Facility Condition Assessment

South Kingstown - South Kingstown High School | *June 2017*

215 Columbia Street, Wakefield, RI 02879

Introduction

South Kingstown High School, located at 215 Columbia Street in Wakefield, Rhode Island, was built in 1954. It comprises 234,900 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.

South Kingstown High School serves grades 9 - 12, has 90 instructional spaces, and has an enrollment of 1,004. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for South Kingstown High School is 1,703 with a resulting utilization of 59%.

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 South Kingstown High School the 5-year need is $24,701,149. 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.

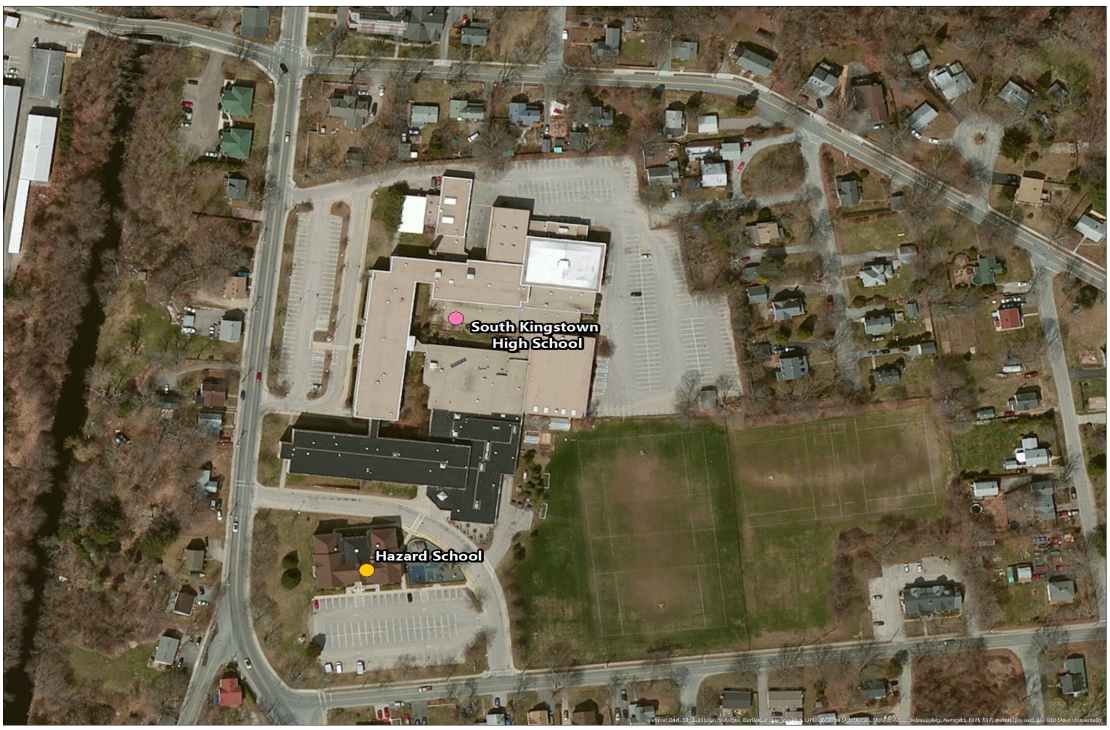

Figure 1: Aerial view of South Kingstown High School

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 South Kingstown High School campus, identified by discipline and building.

Site

The site level systems for this campus include:

Site	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Concrete Pedestrian Pavement

Building Envelope

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

01 - Main Building:	Brick Exterior Wall
	Metal Panel Exterior Wall
	Aluminum Exterior Windows
	Storefront / Curtain Wall
	Storefront Entrance Doors
	Steel Exterior Entrance Doors
	Overhead Exterior Utility Doors
02 - Small Shed:	Wood Siding Exterior Wall
	Aluminum Exterior Windows
	Wood Exterior Doors
03 - Building 03:	Wood Siding Exterior Wall
	Wood Exterior Doors

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

01 - Main Building:	Built-Up Roofing With Ballast
	Metal Low-Slope Roofing
	Single Ply Roofing
02 - Small Shed:	Composition Shingle Roofing
03 - Building 03:	Composition Shingle 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
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System

