Facility Condition Assessment

Westerly - Springbrook Elementary School | *June 2017*

39 Springbrook Road, Westerly, RI 02891

Introduction

Springbrook Elementary School, located at 39 Springbrook Road in Westerly, Rhode Island, was built in 1996. It comprises 43,128 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.

Springbrook Elementary School serves grades KG - 4, has 24 instructional spaces, and has an enrollment of 338. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for Springbrook Elementary School is 350 with a resulting utilization of 97%.

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 Springbrook Elementary School the 5-year need is $4,527,583. 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 Springbrook Elementary 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 Springbrook Elementary 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:	CMU Exterior Wall
	Wood Siding 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:	Composition Shingle Roofing
	Built-Up Roofing With Ballast

Interior

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

01 - Main Building:	Wood Interior Doors
	Interior Door Hardware
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Painted Ceilings
	Vinyl/Fabric Wall Covering
	CMU Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
	Carpet
	Athletic/Sport Flooring

Mechanical

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

01 - Main Building:	1,200 MBH Steel Tube Boiler
	Steam/Hot Water Heating Unit Vent
	12 MBH Steam Unit Heater
	20 MBH Steam Unit Heater
	DDC Heating System Controls
	Electronic Heating System Controls
	2 Ton Ductless Split System
	3 Ton Computer Room A/C
	Make-up Air Unit
	1 HP or Smaller Pump
	5 HP Pump
	2-Pipe Hot Water Hydronic Distribution System
	5,000 CFM Interior AHU
	Ductwork
	Large Roof Exhaust Fan
	Small Roof Exhaust Fan
	Fire Sprinkler System

Plumbing

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

01 - Main Building:	100 Gallon Water Storage Tank
	2" Backflow Preventers
	3/4" Backflow Preventers
	Gas Piping System
	100 Gallon Gas Water Heater
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
	Urinals
	Air Compressor (5 hp)

Electrical

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

01 - Main Building:	
	208/120v Switch

01 - Main Building:	1,200 Amp Switchgear
	Panelboard - 120/208 125A
	Panelboard - 120/208 225A
	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	-	-	$179,053	$960,574	-	$1,139,627	45.80 %
Roofing	-	-	-	-	$1,218	$1,218	0.05 %
Structural	-	-	-	-	-	$0	0.00 %
Exterior	-	-	$1,039	-	-	$1,039	0.04 %
Interior	-	-	$222,554	$175,262	$2,266	$400,082	16.08 %
Mechanical	-	-	$157,556	-	-	$157,556	6.33 %
Electrical	-	-	$14,164	-	$43,377	$57,542	2.31 %
Plumbing	-	-	-	-	$15,966	$15,966	0.64 %
Fire and Life Safety	-	-	-	-	-	$0	0.00 %
Technology	-	-	$710,705	-	-	$710,705	28.56 %
Conveyances	-	-	-	-	-	$0	0.00 %
Specialties	-	-	$4,533	-	-	$4,533	0.18 %
Total	$0	$0	$1,289,603	$1,135,836	$62,828	$2,488,266	

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

The building systems with the most need include:

