



North Smithfield totals 380,545 square feet and consists of the school type(s) detailed below. School(s) were visited three times during the Statewide Facilities Assessment by teams of specialists from February-April 2016. This report provides LEA summary findings for the statewide assessment program.

### School Type by Count



School Type	SqFt
Elementary School	116,175
Middle School	116,400
High School	147,970
<b>Total:</b>	<b>380,545</b>

### Demographics

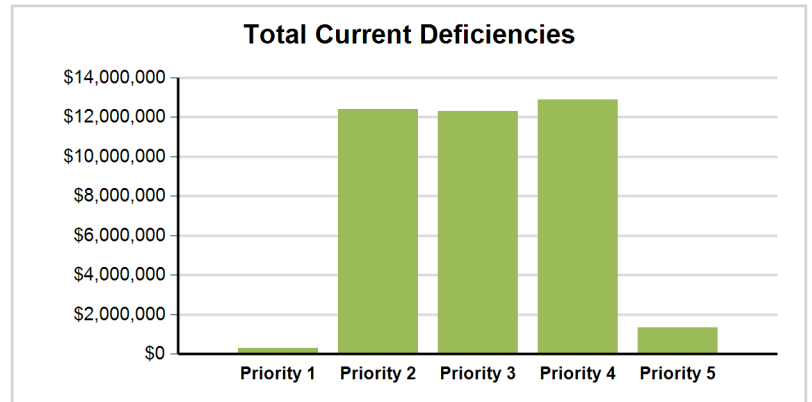
Enrollment is projected to decrease by 3.8% over the next 10 years in North Smithfield. The total LEA enrollment at 4 school(s) is 1,705 students with a total capacity of 2,175 as reported by the LEA. Utilization is calculated by dividing enrollment by capacity, resulting in 78.4% utilization at North Smithfield.

### 78.4 % Utilization



### Educational Program Space Analysis

In North Smithfield there are 158 instructional spaces; of these spaces 36.7% meet or exceed the space size standards. Of the total current deficiencies identified, \$1,319,964 are related to the educational program space assessment. Addressing these identified deficiencies will improve the learning environment and bring the school(s) in the district closer to 21st century learning facilities.



### Five Year Need Summary

The current deficiencies total \$39,204,809, with 32.9% categorized as Priority 4 and another 31.6% as Priority 2. The building systems with the highest current deficiency costs are Interior and Mechanical.

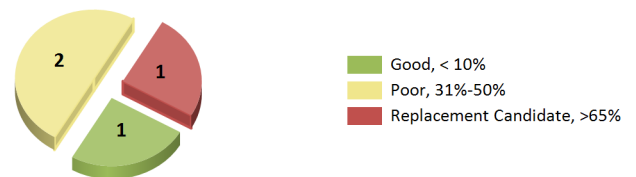
School(s) with Greatest Need	Combined 5-Year Need
North Smithfield High School	\$19,633,087
Dr. Harry L. Halliwell Memorial School	\$11,165,705
North Smithfield Elementary School	\$10,074,534

The projected life cycle need in Years 1 through 5 is \$4,082,324. It is anticipated that the majority of the need will occur in Year 5. School(s) with the greatest need are represented in the adjacent table and make up 94.4% of the combined 5-Year need at North Smithfield.

### Five Year Facility Condition Index (FCI)

For master planning purposes, the total current deficiencies, less new construction, and the first 5 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. The 5-Year need is \$43,287,133 with a district replacement value of \$132,342,450. The resulting 5-Year FCI is 32.7%.