01 - Main Building:	Suspended Acoustical Ceiling Tile
	Non-Painted Plaster/Gypsum Board Ceiling
	Metal Panel Ceilings
	Ceramic Tile Wall
	CMU Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
	Terrazzo Flooring
	Epoxy Coated Flooring
	Carpet
	Athletic/Sport Flooring
02 - Small Shed:	Wood Ceilings
	Interior Wall Painting
	Wood Flooring
03 - Building 03:	Wood Ceilings
	Interior Wall Painting
	Wood Flooring

Mechanical

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

01 - Main Building:	4,200 MBH Cast Iron Steam Boiler
	1,275 MBH Cast Iron Water Boiler
	Steam to Water Heat Exchanger
	Steam Condensate Receiver, Tank and Pump
	Gas Heating Unit Vent
	Steam/Hot Water Heating Unit Vent
	Fin Tube Water Radiant Heater
	Pneumatic Heating System Controls
	3 Ton Ductless Split System
	10 Ton Outside Air Cooled Condenser
	Window Units
	Make-up Air Unit
	10 HP Pump
	2-Pipe Hot Water Hydronic Distribution System
	5,000 CFM Interior AHU
	10,000 CFM Interior AHU
	Ductwork
	10 Ton DX Gas Roof Top Unit
	25 Ton DX Gas Roof Top Unit

01 - Main Building:	Supply Fan
	4'x8' Ventilator/Relief Vent
	Wall Exhaust Fan
	Roof Exhaust Fan
	Laboratory Fume Hood
	Fire Sprinkler System

Plumbing

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

01 - Main Building:	1,000 Gallon Water Storage Tank
	2" Backflow Preventers
	Gas Piping System
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Showers
	Toilets
	Urinals
	Sump Pump
	Air Compressor (5 hp)

Electrical

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

01 - Main Building:	150 kW Emergency Generator
	Automatic Transfer Switch
	1,200 Amp Switchgear
	1,600 Amp Switchgear
	3,000 Amp Switchgear
	1600 Amp Distribution Panel
	600 Amp Distribution Panel
	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	Panelboard - 120/208 400A
	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	-	-	$1,511	$1,381,060	$939,696	$2,322,267	11.97 %
Roofing	-	$3,056,871	-	-	-	$3,056,871	15.76 %
Structural	-	-	-	-	-	$0	0.00 %
Exterior	-	$2,323,895	$1,053	-	-	$2,324,949	11.99 %
Interior	-	-	$1,405,913	$1,413,750	$909,723	$3,729,387	19.23 %
Mechanical	-	$3,802,939	$302,997	$310,479	$3,130	$4,419,545	22.78 %
Electrical	$12,710	$295,096	$7,016	-	$112,500	$427,323	2.20 %
Plumbing	-	-	-	$125,473	$165,051	$290,524	1.50 %
Fire and Life Safety	$881,701	-	-	-	-	$881,701	4.55 %
Technology	-	-	$1,391,060	-	-	$1,391,060	7.17 %
Conveyances	-	-	-	-	-	$0	0.00 %
Specialties	-	-	$18,253	$406,810	$128,344	$553,407	2.85 %
Total	$894,411	$9,478,802	$3,127,804	$3,637,572	$2,258,443	$19,397,032	

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

The building systems with the most need include:

