Accessible parking spaces are off the drop-off loop at the front entrance, with accessible curb ramps at that location.

There are two other small parking lots, one to the west of the building, fed off of Derry Street, and another between the building and the drop-off loop accessed from South Nineteenth Street. There is also a bus drop-off area fed off of Swatara Street to the northwest. Total site parking accommodates approximately 40 vehicles. Paved asphalt areas are in fair condition. Sidewalks around the building are in good condition.



Recommendations:

- Seal coat asphalt paving as part of ongoing maintenance.

Play Areas & Equipment:

There is a small play area to the west of the building, with equipment in fair condition. Being a middle school, Rowland Academy does not utilize the equipment.

Recommendations:

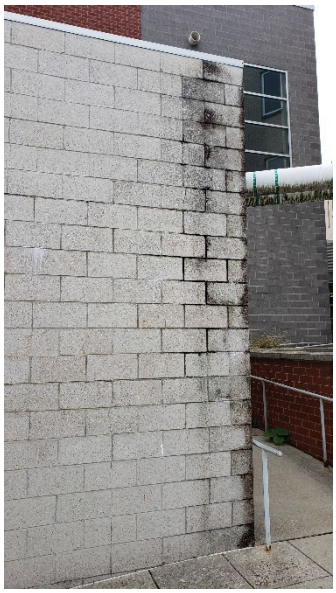
- None at this time.

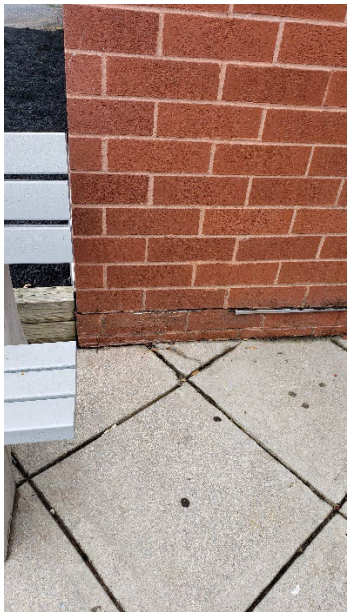
Exterior Building Conditions

Exterior Walls:

The exterior walls are primarily brick at the 1999 additions, and precast paneling and exterior insulation and finish system (EIFS) at the older portions of the building. Most masonry and precast paneling is in good condition, however there is a location of finished CMU being damaged and other masonry being stained from a leaking gutter. The CMU damage, located near the main entrance, appears to be missing the metal coping at the top which would protect it from water infiltration. Additionally, portions of the paneling and masonry are broken away at the loading dock. The EIFS is in generally poor condition, with extensive mildew backup and finish coats being worn away or damaged, thus leaving the insulation and mesh exposed. Other areas the EIFS is entirely torn away, exposing the masonry behind.

There are steel elements around the building, such as the columns at the entrance and the woven steel rod security panels over the gymnasium windows, which are due for new coatings/paint.





Recommendations:

- Repair Exterior Insulation and Finish System.
- Clean stained masonry and precast paneling.
- Replace damaged exterior veneer CMU where damaged.
- Re-caulk joints in masonry and precast concrete.
- Paint steel elements.

Roofing:

The black EPDM roof is at the end of its useful life and is due for replacement.

Soffits at overhanging canopies around the building are in need of repair. The front entrance has missing sections of the linear metal soffit, while other canopies with an acrylic coated or plaster soffit are cracked, torn away, or otherwise damaged.

There is a section of the building near the main entrance which has gutters and downspouts. The gutter appears to be leaking in one area which is the cause of staining on the masonry wall below it.

Recommendations:

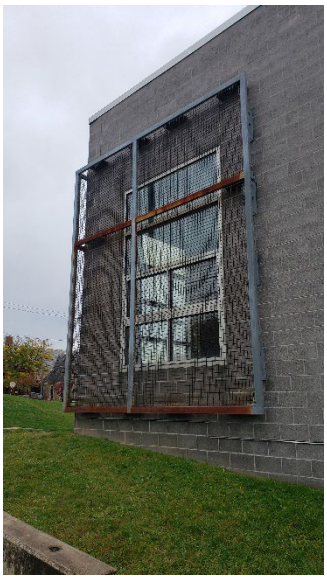
- Repair damaged soffits.

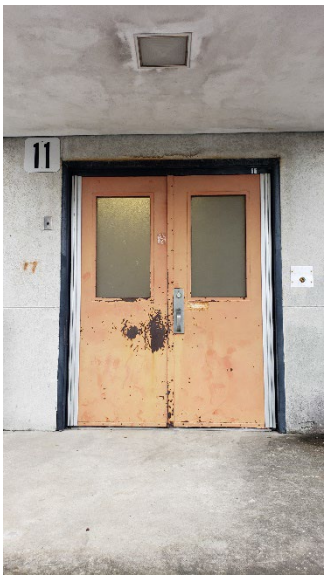
Doors & Windows:

Windows in the newer areas of the building are aluminum storefront and curtainwall systems in good condition. Elsewhere, exterior windows are aluminum casement windows. The casement windows showed signs of age, with the operable portions no longer sealing with fixed portions when closed. Perimeter sealants around all window types is due for replacement.

The door pulls in the entrance doors should be replaced at double doors, so that doors cannot be chained together from the outside.

Service doors are hollow metal or steel and are in poor condition.





Recommendations:

- Replace operable casement windows.
- Replace hollow metal / steel service doors.
- Replace door pulls at double doors so doors cannot be chained together from the outside.

Interior Building Conditions

Structure:

The original, four-story plus basement building is constructed mainly of steel frame construction with roof and floor slabs supported but steel joists and beams. The newer construction from 1999 is a combination of steel frame and masonry load-bearing. The structure appears to be in sound condition.

Recommendations:

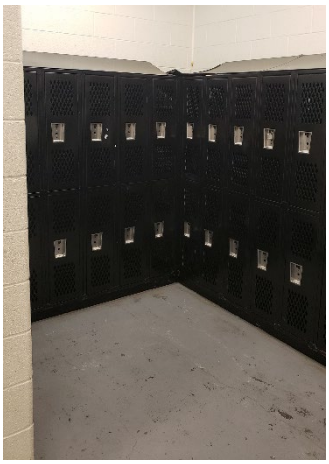
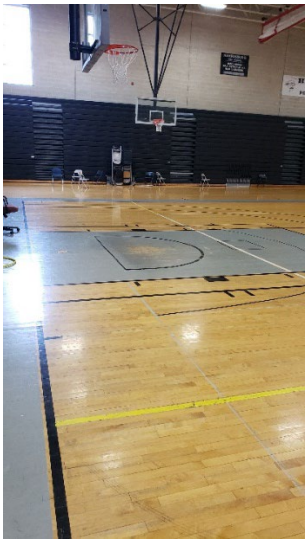
- None at this time.

Finishes:

Wall finishes throughout the building include painted CMU and decorative masonry, structural glazed tile at stairways, painted plaster and GWB, and limited amounts of wood paneling in the corridors. Most of the finishes are in fair condition, however there are areas where the paint is peeling off of the plaster/GWB. There are ceramic tile wainscots in the toilet rooms and corridors. The corridor wainscots were painted over and the paint is wearing off from scratching and other causes. Some stud/GWB walls in corridors is bowed and should be replaced. Most corridor walls do not have a cove base which causes difficulty in cleaning and results in dirty corners where walls meet floors.

Floor finishes include terrazzo, VCT, sealed concrete, wood athletic flooring, and quarry tile in the kitchen. There is carpet in the library and administration suite. VCT is in fair condition, but shows a lot of scuffs and dirt from years of wear. VCT is also cracked and/or chipped in areas. The library has been re-carpeted recently with new carpeting. The wood floor in the 1999 gym is in fair condition, needing to be sanded and refinished. Gym locker rooms have painted concrete floors which need to be repainted. Stairs have rubber treads and painted risers – risers are due for repainting.

The majority of the building has lay-in acoustical ceiling tile of various styles. Much of the lay-in tile is sagging from age or water damaged. Additional ceiling finishes include painted plaster, metal suspended panels, concealed spline suspended systems in stairwells and exposed painted structure. On the ground floor, there are areas of plaster that show evidence of moisture damage.



Recommendations:

- Repair and repaint damaged areas of plaster/GWB where they occur.
- Replace ceiling tile throughout the building.
- Repaint walls throughout the building.
- Sand and refinish gymnasium floors.
- Repaint coated concrete floors in locker rooms.
- Install wall base at walls where missing.
- Consider replacing VCT throughout as part of a comprehensive renovation project.
- Replace concealed spline ceilings in stairwells with lay-in ceilings

Code & Accessibility:

Many of the guard rails in the building's stairwells are not 42 inches high, and are serving the role as handrails, although they do not meet the handrail continuity and shape requirements of accessibility codes.

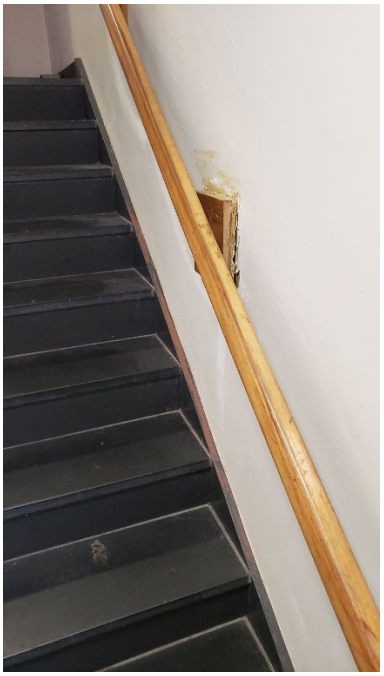
Water closets in accessible toilet stalls do not have the required fixture clearances around them due to lavatories or partitions being installed directly adjacent to them. Grab bars do not meet current ADA requirements, and accessories are not installed within reach range. Also, although not necessarily a Code issue, there are direct lines of sight in to toilet rooms.

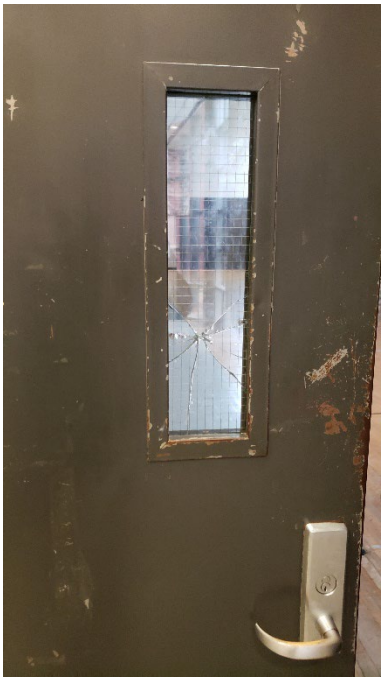
There are two elevators, which have operational issues. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

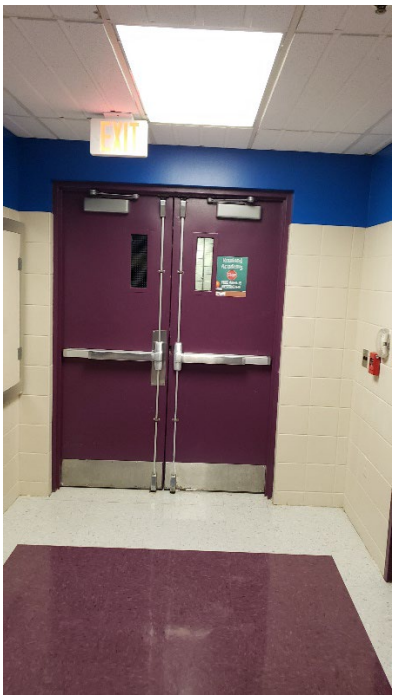
Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.

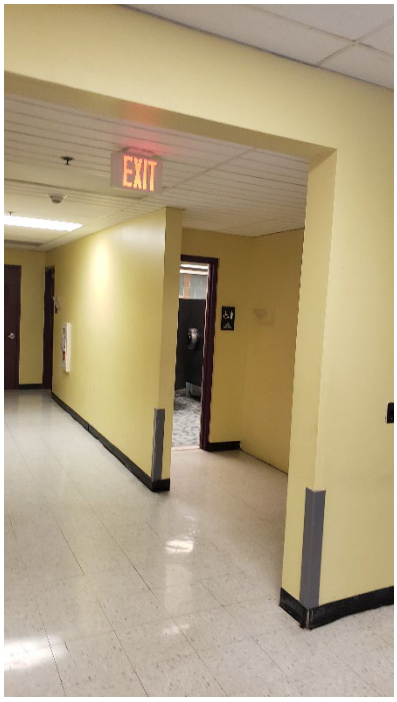
Doors and vision panels have wire glass, which is no longer permissible in educational facilities. Some cross-corridor sets of double doors each about 30 inches wide. Accessibility codes require at least one leaf to be 36 inches.

Both Elevators were not operational at the time of building walkthrough.









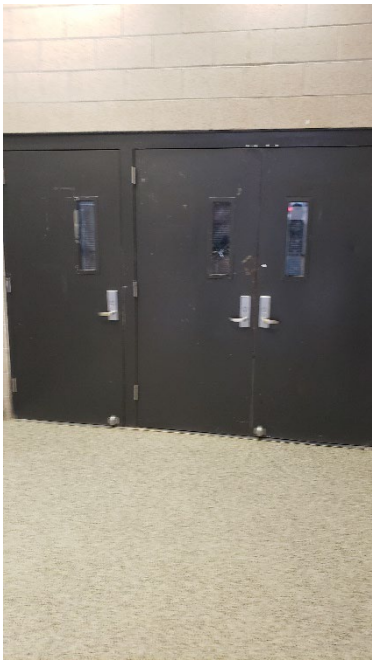
Recommendations:

- Replace handrails and guard rails in stairwells to comply with the IBC and ADA guidelines.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by removing the lavatories adjacent to the water closets to allow proper clearances at the water closets, moving accessories within reach range, and providing ADA compliant grab bars.
- Evaluate elevators for any necessary upgrades and replace communications system.
- Replace doors and vision panels containing wire glass.
- Replace double doors so that at least one leaf is 36 inches wide.
- Reconfigure toilet rooms to eliminate line of site concerns.

Interior Doors:

Doors throughout the building are hollow metal or wood set in to hollow metal frames. Vision panels in doors have wire glass which is no longer permissible in educational facilities. Some hollow metal doors and frames around the 1999 gymnasium addition are in poor condition, with broken glass, dents and flaked off paint.



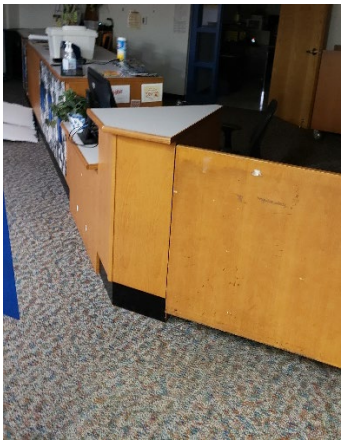


Recommendations:

- Replace doors and vision lites containing wire glass.
- Replace damaged hollow metal doors and frames.

Casework & Built-in Equipment:

Casework throughout the building was replaced during the 1999 renovations. Casework is in fair condition, with countertops being particularly poor and delaminating. Some casework has missing drawers and panels. Hardware is bent or no longer secure to panels.

Recommendations:

- Replace built-in casework throughout the building.

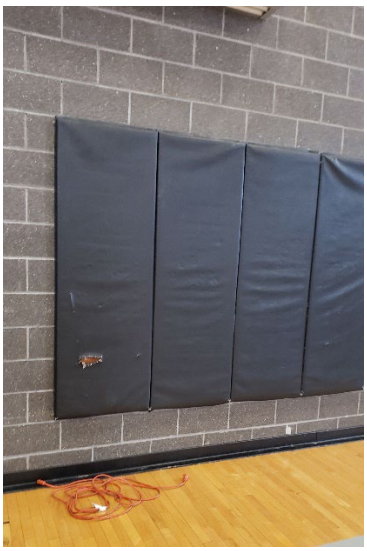
Specialty Equipment:

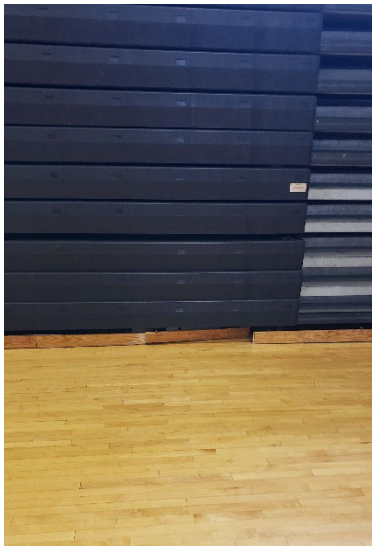
The bleachers are in good condition except for a couple locations of damaged base trim. Athletics equipment in the gymnasium is in good condition, except for wall pads which are torn in some locations.

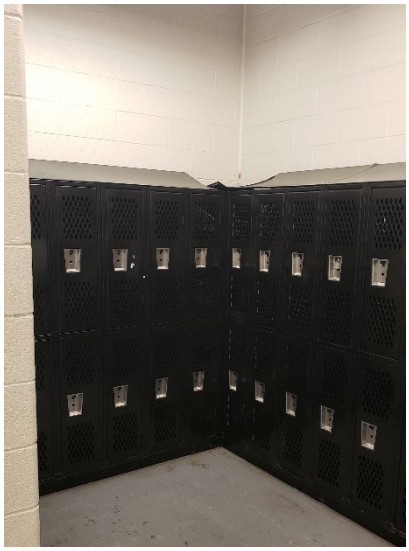
There is an operable partition at the cafeteria platform which has damaged panel finishes.

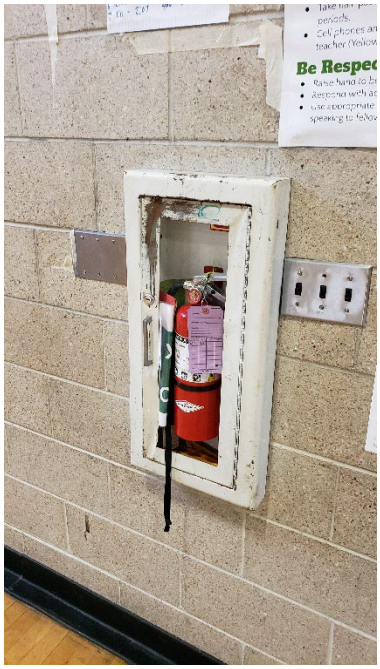
Lockers throughout the building were replaced in 1999, but are in poor condition

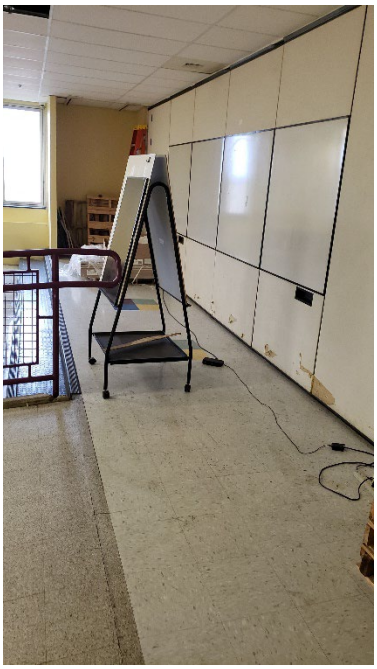
Fire extinguisher cabinets are damaged throughout the building.