### 5-Year FCI Ranges

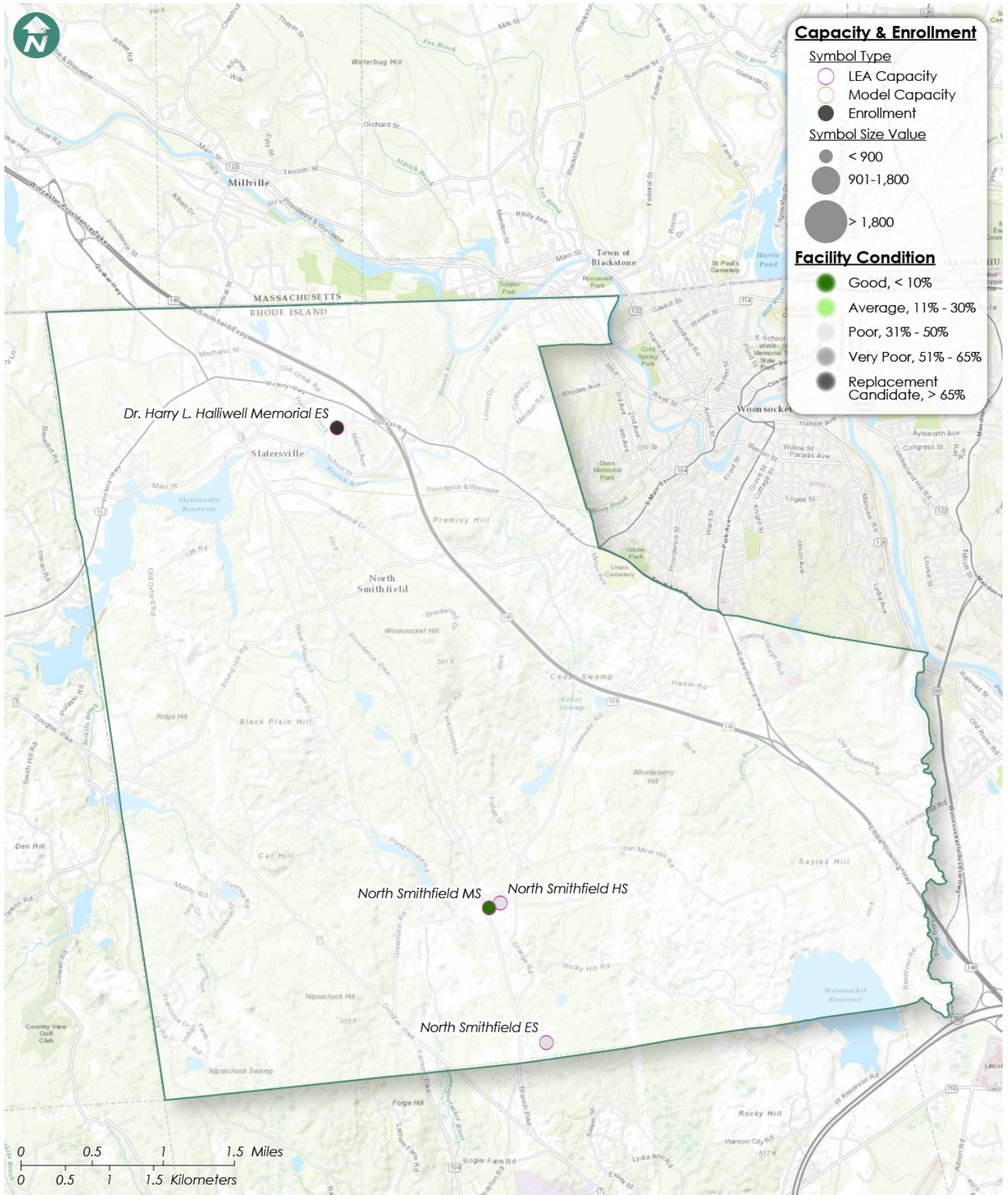


### LEA Summary Data

Gross SqFt	Avg Year Built	Current Deficiencies (Less New Construction)	Life Cycle Year 1-5 Total	Total 5-Year Need (Year 1-5 + Current Defs)	5-Year FCI
380,545	1960	\$39,204,809	\$4,082,324	\$43,287,133	32.7%



# North Smithfield





# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

June 2017

358 Victory Highway, Slatersville, RI 02876





## Introduction

Dr. Harry L. Halliwell Memorial School, located at 358 Victory Highway in Slatersville, Rhode Island, was built in 1957. It comprises 41,175 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.

Dr. Harry L. Halliwell Memorial School serves grades 3 - 5, has 22 instructional spaces, and has an enrollment of 331. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for Dr. Harry L. Halliwell Memorial School is 330 with a resulting utilization of 100%.

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 Dr. Harry L. Halliwell Memorial School the 5-year need is \$11,165,705. 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 Dr. Harry L. Halliwell Memorial 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 Dr. Harry L. Halliwell Memorial School campus, identified by discipline and building.