Mechanical	-	$4,419,545
Interior	-	$3,729,387
Roofing	-	$3,056,871

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

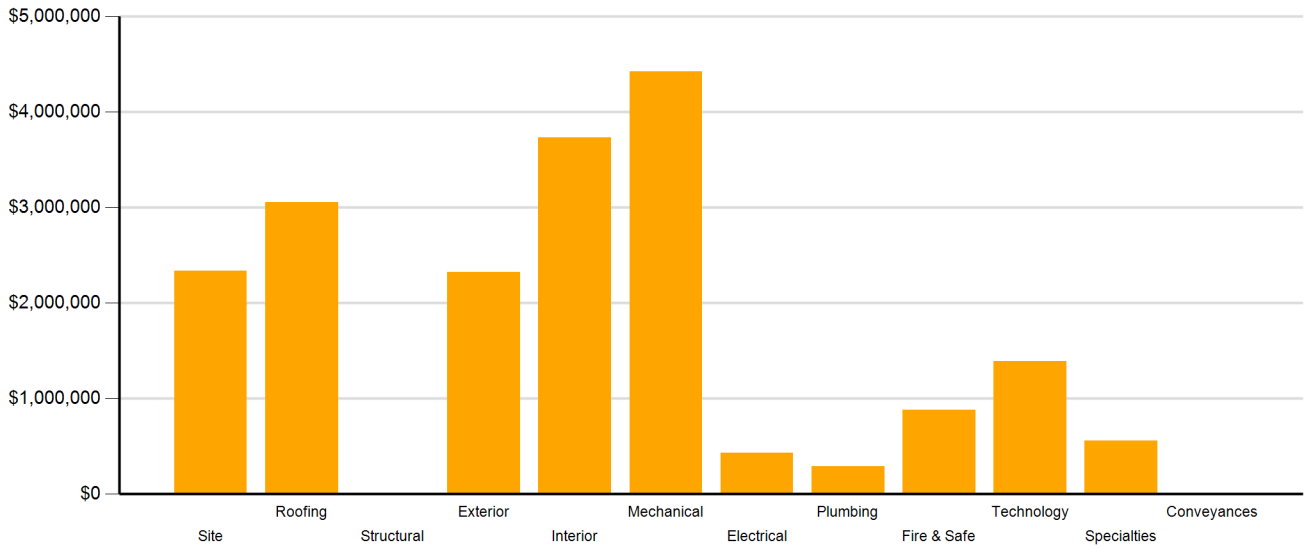

Figure 2: System Deficiencies

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	-	-	$114,209	$169,794	-	$284,004
Barrier to Accessibility	-	-	$5,704	-	-	$5,704
Capital Renewal	-	$9,478,802	$1,597,066	$2,950,713	$904,766	$14,931,347
Code Compliance	$687,759	-	-	-	-	$687,759
Educational Adequacy	$206,652	-	$46,774	$456,111	$1,353,678	$2,063,215
Functional Deficiency	-	-	-	-	-	$0
Hazardous Material	-	-	-	$60,953	-	$60,953
Technology	-	-	$1,362,539	-	-	$1,362,539
Traffic	-	-	$1,511	-	-	$1,511
Total	$894,411	$9,478,802	$3,127,804	$3,637,572	$2,258,443	$19,397,032

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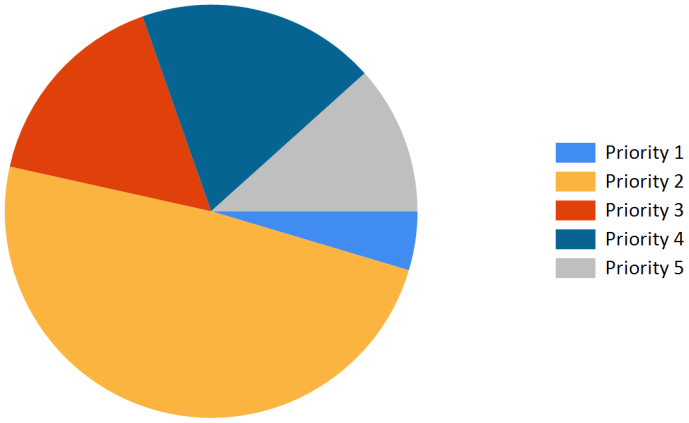

Figure 3: Current deficiencies by priority

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	$2,322,267	$0	$0	$0	$124,372	$541,392	$665,764	$2,988,031
Roofing	$3,056,871	$0	$0	$0	$0	$0	$0	$3,056,871
Structural	$0	$0	$0	$0	$0	$0	$0	$0
Exterior	$2,324,949	$0	$0	$0	$16,647	$5,995	$22,642	$2,347,591
Interior	$3,729,387	$0	$0	$0	$6,636	$1,321	$7,957	$3,737,344
Mechanical	$4,419,545	$0	$0	$0	$109,553	$2,103,277	$2,212,830	$6,632,375
Electrical	$427,323	$0	$0	$0	$70,047	$1,702,911	$1,772,958	$2,200,281
Plumbing	$290,524	$0	$0	$0	$23,570	$1,449	$25,019	$315,543
Fire and Life Safety	$881,701	$0	$0	$0	$0	$0	$0	$881,701
Technology	$1,391,060	$0	$0	$0	$0	$0	$0	$1,391,060
Conveyances	$0	$0	$0	$0	$0	$570,418	$570,418	$570,418
Specialties	$553,407	$0	$0	$0	$0	$0	$0	$553,407
Total	**$19,397,032**	**$0**	**$0**	**$0**	**$350,825**	**$4,926,763**	**$5,277,588**	**$24,674,620**