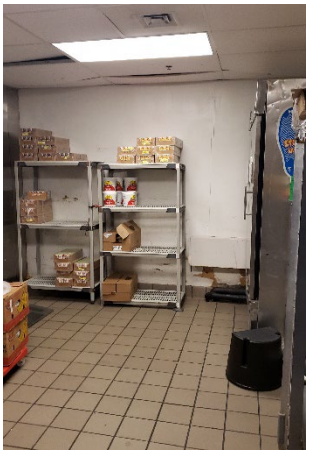


Recommendations:

- Replace the broken base trim in bleachers.
- Replace gymnasium wall pads.
- If an operable partition is still desired at the cafeteria platform, it should be replaced. Otherwise, consider replacing with permanent wall or eliminate a wall altogether.
- Replace lockers throughout the building.
- Replace fire extinguisher cabinets throughout the building.

Food Service Equipment:

The majority of the food service equipment was replaced as part of the 1999 renovation and should be considered for replacement as part of a renovation project. The walk-in freezers and coolers are in poor condition and should be replaced.



Recommendations:

- Replace food service equipment and walk-in cooler/freezers.

Safety & Security:

There is a secure vestibule for visitors entering the building. Visitors must first enter the office through the security vestibule before being granted access to the rest of the facility. However, the main office line of site to the entrance is limited. Entrances with double doors have pulls which could be chained together from the exterior which is a safety and security concern.

Recommendations:

- Consider reconfiguring the office location as part of a major renovation project.
- Replace exterior door hardware at double doors so that they cannot be chained together from the exterior.

Heating, Ventilation & Air Conditioning (HVAC)

HVAC System:

- The package roof top unit are approaching the end of its useful life.
- Air-handling unit is approaching the end of its useful life.
- Variable air volume/fan-powered box is approaching the end of its useful life.
- Exhaust fans are approaching the end of their useful lives.
- The chiller is approaching the end of its useful life.

Recommendation:

- Replace package roof top unit (DX cooling and gas heat).
- Replace air-handling units and supply fans.
- Replace duct coils for variable air volume/fan-powered box. Restoration can also be considered.
- Replace exhaust fans.
- Replace the Trane 140-ton air-cooled chiller.

Electrical

Emergency Power

- Both 35 kW emergency generators are approaching the end of their useful lives.

Recommendation:

- Engage the vendor to assess both emergency generator's condition and remaining service life.

Lighting

- The existing lighting uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

Fire Alarm

- The fire alarm is approaching the end of its useful life.

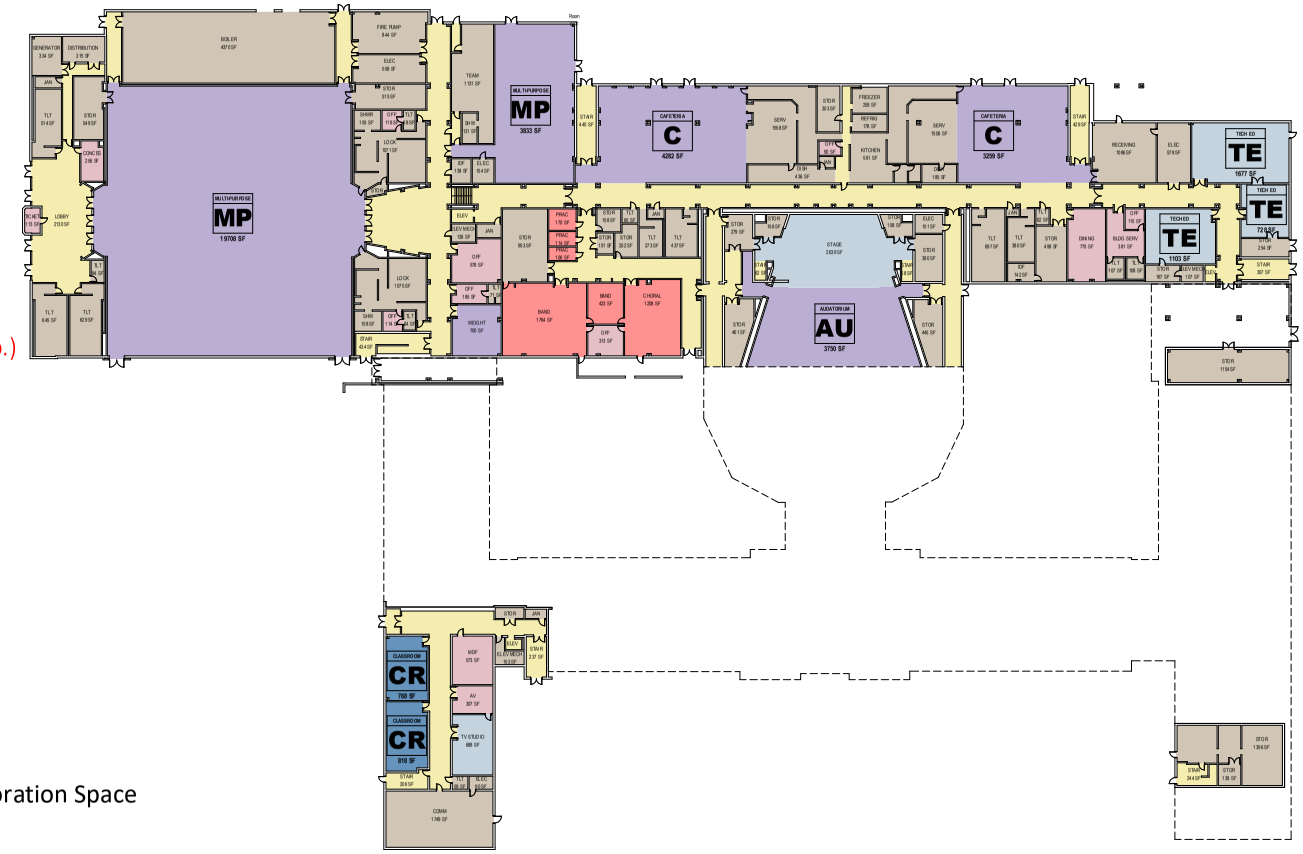
Recommendation:

- Replace the Siemens model M/C FQ fire alarm system.

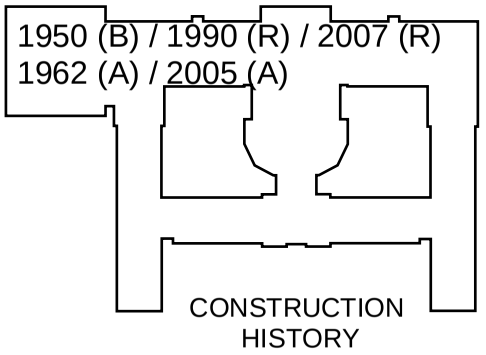
BUILDING STATISTICS (2022)

Grades:	9 - 12
Address:	2451 Market Street,
	Harrisburg, PA 17103
Year Built:	1922
Add/Reno:	2007 Renovation
	2005 Addition
	1990 Renovation
	1962 Addition
Square Footage:	304,298 SF
Functional Capacity:	1,020 Students (85% Cap.)
Current Enrollment:	1,187 Students
Site Acreage:	26 Acres

NORTH ARROW



- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation



First Floor Plan

BUILDING STATISTICS (2022)

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NORTH ARROW

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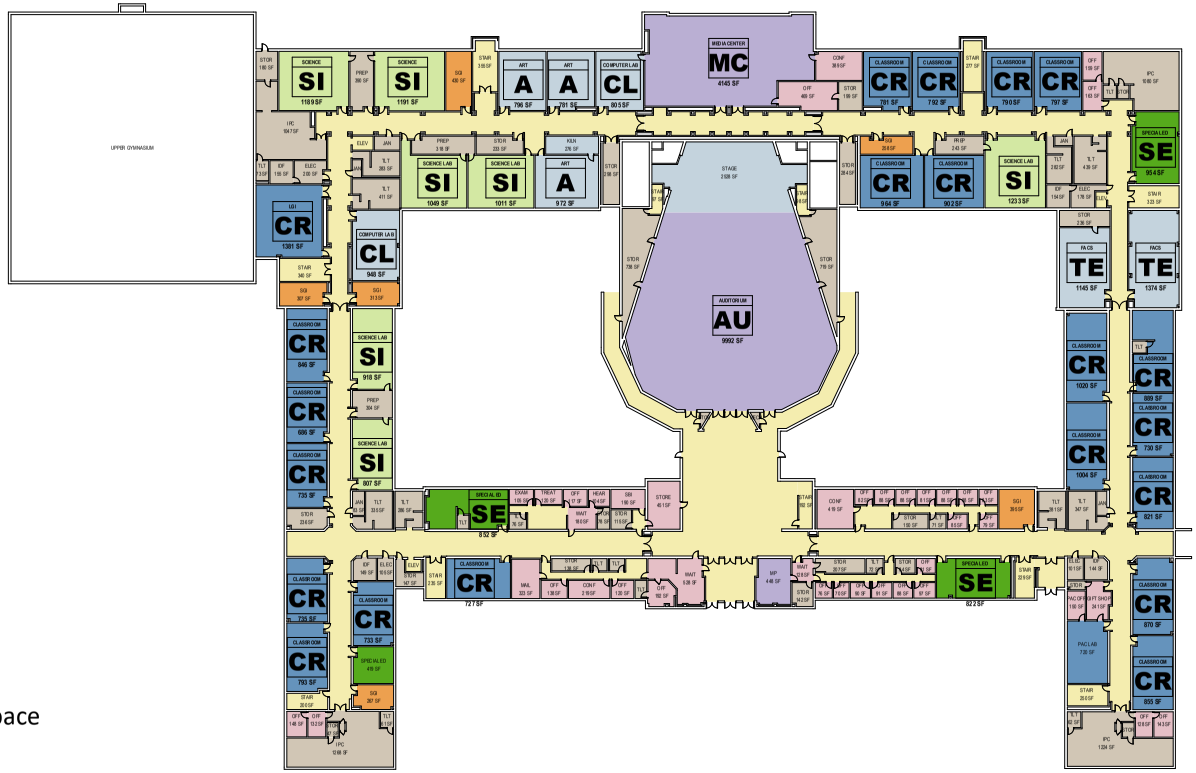
- Administration
- Service / Utility / Storage
- Circulation



1950 (B) / 1990 (R) / 2007 (R)
1962 (A) / 2005 (A)

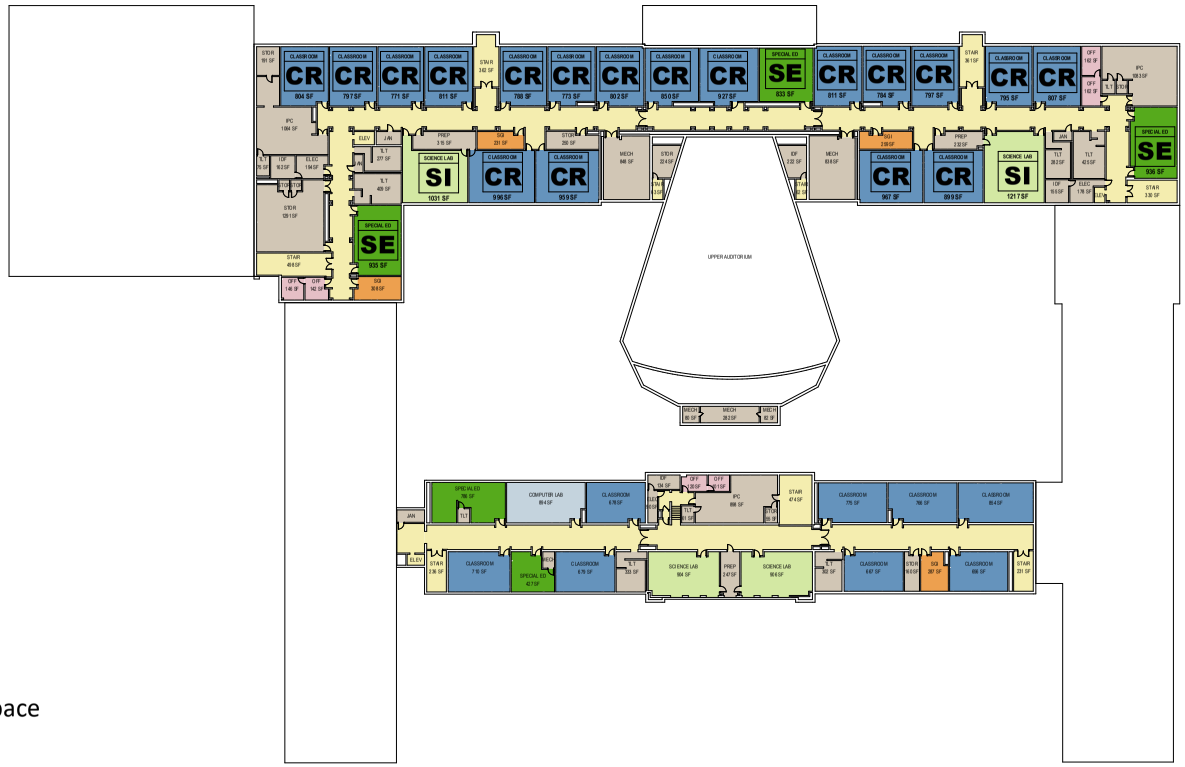
CONSTRUCTION HISTORY

Second Floor Plan

BUILDING STATISTICS (2022)

Grades:	| 9 - 12
Address:	| 2451 Market Street,
	| Harrisburg, PA 17103
Year Built:	| 1922
Add/Reno:	| 2007 Renovation
	| 2005 Addition
	| 1990 Renovation
	| 1962 Addition
Square Footage:	| 304,298 SF
Functional Capacity:	| 1,020 Students (85% Cap.)
Current Enrollment:	| 1,187 Students
Site Acreage:	| 26 Acres

NORTH ARROW



- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
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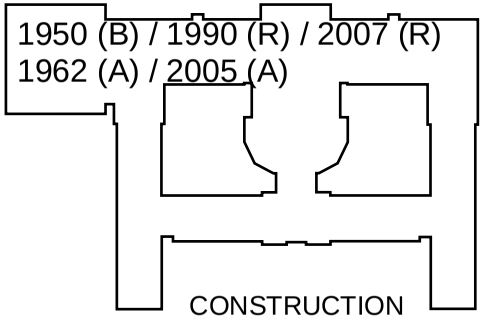


Third Floor Plan

6 | Harrisburg High School – John Harris Campus

Address:	2451 Market Street Harrisburg, PA 17103
Construction Timeline:	Originally constructed in 1925; Additions in 1962/2005; Renovations in 1990/2007.
Building Square Footage:	292,090 sf
Site Acreage:	19.80, includes track and stadium, field house

Building Summary

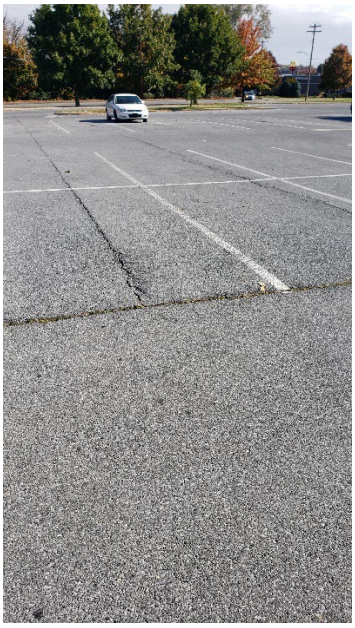
Harrisburg High School – John Harris Campus is a 3-story building located at the east end of the Market Street corridor of Harrisburg. The campus is shared with Marshall Academy as well as Severance Stadium and Field House. The School currently houses grades 9-12. The property is served by public water, sewer and natural gas.

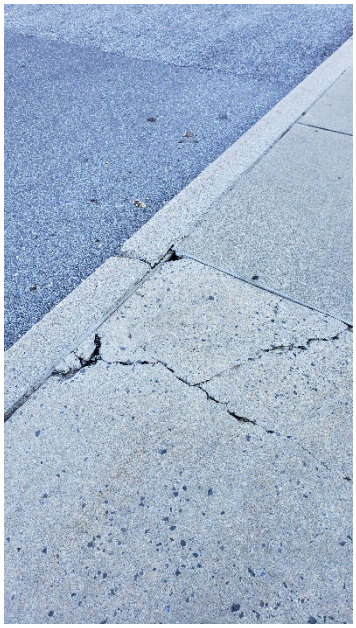
Site Conditions

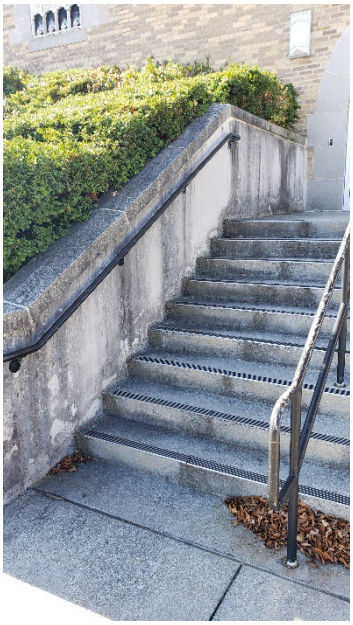
The building is constructed on a hill which slopes away from the site to the south, east and west. The south portion of the building, which faces Severance Stadium is three stories. The north portion of the building, facing Market Street is two stories, and the east and west wings and central auditorium are one story, with partial basements under the wings. The site is accessible by walkways connected to the City's sidewalks.

Paving & Walkways:

Vehicular access to the site is from both Market Street and South 25th Street. There are ADA accessible parking spaces in each of the parking areas, as well as accessible routes from the parking spaces to the building entrances. The parking lots, including the lot adjacent to the field house, accommodate 317 vehicles. The asphalt paving around the building is in fair condition. Generally, the concrete sidewalks are in good condition, although there are a few cracked flags and other areas in need of new sealant between flags. Concrete retaining walls adjacent to stairs and ramps are spalling in several locations.







Recommendations:

- Seal coat asphalt paving as part of ongoing maintenance.
- Replace damaged/cracked flags of concrete sidewalk.
- Replace sealant between flags of concrete as part of ongoing maintenance.
- Repair spalling concrete stair retaining walls.

Athletic Facilities:

The school is served by Severance Stadium, a football stadium which also contains a running track with pole vault and jumping lanes. The complex has a field house on the east end, covered in a separate report. There is also a baseball field on the site, adjacent to Marshall Academy. The baseball complex includes batting cages.

Recommendations:

- None at this time.