### Site

The site level systems for this campus include:

<b>Site</b>	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Asphalt Pedestrian Pavement

### Building Envelope

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

<b>01 - Building 01:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>02 - Building 02:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>03 - Building 03:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>04 - Building 04:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>05 - Building 05:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>06 - Administration Building:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>07 - Building 07:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>08 - Building 08:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>09 - Building 09:</b>	E.I.F.S. Exterior Wall
	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors
<b>10 - Building 10:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows



<b>10 - Building 10:</b>	Aluminum Exterior Windows
	Storefront / Curtain Wall
	Steel Exterior Entrance Doors
<b>11 - Building 11:</b>	Wood Siding Exterior Wall
	Wood Exterior Windows
	Steel Exterior Entrance Doors

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

<b>01 - Building 01:</b>	Composition Shingle Roofing
<b>02 - Building 02:</b>	Composition Shingle Roofing
<b>03 - Building 03:</b>	Composition Shingle Roofing
<b>04 - Building 04:</b>	Composition Shingle Roofing
<b>05 - Building 05:</b>	Composition Shingle Roofing
<b>06 - Administration Building:</b>	Composition Shingle Roofing
<b>07 - Building 07:</b>	Composition Shingle Roofing
<b>08 - Building 08:</b>	Composition Shingle Roofing
<b>09 - Building 09:</b>	Composition Shingle Roofing
<b>10 - Building 10:</b>	Composition Shingle Roofing
<b>11 - Building 11:</b>	Composition Shingle Roofing

## Interior

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

<b>01 - Building 01:</b>	Steel Interior Doors
	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>02 - Building 02:</b>	Wood Interior Doors
	Steel Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

<b>03 - Building 03:</b>	Steel Interior Doors
	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>04 - Building 04:</b>	Wood Interior Doors
	Steel Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>05 - Building 05:</b>	Steel Interior Doors
	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>06 - Administration Building:</b>	Wood Interior Doors
	Steel Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Adhered Acoustical Ceiling Tiles
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>07 - Building 07:</b>	Steel Interior Doors
	Wood Interior Doors





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North Smithfield - Dr. Harry L. Halliwell Memorial School

<b>07 - Building 07:</b>	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>08 - Building 08:</b>	Wood Interior Doors
	Steel Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Interior Wall Painting
	Concrete Flooring
	Vinyl Composition Tile Flooring
	Terrazzo Flooring
<b>09 - Building 09:</b>	Steel Interior Doors
	Wood Interior Doors
	Interior Door Hardware
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
<b>10 - Building 10:</b>	Wood Interior Doors
	Interior Door Hardware
	Wood Ceilings
	Wood Wall Paneling
	Interior Wall Painting
	Concrete Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
<b>11 - Building 11:</b>	Steel Interior Doors
	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Interior Wall Painting
	Concrete Flooring



<b>11 - Building 11:</b>	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring

## Mechanical

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

<b>01 - Building 01:</b>	150 MBH Gas Furnace
	Ductwork
<b>02 - Building 02:</b>	150 MBH Gas Furnace
	Ductwork
<b>03 - Building 03:</b>	150 MBH Gas Furnace
	Ductwork
<b>04 - Building 04:</b>	150 MBH Gas Furnace
	Ductwork
<b>05 - Building 05:</b>	150 MBH Gas Furnace
	Ductwork
<b>06 - Administration Building:</b>	150 MBH Gas Furnace
	Window Units
	Ductwork
<b>07 - Building 07:</b>	150 MBH Gas Furnace
	Ductwork
<b>08 - Building 08:</b>	150 MBH Gas Furnace
	Window Units
	Ductwork
<b>09 - Building 09:</b>	150 MBH Gas Furnace
	Ductwork
<b>10 - Building 10:</b>	400 MBH Gas Furnace
	Ductwork
<b>11 - Building 11:</b>	150 MBH Gas Furnace
	Ductwork

## Plumbing

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

<b>06 - Administration Building:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>01 - Building 01:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>10 - Building 10:</b>	2" Backflow Preventers
	Gas Piping System
	40 Gallon Gas Water Heater
<b>11 - Building 11:</b>	Gas Piping System
	40 Gallon Gas Water Heater



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

<b>02 - Building 02:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>03 - Building 03:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>04 - Building 04:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>05 - Building 05:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>07 - Building 07:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>08 - Building 08:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>09 - Building 09:</b>	Gas Piping System
	40 Gallon Gas Water Heater
<b>06 - Administration Building:</b>	Domestic Water Piping System
<b>01 - Building 01:</b>	Domestic Water Piping System
<b>10 - Building 10:</b>	Domestic Water Piping System
<b>11 - Building 11:</b>	Domestic Water Piping System
<b>02 - Building 02:</b>	Domestic Water Piping System
<b>03 - Building 03:</b>	Domestic Water Piping System
<b>04 - Building 04:</b>	Domestic Water Piping System
<b>05 - Building 05:</b>	Domestic Water Piping System
<b>07 - Building 07:</b>	Domestic Water Piping System
<b>08 - Building 08:</b>	Domestic Water Piping System
<b>09 - Building 09:</b>	Domestic Water Piping System
<b>06 - Administration Building:</b>	Lavatories
	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>01 - Building 01:</b>	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>10 - Building 10:</b>	Lavatories
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Showers
	Toilets
	Urinals
<b>11 - Building 11:</b>	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain



<b>11 - Building 11:</b>	Restroom Lavatories
	Toilets
<b>02 - Building 02:</b>	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>03 - Building 03:</b>	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>04 - Building 04:</b>	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>05 - Building 05:</b>	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>07 - Building 07:</b>	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>08 - Building 08:</b>	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
<b>09 - Building 09:</b>	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets

## Electrical

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

<b>01 - Building 01:</b>	Panelboard - 120/208 100A
	Light Fixtures
<b>02 - Building 02:</b>	Panelboard - 120/208 100A
	Light Fixtures
<b>03 - Building 03:</b>	Panelboard - 120/208 100A
	Light Fixtures
<b>04 - Building 04:</b>	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	Light Fixtures



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

<b>05 - Building 05:</b>	Panelboard - 120/208 100A
	Light Fixtures
<b>06 - Administration Building:</b>	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	Light Fixtures
<b>07 - Building 07:</b>	Panelboard - 120/208 100A
	Building Mounted Lighting Fixtures
	Light Fixtures
<b>08 - Building 08:</b>	Panelboard - 120/208 100A
	Building Mounted Lighting Fixtures
	Light Fixtures
<b>09 - Building 09:</b>	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	Building Mounted Lighting Fixtures
	Light Fixtures
<b>10 - Building 10:</b>	600 Amp Switchgear
	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	600 Amp Distribution Panel
	Light Fixtures
	Building Mounted Lighting Fixtures
<b>11 - Building 11:</b>	Panelboard - 120/208 100A
	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.



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

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

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	-	-	\$1,019,839	\$82,310	\$87,217	\$1,189,365	11.92 %
Roofing	-	\$1,103,046	-	-	-	\$1,103,046	11.06 %
Structural	-	-	-	-	-	\$0	0.00 %
Exterior	-	\$1,772,920	-	\$5,194	-	\$1,778,113	17.83 %
Interior	-	-	\$12,626	\$2,390,769	\$234,366	\$2,637,761	26.44 %
Mechanical	-	\$742,145	-	-	-	\$742,145	7.44 %
Electrical	-	\$399,639	\$17,911	-	\$44,203	\$461,753	4.63 %
Plumbing	-	\$3,921	\$397,754	\$242,490	-	\$644,166	6.46 %
Fire and Life Safety	-	-	-	-	-	\$0	0.00 %
Technology	-	-	\$1,195,275	-	-	\$1,195,275	11.98 %
Conveyances	-	-	-	-	-	\$0	0.00 %
Specialties	-	-	-	\$223,756	-	\$223,756	2.24 %
<b>Total</b>	\$0	\$4,021,670	\$2,643,405	\$2,944,519	\$365,786	\$9,975,380	

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

The building systems with the most need include:

