Facility Condition Assessment

North Kingstown - Davisville Middle School | *June 2017*

200 School Street, North Kingstown, RI 02852

Introduction

Davisville Middle School, located at 200 School Street in North Kingstown, Rhode Island, was built in 1967. It comprises 96,748 gross square feet. Each school across the district was visited three times during the Facility Condition Assessments by three teams of specialists in the spring/summer of 2016.

Davisville Middle School serves grades 6 - 8, has 47 instructional spaces, and has an enrollment of 534. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for Davisville Middle School is 680 with a resulting utilization of 79%.

For master planning purposes a 5-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Davisville Middle School the 5-year need is $16,998,820. The findings contained within this report resulted from an assessment of building systems performed by building professionals experienced in disciplines including: architecture, mechanical, plumbing, electrical, acoustics, hazardous materials, and technology infrastructure.

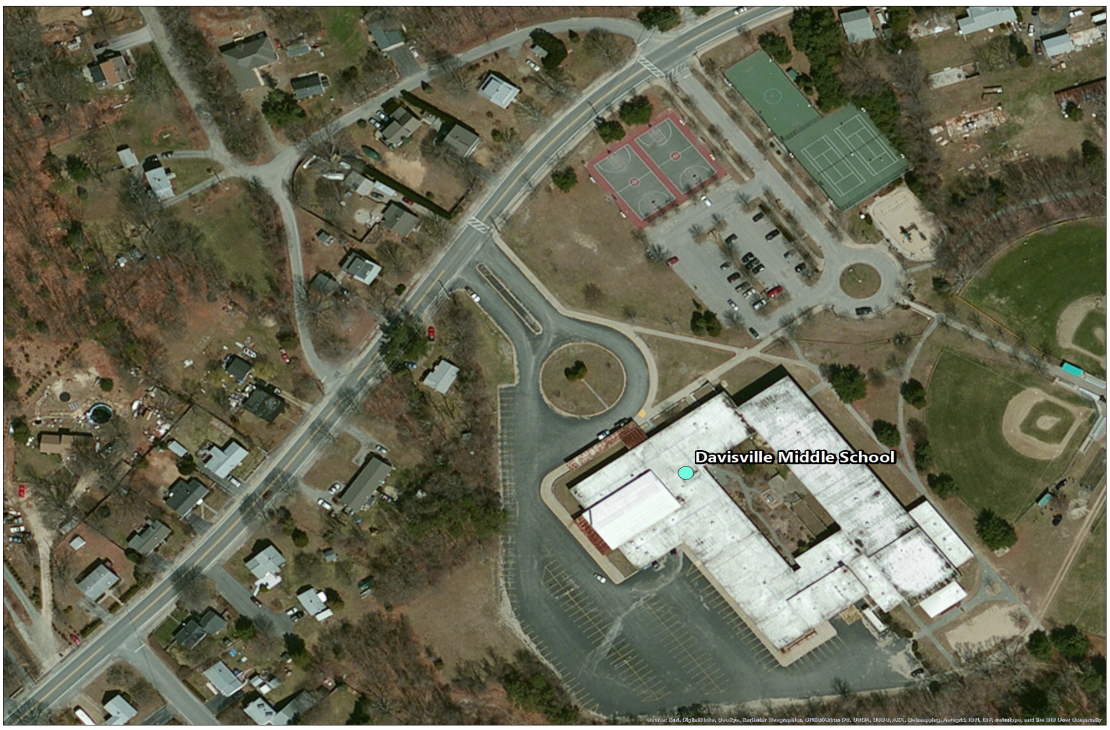

Figure 1: Aerial view of Davisville Middle School

Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

Current Deficiencies: Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

Life Cycle Forecast: Life cycle analysis evaluates ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

Discipline Specialists

All assessment teams produced current deficiencies associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

Facility Condition Assessment: Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by district facilities and maintenance staff where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase. The team took digital photos at each school to better identify significant deficiencies.

Technology: Technology specialists visited RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. The assessment included network architecture, major infrastructure components, classroom instructional systems, necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure results can be attained effectively.

Hazardous Materials: Schools constructed prior to 1990 were assessed by specialists to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

Traffic: A traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations and reviewed data collected on site during the facility condition assessment. Based on this information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

Acoustics: Specialists assessed each school's acoustics, including architectural acoustics, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical system noise and vibration control.

Educational Program Space Assessment: Teams evaluated schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and a listing of alterations that should be made to make the space a better environment for teaching and learning was created.

System Summaries

The following tables summarize major building systems at the Davisville Middle School campus, identified by discipline and building.