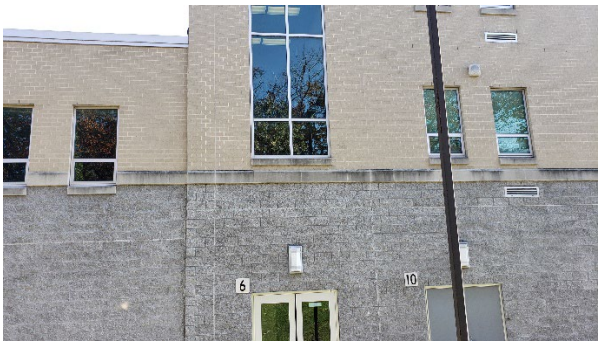
Exterior Building Conditions

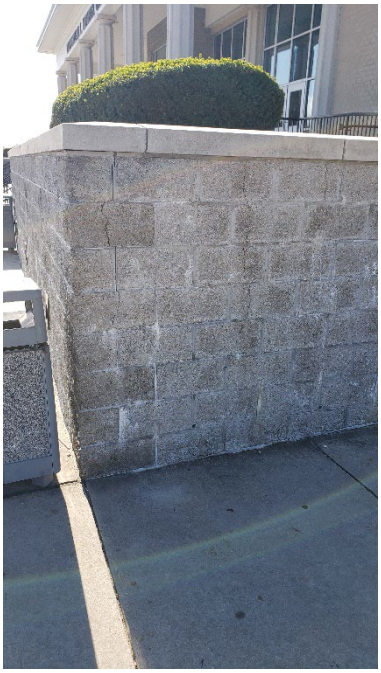
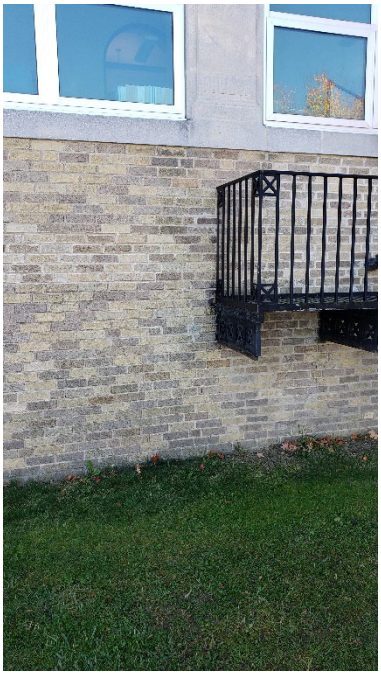
Exterior Walls:

The building's exterior consists mainly of brick veneer with precast architectural concrete accents. The newer wing of the building also has ground face CMU veneer at the lower level. Both are in good condition throughout, although the precast accents require cleaning as part of the building's ongoing maintenance.

The CMU retaining walls near the gymnasium entrance are cracking and have efflorescence – signs that the walls do not properly drain moisture.

Painted areas (columns, box beams, etc.) at overhangs and canopies require scraping and repainting. Some trim needs to be repaired.



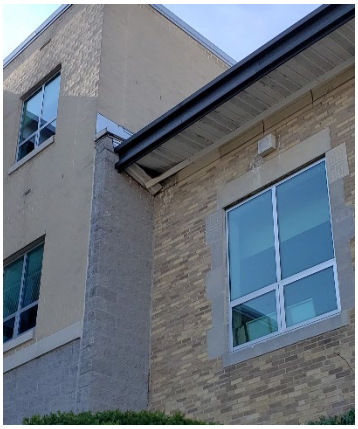
Recommendations:

- Repair gymnasium entrance retaining masonry walls.
- Clean masonry and precast features.

Roofing:

The majority of the roof is an adhered EPDM membrane roofing system, with some areas also a ballasted system. The roof will be due for replacement in 4-6 years.

Soffits around the building are in need of cleaning and missing trim pieces need to be replaced.

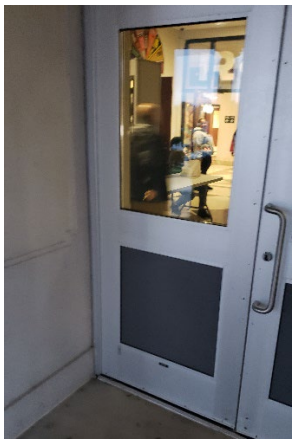



Recommendations:

- Clean soffits, and repair/replace trim where damaged or missing.

Doors & Windows:

The exterior aluminum windows and storefront entrances were replaced in 2005 and are in good condition. Classroom windows have operable awning style vents. The exterior entrances/exits have double doors with pulls on each leaf which is a security/safety concern because the doors could be chained together.



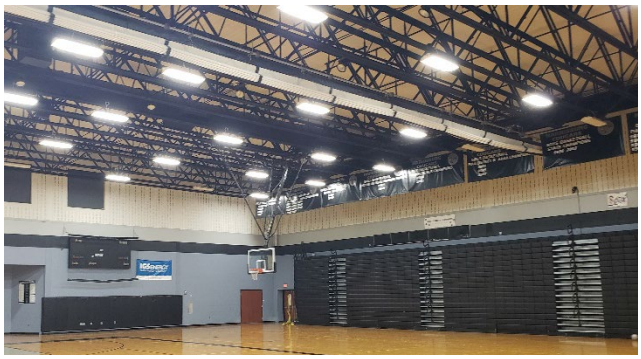
Recommendations:

- Replace hardware at double door entrances/exits.

Interior Building Conditions

Structure:

The building is a combination of load-bearing masonry and steel frame structure, with steel columns supporting steel beams and open web joists in the 2005 addition and load-bearing masonry in the original building. Interior partitions are also a combination of different types, including non-loadbearing concrete masonry units (CMU) as well as gypsum wall board over metal studs. The structure as a whole appears to be in sound condition.

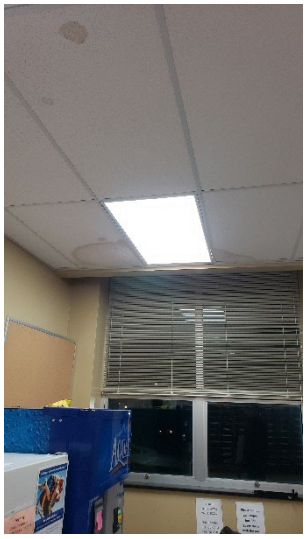


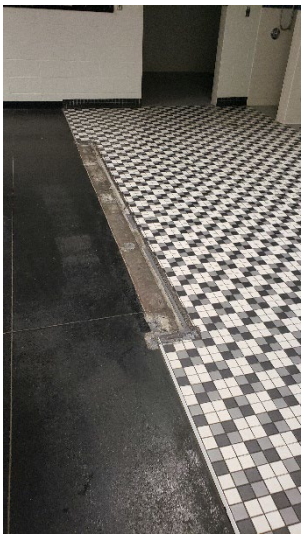
Finishes:

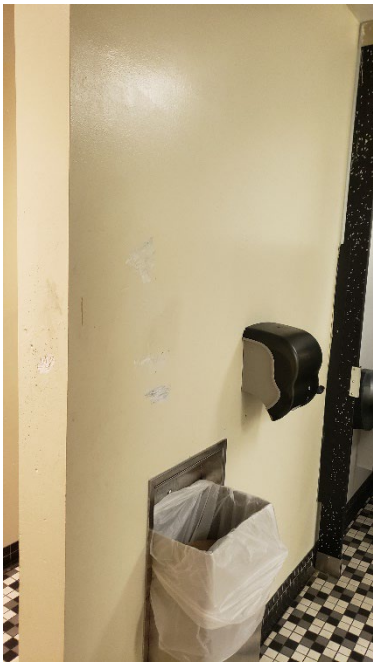
Wall finishes throughout the building include plaster applied to masonry and stud walls, gypsum board, painted CMU in the 2005 addition, and wood paneling in the auditorium. Locker room shower areas have glazed ceramic tile finishes. Plastered corridor walls have areas of damage which should be repaired, commonly at corners and where door hardware hits the wall. Painted CMU walls in toilet rooms are particularly dirty, and also contain residual wall anchors from previously removed toilet accessories. Plaster/GWB walls within many classrooms have areas requiring paint touch-ups due to items being hung and removed from the walls. The gymnasium walls are due for new paint finishes.

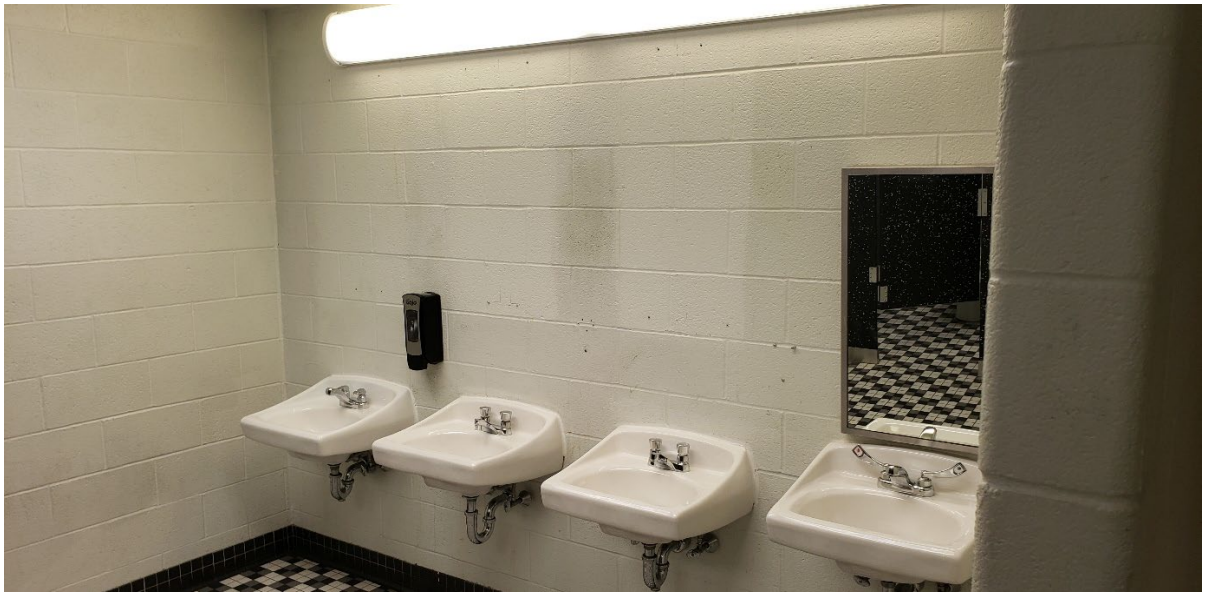
Floor finishes include terrazzo in the original building corridors, VCT in the classrooms and 2005 addition corridors; mosaic ceramic tile in toilet rooms and locker rooms, wood athletic flooring in the gymnasium, and carpet tile in the administration suite, auditorium, media center and select classrooms. The carpeting is in good condition in most spaces, but auditorium carpeting is due for replacement. Also in the auditorium is painted concrete which is due for refinishing. The terrazzo in the corridors has cracks in several areas. Transitions in locker rooms where ceramic tile abuts other flooring need to be repaired. VCT is in fair condition, with certain rooms and areas requiring VCT replacement due to delamination or damaged tile. The floated wood gymnasium floor is due for replacement.

The majority of the building has lay-in acoustical ceiling tile which is in fair condition, but should have water damaged tiles replaced. The toilet rooms have painted GWB ceilings. The main lobby has painted plaster ceilings.





Recommendations:

- Touch-up damaged wall paint in classrooms.
- Repaint bathrooms while properly plugging previous wall anchor areas.
- Repair damaged plaster areas.
- Replace damaged acoustical ceiling tiles.
- Replace carpeting in auditorium.
- Refinish painted concrete in auditorium along with seating replacement.
- Replace gymnasium floor.

Code & Accessibility:

The building has two elevators at the 2005 addition area, as well third elevator serving the two-story original building area. Portions of the original building have wheelchair lifts to access classroom areas not served by the elevators and otherwise only accessed via stairs. Elevators were installed during the 2005 additions and renovations project. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

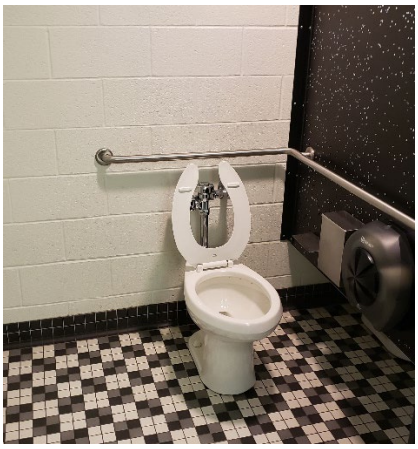
Guard rail and handrail assemblies at original building stairs do not meet current height and handrail requirements.

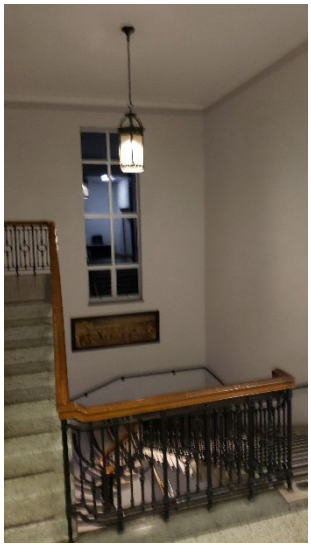
The stage has a wheelchair lift access, although it is not able to be accessed due to stored items blocking it off. However, if the stage is modified in the future, a second accessible means of egress may need to be added.

Water closets in accessible toilet stalls do not have the required grab bars per current ADA requirements, and accessories are not installed within reach range.

Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.

Accessible sinks where they occur within classrooms lack the required knee and toe clearance underneath.



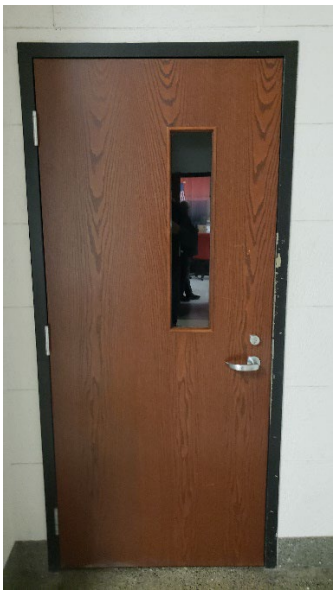


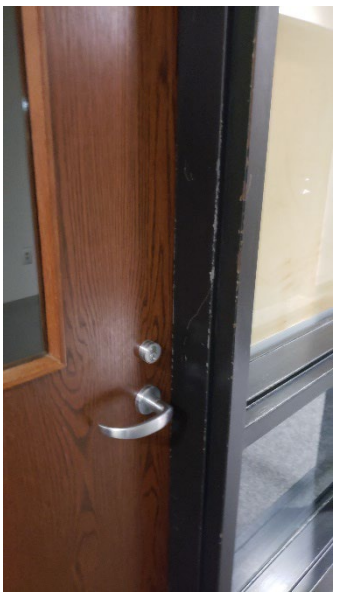
Recommendations:

- Evaluate elevators for any necessary upgrades and replace communications technology.
- Replace the guard/handrail around the stairs with a new guard and handrail that is compliant with current code.
- Renovate all non-ADA compliant single occupancy toilet rooms to be ADA compliant.
- Modify all ADA toilet stalls to comply with current code by moving accessories within reach range and providing ADA compliant grab bars.

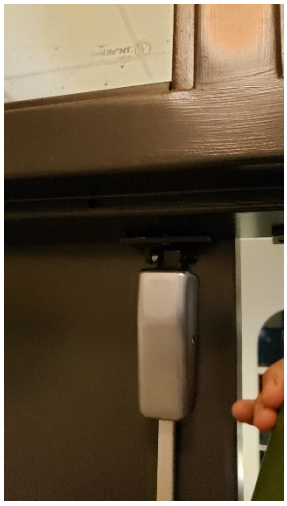
Doors:

Interior wood doors throughout the building mainly date from 2005 and are in generally good condition. A few doors have damage which may require the door to be replaced. Door hardware is lever-style and appears to be ADA compliant. Hollow metal doors and frames should be repainted.










Recommendations:

- Replace damaged doors.
- Scrape and repaint hollow metal doors and frames.

Casework & Built-in Equipment:

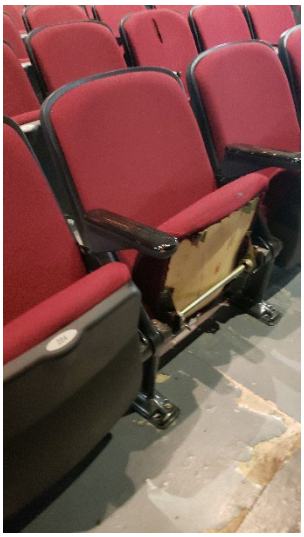
Built-in casework throughout the building was replaced in 2005, as was the library furniture. Most is in good condition, however drawers are missing from tables in science labs (perhaps purposefully). Library furniture has been particularly heavily used and is due for replacement. Locations where sinks occur in casework should be modified where required to have an accessible location per current accessibility standards.

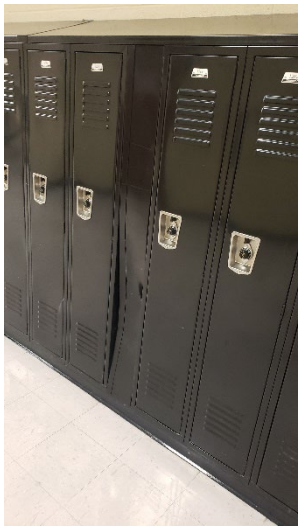

Recommendations:

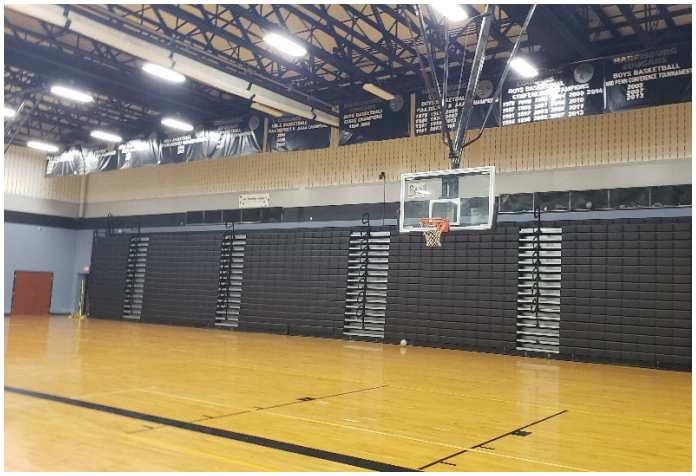
- Replace drawers in science labs if desired.
- Modify casework where accessible sinks are required.
- Replace library furniture.

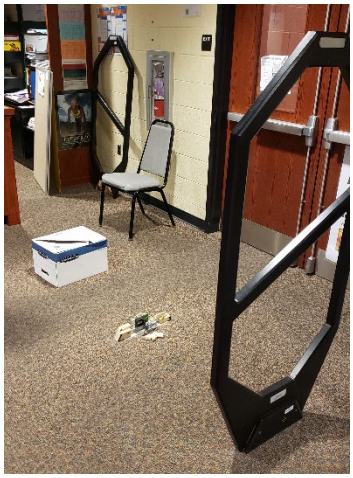
Specialty Equipment:

Lockers in hallways are in fair condition, with certain areas requiring repair. These areas mostly are where infill panels occur between lockers. Auditorium seating is due for replacement – many chairs are damaged or have missing parts. The theatrical equipment is in good condition, as is the gymnasium equipment. The library is missing portions of its theft prevention system. Gymnasium equipment – wall pads, specifically – needs to be replaced.







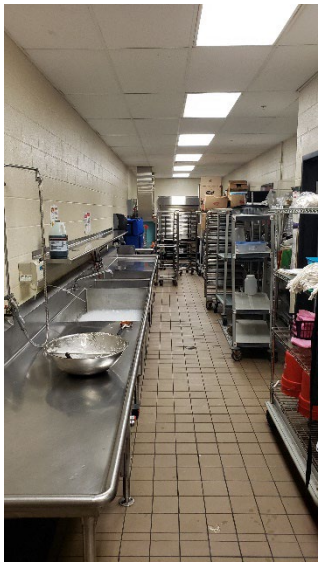


Recommendations:

- Replace auditorium seating.
- Replace library theft protection devices.
- Replace damaged locker infill panels.
- Replace gymnasium wall pads.