Interior	-	\$2,637,761
Exterior	-	\$1,778,113
Technology	-	\$1,195,275

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

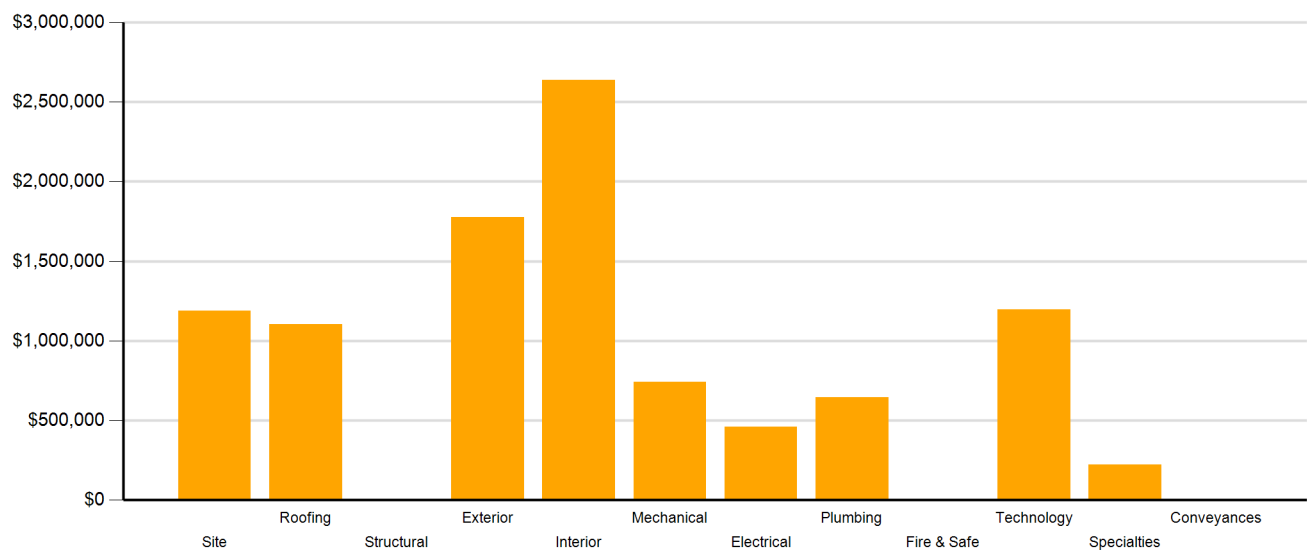


Figure 2: System Deficiencies



## Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

- **Acoustics** deficiencies relate to room acoustics, sound insulation, 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

Category	Priority					Total
	1	2	3	4	5	
Acoustics	-	-	-	\$31,316	-	\$31,316
Barrier to Accessibility	-	-	-	-	-	\$0
Capital Renewal	-	\$4,021,670	\$1,183,728	\$925,608	\$228,535	\$6,359,540
Code Compliance	-	-	-	-	-	\$0
Educational Adequacy	-	-	\$115,474	\$288,932	\$137,251	\$541,657
Functional Deficiency	-	-	-	-	-	\$0
Hazardous Material	-	-	-	\$1,698,663	-	\$1,698,663
Technology	-	-	\$1,079,802	-	-	\$1,079,802
Traffic	-	-	\$264,403	-	-	\$264,403
<b>Total</b>	\$0	\$4,021,670	\$2,643,405	\$2,944,519	\$365,786	\$9,975,380

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

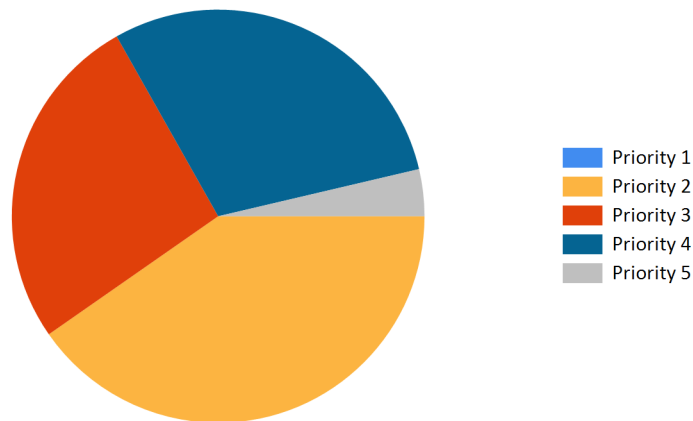


Figure 3: Current deficiencies by priority



### 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

System	Current Deficiencies	Life Cycle Capital Renewal Projections					LC Yr. 1-5 Total	Total 5-Year Need
		Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021		
Site	\$1,189,365	\$0	\$0	\$918,281	\$0	\$93,429	\$1,011,710	\$2,201,075
Roofing	\$1,103,046	\$0	\$0	\$0	\$0	\$0	\$0	\$1,103,046
Structural	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$1,778,113	\$0	\$0	\$0	\$0	\$0	\$0	\$1,778,113
Interior	\$2,637,761	\$0	\$0	\$0	\$0	\$50,991	\$50,991	\$2,688,752
Mechanical	\$742,145	\$0	\$0	\$0	\$6,936	\$0	\$6,936	\$749,081
Electrical	\$461,753	\$0	\$0	\$0	\$0	\$0	\$0	\$461,753
Plumbing	\$644,166	\$0	\$0	\$0	\$0	\$0	\$0	\$644,166
Fire and Life Safety	\$0	\$0	\$0	\$120,688	\$0	\$0	\$120,688	\$120,688
Technology	\$1,195,275	\$0	\$0	\$0	\$0	\$0	\$0	\$1,195,275
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$223,756	\$0	\$0	\$0	\$0	\$0	\$0	\$223,756
<b>Total</b>	<b>\$9,975,380</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,038,969</b>	<b>\$6,936</b>	<b>\$144,420</b>	<b>\$1,190,325</b>	<b>\$11,165,705</b>