Site

The site level systems for this campus include:

Site	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Asphalt Pedestrian Pavement
	Concrete Pedestrian Pavement

Building Envelope

The exterior systems for the building(s) at this campus includes:

01 - Main Building:	Brick Exterior Wall
	E.I.F.S. Exterior Wall
	Aluminum Exterior Windows
	Steel Exterior Entrance Doors
	Storefront Entrance Doors

The roofing for the building(s) at this campus consists of:

01 - Main Building:	EPDM Roofing
	Canopy Roofing

Interior

The interior systems for the building(s) at this campus include:

01 - Main Building:	Steel Interior Doors
	Aluminum/Glass Storefront Interior Doors
	Wood Interior Doors
	Overhead Interior Coiling Doors
	Interior Door Hardware
	Door Hardware
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Non-Painted Plaster/Gypsum Board Ceiling
	Metal Panel Ceilings
	Ceramic Tile Wall
	Wood Wall Paneling
	FRP Wall Finish
	CMU Wall
	Interior Wall Painting

01 - Main Building:	Concrete Flooring
	Ceramic Tile Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
	Rubber Tile Flooring
	Carpet

Mechanical

The mechanical systems for the building(s) at this campus include:

01 - Main Building:	400 MBH Cast Iron Water Boiler
	Finned Wall Radiator
	Steam/Hot Water Heating Unit Vent
	Radiant Steam Heater
	DDC Heating System Controls
	1 Ton Ductless Split System
	2 Ton Ductless Split System
	15 Ton Package DX Unit
	20 Ton Package DX Unit
	Window Units
	5 HP VFD
	1 HP or Smaller Pump
	5 HP Pump
	2-Pipe Hot Water Hydronic Distribution System
	2,000 CFM Interior AHU
	5,000 CFM Outdoor AHU
	Ductwork
	Dehumidifier
	Kitchen Exhaust Hoods
	Roof Exhaust Fan
	Large Roof Exhaust Fan
	Small Roof Exhaust Fan

Plumbing

The plumbing systems for the building(s) at this campus include:

01 - Main Building:	Gas Piping System
	6.4 GPM Instant Water Heater
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Refrigerated Drinking Fountain

01 - Main Building:	Restroom Lavatories
	Showers
	Toilets
	Urinals
	Air Compressor (2 hp)

Electrical

The electrical systems for the building(s) at this campus include:

01 - Main Building:	50 kW Emergency Generator
	Automatic Transfer Switch
	1,600 Amp Switchgear
	112.5 KVA Transformer
	400 Amp Distribution Panel
	Panelboard - 120/208 100A
	Panelboard - 120/208 125A
	Panelboard - 120/208 225A
	Electrical Disconnect
	Building Mounted Lighting Fixtures
	Canopy Mounted Lighting Fixtures
	Light Fixtures

Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

Priority 1 – Mission Critical Concerns: Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

Priority 2 – Indirect Impact to Educational Mission: Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

Priority 3 – Short-Term Conditions: Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

Priority 4 – Long-Term Requirements: Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

Priority 5 – Enhancements: Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.

The following chart summarizes this site's current deficiencies by building system and priority. The listing details current deficiencies including deferred maintenance, functional deficiencies, code compliance, capital renewal, hazardous materials and technology categories.

Table 1: System by Priority

	Priority						
System	1	2	3	4	5	Total	% of Total
Site	-	-	$196,262	$28,329	$333,789	$558,380	4.35 %
Roofing	-	$1,005,906	-	-	-	$1,005,906	7.84 %
Structural	$9,443	-	-	-	-	$9,443	0.07 %
Exterior	-	$912,189	-	$1,039	-	$913,228	7.12 %
Interior	-	-	$726,624	$4,130,190	$595,455	$5,452,269	42.49 %
Mechanical	-	$1,011,763	$1,251	-	$21,760	$1,034,775	8.06 %
Electrical	$1,403	$237,830	$18,846	$23,515	-	$281,594	2.19 %
Plumbing	-	-	$306,098	$103,858	$71,602	$481,558	3.75 %
Fire and Life Safety	$1,326,709	-	-	-	-	$1,326,709	10.34 %
Technology	-	-	$1,216,299	-	-	$1,216,299	9.48 %
Conveyances	-	-	-	-	-	$0	0.00 %
Specialties	-	-	$4,533	$495,170	$50,992	$550,695	4.29 %
Total	$1,337,554	$3,167,689	$2,469,914	$4,782,100	$1,073,598	$12,830,855	

**Displayed totals may not sum exactly due to mathematical rounding*

The building systems with the most need include:

Interior	-	$5,452,269
Fire and Life Safety	-	$1,326,709
Technology	-	$1,216,299

The chart below represents the building systems and associated deficiency costs.