Food Service Equipment:

All kitchen equipment was entirely replaced in 2005 and is in good condition.



Recommendations:

- Food service equipment will be due for replacement in 3-5 years.

Heating, Ventilation & Air Conditioning (HVAC)

HVAC System:

- Unit ventilators are approaching the end of their useful service lives.
- Fan coil units are approaching the end of their useful service lives.

Recommendation:

- Replace unit ventilators in phases.
- Replace fan coil units in phases.

Plumbing

Domestic Water System:

- The domestic water booster pumps are approaching the end of their useful lives.

Recommendation:

- Investigate the failed pump in the domestic water booster pump set to determine if it can be repaired; replace pump set if needed.

Electrical

Lighting:

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

Fire Alarm:

- The fire alarm system is approaching the end of its useful life.

Recommendation:

- Replace the Edwards model EST-2 fire alarm system.

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

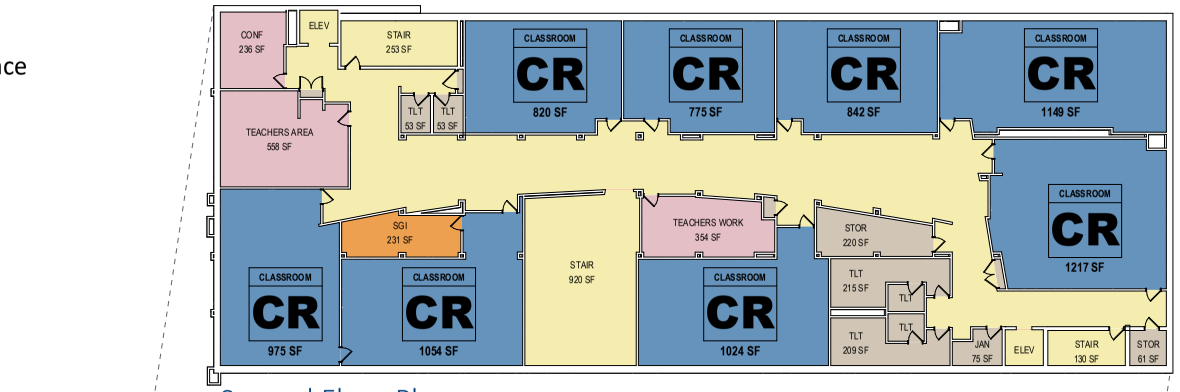
BUILDING STATISTICS (2022)

Grades:	9 - 12
Address:	215 Market Street,
	Harrisburg, PA 17101
Year Built:	1946
Add/Reno:	2004 Renovation
Square Footage:	38,100 SF
Functional Capacity:	382 Students (85% Cap.)
Current Enrollment:	328 Students
Site Acreage:	?

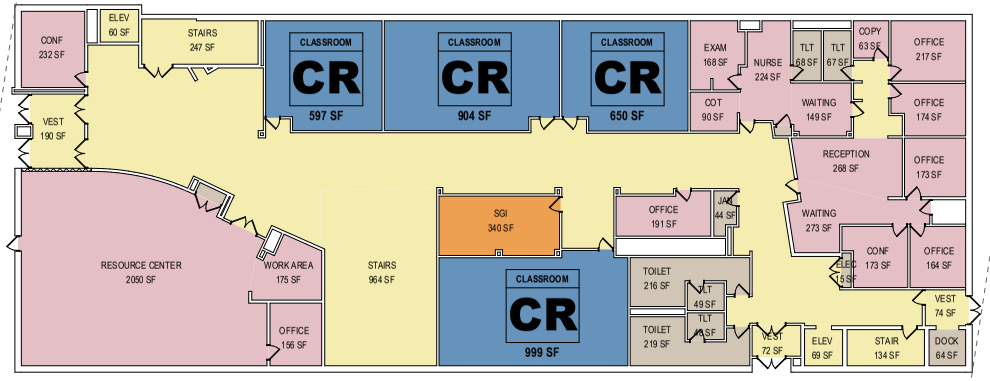
NORTH ARROW

1946 (B) / 2004 (R)

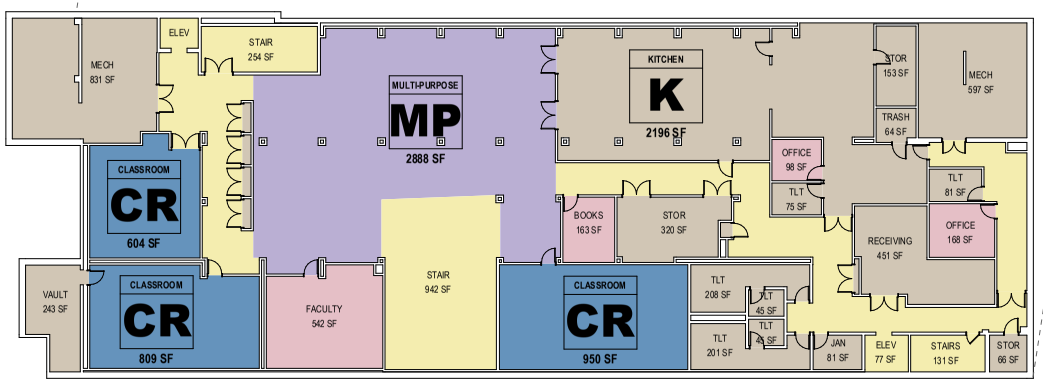
CONSTRUCTION HISTORY



Second Floor Plan



First Floor Plan



Ground Floor Plan

First, Second, and Ground Floor Plan

- Standard Classrooms
- Large Group Instruction / Collaboration Space
- Science Classrooms
- Small Group Instruction
- Learning Support / Special Ed.
- Art / FCS / Tech Ed. / Computer Lab
- Music / Performing Arts
- Multipurpose / Gym / Cafeteria
- Auditorium / Media Center
- Administration
- Service / Utility / Storage
- Circulation

BUILDING STATISTICS (2022)

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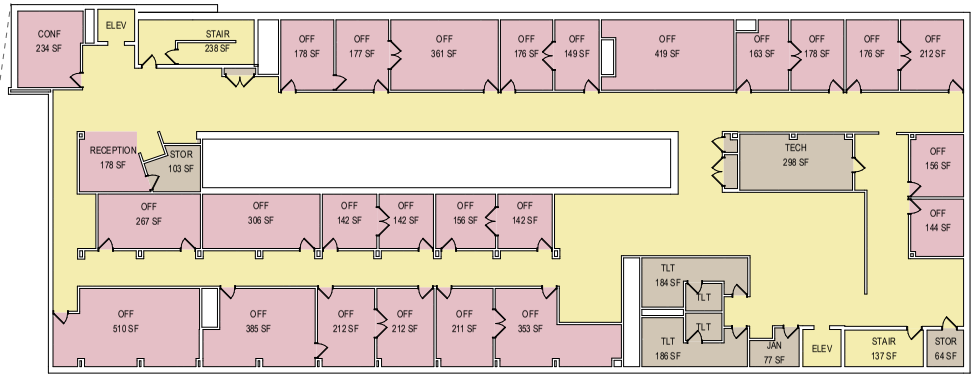
Year Built:	1946
Add/Reno:	2004 Renovation
Square Footage:	38,100 Sf
Functional Capacity:	382 Students (85% Cap.)
Current Enrollment:	328 Students
Site Acreage:	?

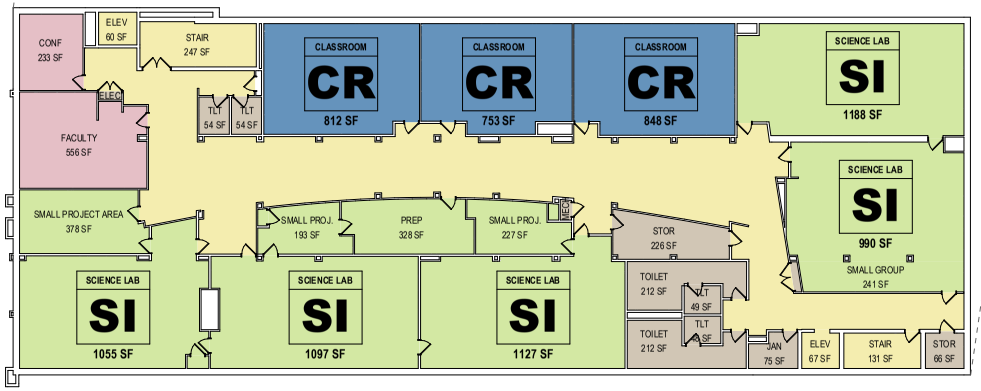
NORTH ARROW

1946 (B) / 2004 (R)

CONSTRUCTION HISTORY



Fourth Floor Plan



Third Floor Plan

Third and Fourth Floor Plan

Address:	215 Market Street Harrisburg, PA 17101
Construction Timeline:	Originally constructed in 1946; Renovations in 2004
Building Square Footage:	82,215 sf
Site Acreage:	0.38 acres

Building Summary

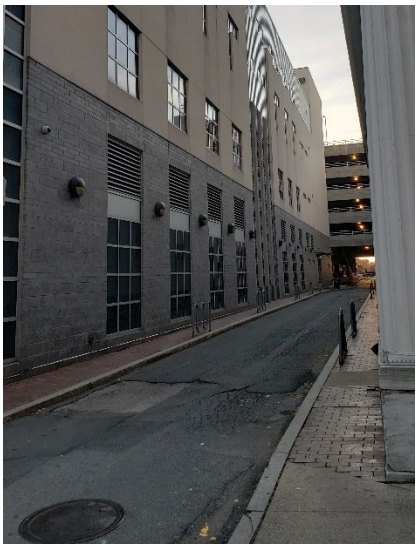
Harrisburg High School – SciTech Campus is a four-story facility located on Market Street in downtown Harrisburg. The School currently houses grades 10-12. The property is served by public water, sewer and natural gas and steam.

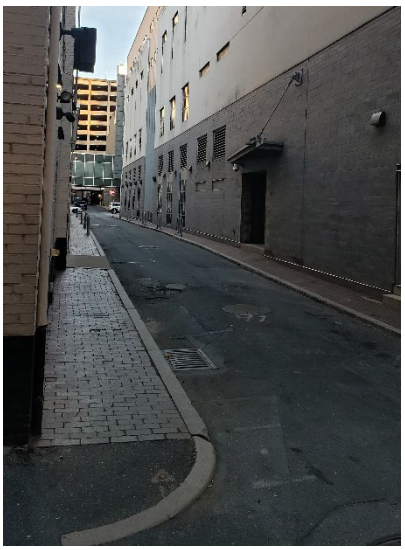
Site Conditions

The building is constructed on the corner of Market Street and South Court Street. It shares a party wall with a two-story structure to the north. Blackberry Street borders the east side of the property, which is where the refuse is collected. There is no place for dumpsters, so refuse is collected at the rear of the basement and taken to the alley by elevator.

Paving & Walkways:

There are no parking areas or drives on the property. Walkways are minimal, surrounding the property on three sides, in good condition.





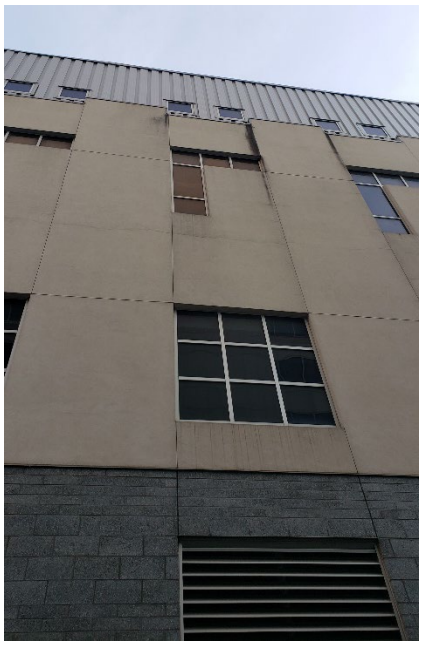
Recommendations:

- None at this time.

Exterior Building Conditions

Exterior Walls:

The building's exterior consists of masonry veneer, metal panel and exterior insulation and finish system (EIFS). The masonry and metal panel are in good condition, and the EIFS is in fair condition but in need of cleaning.



Recommendations:

- Clean EIFS.

Roofing:

The building's membrane roof is approaching the end of its useful life, with replacement likely required in the next 4-8 years. There is also a steel and glass canopy over the front entrance which should be cleaned as part of the District's regular maintenance plan.

Recommendations:

- Replace membrane roof in the next 4-8 years.
- Clean the steel and glass canopy as part of the District's regular maintenance plan.

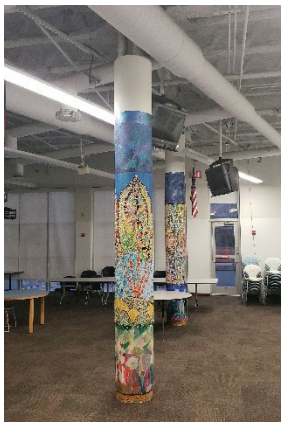
Doors & Windows:

The exterior aluminum storefront and curtain wall entrances/frames were replaced in 2004 and are in good condition. Some windows are cracked and should be replaced. The aluminum entrance and exit doors have hardware which could allow the doors to be chained together which is a safety/security concern.

Recommendations:

- Repair cracked window(s)
- Replace door hardware at main entrance and exits.

Interior Building Conditions



Structure:

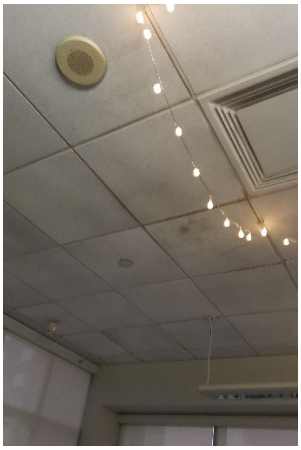
The building has a steel frame structure, with steel columns supporting steel beams and open web joists. Interior partitions are primarily stud and gypsum wallboard partitions. The structure appears to be in sound condition.

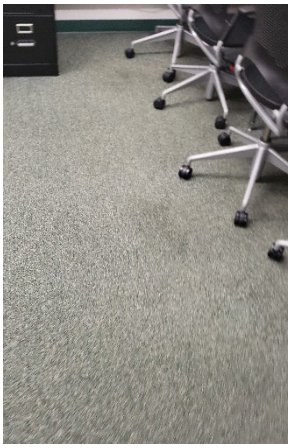
Finishes:

Wall finishes throughout the building include painted gypsum wall board, ceramic wall tile in restrooms. Walls are in fair condition, but are frequently scuffed or marked.

Floor finishes include tile in the main lobby, VCT in classrooms and corridors, carpet in the main office and several classrooms, mosaic ceramic tile in toilet rooms, and porcelain tile in the kitchen. Upper level corridors have epoxy floors, which is occasionally cracked. Carpeting, tile form in offices and broadloom in classrooms, is all due for replacement. The porcelain tile in the main lobby is chipped in several locations. VCT on the whole is in fair condition, but some classrooms are scuffed sufficiently enough to merit replacement.

The majority of the building has lay-in acoustical ceiling tile of various styles which is in fair condition, with many tiles in need of replacement due to leaks or being very dirty. Some spaces, such as the first floor media center and some labs, have exposed structure ceilings. The main lobby has panelized acoustical wood grille ceiling in good condition.





Recommendations:

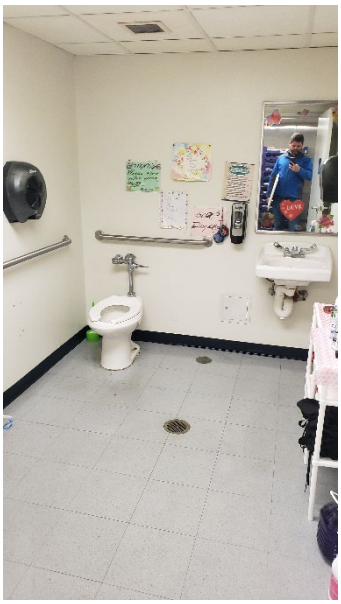
- Paint classrooms as needed.
- Replace VCT in classrooms as needed.
- Replace acoustical ceiling tiles throughout.
- Repair GWB partitions as needed.
- Replace carpet in classrooms and offices.
- Replaced damaged porcelain tiles.

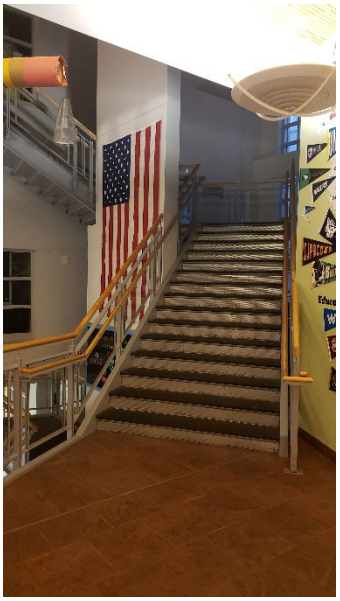
Code & Accessibility:

The building has two elevators. The District's elevators are not known to be upgraded in recent history and should therefore be evaluated for improvements or replacement. All elevators in the School District have pots lines to the machine rooms, which should be replaced with more reliable and current communications technology.

Grab bars and dispensers in accessible toilet compartments do not meet current ADA requirements. Most single-occupant toilet rooms have sinks located too close to the toilet. The building has two elevators connecting the main floor levels.; both of which were installed during the 2004 renovations.

Drinking fountains, while many recently replaced, are often located such that they project into paths of travel, an accessibility concern due to blind persons not being able to sense their presence.



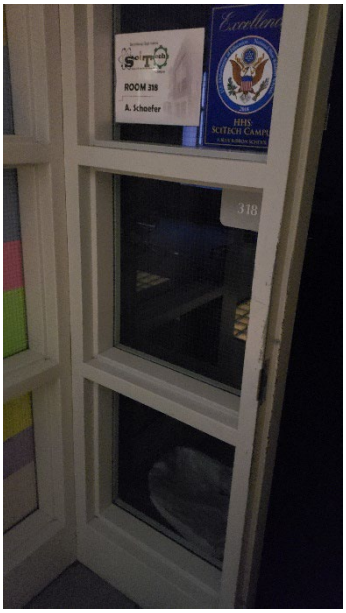


Recommendations:

- Evaluate elevators for any necessary upgrades and replace communications technology.
- Upgrade grab bars and accessible toilet compartments and single occupant rooms to meet current ADA requirements.
- Reconfigure single occupant toilet rooms to meet current accessibility standards.
- Remount or replace plumbing fixtures as required to comply with accessibility.

Doors:

Interior wood doors throughout the building mainly date from 2004 and are in good condition. Most hollow metal frames are in need of new coats of paint. Most hollow metal frames with vision lites have wire glass panels.



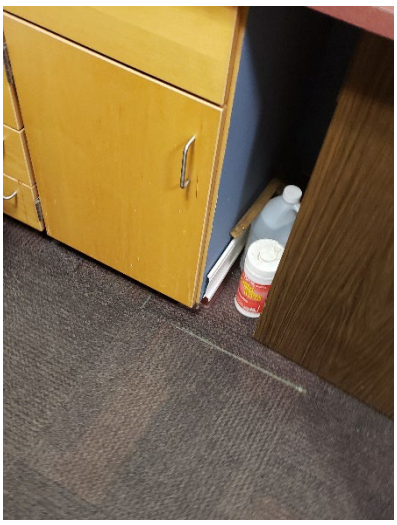
Recommendations:

- Replace wire glass infills as part of a major renovation.
- Paint hollow metal frames.