Site	-	$1,139,627
Technology	-	$710,705
Interior	-	$400,082

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

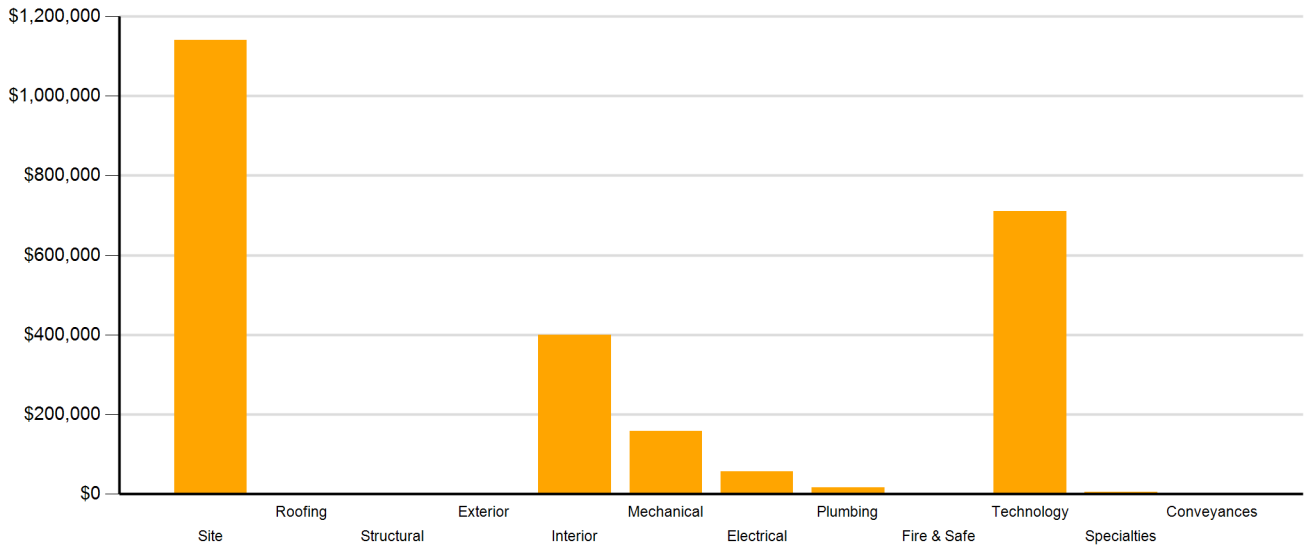

Figure 2: System Deficiencies

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	-	-	$339,436	$113,315	-	$452,752
Barrier to Accessibility	-	-	-	-	-	$0
Capital Renewal	-	-	$73,266	$1,018,357	$1,218	$1,092,841
Code Compliance	-	-	-	-	-	$0
Educational Adequacy	-	-	$4,533	$4,163	$61,609	$70,305
Functional Deficiency	-	-	$14,164	-	-	$14,164
Hazardous Material	-	-	-	-	-	$0
Technology	-	-	$710,705	-	-	$710,705
Traffic	-	-	$147,499	-	-	$147,499
Total	$0	$0	$1,289,603	$1,135,836	$62,828	$2,488,266

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

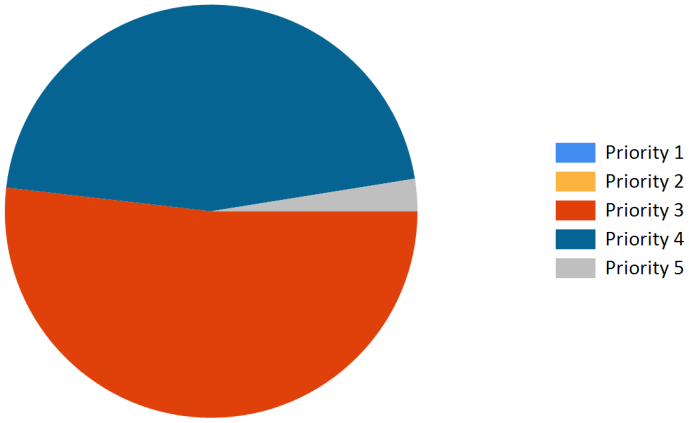

Figure 3: Current deficiencies by priority

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	$1,139,627	$0	$0	$145,141	$0	$0	$145,141	$1,284,768
Roofing	$1,218	$0	$0	$0	$0	$0	$0	$1,218
Structural	$0	$0	$0	$0	$0	$0	$0	$0
Exterior	$1,039	$0	$0	$452,480	$0	$0	$452,480	$453,519
Interior	$400,082	$0	$0	$252,441	$0	$395,878	$648,319	$1,048,401
Mechanical	$157,556	$0	$0	$139,669	$14,329	$18,461	$172,459	$330,015
Electrical	$57,542	$0	$0	$0	$0	$0	$0	$57,542
Plumbing	$15,966	$0	$0	$0	$0	$0	$0	$15,966
Fire and Life Safety	$0	$0	$0	$0	$0	$0	$0	$0
Technology	$710,705	$0	$0	$0	$0	$0	$0	$710,705
Conveyances	$0	$0	$0	$0	$0	$285,209	$285,209	$285,209
Specialties	$4,533	$0	$0	$335,634	$0	$0	$335,634	$340,167
Total	**$2,488,266**	**$0**	**$0**	**$1,325,365**	**$14,329**	**$699,548**	**$2,039,242**	**$4,527,508**