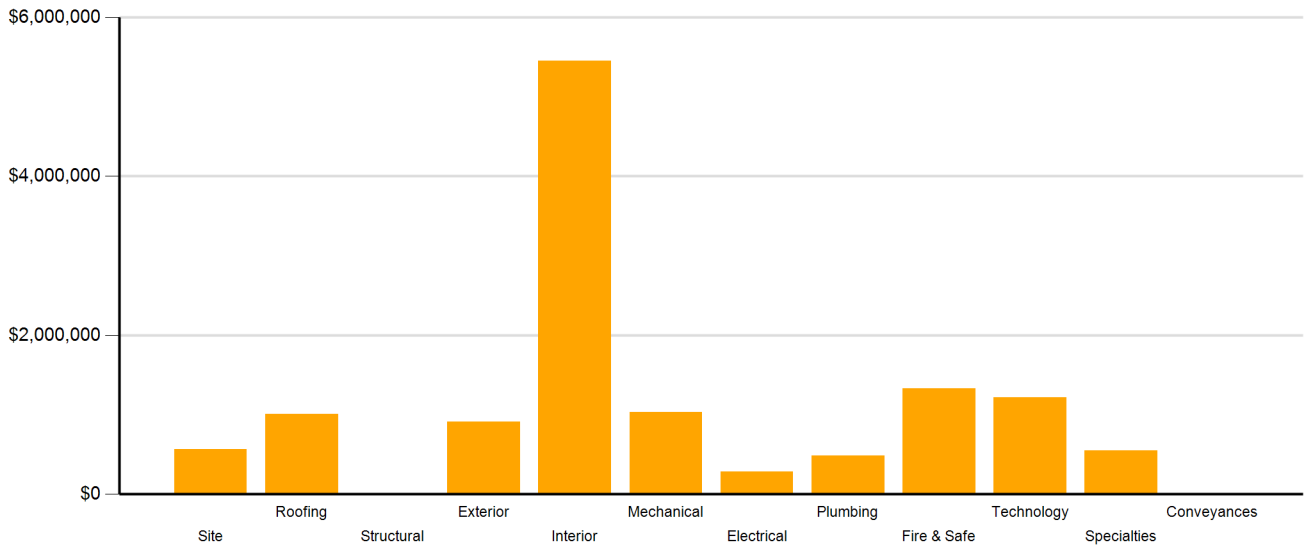

Figure 2: System Deficiencies

Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

• **Acoustics** deficiencies relate to room acoustics, sound insolation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.

• **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities Act and the Rhode Island Governors Commission on Disability. Additional items related to accessibility may be included other categories.

• **Capital Renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiencies correcting planned work postponed beyond its regular life expectancy.

• **Code Compliance** deficiencies related to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance which are reflected in the master plan.

• **Educational Adequacy** deficiencies identify where facilities do not align with the Basic Education Program and the RIDE School Construction Regulations.

• **Functional Deficiencies** are deficiencies for components or systems that have failed before the end of expected life or are not the right application, size, or design.

• **Hazardous Materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.

• **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicated air conditioning for telecommunication rooms.

• **Traffic** deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.

The following chart and table represent the deficiency category by priority. This listing includes current deficiencies for all building systems.

Table 2: Deficiency Category by Priority

	Priority					
Category	**1**	**2**	**3**	**4**	**5**	**Total**
Acoustics	-	-	-	$314,450	-	$314,450
Barrier to Accessibility	-	-	-	-	-	$0
Capital Renewal	$9,443	$3,167,689	$1,237,372	$2,184,767	$620,444	$7,219,716
Code Compliance	$1,258,719	-	-	-	-	$1,258,719
Educational Adequacy	$69,392	-	$163,174	$33,711	$453,154	$719,431
Functional Deficiency	-	-	-	$16,669	-	$16,669
Hazardous Material	-	-	-	$2,232,502	-	$2,232,502
Technology	-	-	$1,057,658	-	-	$1,057,658
Traffic	-	-	$11,709	-	-	$11,709
Total	$1,337,554	$3,167,689	$2,469,914	$4,782,100	$1,073,598	$12,830,855

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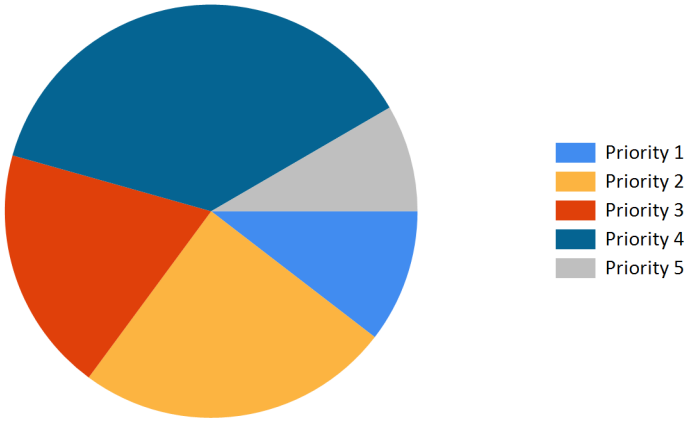

Figure 3: Current deficiencies by priority

Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If a need for immediate replacement was identified, a deficiency was created with the estimated repair costs. The identified deficiency contributes to the facility's total current repair costs.

Capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a 5-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might reach the end of its life before a planned construction project occurs.

The following chart shows all current deficiencies and the subsequent 5-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

Table 3: Capital Renewal Forecast

		Life Cycle Capital Renewal Projections						
System	Current Deficiencies	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	LC Yr. 1-5 Total	Total 5-Year Need
Site	$558,380	$0	$0	$0	$0	$0	$0	$558,380
Roofing	$1,005,906	$0	$0	$0	$85,563	$0	$85,563	$1,091,470
Structural	$9,443	$0	$0	$0	$0	$0	$0	$9,443
Exterior	$913,228	$0	$0	$0	$201,102	$0	$201,102	$1,114,330
Interior	$5,452,269	$0	$0	$0	$437,027	$1,692,948	$2,129,975	$7,582,244
Mechanical	$1,034,775	$0	$0	$28,521	$50,744	$0	$79,265	$1,114,040
Electrical	$281,594	$0	$0	$0	$0	$574,863	$574,863	$856,457
Plumbing	$481,558	$0	$0	$73,774	$236,235	$778,423	$1,088,432	$1,569,990
Fire and Life Safety	$1,326,709	$0	$0	$0	$0	$0	$0	$1,326,709
Technology	$1,216,299	$0	$0	$0	$0	$0	$0	$1,216,299
Conveyances	$0	$0	$0	$0	$0	$0	$0	$0
Specialties	$550,695	$0	$0	$0	$0	$0	$0	$550,695
Total	**$12,830,855**	**$0**	**$0**	**$102,295**	**$1,010,671**	**$3,046,234**	**$4,159,200**	**$16,990,055**