Casework & Built-in Equipment:

Built-in casework throughout the building was replaced in 2004 and is generally in good condition.





Recommendations:

- None at this time.

Specialty Equipment:

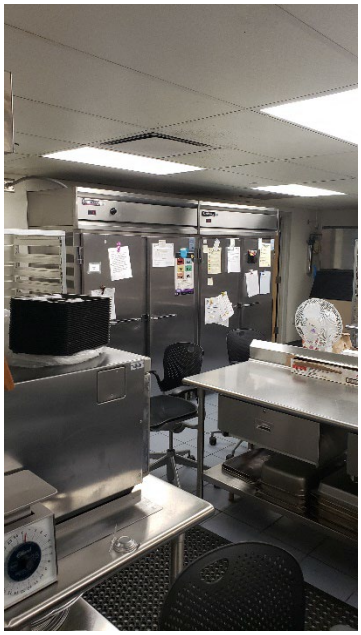
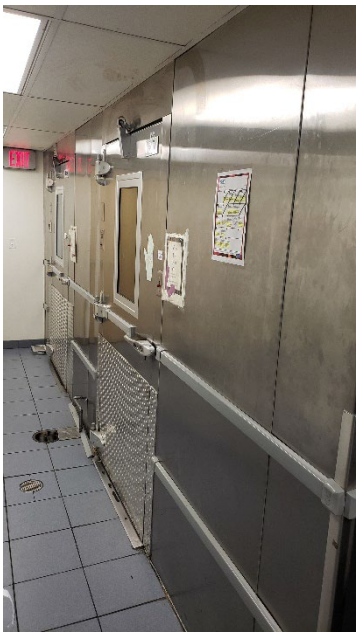
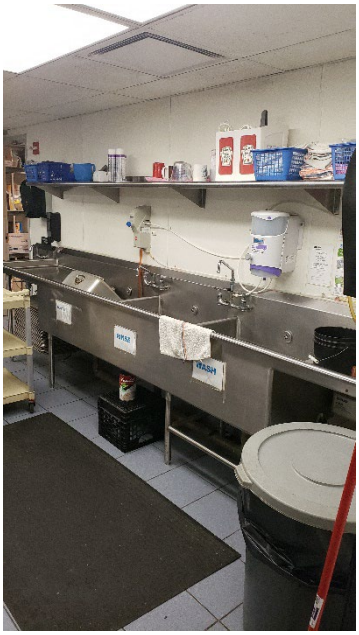
Corridor lockers were replaced in 2004 and are in good condition.

Recommendations:

- None at this time.

Food Service Equipment:

All kitchen equipment was entirely replaced in 2004 and will generally be due for replacement in 3-5 years. The walk-in cooling equipment should be evaluated for more immediate replacement.

Recommendations:

- Evaluate the walk-in refrigerator and freezer for possible replacement.

Safety and Security:

The building does not have a secure vestibule for visitors to pass through the office before being granted access to the building. A significant renovation should include this feature.

Recommendations:

- A future renovation project should include a secure vestibule.

Heating, Ventilation & Air Conditioning (HVAC)

HVAC System:

- Package roof top units are approaching the end of their useful lives (chilled water and heating hot water).
- Make-up air with natural gas heating and energy recovery unit is approaching the end of its useful life.
- Indoor air-handling units are approaching the end of their average expected service lives.
- The variable frequency drives for major air moving, heating and cooling equipment are nearing the end of their expected service lives.
- The variable air volume/fan-powered boxes are approaching the end of their useful lives.
- Cabinet unit heaters are approaching the end of their useful lives.
- Restroom ceiling-mounted exhaust fans are nearing the end of their average expected service lives.
- Steam supply piping valves utilize a main and a back-up steam supply with DDC (direct digital control) controlled actuators. The manual steam supply valve is also present. Both the main and back-up steam supply valves and associated actuators are nearing the end of their average expected service lives.
- The steam/condensate pumps 1 and 2 are nearing the end of their average expected service lives.
- The variable frequency drives associated with heating hot water pumps 1 and 2 are nearing the end of their average expected service lives.
- The expansion tank associated with heating hot water is nearing the end of its useful life.
- The heat exchanger (shell and tube) associated with steam to heating hot water system is nearing the end of its average expected service life.
- The primary and secondary chilled water pump is nearing the end of its average expected service life.
- The secondary chilled water pump variable frequency drives are nearing the end of their average expected service life.

Recommendations:

- Replace two AC units as part of the package roof top unit.
- Replace make-up air with natural gas heating unit as well as replace the energy recovery unit.
- Replace air-handling units.
- Replace all variable frequency drives within 3-9 years.
- Replace fan-powered boxes with heating hot water and heating hot water duct coils. Restoration can also be considered.
- Replace all cabinet unit heaters.
- Replace the restroom ceiling-mounted exhaust fans within 10 years.
- Replace both the main and back-up steam supply valves and associated actuators that are nearing the end of their expected service lives.
- Replace steam/condensate pumps 1 and 2.
- Replace both variable frequency drives associated with heating hot water pumps 1 and 2.
- Replace the expansion tank associated with heating hot water within approximately 2 years.
- Replace the heat exchanger (shell and tube) associated with steam to heating hot water within approximately 3-9 years.
- Replace all chilled water pumps within 2 years.
- Replace both secondary chilled water pump variable frequency drives within 2 years.

Plumbing and Fire Protection

Sanitary Sewer System:

- 2 100 gal laboratory grade chemical drain piping system neutralizer tanks appear to require proper servicing and inspection to adjust the unit/systems' expected remaining service.
- The duplex lift pit pump associated with the chemical neutralizer #1 and elevator pit with 4" piping includes an associated local alarm. It is approaching the end of its average expected service life.
- The duplex lift pit pump associated with the chemical neutralizer #2 with 4" piping includes an associated local alarm, but is showing signs of significant degradation and is approaching the end of its average expected service life.

Recommendation:

- Get the sanitary neutralizer tanks immediately serviced and obtain the systems' current condition. Nearing the end of their average expected service life; replace in approximately 10 years.
- Replace both duplex lift pumps within approximately 3-9 years.

Domestic Water Heater:

- The 119 gal, 24,000 watts electric commercial tank type domestic hot water heater and associated in-line circ pump expansion tank is nearing the end of its average expected service life.

Recommendation:

- Replace the domestic hot water heater and associated expansion tank within approximately 3-9 years.

Sprinkler System:

- The 200 gal/min rated, 15 hp, in-line with 4" piping fire pump is showing signs of significant degradation. It appears to require proper servicing (complete overhaul) and inspection to adjust the unit/system's expected remaining service life determination.

Recommendation:

- Get the fire pump properly serviced (completely overhauled) and obtain the equipment's current condition to adjust the determination. Nearing the end of its average expected service life; replace in approximately 2 years.

Electrical

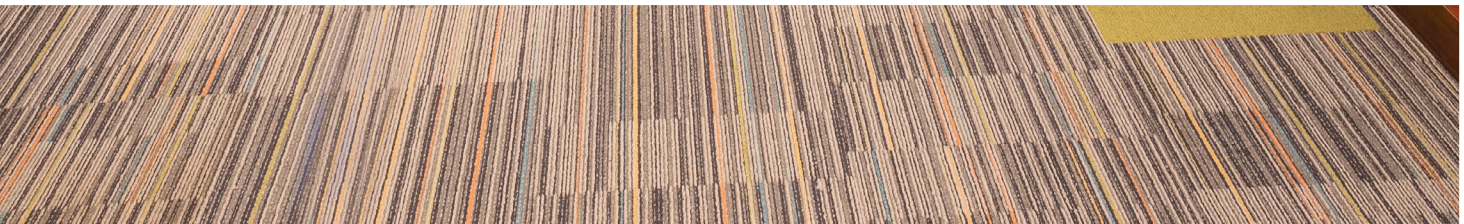
Lighting:

- The existing lighting still uses T8 fluorescent lighting.

Recommendation:

- Replace lighting with LED fixtures.

EXISTING FACILITY COST TO UPGRADE



7 | Existing Facility Cost to Upgrade

Estimated Costs for Each Criteria

The estimated costs listed for each item of work are preliminarily based on visual observation of the condition present during the site inspections. In general, the costs are allowances for the construction cost associated with the improvement. These costs can fluctuate depending on how and when the work is procured. Preliminary costs for estimating and soft costs (design fees, permitting, testing, construction administration, etc have been provided, but are a percentage at this time for planning purposes. Costs should be adjusted for inflation from the date of this report.

It should be noted that the cost to upgrade address general existing facility conditions that need addressed to bring the building to current standards. The total costs to upgrade each facility are not representative of a total project costs should a comprehensive renovation of that facility be undertaken. They do not include soft costs, contingencies, and other fees that would be associated with a typical capital improvement project. Further, when undertaking a full comprehensive renovation, other items not included in these costs may be incorporated into that renovation project if they are foreseen to be upgraded or replaced in the future.

The facility cost to upgrade does not incorporate ongoing yearly maintenance items that can be expected at each building. These ongoing maintenance items should be budgeted in addition to the cost to upgrade.

Note the cost to upgrade does not address the deficiencies noted in the Facility Educational & Functional Needs Assessment section.

Please note that while all educational buildings in the district have been addressed, focus was provided on the following buildings and trying to identify limited scope projects.

- Ben Franklin
- Hamilton
- Camp Curtin
- Melrose
- Scott
- Marshall
- Rowland

Most notably, Ben Franklin, Hamilton and Camp Curtin have been provided with 2 scopes of work to provide options for Harrisburg School District (HSD).

The current challenge is that approximately $100 to $130 Million worth of work has been identified across the entire school district, which cannot be currently addressed. For this reason, it is recommended to use the costs as a means to identify individual projects in the near term that can be accomplished through ESSERS, grant or limited capital budget funds, with the remainder of work planned out over the coming 10 years+ as funds or possibly bonds could be utilized in the future, when current bonds are paid by HSD.

Benjamin Franklin Elementary School

OPTION PROJECT (LIMITED SCOPE)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 97,592 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Seal Coat asphalt Paving areas	SY	6,675	$ 3.50	$0	-	$0
Repair /Replace Damaged Areas of Sidewalks & Curbs	EA	1	$ 4,500.00	$0	-	$0
Repaint Hard Surface Play Area	SF	1,000	$ 8.00	$0	-	$0
Building Exterior						
Roofing (Provided by Tremco)	EA	1	$ 55,000.00	$55,000	-	$63,250
Soffit Replacement	SF	2,500	$ 11.00	$27,500	-	$31,625
Clean exterior masonry veneer and recaulk	SF	25,000	$ 3.50	$0	-	$0
Repoint exterior masonry	SF	5,000	$ 11.50	$0	-	$0
Paint Hollow Metal Doors and Frames	EA	10	$ 250.00	$2,500	-	$2,875
Replace All Exterior Door Hardware	EA	37	$ 2,200.00	$0	-	$0
Building Interior						
Replace VCT and Wall Base throughout building	SF	78,592	$ 6.00	$471,552	-	$542,285
Replace Carpet in Administration Suite & Library	SY	233	$ 48.00	$11,200	-	$12,880
Replace ACT Ceilings	SF	86,592	$ 6.00	$519,552	-	$597,485
Paint all Interior Walls	SF	97,592	$ 3.00	$292,776	-	$336,692
Sand and Refinish gymnasium floor	SF	3,000	$ 8.00	$0	-	$0
Replace Fire Rated Stair Tower Doors & Hardware	EA	16	$ 2,500.00	$0		$0
Replace Interior Doors & Hardware	EA	224	$ 1,800.00	$0	-	$0
Replace handrails and guard rails	EA	6	$ 20,000.00	$0	-	$0
Toilet Room Code Upgrades (Single Occupant)	EA	25	$ 7,500.00	$0		$0
Toilet Room Code Upgrades (Multiple Occupant)	EA	16	$ 1,200.00	$0		$0
Replace Educational Casework Throughout the Building	LF	2,120	$ 340.00	$0	-	$0
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Sand and refinish Stage floor and risers	SF	825	$ 12.00	$0	-	$0
Provide wall pads in multi-purpose room	SF	120	$ 15.00	$0		$0
Elevator	EA	1	$ -	$0	-	$0
Elevator (refurbish 2005 elevator)	EA	1	$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades- **LIMITED SCOPE**	SF	97,592	$ 30.00	$2,927,760	-	$3,366,924
Building Systems - Plumbing / Fire Protection						
No Recommended Work						
Building Systems - Electrical						
Upgrade Fire Alarm System	EA	1	$ 294,230.00	$294,230	-	$338,365
Electrical Upgrades	EA	1	$ 1,244,159.00	$1,244,159	-	$1,430,783
SUBTOTAL				$5,846,229	-	$6,723,163
Estimating Contingency		5%		$292,311	-	$336,158
POSSIBLE ALTERNATES				**$0**		**$0**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$6,138,540**	-	**$7,059,322**
Cost/SF				$63	-	$72
Soft Costs		15%		$920,781	-	$1,058,898
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$7,059,322**	-	**$8,118,220**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Benjamin Franklin Elementary School

OPTION PROJECT (HVAC & Finishes)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 97,592 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Seal Coat asphalt Paving areas	SY	6,675	$ 3.50	$23,363	-	$26,867
Repair /Replace Damaged Areas of Sidewalks & Curbs	EA	1	$ 4,500.00	$4,500	-	$5,175
Repaint Hard Surface Play Area	SF	1,000	$ 8.00	$8,000	-	$9,200
Building Exterior						
Roofing (Provided by Tremco)	EA	1	$ 55,000.00	$55,000	-	$63,250
Soffit Replacement	SF	2,500	$ 11.00	$27,500	-	$31,625
Clean exterior masonry veneer and recaulk	SF	25,000	$ 3.50	$87,500	-	$100,625
Repoint exterior masonry	SF	5,000	$ 11.50	$57,500	-	$66,125
Paint Hollow Metal Doors and Frames	EA	10	$ 250.00	$2,500	-	$2,875
Replace All Exterior Door Hardware	EA	37	$ 2,200.00	$81,400	-	$93,610
Building Interior						
Replace VCT and Wall Base throughout building	SF	78,592	$ 6.00	$471,552	-	$542,285
Replace Carpet in Administration Suite & Library	SY	233	$ 48.00	$11,200	-	$12,880
Replace ACT Ceilings	SF	86,592	$ 6.00	$519,552	-	$597,485
Paint all Interior Walls	SF	97,592	$ 3.00	$292,776	-	$336,692
Sand and Refinish gymnasium floor	SF	3,000	$ 8.00	$24,000	-	$27,600
Replace Fire Rated Stair Tower Doors & Hardware	EA	16	$ 2,500.00	$40,000		$46,000
Replace Interior Doors & Hardware	EA	224	$ 1,800.00	$403,200	-	$463,680
Replace handrails and guard rails	EA	6	$ 20,000.00	$120,000	-	$138,000
Toilet Room Code Upgrades (Single Occupant)	EA	25	$ 7,500.00	$187,500		$215,625
Toilet Room Code Upgrades (Multiple Occupant)	EA	16	$ 1,200.00	$19,200		$22,080
Replace Educational Casework Throughout the Building	LF	2,120	$ 340.00	$720,800	-	$828,920
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Sand and refinish Stage floor and risers	SF	825	$ 12.00	$9,900	-	$11,385
Provide wall pads in multi-purpose room	SF	120	$ 15.00	$1,800		$2,070
Elevator	EA	1	$ -	$0	-	$0
Elevator (refurbish 2005 elevator)	EA	1	$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades	SF	97,592	$ 48.00	$4,684,416	-	$5,387,078
Building Systems - Plumbing / Fire Protection						
No Recommended Work						
Building Systems - Electrical						
Upgrade Fire Alarm System	EA	1	$ 294,230.00	$294,230	-	$338,365
Electrical Upgrades	EA	1	$ 1,244,159.00	$1,244,159	-	$1,430,783
SUBTOTAL				$9,391,548	-	$10,800,280
Estimating Contingency		10%		$939,155	-	$1,080,028
POSSIBLE ALTERNATES				**$1,350,400**		**$1,552,960**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$10,330,702**	-	**$11,880,308**
Cost/SF				$106	-	$122
Soft Costs		20%		$2,066,140	-	$2,376,062
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$12,396,843**	-	**$14,256,369**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Hamilton School

OPTION PROJECT (LIMITED)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards
Educational and functional deficiencies are not included in the below costs
Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 75,375 SF

	Unit	Quant	Cost	Cost Range LOW		HIGH
Existing Facility Upgrades						
Sitework						
Parge concrete stairs risers and side walls	EA	1	$ 1,500.00	$0	-	$0
Repair /Replace Damaged Areas of Sidewalks & Curbs	SY	400	$ 115.00	$0	-	$0
Replace Playground Guard Rails for Code Compliance	LF	115	$ 125.00	$0	-	$0
Building Exterior						
Clean Precast Concrete Façade Elements	SF	500	$ 3.00	$0	-	$0
Apply New Coats of Paint to Painted Elements	SF	1,200	$ 15.00	$0	-	$0
Clean Exterior Masonry Veneer & recaulk	SF	8,000	$ 3.00	$0	-	$0
Replace Exterior Windows with New Alum Storefront	SF	7,943	$ 100.00	$0	-	$0
Roofing (Provided by Tremco)	EA	1	$ 45,000.00	$45,000	-	$51,750
Replace All Exterior Door Hardware	EA	17	$ 2,200.00	$0	-	$0
Building Interior						
Replace VCT and Wall Base Throughout Building	SF	57,280	$ 6.00	$343,680	-	$395,232
Replace Carpet in Administration Suite	SY	128	$ 48.00	$6,133	-	$7,053
Replace Rubber Stair Treads (Cost per flight)	EA	14	$ 5,175.00	$72,450	-	$83,318
Replace ACT Ceilings as part of HVAC replacement	SF	63,092	$ 6.00	$378,552	-	$435,335
Repair Damaged Plaster Walls and Ceilings	SY	25	$ 55.00	$1,375	-	$1,581
Paint all Interior Walls	SF	75,375	$ 4.00	$301,500	-	$346,725
Stair Guard/Handrail Code Upgrade	EA	5	$ 22,000.00	$0	-	$0
Toilet Room Code Upgrades (Single Occupant - reconfigure)	EA	4	$ 7,500.00	$0		$0
Toilet Room Code Upgrades (Single Occupant - no reconfig)	EA	2	$ 1,200.00	$0		$0
Toilet Room Code Upgrades (Multiple Occ't - major reno)	SF	2261	$ 180.00	$0		$0
Provide Wheelchair Lift to Stage	EA	1	$ 25,000.00	$0		$0
Replace Casework Throughout the Building	LF	1,275	$ 340.00	$0	-	$0
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Relocate&Reno Kitchen/Café w/ new FS package	EA	1	$ -	$0	-	$0
Elevator			$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades	EA	1	$ 2,698,526.00	$2,698,526	-	$3,103,305
Building Systems - Plumbing / Fire Protection						
Fire Pump	EA	1	$ 52,500.00	$0	-	$0
Building Systems - Electrical						
Renovation Electrical Improvements	EA	1	$ 827,363.00	$827,363	-	$951,467
SUBTOTAL				$4,674,579	-	$5,375,766
Estimating Contingency		5%		$233,729	-	$268,788
POSSIBLE ALTERNATES				**$0**		**$0**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$4,908,308**	-	**$5,644,555**
Cost/SF				$65	-	$75
Soft Costs		15%		$736,246	-	$846,683
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$5,644,555**	-	**$6,491,238**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Hamilton School