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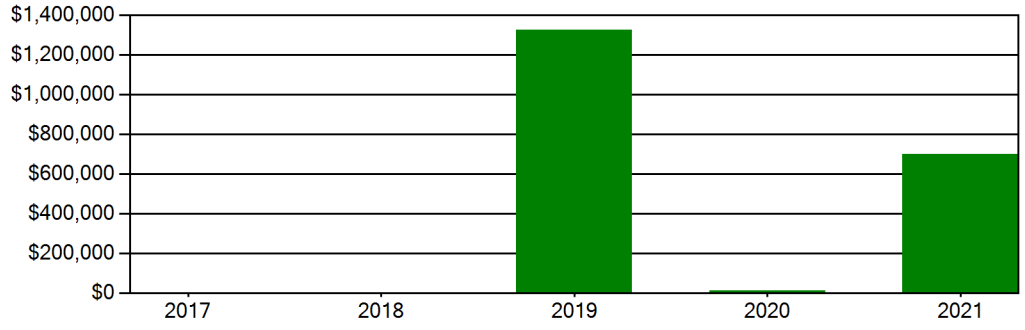
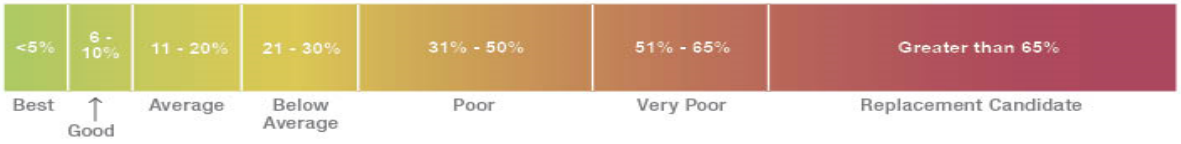


Figure 4: Life Cycle Capital Renewal Forecast

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 $15,094,800. For planning purposes, the total 5-year need at the Springbrook Elementary School is $4,527,583 (Life Cycle Years 1-5 plus the FCI deficiency cost). The Springbrook Elementary School facility has a 5-year FCI of 29.99%.

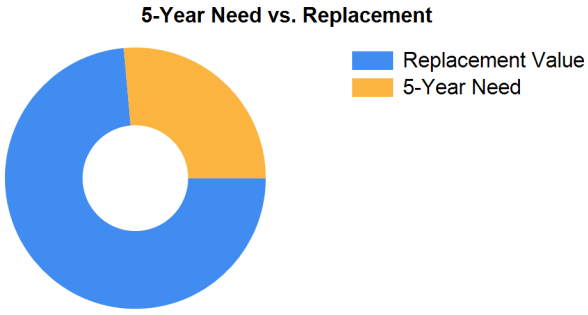


Figure 5: 5-Year FCI

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 240 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 Springbrook Elementary School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be $0.

Summary of Findings

The Springbrook Elementary School comprises 43,128 square feet and was constructed in 1996. Current deficiencies at this school total $2,488,341. Five year capital renewal costs total $2,039,242. The total identified need for the Springbrook Elementary School (current deficiencies and 5-year capital renewal costs) is $4,527,583. The 5-year FCI is 29.99%.

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
Springbrook Elementary School Totals	43,128	1996	$2,488,341	$2,039,242	$4,527,583	29.99%

**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	3,000	SF	3	$25,463	830
Note: Asphalt is cracked and broken up in many areas and should be replaced.						
Concrete Walks Require Replacement	Capital Renewal	300	SF	3	$6,091	832
Note: The concrete sidewalks are cracked and uneven. The areas have been reworked to try to smooth out and become even. The concrete walks should be replaced.						
Install New Paving	Traffic	7,100	SF	3	$147,499	4444
Note: Widen east side of driveway on north side of campus to relieve congestion while entering/exiting (square footage provided is an estimate)						
Asphalt Paving Requires Replacement	Capital Renewal	200	CAR	4	$657,248	829
Note: The asphalt paving is in very bad shape with cracking and breaking apart. The areas are beyond the life cycle and should be replaced. There is standing water on the pavement where regrading should take place with new drainage.						
Asphalt Paving Requires Replacement	Capital Renewal	92	CAR	4	$302,334	1453
Note: Parking areas are lacking and the majority of the parking lot is cracking and breaking apart. The area should be re-paved.						
Gate Requires Replacement	Capital Renewal	1	Ea.	4	$992	1452
Note: The gate at the southern entrance way needs to be replaced. It is uneven with some rust.						
Location: Southern entrance way						
	Sub Total for System	**6**	**items**		**$1,139,627**	
	Sub Total for School and Site Level	**6**	**items**		**$1,139,627**	