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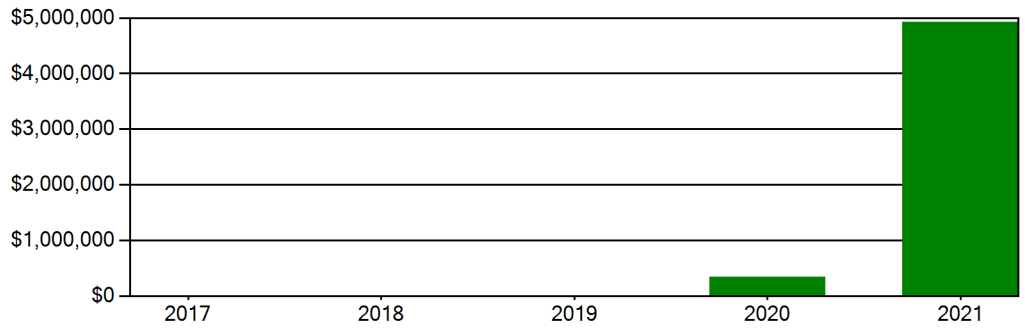
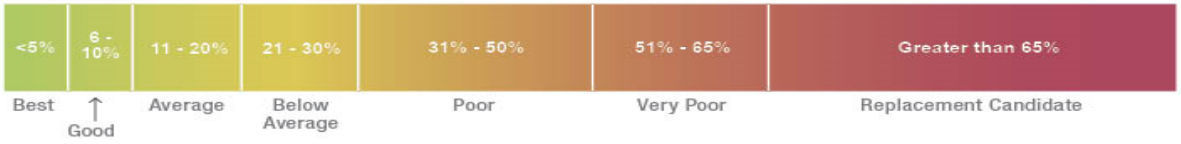


Figure 4: Life Cycle Capital Renewal Forecast

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 $84,564,000. For planning purposes, the total 5-year need at the South Kingstown High School is $24,701,149 (Life Cycle Years 1-5 plus the FCI deficiency cost). The South Kingstown High School facility has a 5-year FCI of 29.18%.

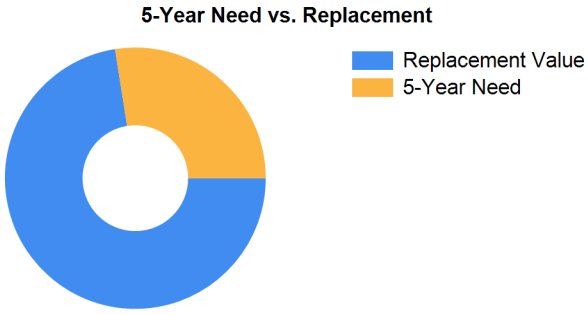


Figure 5: 5-Year FCI

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 1,270 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 South Kingstown High School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be $0.

Summary of Findings

The South Kingstown High School comprises 234,900 square feet and was constructed in 1954. Current deficiencies at this school total $19,423,561. Five year capital renewal costs total $5,277,588. The total identified need for the South Kingstown High School (current deficiencies and 5-year capital renewal costs) is $24,701,149. The 5-year FCI is 29.18%.