OPTION PROJECT (HVAC & Finishes)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards
Educational and functional deficiencies are not included in the below costs
Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 75,375 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Parge concrete stairs risers and side walls	EA	1	$ 1,500.00	$1,500	-	$1,725
Repair /Replace Damaged Areas of Sidewalks & Curbs	SY	400	$ 115.00	$46,000	-	$52,900
Replace Playground Guard Rails for Code Compliance	LF	115	$ 125.00	$14,375	-	$16,531
Building Exterior						
Clean Precast Concrete Façade Elements	SF	500	$ 3.00	$1,500	-	$1,725
Apply New Coats of Paint to Painted Elements	SF	1,200	$ 15.00	$18,000	-	$20,700
Clean Exterior Masonry Veneer & recaulk	SF	8,000	$ 3.00	$24,000	-	$27,600
Replace Exterior Windows with New Alum Storefront	SF	7,943	$ 100.00	$794,297	-	$913,441
Roofing (Provided by Tremco)	EA	1	$ 45,000.00	$45,000	-	$51,750
Replace All Exterior Door Hardware	EA	17	$ 2,200.00	$37,400	-	$43,010
Building Interior						
Replace VCT and Wall Base Throughout Building	SF	57,280	$ 6.00	$343,680	-	$395,232
Replace Carpet in Administration Suite	SY	128	$ 48.00	$6,133	-	$7,053
Replace Rubber Stair Treads (Cost per flight)	EA	14	$ 5,175.00	$72,450	-	$83,318
Replace ACT Ceilings as part of HVAC replacement	SF	63,092	$ 6.00	$378,552	-	$435,335
Repair Damaged Plaster Walls and Ceilings	SY	25	$ 55.00	$1,375	-	$1,581
Paint all Interior Walls	SF	75,375	$ 4.00	$301,500	-	$346,725
Stair Guard/Handrail Code Upgrade	EA	5	$ 22,000.00	$110,000	-	$126,500
Toilet Room Code Upgrades (Single Occupant - reconfigure)	EA	4	$ 7,500.00	$30,000		$34,500
Toilet Room Code Upgrades (Single Occupant - no reconfig)	EA	2	$ 1,200.00	$2,400		$2,760
Toilet Room Code Upgrades (Multiple Occ't - major reno)	SF	2261	$ 180.00	$406,980		$468,027
Provide Wheelchair Lift to Stage	EA	1	$ 25,000.00	$25,000		$28,750
Replace Casework Throughout the Building	LF	1,275	$ 340.00	$433,500	-	$498,525
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Relocate&Reno Kitchen/Café w/ new FS package	EA	1	$ -	$0	-	$0
Elevator			$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades	EA	1	$ 2,698,526.00	$2,698,526	-	$3,103,305
Building Systems - Plumbing / Fire Protection						
Fire Pump	EA	1	$ 52,500.00	$52,500	-	$60,375
Building Systems - Electrical						
Renovation Electrical Improvements	EA	1	$ 827,363.00	$827,363	-	$951,467
SUBTOTAL				$6,672,031	-	$7,672,836
Estimating Contingency		10%		$667,203	-	$767,284
POSSIBLE ALTERNATES				**$1,273,797**		**$1,464,866**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$7,339,234**	-	**$8,440,119**
Cost/SF				$97	-	$112
Soft Costs		20%		$1,467,847	-	$1,688,024
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$8,807,081**	-	**$10,128,143**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Camp Curtin Academy

OPTION PROJECT (LIMITED)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 154,815 SF

	Unit	Quant		Cost	Cost Range LOW		HIGH
Existing Facility Upgrades							
Sitework							
Mill/Overlay Paved Drives & Parking	SF	83,000	$	4.00	$0	-	$0
Repair / Replace Concrete Sidewalk	SY	10	$	115.00	$0	-	$0
Add Bollards at North Entrance	EA	2	$	1,100.00	$0	-	$0
Building Exterior							
Clean Exterior Masonry Veneer & recaulk	SF	40,000	$	3.00	$0	-	$0
Brick Repointing	SF	500	$	11.50	$0	-	$0
Repair Spalled Stone Veneer	SF	100	$	43.00	$0	-	$0
Roof Replacement (Price provided by Tremco)	LS	1	$	3,210,000.00	$0	-	$0
Clean and Recoat Soffits	SF	2,900	$	11.00	$0	-	$0
Replace Damaged Fascia/Trim	LF	100	$	24.00	$2,400		$2,760
Replace Sealants Around Windows	EA	1	$	45,000.00	$0	-	$0
Repair All Operable Window Cranks/Levers	EA	1	$	16,000.00	$0	-	$0
Replace All Exterior Door Hardware	EA	37	$	2,200.00	$0	-	$0
Building Interior							
Replace Carpet - Library and Admin Suite	SY	444	$	48.00	$21,333	-	$24,533
Replace Acoustical Tile Ceilings Throughout Building	SF	135,815	$	6.00	$814,890	-	$937,124
Replace VCT throughout building	SF	107,943	$	6.00	$647,658	-	$744,807
Paint All Interior Walls	SF	154,815	$	5.00	$774,075	-	$890,186
Toilet Room Code Upgrades (Single Occupant)	EA	23	$	1,200.00	$0		$0
Toilet Room Code Upgrades (Multiple Occupant)	EA	10	$	1,200.00	$0		$0
Semi-Recessed FE Cabinets	EA	40	$	650.00	$0		$0
Modify Casework at Classroom Sinks for Accessibility	EA	40	$	45.00	$0		$0
Replace Counters on Educational Casework	LF	2,600	$	65.00	$0	-	$0
Specialties & Equipment							
Food Service Equipment - Refrigerator and Freezer	EA	1	$	25,000.00	$0	-	$0
Replace Toilet Partitions	EA	10	$	11,800.00	$0	-	$0
Elevator Upgrades	EA	1	$	70,000.00	$0	-	$0
Building Systems - HVAC							
HVAC System Upgrades	EA	1	$	2,311,920.00	$2,311,920	-	$2,658,708
Building Systems - Plumbing / Fire Protection							
No recommended work			$	-			
Building Systems - Electrical							
LED Lighting	EA	1	$	1,392,200.00	$1,392,200	-	$1,601,030
SUBTOTAL					$5,964,476	-	$6,859,148
Estimating Contingency		5%			$298,224	-	$342,957
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE					**$6,262,700**	-	**$7,202,105**
Cost/SF					$40	-	$47
Soft Costs		15%			$939,405	-	$1,080,316
TOTAL OVERALL ESTIMATED COST TO UPGRADE					**$7,202,105**	-	**$8,282,421**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Camp Curtin Academy

OPTION PROJECT (HVAC & Finishes)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 154,815 SF

	Unit	Quant	Cost	Cost Range LOW		HIGH
Existing Facility Upgrades						
Sitework						
Mill/Overlay Paved Drives & Parking	SF	83,000	$ 4.00	$332,000	-	$381,800
Repair / Replace Concrete Sidewalk	SY	10	$ 115.00	$1,150	-	$1,323
Add Bollards at North Entrance	EA	2	$ 1,100.00	$2,200	-	$2,530
Building Exterior						
Clean Exterior Masonry Veneer & recaulk	SF	40,000	$ 3.00	$120,000	-	$138,000
Brick Repointing	SF	500	$ 11.50	$5,750	-	$6,613
Repair Spalled Stone Veneer	SF	100	$ 43.00	$4,300	-	$4,945
Roof Replacement (Supplied by Tremco)	LS	1	$ 3,210,000.00	$3,210,000	-	$3,210,000
Clean and Recoat Soffits	SF	2,900	$ 11.00	$31,900	-	$36,685
Replace Damaged Fascia/Trim	LF	100	$ 24.00	$2,400		$2,760
Replace Sealants Around Windows	EA	1	$ 45,000.00	$45,000	-	$51,750
Repair All Operable Window Cranks/Levers	EA	1	$ 16,000.00	$16,000	-	$18,400
Replace All Exterior Door Hardware	EA	37	$ 2,200.00	$81,400	-	$93,610
Building Interior						
Replace Carpet - Library and Admin Suite	SY	444	$ 48.00	$21,333	-	$24,533
Replace Acoustical Tile Ceilings Throughout Building	SF	135,815	$ 6.00	$814,890	-	$937,124
Replace VCT throughout building	SF	107,943	$ 6.00	$647,658	-	$744,807
Paint All Interior Walls	SF	154,815	$ 5.00	$774,075	-	$890,186
Toilet Room Code Upgrades (Single Occupant)	EA	23	$ 1,200.00	$27,600		$31,740
Toilet Room Code Upgrades (Multiple Occupant)	EA	10	$ 1,200.00	$12,000		$13,800
Semi-Recessed FE Cabinets	EA	40	$ 650.00	$26,000		$29,900
Modify Casework at Classroom Sinks for Accessibility	EA	40	$ 45.00	$1,800		$2,070
Replace Counters on Educational Casework	LF	2,600	$ 65.00	$169,000	-	$194,350
Specialties & Equipment						
Food Service Equipment - Refrigerator and Freezer	EA	1	$ 25,000.00	$25,000	-	$28,750
Replace Toilet Partitions	EA	10	$ 11,800.00	$118,000	-	$135,700
Elevator Upgrades	EA	1	$ 70,000.00	$70,000	-	$80,500
Building Systems - HVAC						
HVAC System Upgrades	EA	1	$ 30.00	$4,644,450	-	$5,341,118
Building Systems - Plumbing / Fire Protection						
No recommended work			$ -			
Building Systems - Electrical						
LED Lighting	EA	1	$ 1,392,200.00	$1,392,200	-	$1,601,030
SUBTOTAL				$12,596,106	-	$14,004,022
Estimating Contingency		10%		$1,259,611	-	$1,400,402
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$13,855,717**	-	**$15,404,425**
Cost/SF				$89	-	$100
Soft Costs		20%		$2,771,143	-	$3,080,885
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$16,626,860**	-	**$18,485,309**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Melrose Elementary School

OPTION PROJECT

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 81,480 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Mill/Overlay Paved Drives & Parking	SF	22,500	$ 4.00	$90,000	-	$103,500
Repair /Replace Damaged Areas of Sidewalks & Curbs	SY	300	$ 115.00	$34,500	-	$39,675
Building Exterior						
Clean Exterior Masonry Veneer & recaulk	SF	28,308	$ 3.00	$84,924	-	$97,663
Roofing	EA	1	$ 348,197.00	$348,197	-	$400,427
Replace All Exterior Door Hardware	EA	34	$ 2,200.00	$74,800	-	$86,020
Building Interior						
Replace VCT and wall base throughout building	SF	52,384	$ 6.00	$314,304	-	$361,450
Replace Carpet in Administration Suite and Library	SY	400	$ 48.00	$19,200	-	$22,080
Replace ACT Ceilings as part of HVAC replacement	SF	66,639	$ 6.00	$399,834	-	$459,809
Paint all Interior Walls, HM doors/frames, railings	SF	81,480	$ 4.00	$325,920	-	$374,808
Replace toilet room tile flooring	SF	2,190	$ 9.00	$19,710	-	$22,667
Replace acoustical panels in multipurpose room	SF	800	$ 16.00	$12,800	-	$14,720
Remove wall paneling in multipurpose room	SF	300	$ 3.00	$900	-	$1,035
Replace multipurpose room stage floor and risers	SF	750	$ 25.00	$18,750	-	$21,563
Replace Wood Floor in Gymnasium	SF	6595	$ 22.00	$145,090	-	$166,854
Toilet Room Code Upgrades (Single Occupant)	EA	7	$ 1,200.00	$8,400		$9,660
Toilet Room Code Upgrades (Multiple Occupant)	EA	10	$ 1,200.00	$12,000		$13,800
Install panels under sinks at casework	EA	25	$ 150.00	$3,750	-	$4,313
Specialties & Equipment						
Provide theatrical package for elementary performances	EA	1	$ 55,000.00	$55,000	-	$63,250
Food Service Equipment	EA	1	$ -	$0	-	$0
Elevator			$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades	EA	1	$ 501,300.00	$501,300	-	$576,495
Building Systems - Plumbing / Fire Protection						
Renovation Plumbing Improvements	EA	1	$ 108,900.00	$108,900	-	$125,235
Fire Protection Systems				$0	-	$0
Building Systems - Electrical						
Fire Alarm System Upgrades	EA	1	$ 229,873.00	$229,873	-	$264,354
Renovation Electrical Improvements	EA	1	$ 893,226.00	$893,226	-	$1,027,210
SUBTOTAL				$3,701,378	-	$4,256,585
Estimating Contingency		10%		$370,138	-	$425,658
POSSIBLE ALTERNATES				**$777,511**		**$894,138**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$4,071,516**	-	**$4,682,243**
Cost/SF				$50	-	$57
Soft Costs		20%		$814,303	-	$936,449
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$4,885,819**	-	**$5,618,692**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Cougar Academy (and current DAO)

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 91,680 SF

Existing Facility Upgrades	Unit	Quant		Cost	Cost Range LOW		HIGH
Sitework							
Reconfigure / Restripe parking to include ADA parking	EA	1	$	4,500.00	$4,500	-	$5,175
Building Exterior							
Roof Replacement (Supplied by Tremco)	EA	1	$	1,091,000.00	$1,091,000	-	$1,091,000
Repoint Exterior Brick	SF	3,500	$	11.50	$40,250	-	$46,288
Paint hollow metal doors and frames	EA	6	$	250.00	$1,500	-	$1,725
Replace hollow metal doors accessing basement	EA	1	$	4,500.00	$4,500	-	$5,175
Replace All Exterior Door Hardware	EA	29	$	2,200.00	$63,800	-	$73,370
Building Interior							
Replace ACT ceilings	SF	83,930	$	6.00	$503,580	-	$579,117
Replace wood stage floor	SF	700	$	25.00	$17,500	-	$20,125
Repair / Repaint damaged plaster/GWB walls as req'd	SF	500	$	12.00	$6,000	-	$6,900
Replace carpet in office areas	SY	556	$	48.00	$26,667	-	$30,667
Toilet Room Code Upgrades (Single Occupant)	EA	13	$	7,500.00	$97,500		$112,125
Toilet Room Code Upgrades (Multiple Occupant)	EA	12	$	1,200.00	$14,400		$16,560
Specialties & Equipment							
Replace All Food Service Equipment	EA	1	$	350,000.00	$350,000	-	$402,500
Elevator			$	-	$0	-	$0
Building Systems - HVAC							
HVAC Upgrades	EA	1	$	272,400.00	$272,400	-	$313,260
Building Systems - Plumbing / Fire Protection							
No recommended work							
Building Systems - Electrical / Fire Alarm							
Upgrade Fire Alarm System	EA	1	$	262,130.00	$262,130	-	$301,450
Electrical Upgrades	EA	1	$	1,033,510.00	$1,033,510	-	$1,188,537
SUBTOTAL					$3,789,237	-	$4,193,972
Estimating Contingency		20%			$757,847	-	$838,794
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE					**$4,547,084**	-	**$5,032,767**
Cost/SF					$50	-	$55
Soft Costs		25%			$1,136,771	-	$1,258,192
TOTAL OVERALL ESTIMATED COST TO UPGRADE					**$5,683,855**	-	**$6,290,958**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Downey Elementary School

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 93,475 SF

Existing Facility Upgrades	Unit	Quant		Cost	Cost Range LOW		HIGH
Sitework							
Mill/Overlay Paved Drives & Parking	EA	1	$	41,000.00	$41,000	-	$47,150
Replace fence at corner of Monroe/Cumberland Streets	LF	300	$	275.00	$82,500	-	$94,875
Building Exterior							
Clean Exterior Masonry Veneer & recaulk	SF	20,000	$	3.50	$70,000	-	$80,500
Repoint Exterior Masonry	SF	3,500	$	11.50	$40,250	-	$46,288
Replace Standing Seam metal entrance canopy roof	EA	1	$	32,500.00	$32,500	-	$37,375
Repaint Hollow Metal Doors and Frames	EA	16	$	250.00	$4,000	-	$4,600
Replace exterior door hardware	SF	1010	$	80.00	$80,800	-	$92,920
Building Interior							
Replace VCT throughout building	SF	68,016	$	6.00	$408,096	-	$469,310
Replace carpeting in offices and Library	SY	312	$	48.00	$14,981	-	$17,229
Paint all interior walls, HM doors/frames, handrails	SF	93,475	$	4.00	$373,900	-	$429,985
Replace ACT Ceilings	SF	79,630	$	6.00	$477,780	-	$549,447
Replace multipurpose room floor with resilient tile floor	SF	3,302	$	6.00	$19,812	-	$22,784
Replace Interior Doors & Hardware	EA	200	$	1,500.00	$300,000	-	$345,000
Replace Fire Rated Stair Tower Doors & Hardware	EA	12	$	2,500.00	$30,000		$34,500
Replace Educational Casework Throughout the Building	LF	1650	$	340.00	$561,000		$645,150
Replace Library Furniture	EA	1	$	35,000.00	$35,000	-	$40,250
Reconfigure stair access to stage for Code compliance	EA	1	$	8,000.00	$8,000	-	$9,200
Replace gymnasium vision panels with masonry infill	SF	80	$	22.00	$1,760	-	$2,024
Reconfigure doorways for ADA Compliance	EA	1	$	5,500.00	$5,500	-	$6,325
Stair Guard/Handrail Code Upgrade	EA	1	$	22,000.00	$22,000	-	$25,300
Toilet Room Code Upgrades (Single Occupant)	EA	20	$	7,500.00	$150,000		$172,500
Toilet Room Code Upgrades (Multiple Occupant)	EA	10	$	1,200.00	$12,000		$13,800
Specialties & Equipment							
Food Service Equipment	EA	1	$	-	$0	-	$0
Gymnasium wall pads	SF	240	$	15.00	$3,600	-	$4,140
Elevator			$	-	$0	-	$0
Building Systems - HVAC							
HVAC Upgrades	EA	1	$	1,238,940.00	$1,238,940	-	$1,424,781
Building Systems - Plumbing / Fire Protection							
No recommended work							
Building Systems - Electrical							
Renovation Electrical Improvements	EA	1	$	984,852.00	$984,852	-	$1,132,580
Upgrade Fire Alarm System	EA	1	$	300,900.00	$300,900	-	$346,035
SUBTOTAL					$5,299,171	-	$6,094,047
Estimating Contingency		20%			$1,059,834	-	$1,218,809
POSSIBLE ALTERNATES					**$1,202,050**		**$1,382,358**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE					**$6,359,006**	-	**$7,312,856**
Cost/SF					$68	-	$78
Soft Costs		25%			$1,589,751	-	$1,828,214
TOTAL OVERALL ESTIMATED COST TO UPGRADE					**$7,948,757**	-	**$9,141,071**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Foose Elementary School