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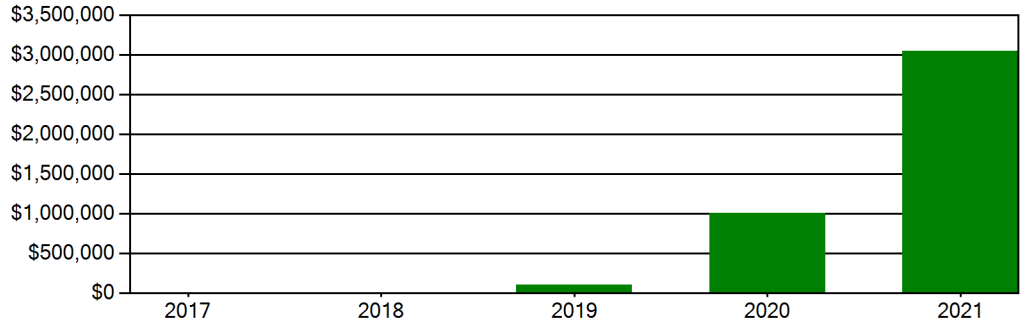
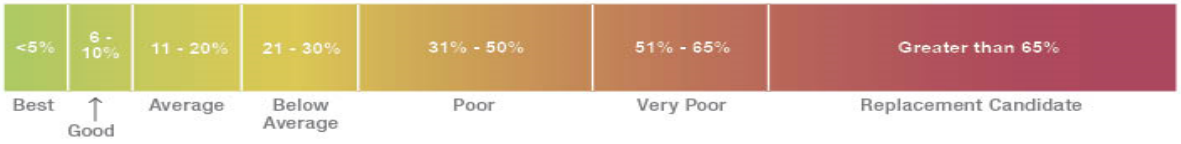


Figure 4: Life Cycle Capital Renewal Forecast

Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of schools. The FCI is derived by dividing the total repair cost, including educational adequacy and site-related repairs, by the total replacement cost. A facility with a higher FCI percentage has more need, or higher priority, than a facility with a lower FCI. It should be noted that costs in the New Construction category are not included in the FCI calculation.



Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair schools with a FCI of 65 percent or greater. This is due to efficiency gains with facilities that are more modern and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners and facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decisions.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A 5-year FCI was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is $31,926,840. For planning purposes, the total 5-year need at the Davisville Middle School is $16,998,820 (Life Cycle Years 1-5 plus the FCI deficiency cost). The Davisville Middle School facility has a 5-year FCI of 53.22%.

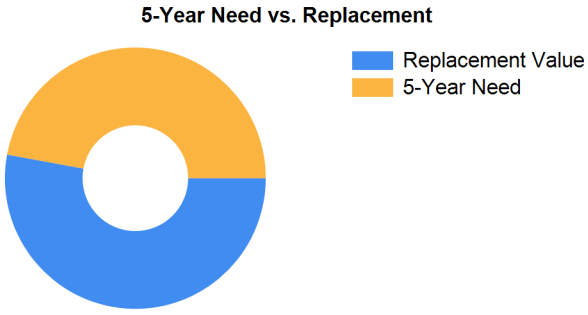


Figure 5: 5-Year FCI

It is important to reiterate that this FCI replacement threshold is not conclusive, but is intended to initiate planning discussion in which other relevant issues with regard to a facility's disposition must be incorporated. This merely suggests where conversations regarding replacement might occur.

Rhode Island Aspirational Capacity

The capacity of a school reflects how many students the school's physical facility can effectively serve. There are various methodologies that exist to calculate capacity. It is not uncommon to review an existing building only to find that the capacity that had once been assigned is greater than what can be reasonably accommodated today. This is primarily because of a change in how programs are delivered.

The Rhode Island Aspirational Capacity is based on the Rhode Island School Construction Regulations (SCRs) and is an aspirational goal of space use. The capacity for each individual public school in the state of Rhode Island was designed to conform to Section 1.06-2 Space Allowance Guidelines of the Rhode Island Department of Education (RIDE) SCRs. These regulations outline the allowed gross square feet (GSF) per student at each school type (ES, MS, HS) by utilizing a sliding scale based on projected enrollment. The resulting capacities reflect how school capacities align to the SCRs for new construction. The existing enrollment was multiplied by the GSF per student for the appropriate bracket. For the purposes of this analysis, Pre-K centers were rolled into the elementary totals, and K-8 facilities were counted as middle schools.