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

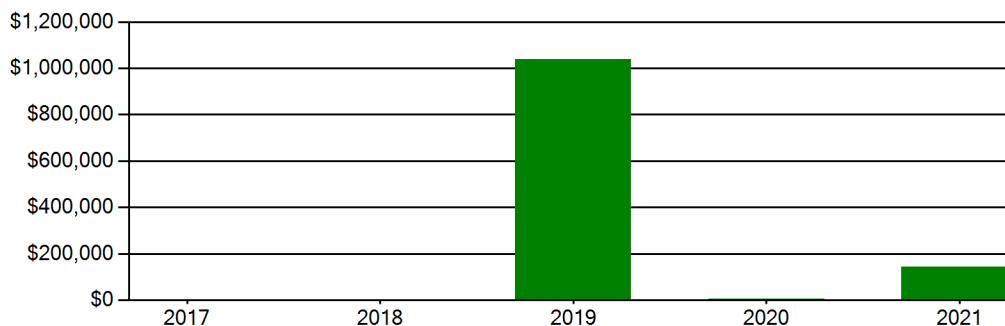
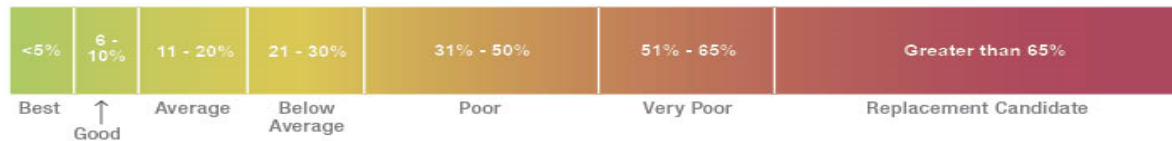


Figure 4: Life Cycle Capital Renewal Forecast



## 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 \$14,411,250. For planning purposes, the total 5-year need at the Dr. Harry L. Halliwell Memorial School is \$11,165,705 (Life Cycle Years 1-5 plus the FCI deficiency cost). The Dr. Harry L. Halliwell Memorial School facility has a 5-year FCI of 77.48%.

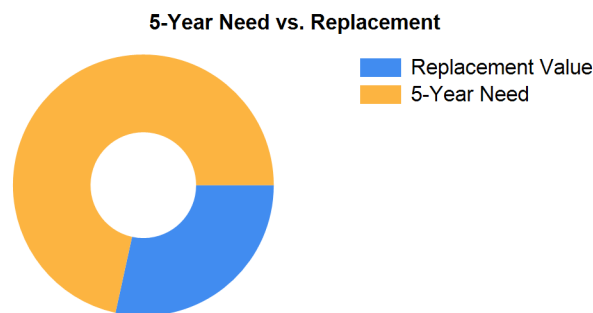


Figure 5: 5-Year FCI

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 229 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 Dr. Harry L. Halliwell Memorial School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be \$158,760.



## Summary of Findings

The Dr. Harry L. Halliwell Memorial School comprises 41,175 square feet and was constructed in 1957. Current deficiencies at this school total \$9,975,380. Five year capital renewal costs total \$1,190,325. The total identified need for the Dr. Harry L. Halliwell Memorial School (current deficiencies and 5-year capital renewal costs) is \$11,165,705. The 5-year FCI is 77.48%.

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
<b>Dr. Harry L. Halliwell Memorial School Totals</b>	<b>41,175</b>	<b>1957</b>	<b>\$9,975,380</b>	<b>\$1,190,325</b>	<b>\$11,165,705</b>	<b>77.48%</b>

*\*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.



## Site Level Deficiencies

### Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Septic System Has Failed And Requires Replacement	Capital Renewal	1	Ea.	3	\$755,436	2847
Traffic Signage Is Required	Traffic	7	Ea.	3	\$264,403	4452
<b>Note:</b> Upgrade school zone signs						
Backstops Require Replacement	Educational Adequacy	1	Ea.	4	\$28,674	28524
<b>Note:</b> Backstops Require Replacement						
Exterior Basketball Goals Require Replacement	Capital Renewal	4	Ea.	4	\$30,520	1110
Fencing Requires Replacement (4' Chain Link Fence)	Capital Renewal	360	LF	4	\$23,116	1112
<b>Note:</b> Fence is falling down.						
Exterior Basketball Goals are Required	Educational Adequacy	1	Ea.	5	\$5,878	28767
<b>Note:</b> Exterior Basketball Goals are Required						
The school lacks a paved play area.	Educational Adequacy	1	Ea.	5	\$81,339	28025
<b>Note:</b> The school lacks a paved play area.						
<b>Sub Total for System</b>		<b>7</b>	<b>items</b>		<b>\$1,189,365</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Handrail Requires Repainting	Capital Renewal	500	LF	4	\$5,194	1312
<b>Note:</b> Railings throughout the campus are worn and in need of repainting.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$5,194</b>	
<b>Sub Total for School and Site Level</b>		<b>8</b>	<b>items</b>		<b>\$1,194,559</b>	