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 122,400 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Seal Coat asphalt Paving areas	SY	4,764	$ 3.50	$16,674	-	$19,175
Repair /Replace Damaged Areas of Sidewalks & Curbs	SY	300	$ 115.00	$34,500	-	$39,675
Paint All Exterior Handrails	EA	1	$ 2,500.00	$2,500	-	$2,875
Repaint Hard Surface Play Area	SF	2,000	$ 8.00	$16,000	-	$18,400
Building Exterior						
Clean Exterior Brick Veneer; remove Graffiti; recaulk	SF	58,000	$ 3.00	$174,000	-	$200,100
Brick Repointing	SF	5,000	$ 11.50	$57,500	-	$66,125
Roofing (Provided by Tremco)	Sq	1	$ 2,500,000.00	$2,500,000	-	$2,500,000
Replace trim, gutters and downspouts 2005 Additions	EA	1	$ 55,000.00	$55,000	-	$63,250
Repair Masonry at East Side of Building	EA	1	$ 4,500.00	$4,500		$5,175
Repair EIFS	SF	3,000	$ 8.00	$24,000	-	$27,600
Repaint Exterior Hollow Metal Doors and Frames	EA	15	$ 250.00	$3,750		$4,313
Replace All Exterior Door Hardware	Ea	21	$ 2,200.00	$46,200	-	$53,130
Building Interior						
Replace VCT and Wall Base throughout building	SF	97,165	$ 6.00	$582,990	-	$670,439
Replace Carpet in Administration Suite & Media Center	SY	444	$ 48.00	$21,333	-	$24,533
Replace ACT Ceilings	SF	109,238	$ 6.00	$655,428	-	$753,742
Paint all Interior Walls	SF	122,400	$ 5.00	$612,000	-	$703,800
Replace Ceramic Tile Wainscot in Corridors	SF	1,500	$ 12.00	$18,000	-	$20,700
Replace Stair Tower and Cross Corridor Doors/Hardware	EA	14	$ 2,500.00	$35,000	-	$40,250
Stair Guard/Handrail Code Upgrade	EA	2	$ 22,000.00	$44,000	-	$50,600
Toilet Room Code Upgrades (Single Occupant)	EA	13	$ 7,500.00	$97,500		$112,125
Toilet Room Code Upgrades (Multiple Occupant)	EA	12	$ 1,200.00	$14,400		$16,560
Semi-Recessed FE Cabinets	EA	30	$ 650.00	$19,500		$22,425
Replace Front Office Casework	LF	150	$ 340.00	$51,000	-	$58,650
Specialties & Equipment						
Food Service Equipment	EA	1	$ 350,000.00	$350,000	-	$402,500
Gymnasium Equipment	EA	1	$ 45,000.00	$45,000	-	$51,750
Auditorium Theatrical Lighting & PA System	EA	1	$ 20,000.00	$20,000	-	$23,000
Elevator			$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades	EA	1	$ 1,565,220.00	$1,565,220	-	$1,800,003
Building Systems - Plumbing / Fire Protection						
Renovation Plumbing Improvements	EA	1	$ 184,140.00	$184,140	-	$211,761
Fire Protection Systems				$0	-	$0
Building Systems - Electrical						
Renovation Electrical Improvements	EA	1	$ 1,490,225.00	$1,490,225	-	$1,713,759
SUBTOTAL				$8,740,360	-	$9,676,414
Estimating Contingency		20%		$1,748,072	-	$1,935,283
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				$10,488,432	-	$11,611,697
Cost/SF				$86	-	$95
Soft Costs		25%		$2,622,108	-	$2,902,924
TOTAL OVERALL ESTIMATED COST TO UPGRADE				$13,110,541	-	$14,514,622

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Scott Elementary School

OPTION PROJECT

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 78,960 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Seal Coat Asphalt Paving	SY	750	$ 3.50	$2,625	-	$3,019
Repair /Replace Damaged Areas of Sidewalks & Curbs	SY	20	$ 115.00	$2,300	-	$2,645
Paint Guard Rails, Replace Sections for Fall Protection	EA	1	$ 12,000.00	$12,000	-	$13,800
Repaint Hard Surface Play Area	SF	200	$ 8.00	$1,600	-	$1,840
Replace masonry piers along Derry & Berryhill Streets	LF	150	$ 230.00	$34,500	-	$39,675
Replace Drain at Service Drive; Vehicle Grade	EA	1	$ 20,000.00	$20,000	-	$23,000
Building Exterior						
Clean Exterior Masonry Veneer & recaulk	SF	20,000	$ 3.00	$60,000	-	$69,000
Roofing (Provided by Tremco)	EA	1	$ 153,000.00	$153,000	-	$153,000
Soffit Replacement	SF	100	$ 11.00	$1,100	-	$1,265
Replace Exterior Sun Shades	LF	755	$ -	$0	-	$0
Replace All Exterior Door Hardware	EA	14	$ 2,200.00	$30,800	-	$35,420
Building Interior						
Replace bottom (2) courses of Ceramic Tile in Corridors	SF	2,000	$ 26.00	$52,000	-	$59,800
Replace VCT and Wall Base Throughout Building	SF	57,658	$ 6.00	$345,948	-	$397,840
Replace Carpet in Administration Suite	SY	89	$ 48.00	$4,267	-	$4,907
Replace ACT Ceilings as part of HVAC replacement	SF	66,615	$ 5.00	$333,075	-	$383,036
Paint all Interior Walls	SF	78,960	$ 4.00	$315,840	-	$363,216
Stair Guard/Handrail Code Upgrade	EA	4	$ 22,000.00	$88,000	-	$101,200
Replace Fire Rated Doors	EA	30	$ 2,500.00	$75,000	-	$86,250
Toilet Room Code Upgrades (Single Occupant - reconfigure)	EA	11	$ 7,500.00	$82,500		$94,875
Toilet Room Code Upgrades (Single Occupant - no reconfig)	EA	7	$ 1,200.00	$8,400		$9,660
Toilet Room Code Upgrades (Multiple Occupant)	EA	10	$ 3,500.00	$35,000		$40,250
Replace Casework Throughout the Building	LF	1,750	$ 340.00	$595,000	-	$684,250
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Elevator			$ -	$0	-	$0
Building Systems - HVAC						
HVAC Upgrades	EA	1	$ 3,426,600.00	$3,426,600	-	$3,940,590
Building Systems - Plumbing / Fire Protection						
No Recommended Work						
Building Systems - Electrical						
Upgrade Fire Alarm System	EA	1	$ 249,216.00	$249,216	-	$286,598
Renovation Electrical Improvements	EA	1	$ 830,338.00	$830,338	-	$954,889
SUBTOTAL				$6,759,109	-	$7,750,025
Estimating Contingency		20%		$1,351,822	-	$1,550,005
POSSIBLE ALTERNATES				**$784,500**		**$902,175**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$8,110,930**	-	**$9,300,030**
Cost/SF				$103	-	$118
Soft Costs		25%		$2,027,733	-	$2,325,007
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$10,138,663**	-	**$11,625,037**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Marshall Academy

OPTION PROJECT

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 82,370 SF

	Unit	Quant	Cost	Cost Range LOW		HIGH
Existing Facility Upgrades						
Sitework						
Modify Parking for Accessible Access to Main Entrance	EA	1	$ 8,000.00	$8,000	-	$9,200
Replace Dilapidated Retaining Walls	EA	1	$ 6,000.00	$6,000	-	$6,900
Replace Corroding Steel Handrails	LF	120	$ 100.00	$12,000	-	$13,800
Building Exterior						
Clean Exterior Masonry Veneer & recaulk	SF	40,500	$ 3.00	$121,500	-	$139,725
Roofing (Separate by Tremco. $1.8 Million)	EA	1	$ -	$0	-	$0
Replace All Exterior Door Hardware	EA	22	$ 2,200.00	$48,400	-	$55,660
Building Interior						
Replace VCT and Wall Base Throughout Building	SF	58,907	$ 6.00	$353,442	-	$406,458
Repair Damaged Plaster Walls and Ceilings	SY	200	$ 55.00	$11,000	-	$12,650
Paint all Interior Walls	SF	82,370	$ 4.00	$329,480	-	$378,902
Replace ACT Ceilings throughout Building	SF	67,172	$ 5.00	$335,860	-	$386,239
Replace carpeting in offices	SY	191	$ 48.00	$9,157	-	$10,531
Toilet Room Code Upgrades (Single Occupant - reconfigure)	EA	7	$ 7,500.00	$52,500		$60,375
Toilet Room Code Upgrades (Multiple Occupant)	EA	11	$ 1,500.00	$16,500		$18,975
Modify Classroom Casework at Sinks (ADA)	LF	90	$ 600.00	$54,000	-	$62,100
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Replace Auditorium Seating	EA	570	$ 500.00	$285,000	-	$327,750
Replace Gymnasium Wall Pads	SF	600	$ 15.00	$9,000	-	$10,350
Building Systems - HVAC						
HVAC System Upgrades	EA	1	$ 1,187,160.00	$1,187,160	-	$1,365,234
Building Systems - Plumbing / Fire Protection						
No Recommended Work						
Building Systems - Electrical						
Fire Alarm System Upgrade	EA	1	$ 249,216.00	$249,216	-	$286,598
Renovation Electrical Improvements	EA	1	$ 979,386.00	$979,386	-	$1,126,294
SUBTOTAL				$4,067,601	-	$4,677,742
Estimating Contingency		20%		$813,520	-	$935,548
POSSIBLE ALTERNATES				**$454,900**		**$523,135**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$4,881,122**	-	**$5,613,290**
Cost/SF				$59	-	$68
Soft Costs		25%		$1,220,280	-	$1,403,322
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$6,101,402**	-	**$7,016,612**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

Rowland Academy

OPTION PROJECT

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards
Educational and functional deficiencies are not included in the below costs
Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 118,775 SF

Existing Facility Upgrades	Unit	Quant	Cost	Cost Range LOW		HIGH
Sitework						
Seal Coat asphalt Paving areas	SY	2,892	$ 3.50	$10,122	-	$11,640
Improve Drainage in Small Courtyard next to Entrance	EA	1	$ 15,000.00	$15,000	-	$17,250
Building Exterior						
Roofing (Supplied by Tremco)	LS	1	$ 220,000.00	$220,000	-	$220,000
Soffit Replacement	SF	200	$ 11.00	$2,200	-	$2,530
Repair Exterior Insulation and Finish System (EIFS)	SF	17,800	$ 11.00	$195,800	-	$225,170
Clean Stained Masonry/Precast Paneling, Recaulk	SF	28,000	$ 3.00	$84,000	-	$96,600
Replace Double Hung Windows	EA	160	$ 1,400.00	$224,000	-	$257,600
Paint Exterior Steel Elements	SF	500	$ 6.50	$3,250	-	$3,738
Replace Exterior HM Doors and Frames	EA	7	$ 4,500.00	$31,500	-	$36,225
Replace Exterior Door Hardware (Alum Doors)	EA	18	$ 2,200.00	$39,600	-	$45,540
Building Interior						
Repair Damaged Plaster Walls and Ceilings	SY	40	$ 55.00	$2,200	-	$2,530
Replace ACT and Concealed Spline Clgs Throughout	SF	85,864	$ 6.00	$515,184	-	$592,462
Paint All Interior Walls	SF	118,775	$ 5.00	$593,875	-	$682,956
Sand and Refinish Gymnasium Floor	SF	11,271	$ 8.00	$90,168	-	$103,693
Repaint Coated Concrete Locker Room Floors	SF	700	$ 5.00	$3,500	-	$4,025
Replace VCT and wall base throughout building	SF	74,280	$ 6.00	$445,680	-	$512,532
Stair Guard/Handrail Code Upgrade	EA	4	$ 22,000.00	$88,000	-	$101,200
Toilet Room Code Upgrades (Single Occupant - reconfigure)	EA	5	$ 7,500.00	$37,500		$43,125
Toilet Room Code Upgrades (Multiple Occupant)	EA	14	$ 15,000.00	$210,000		$241,500
Toilet Room Code Upgrades (Single Occupant - no reconfigu	EA	9	$ 1,500.00	$13,500	-	$15,525
Replace Fire Rated Doors	EA	50	$ 2,500.00	$125,000	-	$143,750
Replace Damaged Hollow Metal Doors	EA	20	$ 1,800.00	$36,000		$41,400
Make Improvements to Front Office Area for Visibility	SF	1,200	$ 125.00	$150,000		$172,500
Replace Educational Casework Throughout the Building	LF	2,550	$ 340.00	$867,000	-	$997,050
Specialties & Equipment						
Food Service Equipment	EA	1	$ -	$0	-	$0
Replace Gymnasium Wall Pads	SF	312	$ 15.00	$4,680	-	$5,382
Repair Bleachers Trim	EA	1	$ 3,000.00	$3,000	-	$3,450
Replace Dividing Partition in Cafeteria	EA	1	$ 40,000.00	$40,000	-	$46,000
Replace Corridor Lockers	LF	500	$ 350.00	$175,000	-	$201,250
Semi-Recessed FE Cabinets	EA	25	$ 650.00	$16,250		$18,688
Elevator Upgrade	EA	1	$ -	$0	-	$0
Elevator Replacement	EA	1	$ -	$0	-	$0
Building Systems - HVAC						
HVAC System Upgrades	EA	1	$ 2,057,520.00	$2,057,520	-	$2,366,148
Building Systems - Plumbing / Fire Protection						
No Recommended Work						
Building Systems - Electrical						
Fire Alarm Upgrades	EA	1	$ 348,336.00	$348,336	-	$400,586
Renovation Electrical Improvements	SF	1	$1,393,364	$1,393,364	-	$1,602,369
SUBTOTAL				$8,041,229	-	$9,214,413
Estimating Contingency		20%		$1,608,246	-	$1,842,883
POSSIBLE ALTERNATES				**$1,350,000**		**$1,552,500**
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$9,649,475**	-	**$11,057,296**
Cost/SF				$81	-	$93
Soft Costs		25%		$2,412,369	-	$2,764,324
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$12,061,844**	-	**$13,821,620**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

HHS - John Harris Campus

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 292,090 SF

	Unit	Quant	Cost	Cost Range LOW		HIGH
Existing Facility Upgrades						
Sitework						
Seal Coat asphalt Paving areas	SY	8,333	$ 3.50	$29,167	-	$33,542
Repair / Replace Concrete Sidewalk	SY	100	$ 115.00	$11,500	-	$13,225
Repair Spalling Concrete At Stair Retaining Walls	EA	5	$ 1,500.00	$7,500	-	$8,625
Building Exterior						
Roofing (Supplied by Tremco)	EA	1	$ 4,850,000.00	$4,850,000	-	$4,850,000
Repair Gymnasium Entrance Retaining Masonry Walls	EA	1	$ 6,000.00	$6,000	-	$6,900
Clean Masonry and Precast Features	SF	8,000	$ 3.00	$24,000	-	$27,600
Clean and Repair Soffits	SF	1200	$ 14.00	$16,800	-	$19,320
Replace All Exterior Door Hardware	EA	54	$ 2,200.00	$118,800	-	$136,620
Building Interior						
Painting Touch-Up, Bathroom Paint, HM Doors/Frames	SF	16,400	$ 5.00	$82,000	-	$94,300
Repair Damaged Plaster Walls	SY	250	$ 55.00	$13,750	-	$15,813
Replace Damaged Acoustical Tile	SF	2,400	$ 6.00	$14,400	-	$16,560
Replace Auditorium Carpeting	SY	278	$ 48.00	$13,333	-	$15,333
Repaint Auditorium Painted Concrete Flooring	SF	7,500	$ 5.00	$37,500	-	$43,125
Replace Gym Floor	SF	19,708	$ 22.00	$433,576	-	$498,612
Paint Gymnasium Walls and Ceilings	SF	19,708	$ 2.75	$54,197		$62,327
Replace Damaged Wood Doors	EA	40	$ 1,500.00	$60,000		$69,000
Toilet Room Code Upgrades (Single Occupant)	EA	24	$ 1,500.00	$36,000		$41,400
Toilet Room Code Upgrades (Multiple Occupant)	EA	23	$ 1,500.00	$34,500		$39,675
Stair Guard/Handrail Code Upgrade	EA	5	$ 22,000.00	$110,000	-	$126,500
Modify Classroom Casework at Sinks (ADA)	LF	30	$ 600.00	$18,000	-	$20,700
Specialties & Equipment						
Replace Auditorium Seating	EA	1108	$ 500.00	$554,000	-	$637,100
Replace Library Anti-Theft Devices	EA	1	$ 1,500.00	$1,500	-	$1,725
Replace Gymnasium Wall Pads	SF	336	$ 15.00	$5,040	-	$5,796
Replace Damaged Metal Locker Infill Panels	EA	100	$ 85.00	$8,500	-	$9,775
Building Systems - HVAC						
HVAC System Upgrades	EA	1	$ 2,669,472.00	$2,669,472	-	$3,069,893
Building Systems - Plumbing / Fire Protection						
Plumbing System Upgrades	EA	1	$ 75,000.00	$75,000	-	$86,250
Building Systems - Electrical						
Replace Fire Alarm System	EA	1	$ 693,000.00	$693,000	-	$796,950
LED Lighting	EA	1	$ 2,704,636.00	$2,704,636	-	$3,110,331
SUBTOTAL				$12,682,171	-	$13,856,997
Estimating Contingency		20%		$2,536,434	-	$2,771,399
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE				**$15,218,605**	-	**$16,628,396**
Cost/SF				$52	-	$57
Soft Costs		25%		$3,804,651	-	$4,157,099
TOTAL OVERALL ESTIMATED COST TO UPGRADE				**$19,023,257**	-	**$20,785,495**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

HHS - SciTech Campus

ESTIMATED COSTS TO UPGRADE TO CURRENT STANDARDS

The following cost estiamte includes upgrades to bring the existing components of the facility to current standards

Educational and functional deficiencies are not included in the below costs

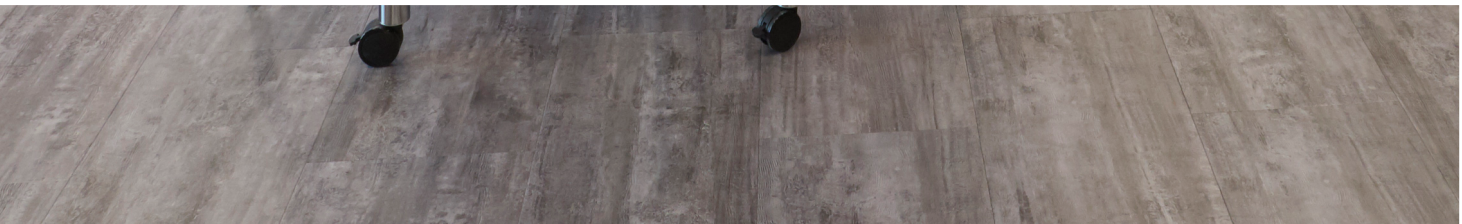
Cost are estimated in a range of expected costs with the high costs being 1.15 times the low range.