Building: 01 - Main Building

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Splash Blocks Are Required	Capital Renewal	3	Ea.	5	$1,218	845
Note: The splash stones need to be replaced on the roof.						
	Sub Total for System	**1**	**items**		**$1,218**	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Aluminum Window Requires Repair	Capital Renewal	1	Ea.	3	$1,039	844
Note: Windows on the south side needs to be replaced as the seal is broken with moisture getting in the panes.						
	Sub Total for System	**1**	**items**		**$1,039**	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Classroom Entry Doors Provide Insufficient Sound Isolation	Acoustics	22	Ea.	3	$181,881	4731
Note: All classroom						
The Acoustical Ceiling Tiles Require Replacement	Capital Renewal	750	SF	3	$6,728	840
Note: Acoustic tiles need to be replaced in many of the rooms based on discoloring and warped due to humidity.						
The Carpet Flooring Requires Replacement	Capital Renewal	1,294	SF	3	$27,963	1847
The Vinyl Composition Tile Requires Replacement	Capital Renewal	525	SF	3	$5,982	838
Note: VCT tiles in the hallway near the boiler room. Approximately 500SF. Stairwell VCT to back of the stage is missing (wear and tear) and needs to be replaced.						
Interior Gypsum Board Walls Require Repair	Capital Renewal	64	SF Wall	4	$465	842
Note: The gypsum board and wallpaper in classroom will need to be replaced due to water damage.						
Room Is Excessively Reverberant (Install Fiberglass Wall Panel)	Acoustics	2,000	SF	4	$113,315	4733
Note: Gym						
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	110	SF	4	$4,163	Rollup
The Gypsum Board Ceilings Require Repair	Capital Renewal	50	SF	4	$661	841
Note: Gypsum ceiling has damage in the library due to leaking roof area. The area will also need to be repainted.						
Vinyl/Fabric Wall Covering Requires Replacement	Capital Renewal	8,000	SF	4	$56,658	1844
Classroom Door Requires Vision Panel	Educational Adequacy	1	Ea.	5	$2,266	Rollup
	Sub Total for System	**10**	**items**		**$400,082**	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Unit Ventilators Are Excessively Noisy	Acoustics	25	Ea.	3	$157,556	4732
Note: All classrooms						
	Sub Total for System	**1**	**items**		**$157,556**	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Electrical Receptacles Are Inadequate And More are Needed	Functional Deficiency	25	Ea.	3	$14,164	847
Note: Additional capacity needed in classrooms and offices						
Room Has Insufficient Electrical Outlets	Educational Adequacy	88	Ea.	5	$43,377	Rollup
	Sub Total for System	**2**	**items**		**$57,542**	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks a drinking fountain.	Educational Adequacy	9	Ea.	5	$9,858	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	6	Ea.	5	$6,108	Rollup
	Sub Total for System	**2**	**items**		**$15,966**	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Classroom AV/Multimedia systems are in need of improvements.	Technology	21	Ea.	3	$198,302	3617
Technology: Instructional spaces do not have local sound reinforcement.	Technology	21	Ea.	3	$99,151	3615
Technology: Main Telecommunications Room ground system is inadequate or non-existent.	Technology	1	Ea.	3	$6,610	3613
Technology: Main Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$42,304	3611
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards.	Technology	48	Ea.	3	$20,397	3614
Technology: Network cabling infrastructure is partially outdated and/or needs expansion.	Technology	108	Ea.	3	$45,893	3618
Technology: Network system inadequate and/or near end of useful life	Technology	2	Ea.	3	$15,109	3620
Technology: Network system inadequate and/or near end of useful life	Technology	20	Ea.	3	$94,430	3621
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life.	Technology	43,128	SF	3	$73,306	3622
Technology: Special Space AV/Multimedia system is inadequate.	Technology	1	Ea.	3	$53,825	3619
Technology: Special Space AV/Multimedia systems are in need of minor improvements.	Technology	3	Room	3	$56,658	3616
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	$4,721	3612
	Sub Total for System	**12**	**items**		**$710,705**	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	1	Ea.	3	$4,533	Rollup
	Sub Total for System	**1**	**items**		**$4,533**	
	Sub Total for Building 01 - Main Building	**30**	**items**		**$1,348,640**	
	Total for Campus	**36**	**items**		**$2,488,266**	

Springbrook Elementary School - Life Cycle Summary Yrs 1-5

Site Level Life Cycle Items

Site

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Playfield Areas	ES Playgrounds		1	Ea.	$44,588	3
Parking Lot Lighting	Pole Lighting		13	Ea.	$100,553	3
		Sub Total for System	**2**	**items**	**$145,141**	
		Sub Total for Building -	**2**	**items**	**$145,141**	