The most consistent and equitable way a state can determine school capacities across a variety of districts and educational program offerings is to use square-foot-per-student standards. In contrast, in the 2013 Public Schoolhouse Assessment Report, LEAs self-reported capacities for their elementary, middle and high schools. Districts typically report "functional capacity," which is defined as the number of students each classroom can accommodate. Functional capacity counts how many students can occupy a space, not how much room students and teachers have within that space. For example, a 650-square-foot classroom and a 950-square-foot classroom can both have a reported capacity of 25 students, but the actual teaching and learning space per student varies greatly.

The variation in square feet per student impacts the kinds of teaching practices possible in each space. The lowest allocation of space per student restricts group and project-based learning strategies and requires teachers to teach in more traditional, lecture-style formats, due to a lack of space. Furthermore, the number of students that can be accommodated in a classroom does not account for access to sufficient common spaces such as libraries, cafeterias, and gymnasiums. When cafeterias are undersized relative to the population, schools must host four or more lunch periods a day, resulting in some students eating lunch mid-morning and some mid-afternoon. Similarly, undersized libraries and gymnasiums create scheduling headaches for schools and restrict student access. Finally, a classroom count-only approach to school capacity does not consider the inherent scheduling challenges schools face.

Applying the Rhode Island Aspirational Capacity, a facility of this size could ideally support an enrollment of approximately 547 students.

Facility New Construction

As part of the Educational Program Space Assessment, select core spaces were compared to the RI School Construction Regulations. If it was determined that a facility was in need of square footage related to a cafeteria or library/media center, a cost for additional space was estimated. This cost is not included in the total 5-year need or the 5-year FCI calculation.

The New Construction cost to bring the Davisville Middle School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be $979,031.

Summary of Findings

The Davisville Middle School comprises 96,748 square feet and was constructed in 1967. Current deficiencies at this school total $12,839,620. Five year capital renewal costs total $4,159,200. The total identified need for the Davisville Middle School (current deficiencies and 5-year capital renewal costs) is $16,998,820. The 5-year FCI is 53.22%.

Table 4: Facility Condition by Building

	Gross Sq Ft	Year Built	Current Deficiencies	LC Yr. 1-5 Total	Total 5 Yr Need (Yr 1-5 + Current Defs)	5-Year FCI
Davisville Middle School Totals	96,748	1967	$12,839,620	$4,159,200	$16,998,820	53.22%

**Displayed totals may not sum exactly due to mathematical rounding*

The following pages provide a listing of all current deficiencies and 5-year life cycle need and the associated costs, followed by photos taken during the assessment.

Cost Estimating

Cost estimates are derived from local cost estimating expertise and enhanced by industry best practices, historical cost data, and relevance to the Rhode Island region. Costs have been developed from current market rates as of the 2nd quarter in 2016. All costs are based on a replace-in-kind approach, unless the item was not in compliance with national or state regulations or standards.

For planning and budgeting purposes, facility assessments customarily add a soft cost multiplier onto deficiency repair cost estimates. This soft cost multiplier accounts for costs that are typically incurred when contracting for renovation and construction services. Soft costs typically include construction cost factors, such as contractor overhead and profit, as well as labor and material inflation, professional fees, and administrative costs. Based on the Rhode Island School Construction Regulations, a soft cost multiplier of 20% is included on all cost estimates. Other project allowances are included in the cost estimates based on school attributes such as age, location, and historic designation. All stated costs in the assessment report will include soft costs for planning and budgeting purposes. These are estimates, and costs will vary at the time of construction.

LEA Feedback

As part of the assessment process, LEAs were given several opportunities to provide feedback on the data. Jacobs performed a thorough review of the comments provided relating to the Facilities Condition Assessment. Based on information provided, some adjustments were made to improve or refine the dataset. In other situations, enough information was not provided, item was out of scope, or evidence provided by assessment team did not align with the feedback and no adjustment was made. Finally, deficiency priorities, costs, and educational space/technology standards are consistent throughout the state.

Site Level Deficiencies

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Asphalt Walks Require Replacement	Capital Renewal	5,000	SF	3	$42,439	12527
Concrete Walks Require Replacement	Capital Renewal	7,000	SF	3	$142,114	12185
Crosswalk Requires Repainting	Traffic	1	Ea.	3	$755	16905
Note: Repaint crosswalk on school driveway next to tennis courts						
Crosswalk: Needs to be added	Traffic	1	Ea.	3	$755	16907
Note: Add crosswalk to main school driveway						
Pavement Markings: Words/Symbols Are Required	Traffic	3	Ea.	3	$1,133	16904
Note: Add handicap parking space markings (at least 3 spaces)						
Traffic Signage Is Required	Traffic	4	Ea.	3	$9,065	16906
Note: Add school zone signage and flashing beacons on School St.						
Backstops Require Replacement	Educational Adequacy	1	Ea.	4	$28,329	28511
Note: Backstops Require Replacement						
Paving Requires Restriping	Capital Renewal	158	CAR	5	$8,952	12187
Note: Resurface Parking Areas						
School lacks a competition track.	Educational Adequacy	1	Ea.	5	$324,837	28251
Note: School lacks a competition track.						
	Sub Total for System	**9**	**items**		**$558,380**	
	Sub Total for School and Site Level	**9**	**items**		**$558,380**	