EXISTING BUILDING AREA 82,215 SF

	Unit	Quant		Cost	Cost Range		
Existing Facility Upgrades					**LOW**		**HIGH**
Sitework							
No recommended work.			$	-	$0	-	$0
Building Exterior							
Roofing (Supplied by Tremco), no cost at this time	EA	1	$	-	$0	-	$0
Clean EIFS	SF	6,400	$	3.00	$0	-	$0
Replace Exterior Door Hardware at Alum. Entrances/Exits	EA	4	$	2,200.00	$8,800	-	$10,120
Replace Cracked Window(s) (one observed)	SF	9	$	42.00	$378	-	$435
Building Interior							
Replace carpeting in the classrooms and office	SY	759	$	40.00	$30,360	-	$34,914
Replace Acoustical Ceiling Tile Throughout	EA	66,215	$	6.00	$397,290	-	$456,884
Replace VCT in classrooms as needed	SF	9,000	$	6.00	$54,000	-	$62,100
Repair GWB partiitons as needed	SF	500	$	3.50	$1,750	-	$2,013
Paint Classroom Walls as needed	SF	14,000	$	5.00	$70,000	-	$80,500
Replace damaged porcelain floor tiles	SF	400	$	14.00	$5,600	-	$6,440
Toilet Room Code Upgrades (Single Occupant)	EA	18	$	7,500.00	$135,000	-	$155,250
Toilet Room Code Upgrades (Multiple Occupant)	EA	10	$	1,200.00	$12,000	-	$13,800
Paint Hollow Metal Frames	EA	188	$	150.00	$28,200	-	$32,430
Secure Entry Vestibule	EA	1	$	40,000.00	$40,000	-	$46,000
Specialties & Equipment							
Replace walk-in refrigerator and freezer	EA	1	$	28,000.00	$28,000	-	$32,200
Building Systems - HVAC							
HVAC System Upgrades	EA	1	$	2,749,680.00	$2,749,680	-	$3,162,132
Building Systems - Plumbing / Fire Protection							
Plumbing System Upgrades	SF	1	$	125,820.00	$125,820	-	$144,693
Building Systems - Electrical							
Electrical System Upgrades - Lighting	SF	1	$	661,710.00	$661,710	-	$760,967
SUBTOTAL					$4,348,588	-	$5,000,876
Estimating Contingency		20%			$869,718	-	$1,000,175
TOTAL ESTIMATED CONSTRUCTION COST TO UPGRADE					**$5,218,306**	-	**$6,001,051**
Cost/SF					$63	-	$73
Soft Costs		25%			$1,304,576	-	$1,500,263
TOTAL OVERALL ESTIMATED COST TO UPGRADE					**$6,522,882**	-	**$7,501,314**

The above costs are represenetive of the costs at the time of the study. Add escalation factor for each year beyond the current year for projected inflation.

AUTHOR'S CREDENTIALS



8 | Authors' Credentials

R. Jeffrey Straub AIA, LEED Fellow, ALEP, CPD

Education

Bachelor of Architecture, Pennsylvania State University
Distinguished Thesis (Educational Architecture within the Inner City Fabric)
Bachelor of Art History, Pennsylvania State University
Area of Focus (Italian Baroque Architecture and Modern Architecture of the 20th Century)
Foreign Study, Sede di Roma, Rome Italy

Professional Experience

2009-Present	Studio Director and Principal Crabtree, Rohrbaugh & Associates – Architects
2007-2009	Team Leader, Senior Project Manager Crabtree, Rohrbaugh & Associates – Architects
2005-2007	Project Manager Crabtree, Rohrbaugh & Associates – Architects
1998-2005	Project Designer Crabtree, Rohrbaugh & Associates – Architects

Professional Registrations

Registered Architect in:

Pennsylvania	Virginia	Maryland	West Virginia	New Jersey	Michigan
New York	Ohio	Delaware	Colorado	Texas	

(AIA) American Institute of Architects, *Certificate # 30173099*
(LEED Fellow) Leadership in Energy and Environmental Design, U.S. Green Building Council
(NCARB) National Council of Architectural Registration Boards, *Certificate # 61558*
(LEED AP BD&C) Accredited Professional, Building Design & Construction Specialty, *Certificate # 73668*
Leadership in Energy and Environmental Design, U.S. Green Building Council
(ALEP) Accredited Learning Environment Planner
(REFP) Registered Educational Facility Planner
(CPD) Crime Prevention through Environmental Design Professional Designation

Professional Affiliations

The American Institute of Architects,
Chair, AIA Pennsylvania School Educaion Subcommittee
Past Treasurer, Board of Directors, Design Awards Chairman, Central Pennsylvania Chapter
A4LE (Association for Learning Environments, formerly CEFPI [Council of Educational Facility Planners International] Past Board of Directors, Northeast Chapter
U.S. Green Building Council Central Pennsylvania, Market Leadership Advisory Board (MLAB)
Pennsylvania Historical and Museum Commission (Pennsylvania Heritage Society)
National Institute of Crime Prevention

Recent Professional Awards

Central PA Chapter of The American Institute of Architects- (8) Projects Buildings Cited for Design Excellence
U.S. Green Building Council – (16) Buildings Cited for Design Excellence
Association for Learning Environments – (2) Schools Cited for Design Excellence
Pennsylvania Historic Museum Commission- (2) Historic Preservation Awards

US. Green Building Council

20 Buildings recognized by U.S. Green Building Council as Certified and Registered Sustainable Projects

Recent Speaking Engagements involved with but not limited to:

2021	LEED Live: U.S. Green Building Council & Center for Green Schools *"Every School can be Green: Platinum in Unexpected Places"*
2021	American Institute of Architects New York, New Jersey & Pennsylvania- TriState Conference "Reimagining School Design- What Will Schools Look Like?"
2021	American Institute of Architects New York, New Jersey & Pennsylvania- TriState Conference "Reimagining School Design- Where Do We Go from Here?"
2019	USGBC Central PA (GreenCON) *"Sustainable School Design in Inner City Philadelphia, Implementation of LEED v4 & v4.1 in Schools"*
2019	Pennsylvania Association of School Business Officials "PlanCON: From 1973 to the Future, PA's support of School Construction & Modernization"
2019	Association for Learning Environments (A4LE), Northeast Conference, Rhode Island "Discovering a Sustainable Vision through Collaboration in the Learning Environment"
2018	Maryland Association of School Business Officials (ASBO) *"Proactively Mitigating Safety Concerns, Prior to a Threat Entering the Building"*
2018	Spring Semester, Shippensburg University, Superintendents Doctoral Program
2018	PA School Safety & Security Exchange "Assessment Criteria: Overview of PCCD & CPTED"

Recent Educational Projects involved with include but are not limited to:

Tulpehocken Area School District, PA
- Tulpehocken Area High / Middle School

Manheim Central School District, PA
- Manheim Central High School

Chambersburg Area School District, PA
- District-Wide Facility Master Plan
- Andrew Buchanan Elementary School
- Falling Spring Elementary School
- Guilford Hills Elementary School
- Lurgan Elementary School

The School District of Philadelphia , PA
- Solomon Solis-Cohen Elementary Schools
- Rhawnhurst Elementary School
- 2021 Classroom Modernizations (3 Schools)
- 2020 Classroom Modernizations (11 Schools)
- 2019 Classroom Modernizations (4 Schools)
- 2018 Classroom Modernizations (3 Schools)

Midd-West School District, PA
- Midd-West High School
- Middleburg Elementary School
- District-Wide Facility Master Plan

Connellsville Area School District, PA
- District-Wide Facility Master Plan
- Connellsville Area High School
- Connellsville Area Career & Technology Center

Harrisburg Area Community College- Public Safety Center
- Training Grounds & Law Enforcement Center

Dauphin County Technical School, PA

Prince George's Public Schools, MD
- William Wirt Middle School

Dubois Area School District, PA
- Oklahoma Elementary School

Mechanicsburg Area School District, PA
- Wildcat Activity Center

State College Area School District, PA
- State College Area High School
- The Delta Program School
- District-Wide Facility Master Plan
- Corl Street Elementary School
- Radio Park Elementary School

South Middleton School District, PA
- District-Wide Facility Study
- Iron Forge Elementary School
- Rice Elementary School

Pottstown School District, PA
- District-Wide Facility Study
- Rupert Elementary School
- Barth Elementary School
- Lincoln Elementary School
- Franklin Elementary School

Queen Anne's Public Schools, MD
- Sudlersville Middle School

Middletown Area School District, PA
- Middletown Middle School

York County School of Technology, PA

Clearfield County Career & Technical Center, PA

Sean R. Douty AIA, LEED AP

Education

Master of Architecture, University of Maryland, 2011
Certificate in Urban Design, University of Maryland, 2011
Bachelor of Science in Architecture, University of Maryland, 2006

Professional Experience

2018-Present	Project Manager Crabtree, Rohrbaugh & Associates – Architects
2016-2018	Senior Associate OMNI Architects, PC; New York, NY
2014-2016	Associate OMNI Architects, PC; New York, NY
2012-2014	Project Architect OMNI Architects, PC; New York, NY

Professional Registrations

Registered Architect in Pennsylvania, *Certificate # RA408645*
Registered Architect in New York, *Certificate # 038169*
(AIA) American Institute of Architects, *Certificate # 38064654*
(LEED AP) Accredited Professional, *Certificate # 0010458568*
Leadership in Energy and Environmental Design, U.S. Green Building Council

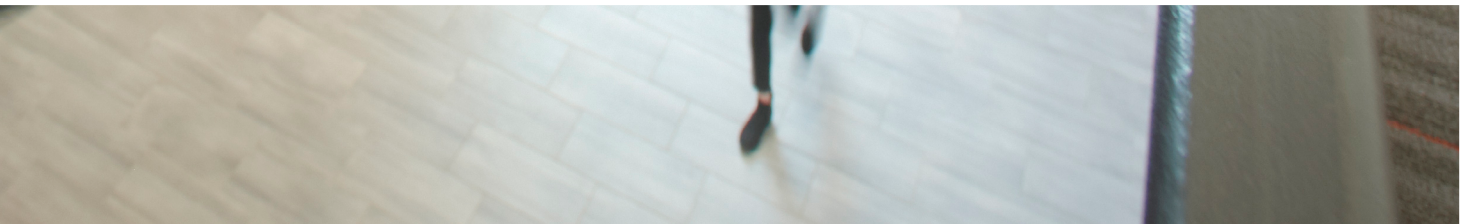
Professional Affiliations

The American Institute of Architects
U.S. Green Building Council Central Pennsylvania

Recent Educational Projects involved with Include but are not limited to:

Wilson School District, PA
Wilson High School
Manheim Central School District, PA
Manheim Central High School
Southwestern School District, PA
Southwestern High School
Elizabethtown Area School District, PA
Bear Creek Elementary School
East High Street Elementary School
Midd-West School District, PA
Midd-West High School
Dauphin County Technical School, PA
Northern Lebanon School District, PA
Northern Lebanon Secondary School
Mechanicsburg Area School District, PA
Broad Street Elementary School
Northside Elementary School
Hanover County Public Schools, VA
New Elementary School
Queen Annes County Public Schools , MD
Sudlersville Elementary School

APPENDIX A



A | Appendix

Understanding Capacity in Educational Feasibility Studies

Physical Capacity

Physical Capacity is the maximum number of people an educational space can safely hold. The calculation for physical capacity is primarily driven by building and fire codes. It is dependent on a variety of factors including, but not limited to, square footage, the number and location of exits, whether the building has a sprinkler system, fixed furniture and equipment, and if any hazardous materials are present.

All educational and support spaces including general classrooms, science labs, small group rooms, vocational/technical spaces, maker spaces, libraries, auditoriums, gymnasiums, and cafeterias have physical capacities which are unique to their size, layout, location within a building, and the governmental boundaries in which they reside. When determining physical capacity your architect or facilities manager in consultation with the local fire marshal and codes officer can provide that calculation. In general, physical capacities are far greater than what would be appropriate educationally. For example, a kindergarten room may be physically rated for 45 people, but a kindergarten class of 45 students is not educationally appropriate.

Physical capacities are established beyond the control of the Board of School Directors or administration and under no circumstances should be exceeded. It is important that all involved with facility design, scheduling, administration, and management know the physical capacities. However, it is not as critical to feasibility studies as educational capacity.

Educational Capacity

Educational capacity is the number of students and staff deemed appropriate for instruction in an educational space or to receive service in a support area. Educational capacity is a function of academic programming, educational goals, and operations of the school district. It is driven by the curriculum, needs of the students, instructional strategies, equipment and technology utilized, services provided, number of adults required to provide instruction and manage instructional space, and budgetary considerations. The capacity of support spaces is determined by factors such as the type of services provided, number of lunches served, fixed seating, age appropriate groupings, or schedule. All educational and support spaces including general classrooms, science labs, small group rooms, vocational/technical spaces, maker spaces, libraries, auditoriums, gymnasiums, and cafeterias have different educational capacities.

Most educational capacities are established by the Board of School Directors and/or administration through best practice, past practice, by school district policy, or through contractual obligations. Typically, they are established based on the age and needs of the students, academic offering, supervision and safety, and technology and instructional strategies utilized. In some cases, educational capacity may be state or federally mandated as in special education. The only caveat being is that educational capacity may never exceed physical capacity.

Utilization Rate

Utilization rate is the average number of students and staff typically scheduled to occupy a school. It is expressed as a percent of the educational capacity.

In a perfect scenario the utilization of support spaces would allow every instructional space to be scheduled to its educational capacity every instructional period of the day all school year long. That perfect scenario would reflect a 100% utilization rate. However, that is never the case as the number and suitability of instructional and support spaces, the size, distribution, and rate of growth/decline of the student body, the availability of professional and support staff, the instructional strategies and technology utilized, academic programs being offered, grade advancement/retention and graduation requirements, transportation schedules, and even the unique needs of a single student or small group of students are all part of a complex set variables that impact the likelihood of ever reaching a utilization rate of 100%.

In practice, schools represent a collection of instructional spaces, some scheduled above their educational capacity and some below and that varies over time. Schools that function well have the instructional and operational flexibility to allow management of that variation over time. In more challenging situations the educational capacity of all instructional spaces in a school are consistently exceeded or greatly underutilized.

Best practices for educational facility planning establish utilization rates in elementary schools at 90% of their educational capacity and 85% at the secondary level. Those rates are often adjusted based on the programs and experiences of each school district. Typically, they are adjusted down closer to 85% at the elementary level and 80% at the secondary level. When planning capacity, the utilization rate is often expressed in terms of the additional educational capacity required to efficiently schedule the anticipated enrollment. For example, as a basis for planning an elementary school with an anticipated enrollment of 500 students and a utilization rate of 90% plans for an educational capacity of 550 students. A middle school with an anticipated enrollment of 500 students and a utilization rate of 85% plans for an educational capacity of 575 students. Again, a district may choose to adjust that rate. If a district determines based on the way it groups its middle school teams, it may choose to plan a capacity for 590 using a utilization rate of 82%.

It is critical in planning and design that a school district establishes both an educational capacity for instructional spaces and for their schools as a whole given the academic and co-curricular programs that it offers and apply a utilization rate that it reasonably anticipates experiencing.

For reimbursement purposes, the Pennsylvania Department of Education establishes utilization rates for schools below 1500 students at 90% and 85% for schools above 1500 students regardless of grade alignment.

Planned Capacity

Planned Capacity is the educational capacity of a school given changes in way it is being academically programmed and operated adjusted by anticipated enrollments and multiplied by its desired utilization rate. It is calculated as the sum of the anticipated educational capacity of each instructional space in a school (increased or decreased from current capacity based on anticipated enrollment) multiplied by the targeted utilization rate. As a matter of best practice, planned capacities should not exceed educational capacities established by the district and planned for based on enrollment projections the district has accepted.

Renovations, additions, or new construction of educational space typically take 36 to 60 months to move through planning, approvals, financing, permitting, construction, and opening. Given the lead time of 36-60 months to plan, design, obtain Pennsylvania Department of Education and community approval, finance, permit, construct, and open new elementary instructional space, school districts with elementary enrollments trending upward should begin to plan when a student body surpasses 90% of a school's utilization capacity.

- Enrollment projections have the highest degree of validity within 60 months of being calculated; beyond 60 months their margin of error increases greatly.
- As a baseline the capacity of an educational facility should be planned for 100% of the projected enrollment five years from point when planning begins plus an additional 10% at the elementary level and 15% at the secondary level to allow for:
    1. scheduling inefficiencies,
    2. future growth, and
    3. PDE will not reimburse a district for work on that school for 20 years.
- The baseline for capacity is often adjusted by clients based on how aggressively enrollment is trending, historical experiences of a school district, and how a district believes their schools are best programmed and scheduled for the students they serve. Typically, they are adjusted by 5% to 15% beyond projected at the elementary level and up to 20% at the secondary level.

PDE Reimbursement Factor

The Pennsylvania Department of Education (PDE) utilizes a weighted number of students to calculate reimbursement. PDE, at times, refers to the weighted number of students as "capacity." However, it is important to note that the weighting of students is for reimbursement purposes and does NOT reflect the way elementary and secondary school buildings are programmed or scheduled.

Prior to Act 77 of 2019 PDE's calculations for capacity and reimbursement was based on a reasonable application of how elementary, middle, and high schools operated in the Commonwealth and how mandated programs like special education and non-instructional spaces impact those operations. However, it did not provide adequate reimbursement for educational spaces that were more costly than general classrooms to construct.

As in the past, non-instructional spaces such as hallways, cafeterias, offices, and mechanical areas are not reimbursable. Additionally, maintenance buildings, bus garages, athletic stadiums, and district offices are considered operational and co-curricular spaces that do not qualify for school construction reimbursement. It should also be noted that when a school district receives reimbursement for a school project, that school is not eligible for additional state subsidies for additions, renovations, or alterations for twenty-years.

PDE capacities are established by the Pennsylvania Department of Education and are beyond the control of the Board of School Directors or administration. However, school districts may establish Educational Capacities at, below, or above PDE capacities if they do not exceed Physical Capacity.

APPENDIX B

B | Appendix

Limitations of Enrollment Modeling used in the Study

Basic Limitations of the Pennsylvania Department of Education (PDE) Model

1. Internal policy changes that can affect the accuracy of projections
    a. policy on how old a child must be before being admitted into kindergarten and first grade
    b. policy on when and how a student is evaluated for special education services
    c. policy on how many students the area vocational-technical school is to receive
    d. policy on who provides full-time special education programs e. policy on scholastic retention and acceleration
2. External factors that can affect the accuracy of projections
    a. the opening or closing of a nonpublic school
    b. a significant increase or decrease in new home building
    c. a shift in migration patterns
3. Other considerations
    a. Enrollment projections for school districts with less than 1,000 students tend to be less reliable.
    b. Actual live birth data for the most recent year are added annually. However, enrollment projections beyond five years are subject to errors in the lower grades resulting from inconsistencies between actual and projected live births and should be reviewed closely.

Basic Limitations of Crabtree, Rohrbaugh & Associates

1. The model is sensitive to changes of internal and external factors which may only have a short-term impact, be an anomaly, a function of data reporting, or so recent they do not reflect in the model. Such factors may include:
    a. changes in policy such as a reduction in credits required for graduation, on-line programs that allow students to accelerate through the curriculum, increasing numbers of students enrolled but spending less than a full day/year in the district's programs.
    b. a "bubble class" entering the system.
    c. an unexpected return of students from other educational institutions.
    d. a change in attendance boundaries
    e. a significant increase in home building with a lag in occupancy permits.
    f. enrollment projections beyond five years are subject to errors as a result of sudden changes in the economy, housing market, migration, educational programming, and state and federal legislation.

Basic Limitations of the Modeling Best Fit

1. It is not a model in and of itself, but an analysis of the models utilized. Limits of the analysis include:
    a. while incorporating the strengths of the models used, it also incorporates the limits of the models.
    b. "outliers", while statistically valid, can skew the line of best fit.
    c. utilizing an average of averages can be misleading.