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
South Kingstown High School Totals	234,900	1954	$19,423,561	$5,277,588	$24,701,149	29.18%

**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
Crosswalk Requires Repainting	Traffic	2	Ea.	3	$1,511	9305
Note: Repaint crosswalks at end of school driveways						
Asphalt Paving Requires Replacement	Capital Renewal	114	CAR	4	$374,631	54851
Note: Per LEA review - all asphalt should be replaced.						
Asphalt Paving Requires Replacement	Capital Renewal	270	CAR	4	$887,285	54852
Note: Per LEA review - all asphalt should be replaced.						
Backstops Require Replacement	Educational Adequacy	1	Ea.	4	$28,329	28591
Note: Backstops Require Replacement						
Fencing Requires Replacement (8' Chain Link Fence)	Capital Renewal	1,360	LF	4	$90,814	8460
Note: Fence is rusted and falling.						
School has insufficient # of tennis courts.	Educational Adequacy	1	Ea.	5	$161,597	29044
Note: School has insufficient # of tennis courts.						
School has insufficient baseball fields.	Educational Adequacy	1	Ea.	5	$207,745	28329
Note: School has insufficient baseball fields.						
School has insufficient football/soccer fields.	Educational Adequacy	1	Ea.	5	$94,430	28199
Note: School has insufficient football/soccer fields.						
School has insufficient softball fields.	Educational Adequacy	1	Ea.	5	$151,087	28373
Note: School has insufficient softball fields.						
School lacks a competition track.	Educational Adequacy	1	Ea.	5	$324,837	28274
Note: School lacks a competition track.						
	Sub Total for System	**10**	**items**		**$2,322,267**	
	Sub Total for School and Site Level	**10**	**items**		**$2,322,267**	

Building: 01 - Main Building

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Built-up Roofing With Aggregate Ballast Requires Replacement	Capital Renewal	60,000	SF	2	$2,281,673	54853
Note: Per LEA review feedback - school needs new roof						
The Metal Roof Structural Roof Covering Requires Replacement	Capital Renewal	2,160	SF	2	$82,140	54854
Note: Per LEA review - school needs new roof						
The Single-Ply Membrane Roof Covering Requires Replacement	Capital Renewal	54,000	SF	2	$693,058	8495
Note: Roof is leaking at the new addition and science wing.						
	Sub Total for System	**3**	**items**		**$3,056,871**	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Aluminum Window Requires Replacement	Capital Renewal	13,704	SF	2	$2,319,047	54855
Note: Per LEA review - replace windows						
The Concrete Pre-Cast Panel Requires Replacement (Bldg SF)	Capital Renewal	30	SF	2	$4,849	8496
Note: Foundation concrete wall corner is damaged.						
Location: Northwest corner by secondary entrance						
The Metal Panel Exterior Requires Repair	Capital Renewal	100	SF Wall	3	$1,053	8462
Location: Wood shop						
	Sub Total for System	**3**	**items**		**$2,324,949**	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Entry Door Does Not Have Required Power Assist Device	Barrier to Accessibility	2	Ea.	3	$5,704	8474
Note: Power assist mechanism is not functioning properly and should be replaced.						