Building: 01 - Main Building

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Tectum Decking Requires Replacement	Capital Renewal	13,650	SF	2	$1,005,906	12212
Note: Tectum ceiling is aged and stained						
	Sub Total for System	**1**	**items**		**$1,005,906**	

Structural

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Foundation Study Recommended	Capital Renewal	1	Job	1	$9,443	12217
Note: Moderate cracks on slab at hallway - outside Library, Lobby, Wood Shop, Boiler Room and Cafeteria						
	Sub Total for System	**1**	**items**		**$9,443**	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Aluminum Storefront Exterior Door Requires Replacement	Capital Renewal	4	Door	2	$28,329	12194
Note: Original storefront system. Beginning to show signs of age.						
The Aluminum Window Requires Replacement	Capital Renewal	4,500	SF	2	$756,380	12195
Note: All exterior window systems are original, not energy efficient and deteriorating						
The Metal Exterior Door Requires Replacement	Capital Renewal	20	Door	2	$127,480	12193
Note: Corroding						
Handrail Requires Repainting	Capital Renewal	100	LF	4	$1,039	12216
Note: Paint at interior stairwells is worn						
	Sub Total for System	**4**	**items**		**$913,228**	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Acoustical Ceiling Tiles Require Replacement	Capital Renewal	75,398	SF	3	$676,381	12196
Note: Original ceiling tiles are stained and damaged						
The Carpet Flooring Requires Replacement	Capital Renewal	800	SF	3	$17,288	12198
Note: Carpet is aged and worn						
The Wood Flooring Requires Replacement	Capital Renewal	1,000	SF	3	$32,956	12200
Note: Wood is scratched and worn						
Location: Stage						
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	73,848	SF	4	$2,092,029	Rollup

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Caulking - significant areas of broken pieces &/or deteriorating caulk	Hazardous Material	200	LF	4	$3,777	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	75,398	SF	4	$888,236	12230
Note: Original ceiling grid is stained and damaged						
Interior Storefront Doors Require Replacement	Capital Renewal	4	Door	4	$18,886	12227
Note: Original 1967 storefront doors						
Interior Toilet Partition Requires Replacement	Capital Renewal	50	Ea.	4	$217,188	12208
Note: Replace metal and plastic toilet partitions throughout the building						
Moveable Partitions Require Replacement	Capital Renewal	4,000	SF Wall	4	$458,927	12189
Note: Partitions do not work and the fabric is peeling off						
Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each)	Hazardous Material	370	Ea.	4	$104,817	Rollup
Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - linear feet)	Hazardous Material	640	LF	4	$14,504	Rollup
Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet)	Hazardous Material	1,600	SF	4	$15,109	Rollup
Paint (probable pre-1978 in base layer(s)) -large areas(> 10 sq. ft.)of peeling/damage & area in active use-adults only (measurement unit - linear feet)	Hazardous Material	100	LF	4	$2,266	Rollup
Partitions Provide Insufficient Sound Isolation	Acoustics	7,500	SF	4	$212,466	19835
Note: All classrooms						
Room Is Excessively Reverberant (Install Fiberglass Wall Panel)	Acoustics	1,800	SF	4	$101,984	19836
Note: Gym						
Classroom Door Requires Vision Panel	Educational Adequacy	1	Ea.	5	$2,266	Rollup
Interior Doors Require Repainting	Capital Renewal	160	Door	5	$10,727	12197
Note: Throughout the building						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	86,498	SF	5	$567,673	Rollup
Room lacks appropriate sound control.	Educational Adequacy	100	SF	5	$3,456	Rollup
The Concrete Flooring Requires Repair Or Repainting	Capital Renewal	1,500	SF	5	$11,332	12201
Note: Paint is peeling from the floor						
	Sub Total for System	**20**	**items**		**$5,452,269**	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Outdoor Air Handler HVAC Component Required Replacement	Capital Renewal	2	Ea.	2	$283,289	12532
The Air Handler HVAC Component Requires Replacement	Capital Renewal	4	Ea.	2	$171,386	12531
The Fin Tube Water Radiant Heater Requires Replacement	Capital Renewal	11	Ea.	2	$18,302	12222
The Steam/Hot Water Radiant Heater Requires Replacement	Capital Renewal	105	Ea.	2	$538,786	12533
Kitchen Air/Exhaust Is Inadequate And Should Be Repaired	Capital Renewal	1	Ea.	3	$1,251	12213
Remove Abandoned Equipment	Capital Renewal	7	Ea.	5	$21,760	12214
Note: Old boiler and above ground fuel storage tank are no longer in use. Old hot water storage tanks are still in the Boiler Room.						
	Sub Total for System	**6**	**items**		**$1,034,775**	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room last power shut-off valves for utilities	Educational Adequacy	1	Ea.	1	$1,403	Rollup
Generator Requires Replacement	Capital Renewal	1	Ea.	2	$75,544	12203
Switchgear Is Needed Or Requires Replacement	Capital Renewal	1	Ea.	2	$81,549	12530
The Panelboard Requires Replacement	Capital Renewal	6	Ea.	2	$28,895	12218
The Panelboard Requires Replacement	Capital Renewal	9	Ea.	2	$51,842	12219
Upgrade Gym Lighting To LED	Capital Renewal	10	Ea.	3	$18,846	12231
Stage Lighting Requires Replacement	Functional Deficiency	12	Ea.	4	$16,669	12223
The Canopy Lighting Requires Replacement	Capital Renewal	5	Ea.	4	$6,846	12202
	Sub Total for System	**8**	**items**		**$281,594**	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Domestic Water Piping Requires Repair	Capital Renewal	100	LF	3	$691	12234
Note: The drains in the Science Classroom emergency showers are not draining properly.						
The Showers Plumbing Fixtures Require Replacement	Capital Renewal	34	Ea.	3	$256,848	12206
Location: Locker Rooms						
The Toilets Plumbing Fixtures Require Repair	Capital Renewal	25	Ea.	3	$38,976	12205
The Urinal Plumbing Fixtures Require Repair	Capital Renewal	14	Ea.	3	$9,583	12211
The Classroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	24	Ea.	4	$64,816	12191
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	7	Ea.	4	$17,913	12210
The Restroom Lavatories Plumbing Fixtures Require Repair	Capital Renewal	25	Ea.	4	$19,311	12204
The Showers Plumbing Fixtures Require Repair	Capital Renewal	5	Ea.	4	$1,817	12207
Note: Science room emergency showers						
Room lacks a drinking fountain.	Educational Adequacy	4	Ea.	5	$4,382	Rollup
Room lacks a private shower area.	Educational Adequacy	1	Ea.	5	$10,166	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	38	Ea.	5	$57,054	Rollup
	Sub Total for System	**11**	**items**		**$481,558**	