Building: 01 - Main Building

Exterior

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Exterior Wall Veneer	Wood Siding - Bldg SF basis		15,095	SF	$452,480	3
		Sub Total for System	**1**	**items**	**$452,480**	

Interior

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Suspended Plaster and	Painted ceilings		13,273	SF	$55,522	3
Wall Painting and Coating	Painting/Staining (Bldg SF)		29,803	SF	$196,919	3
Resilient Flooring	Vinyl Composition Tile Flooring		34,509	SF	$395,878	5
		Sub Total for System	**3**	**items**	**$648,319**	

Mechanical

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Decentralized Cooling	Computer Room A/C (3 ton)		1	Ea.	$28,521	3
Exhaust Air	Roof Exhaust Fan - Large		8	Ea.	$111,148	3
Decentralized Heating Equipment	Unit Heater Steam/HW (12 MBH)		6	Ea.	$14,329	4
Exhaust Air	Roof Exhaust Fan - Small		7	Ea.	$18,461	5
		Sub Total for System	**4**	**items**	**$172,458**	

Conveyances

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Elevators	Hydraulic (Passenger Elev)		1	Ea.	$285,209	5
		Sub Total for System	**1**	**items**	**$285,209**	

Specialties

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Casework	Fixed Cabinetry		30	Room	$335,634	3
		Sub Total for System	**1**	**items**	**$335,634**	
		Sub Total for Building 01 - Main Building	**10**	**items**	**$1,894,100**	
		Total for: Springbrook Elementary School	**12**	**items**	**$2,039,241**	

Supporting Photos

Site Aerial

Entrance Gates

Office Area

Concrete Pedestrian Paving


Ballasted Roof


Gymnasium Partition Wall


Urinal Fixtures

Library

Classroom Cabinetry


Interior Windows


Worn Gym Floor


Rear Elevation

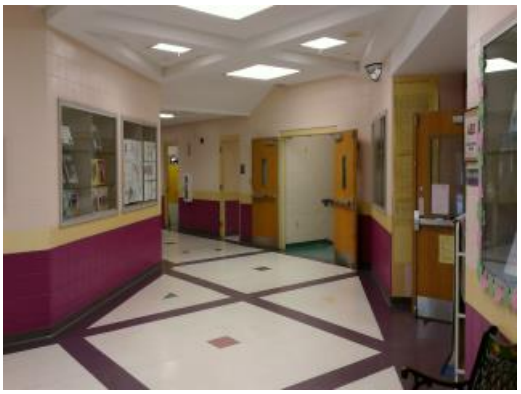

Main Distribution


Ceiling Mounted Unit Heater


Cracked Paved Play Area


Classroom Sink

Alligatored Roadway Pavement



Hallway Finishes

Site Signage

Exposed Gym Ceiling

Circulation Pump

Music Room


Cracked CMU


Typical Classroom

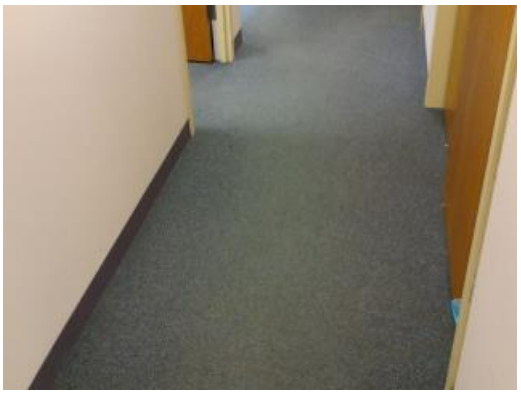

Stained Ceiling Tiles

Plaque


Exterior Metal Doors


Restroom Fixtures And Finishes


Elevator Equipment


Worn Carpet


Peeling Wall Covering


Roadway Pavement


Steep Slope Roof


Cracked Asphalt Pavement


Site Lighting


VCT Flooring Separation


Main Entrance


Main Entrance


Playground Equipment

Air Compressor


Kitchen


Damaged Gypsum Board Ceiling


Stairwell


Clogged Roof Drain


Boiler


Water Coolers


Alligatored Asphalt Paving


Stained Service Sink


Displaced Ceiling Tiles


Backstop


Playground


Gym Side Elevation

Chipped VCT On Stairs

Upper Windows Seals Broken