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Doors Require Replacement	Capital Renewal	37	Door	3	$170,603	8463
Note: Doors are scratched and/or broken throughout main building.						
The Athletic Sport Flooring Requires Replacement	Capital Renewal	4,430	SF	3	$151,617	8473
Note: Athletic floor is aged and worn.						
Location: Small gym						
The Carpet Flooring Requires Replacement	Capital Renewal	16,500	SF	3	$358,977	8464
Note: Carpet is worn and stained throughout the building.						
The Vinyl Composition Tile Requires Replacement	Capital Renewal	54,000	SF	3	$619,474	8465
Note: VCT worn, chipped, and peeling.						
The Wood Flooring Requires Replacement	Capital Renewal	3,000	SF	3	$99,538	8466
Note: Wood floor is scratched and worn at stage.						
Location: Auditorium stage						
Ceiling Grid Requires Replacement	Capital Renewal	98,458	SF	4	$1,167,761	8492
Note: Ceiling tiles are stained and sagging at the main building classrooms, library, cafeteria, offices, and kitchen.						
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. AND NOT in children-accessible area (measurement unit - each)	Hazardous Material	1	Ea.	4	$285	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. AND NOT in children-accessible area (measurement unit - square feet)	Hazardous Material	600	SF	4	$5,704	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - each)	Hazardous Material	84	Ea.	4	$23,958	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - linear feet)	Hazardous Material	271	LF	4	$6,183	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. OR overall worn AND in children-accessible area (measurement unit - square feet)	Hazardous Material	2,611	SF	4	$24,823	Rollup
Room Is Excessively Reverberant	Acoustics	7,600	SF	4	$169,794	19725
Note: Main gym & small gym						
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	400	SF	4	$15,242	Rollup
Classroom Door Requires Vision Panel	Educational Adequacy	5	Ea.	5	$11,408	Rollup
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	135,957	SF	5	$898,315	Rollup
	Sub Total for System	**16**	**items**		**$3,729,387**	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductless Split System AC Requires Replacement	Capital Renewal	6	Ea.	2	$46,694	8489
Note: Units are aged. Condensers are rusting and evaporative units are molded.						
Package Roof Top Unit Requires Replacement	Capital Renewal	1	Ea.	2	$29,808	8482
Note: RTU is aged and heat exchanger is rusted.						
Package Roof Top Unit Requires Replacement	Capital Renewal	1	Ea.	2	$72,674	8485
Note: Unit is aged and rusted.						
Replace Unit Vent	Capital Renewal	9	Ea.	2	$152,233	8493
Note: Units are aged and have not been maintained.						
Location: Gym						
Replace Unit Vent	Capital Renewal	17	Ea.	2	$287,552	8494
Note: Units are aged. Many are not operational with failed motors.						
Replace Unit Vent	Capital Renewal	119	Ea.	2	$2,012,861	54857
Note: Updated per LEA review						
The Air Handler HVAC Component Requires Replacement	Capital Renewal	1	Ea.	2	$119,484	8480
Note: Air handler is aged and rusted with corroded connections.						
Location: Auditorium						
The Exterior Condenser Requires Replacement	Capital Renewal	1	Ea.	2	$16,342	8481
Note: Condenser is old and the heat exchanger is rusted.						
The Steam Condensate Receiver Requires Replacement	Capital Renewal	3	Ea.	2	$1,055,274	8486
Note: Pumps and seals are rusted and leaking.						
The Window AC Unit Component Requires Replacement	Capital Renewal	3	Ea.	2	$10,017	8479
Note: Units are aged and beginning to fail. Plastic casing is cracked and coils are clogged.						

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Large Diameter Exhausts/Hoods Require Replacement	Capital Renewal	1	Ea.	3	$13,893	8469
Note: Boiler room supply fan is not functioning.						
The Make Up Air Equipment Requires Replacement	Capital Renewal	11	Ea.	3	$174,894	8475
Note: Units are aged, connections are corroded, cases are rusted.						
Location: Library, gyms, locker rooms, boiler room						
Unit Ventilators Are Excessively Noisy	Acoustics	18	Ea.	3	$114,209	27972
Location: All learning spaces						
Exhaust Fan Ventilation Requires Replacement	Capital Renewal	1	Ea.	4	$2,678	8470
Lab lacks an appropriate fume hood.	Educational Adequacy	14	Ea.	4	$307,801	Rollup
Remove Abandoned Equipment	Capital Renewal	1	Ea.	5	$3,130	8488
Note: Fuel storage tank has been abandoned in place and needs to be removed.						
	Sub Total for System	**16**	**items**		**$4,419,545**	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room last power shut-off valves for utilities	Educational Adequacy	9	Ea.	1	$12,710	Rollup
Switchgear Is Needed Or Requires Replacement	Capital Renewal	1	Ea.	2	$82,102	8478
Switchgear Is Needed Or Requires Replacement	Capital Renewal	1	Ea.	2	$69,059	8487
Note: Switchgear is old with broken breakers and is being used improperly as a disconnect.						
The Distribution Panel Requires Replacement	Capital Renewal	1	Ea.	2	$51,908	8461
Note: Panel is old and breakers are cracking.						
The Panelboard Requires Replacement	Capital Renewal	13	Ea.	2	$63,031	8483
Note: Panelboards are old, cases are damaged, and breakers are cracked.						
The Panelboard Requires Replacement	Capital Renewal	5	Ea.	2	$28,996	8484
Note: Panels are aged, cases are damaged, and masonite panels are falling apart.						
The Mounted Building Lighting Requires Repair	Capital Renewal	15	Ea.	3	$7,016	8467
Remove Abandoned Equipment	Capital Renewal	1	Ea.	5	$3,321	8468
Note: Abandoned emergency generator should be removed.						
Room Has Insufficient Electrical Outlets	Educational Adequacy	220	Ea.	5	$109,178	Rollup
	Sub Total for System	**9**	**items**		**$427,323**	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	9	Ea.	4	$91,980	8471
Note: Units are aged, corroded, and non-functional.						
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	13	Ea.	4	$33,493	8472
Note: Service sinks are stained and rusting.						
Room lacks a drinking fountain.	Educational Adequacy	3	Ea.	5	$3,308	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	107	Ea.	5	$161,742	Rollup
	Sub Total for System	**4**	**items**		**$290,524**	