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Install Fire Sprinklers (NFPA 13)	Code Compliance	96,748	SF	1	$1,258,719	12232
Note: No fire sprinklers in the building, install complete fire suppression system.						
Room lacks shut-off valves for utilities. (International Fuel Gas Code, Section 409.6)	Educational Adequacy	6	Ea.	1	$67,989	Rollup
	Sub Total for System	**2**	**items**		**$1,326,709**	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	28	Ea.	3	$158,642	Rollup
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life.	Technology	20	Ea.	3	$396,604	18305
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life.	Technology	1	Ea.	3	$19,830	18306
Technology: Instructional spaces do not have local sound reinforcement.	Technology	31	Ea.	3	$146,366	18309
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	$5,288	18299
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,394	18298
Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	$4,721	18300
Technology: Main Telecommunications Room ground system is inadequate or non-existent.	Technology	1	Ea.	3	$6,610	18296
Technology: Main Telecommunications Room is not dedicated and/or inadequate.	Technology	1	Ea.	3	$49,859	18295
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards.	Technology	281	Ea.	3	$119,406	18303
Technology: Network system inadequate and/or near end of useful life	Technology	3	Ea.	3	$22,663	18307
Technology: Network system inadequate and/or near end of useful life	Technology	36	Ea.	3	$169,973	18308
Technology: Special Space AV/Multimedia systems are in need of minor improvements.	Technology	1	Room	3	$18,886	18304
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	$7,554	18297
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus.	Technology	30	Ea.	3	$45,326	18301

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Telephone system is inadequate and/or non-existent.	Technology	1	Ea.	3	$7,177	18302
	Sub Total for System	**16**	**items**		**$1,216,299**	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	1	Ea.	3	$4,533	Rollup
Replace Cabinetry In Classes/Labs	Capital Renewal	22	Room	4	$244,474	12226
Note: Original cabinets are deteriorating and aged						
The Metal Student Lockers Require Replacement	Capital Renewal	502	Ea.	4	$245,314	12225
Note: Original lockers are corroding, missing doors, bent, and not functional. The locker design at the hallway with upper doors are a safety concern where kids can run into the metal doors when open.						
Welding Bays Are Required	Educational Adequacy	1	Ea.	4	$5,382	Rollup
Room lacks an appropriate refrigerator.	Educational Adequacy	6	Ea.	5	$50,992	Rollup
	Sub Total for System	**5**	**items**		**$550,695**	
	Sub Total for Building 01 - Main Building	**74**	**items**		**$12,272,475**	
	Total for Campus	**83**	**items**		**$12,830,855**	

Davisville Middle School - Life Cycle Summary Yrs 1-5

Building: 01 - Main Building

Roofing

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Canopy Roofing	Canopies		1,500	SF	$85,563	4
		Sub Total for System	**1**	**items**	**$85,563**	

Exterior

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Exterior Wall Veneer	E.I.F.S. - Bldg SF basis		9,748	SF	$201,102	4
		Sub Total for System	**1**	**items**	**$201,102**	

Interior

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Interior Swinging Doors	Wood		36	Door	$165,992	4
Wall Paneling	Wood Panel wall		250	SF	$2,282	4
Wood Flooring	Wood Flooring - All Types		8,100	SF	$268,753	4
Resilient Flooring	Rubber Tile Flooring		200	SF	$3,736	5
Interior Swinging Doors	Steel		180	Door	$770,749	5
Interior Door Supplementary Components	Door Hardware		220	Door	$690,206	5
Tile Flooring	Ceramic Tile		8,500	SF	$228,257	5
		Sub Total for System	**7**	**items**	**$2,129,974**	

Mechanical

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Facility Distribution Systems Supplementary Components	Dehumidifier		1	Ea.	$28,521	3
Decentralized Heating Equipment	Heating Unit Vent - Steam/Hot water		3	Ea.	$50,744	4
		Sub Total for System	**2**	**items**	**$79,265**	

Electrical

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)		96,748	SF	$574,863	5
		Sub Total for System	**1**	**items**	**$574,863**	

Plumbing

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Refrigerated Drinking Fountain		10	Ea.	$73,774	3
Plumbing Fixtures	Mop/Service Sinks		2	Ea.	$5,153	4
Plumbing Fixtures	Restroom Lavatories		39	Ea.	$124,060	4
Plumbing Fixtures	Toilets		31	Ea.	$88,415	4
Plumbing Fixtures	Urinals		14	Ea.	$18,607	4
Domestic Water Piping	Domestic Water Piping System (Bldg.SF)		96,748	SF	$778,423	5
		Sub Total for System	**6**	**items**	**$1,088,432**	
		Sub Total for Building 01 - Main Building	**18**	**items**	**$4,159,200**	
		Total for: Davisville Middle School	**18**	**items**	**$4,159,200**	

Supporting Photos


Steps Near Main Entrance


Asphalt Sidewalk Facing Park


Damaged Tectum Ceiling in Gymnasium


Spalling Sidewalk

Site Aerial

Stained Tectum Ceiling in Gymnasium

Site Sign

Worn Paint at Interior Stairwells

Gymnasium

Typical Classroom


Cafeteria


Typical Science Lab


Front Elevation


Library


Rear Elevation


Music Room


Damaged Moveable Classroom Partitions


Back of Kitchen


Corroding Exterior Door at Rear of Building


Damaged Moveable Gym Partition


Typical Exterior Windows


Corroding Exterior Door at Courtyard


Repaint Interior Doors


Aging Exterior Storefront Doors


Worn Carpet at Classrooms


Aged and Damaged Ceiling Tile at Classroom


Worn Stage Flooring


Paint Peeling at Classrooms


Damaged Toilet Partitions


Worn Vinyl Flooring


Cracked Flooring Outside Wood Shop


Refinish Concrete Flooring


Cracked Flooring at Administrative Offices


Cracked Flooring Outside of Cafeteria


Lockers with Safety Concern at First Floor and Basement


Corroded Lockers at Basement


Typical Classroom Cabinets


Corroded Lockers at Girls Locker Room

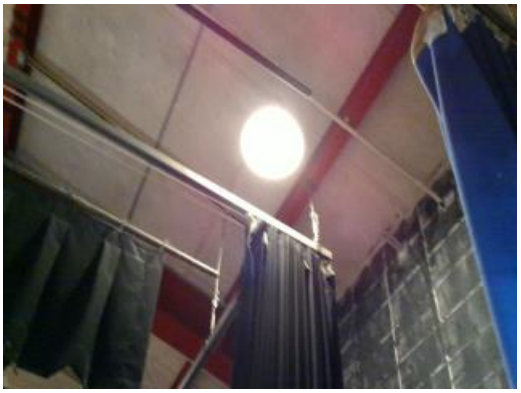

Peeling Paint in Hallways

Original Storefront Doors at Front Lobby


Science Room Emergency Shower


Damaged Ceiling Grid at Hallway


Typical Roof Condition


Stage Lighting


Roof Facing Faculty Parking


Fuel Oil Storage Tank


Inceniator

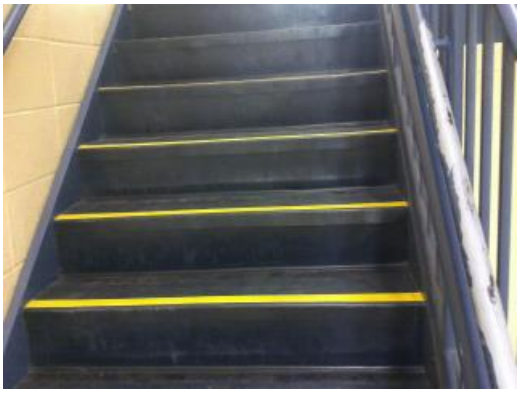

Main Switchboard


Hot Water Expansion tanks


Girls Showers

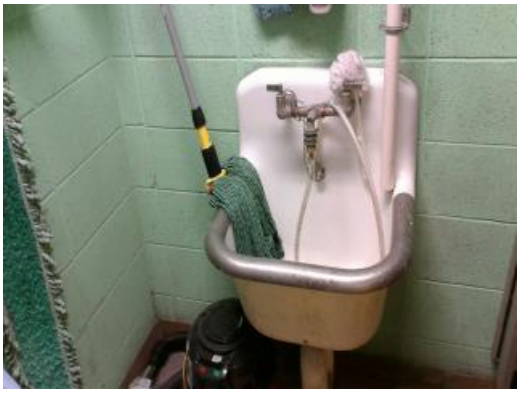

Main Switchboard


Storage Room 219


Interior Stairwell


Boys Showers


Art Room Closet


Second Floor Custodial Closet


Sink in Room 164


Boys Restroom Near Gym