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Fire Alarm Is Missing Or Inadequate (NFPA 72 and NFPA 101, Section 9.6)	Code Compliance	234,650	SF	1	$687,759	54856
Note: Updated per LEA review						
Room lacks shut-off valves for utilities. (International Fuel Gas Code, Section 409.6)	Educational Adequacy	17	Ea.	1	$193,942	Rollup
	Sub Total for System	**2**	**items**		**$881,701**	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	5	Ea.	3	$28,521	Rollup
Technology: Auditorium AV/Multimedia system is in need of minor improvements.	Technology	1	Room	3	$95,070	13163

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Campus network switching electronics are antiquated and/or do not meet standards.	Technology	482	Ea.	3	$229,118	13176
Technology: Classroom AV/Multimedia systems are in need of improvements.	Technology	28	Ea.	3	$266,195	13159
Technology: Instructional spaces do not have local sound reinforcement.	Technology	30	Ea.	3	$142,605	13177
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	10	Ea.	3	$53,239	13166
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	13169
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	13170
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	13171
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	13172
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	13173
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	13174
Technology: Intermediate Telecommunications Room needs minor improvements.	Technology	1	Ea.	3	$16,732	13168
Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	10	Ea.	3	$47,535	13167
Technology: Main Telecommunications Room ground system is inadequate or non-existent.	Technology	1	Ea.	3	$6,655	13165
Technology: Main Telecommunications Room needs minor improvements.	Technology	1	Ea.	3	$21,676	13164
Technology: Network cabling infrastructure is partially outdated and/or needs expansion.	Technology	96	Ea.	3	$41,070	13160
Technology: Network system inadequate and/or near end of useful life	Technology	30	Ea.	3	$142,605	13162
Technology: Number of current, up to date, network switch ports are insufficient to support campus technology.	Technology	96	Ea.	3	$45,633	13161
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements.	Technology	6	Ea.	3	$28,521	13175
	Sub Total for System	**20**	**items**		**$1,391,060**	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	4	Ea.	3	$18,253	Rollup
Replace Cabinetry In Classes/Labs	Capital Renewal	27	Room	4	$302,071	8490
Note: Laminate chipped or faded on main building cabinetry.						
Walk In Cooler/Freezer Is Required	Educational Adequacy	1	Ea.	4	$90,316	Rollup
Welding Bays Are Required	Educational Adequacy	2	Ea.	4	$10,838	Rollup
Work Tables Are Required	Educational Adequacy	1	Ea.	4	$3,585	Rollup
Room lacks an appropriate refrigerator.	Educational Adequacy	15	Ea.	5	$128,344	Rollup
	Sub Total for System	**6**	**items**		**$553,407**	
	Sub Total for Building 01 - Main Building	**79**	**items**		**$17,074,765**	
	Total for Campus	**89**	**items**		**$19,397,032**	

Buildings with no reported deficiencies

02 - Small Shed

03 - Building 03

South Kingstown High School - Life Cycle Summary Yrs 1-5

Site Level Life Cycle Items

Site

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fences and Gates	Fencing - Chain Link (8 Ft)	1,850	LF	$124,372	4
Parking Lot Lighting	Pole Mounted Fixtures (Ea.)	8	Ea.	$61,879	5
Pedestrian Pavement	Sidewalks - Concrete	23,460	SF	$479,513	5
	Sub Total for System	**3**	**items**	**$665,764**	
	Sub Total for Building -	**3**	**items**	**$665,764**	

Building: 01 - Main Building

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Air Distribution	Make-up Air Unit	6	Ea.	$95,397	4
Note:	Shop classrooms, kitchen, and cafeteria				
Decentralized Heating Equipment	Heating Unit Vent - Gas	1	Ea.	$14,156	4
Exhaust Air	Laboratory Fume Hood	5	Ea.	$142,605	5
Exhaust Air	Roof Exhaust Fan	62	Ea.	$322,655	5
Exhaust Air	Ventilator/Relief Vent (4'x8')	4	Ea.	$53,026	5
Heating System Supplementary Components	Controls - Pneumatic (Bldg.SF)	234,650	SF	$1,584,991	5
	Sub Total for System	**6**	**items**	**$2,212,829**	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Building Mounted Fixtures (Ea.)	34	Ea.	$50,748	4
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	14	Ea.	$19,299	4
Packaged Generator Assemblies	Emergency Generator (150 KW)	1	Ea.	$123,591	5
Lighting Fixtures	Light Fixtures (Bldg SF)	234,650	SF	$1,394,257	5
Electrical Service	Switchgear - Main Dist Panel (3000 Amps)	2	Ea.	$185,063	5
	Sub Total for System	**5**	**items**	**$1,772,957**	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Compressed-Air Systems	Air Compressor (5 hp)	2	Ea.	$23,570	4
Building Support Plumbing System Supplementary Components	Sump Pump	1	Ea.	$1,449	5
	Sub Total for System	**2**	**items**	**$25,019**	

Conveyances

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Elevators	Hydraulic (Passenger Elev)	2	Ea.	$570,418	5
	Sub Total for System	**1**	**items**	**$570,418**	
	Sub Total for Building 01 - Main Building	**14**	**items**	**$4,581,223**	

Building: 03 - Building 03

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Entrance Doors	Wood	2	Door	$16,647	4
Exterior Wall Veneer	Wood Siding - Bldg SF basis	200	SF	$5,995	5
	Sub Total for System	**2**	**items**	**$22,642**	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wood Flooring	Wood Flooring - All Types	200	SF	$6,636	4
Wall Painting and Coating	Painting/Staining (Bldg SF)	200	SF	$1,321	5
	Sub Total for System	**2**	**items**	**$7,957**	
	Sub Total for Building 03 - Building 03	**4**	**items**	**$30,599**	
	Total for: South Kingstown High School	**21**	**items**	**$5,277,586**	

Supporting Photos


Abandoned Generator


Science Room


Auditorium AHU


Failing Window Unit


Music Room


Typical Classroom


Main Building Exterior


Drop Off Exterior


Damaged Metal Panel Wall


Worn Wood Door


Non-Functional Drinking Fountain


Corroded Make-Up Air Unit


Damaged Door And Frame

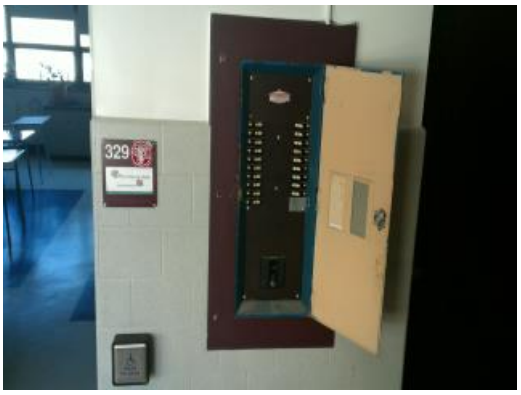

Gym Heater


Heating Unit


Wall Exhaust Fan

Cafeteria

Condenser



Aged Panelboard

Corroded Utility Sink

25 Ton RTU

Aged 225 Amp Panelboard


Chipped And Curling VCT


Rusted Condensate Receiver


Worn Wood Floor


Rusted And Falling Fence


Chipped Art Classroom Cabinetry


Worn And Stained Carpet


Peeling Paint


Chipped VCT


Storage


Concrete Wall Corner


1,200 Amp Switchgear


Rusted And Molding Split System


Stained And Sagging Ceiling Tiles


Worn Gym Paint


Worn Athletic Flooring


Peeling Paint In Storage


Site Aerial


Building Mounted Light

Small Gym Interior

Marquee

Library

Main Gym