## Building: 01 - Building 01

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	2,500	SF	2	\$71,302	1120
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	2,500	SF	2	\$74,939	1114
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1144
<b>Note:</b> Exterior door at entrance is worn, chipped, and faded.						
The Wood Window Requires Replacement	Capital Renewal	60	SF	2	\$11,456	1115
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	96	SF	2	\$18,329	1121
<b>Note:</b> Windows are single-pane and likely original to the building.						
The Wood Window Requires Replacement	Capital Renewal	40	SF	2	\$7,637	1122
<b>Note:</b> Windows are single-pane and likely original to the building.						
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$118,779</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
9x9 Asbestos Tile Present and In Active Use, Greater than 25 Percent has Significant Deterioration	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	2,500	SF	4	\$29,651	1116
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,375	SF	5	\$15,692	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$138,777</b>	



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2849
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$36,753</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1197
The Panelboard Requires Replacement <b>Note:</b> 40 amp	Capital Renewal	1	Ea.	2	\$4,849	1073
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$23,722</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	2895
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life <b>Note:</b> Corrosion at the soil line.	Capital Renewal	2,500	SF	3	\$20,115	1194
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	1	Ea.	4	\$10,220	1205
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	1	Ea.	4	\$2,576	1076
The Restroom Lavatories Plumbing Fixtures Require Replacement <b>Note:</b> Restroom lavatories are corroded and leaking.	Capital Renewal	2	Ea.	4	\$6,362	1075
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$42,433</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
Technology: Campus wireless infrastructure meets standards but does not cover all areas of campus. <b>Note:</b> Wireless does not support 802.11AC	Technology	24	Ea.	3	\$31,943	24960
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$43,491</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs <b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.	Capital Renewal	2	Room	4	\$22,376	1119
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$22,376</b>	
<b>Sub Total for Building 01 - Building 01</b>		<b>22</b>	<b>items</b>		<b>\$497,632</b>	

## Building: 02 - Building 02

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement <b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.	Capital Renewal	2,500	SF	2	\$71,302	1136
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF) <b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.	Capital Renewal	2,500	SF	2	\$74,939	1128
The Metal Exterior Door Requires Replacement <b>Note:</b> Exterior door at entrance is worn, chipped, and faded.	Capital Renewal	1	Door	2	\$6,417	1130
The Wood Window Requires Replacement <b>Note:</b> Single-pane windows from 1957.	Capital Renewal	60	SF	2	\$11,456	1129
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	96	SF	2	\$18,329	1137
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	40	SF	2	\$7,637	1138
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$118,779</b>	



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	2,500	SF	4	\$29,651	1132
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,375	SF	5	\$15,692	Rollup
	<b>Sub Total for System</b>	<b>4</b>	<b>items</b>		<b>\$138,777</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2851
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	2	Ea.	2	\$6,936	1078
	<b>Sub Total for System</b>	<b>2</b>	<b>items</b>		<b>\$43,689</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1220
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1077
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
	<b>Sub Total for System</b>	<b>3</b>	<b>items</b>		<b>\$23,722</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	1079
<b>Note:</b> Water heater is rusted and corroded.						
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	2,500	SF	3	\$20,115	1219
<b>Note:</b> Corrosion at the soil line.						
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	1	Ea.	4	\$10,220	1226
<b>Note:</b> Drinking fountain is leaking.						
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	1	Ea.	4	\$2,576	1228
<b>Note:</b> Mop sink is corroded and leaking.						
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	4	\$6,362	1225
<b>Note:</b> Restroom lavatories are stained and leaking.						
	<b>Sub Total for System</b>	<b>5</b>	<b>items</b>		<b>\$42,433</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$11,547</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs	Capital Renewal	2	Room	4	\$22,376	1135
<b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.						
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$22,376</b>	
	<b>Sub Total for Building 02 - Building 02</b>	<b>22</b>	<b>items</b>		<b>\$472,625</b>	

## Building: 03 - Building 03

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	2,500	SF	2	\$71,302	1150
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	2,500	SF	2	\$74,939	1141
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1145
<b>Note:</b> Exterior door at entrance is worn, chipped, and faded.						





# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Wood Window Requires Replacement <b>Note:</b> Single-pane windows from 1957.	Capital Renewal	96	SF	2	\$18,329	1142
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	40	SF	2	\$7,637	1151
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	60	SF	2	\$11,456	1152
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$118,779</b>	

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
9x9 Asbestos Tile Present and In Active Use, Greater than 25 Percent has Significant Deterioration	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Ceiling Grid Requires Replacement <b>Note:</b> Grid system is original to the building and in need of replacement.	Capital Renewal	2,500	SF	4	\$29,651	1146
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,375	SF	5	\$15,692	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$138,777</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2852
The Gas Furnace HVAC Component Requires Replacement <b>Note:</b> Furnaces are corroded and rusted.	Capital Renewal	2	Ea.	2	\$6,936	1080
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$43,689</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1254
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1082
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$23,722</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	1081
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life <b>Note:</b> Corrosion at the soil line.	Capital Renewal	2,500	SF	3	\$20,115	1253
The Custodial Mop Or Service Sink Requires Replacement <b>Note:</b> Mop sink is corroded and leaking.	Capital Renewal	1	Ea.	4	\$2,576	1259
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	1	Ea.	4	\$7,377	1258
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	4	\$6,362	1257
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$39,591</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$11,547</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs <b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.	Capital Renewal	2	Room	4	\$22,376	1149
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$22,376</b>	
<b>Sub Total for Building 03 - Building 03</b>		<b>22</b>	<b>items</b>		<b>\$469,783</b>	



## Building: 04 - Building 04

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	2,500	SF	2	\$71,302	1161
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	2,500	SF	2	\$74,939	1154
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1156
<b>Note:</b> Exterior door at entrance is worn, chipped, and faded.						
The Wood Window Requires Replacement	Capital Renewal	96	SF	2	\$18,329	1155
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	40	SF	2	\$7,637	1162
<b>Note:</b> Windows are single-pane and likely original to the building.						
The Wood Window Requires Replacement	Capital Renewal	60	SF	2	\$11,456	1165
<b>Note:</b> Windows are single-pane and likely original to the building.						
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$118,779</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	2,500	SF	4	\$29,651	1157
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,375	SF	5	\$15,692	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$138,777</b>	

### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2853
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	2	Ea.	2	\$6,936	1083
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$43,689</b>	

### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1277
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1085
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$5,799	1283
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$29,521</b>	

### Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	1084
<b>Note:</b> Water heater is rusted and corroded.						
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	2,500	SF	3	\$20,115	1275
<b>Note:</b> Corrosion at the soil line.						
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	1	Ea.	4	\$2,576	1287
<b>Note:</b> Mop sink is corroded and leaking.						
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	1	Ea.	4	\$7,377	1285
<b>Note:</b> Compressor is non-functional.						
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	4	\$6,362	1282
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$39,591</b>	



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$11,547</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs	Capital Renewal	2	Room	4	\$22,376	1160
<b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$22,376</b>	
<b>Sub Total for Building 04 - Building 04</b>		<b>23</b>	<b>items</b>		<b>\$475,582</b>	

## Building: 05 - Building 05

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	5,000	SF	2	\$142,605	1179
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$142,605</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	5,000	SF	2	\$149,877	1168
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1172
<b>Note:</b> Exterior door at entrance is worn, chipped, and faded.						
The Wood Window Requires Replacement	Capital Renewal	80	SF	2	\$15,275	1170
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	192	SF	2	\$36,659	1180
<b>Note:</b> Windows are single-pane and likely original to the building.						
The Wood Window Requires Replacement	Capital Renewal	120	SF	2	\$22,912	1182
<b>Note:</b> Windows are single-pane and likely original to the building.						
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$231,140</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
12 x 12 Floor Tiles Are Lifting or Broken and Highly Likely Contain Asbestos	Hazardous Material	4,500	SF	4	\$128,344	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	5,000	SF	4	\$58,523	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	5,000	SF	4	\$59,303	1173
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	4,750	SF	5	\$31,385	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$277,555</b>	

### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	5,000	SF	2	\$73,506	2856
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	4	Ea.	2	\$13,873	1288
<b>Note:</b> Heat exchangers are rusted.						
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$87,378</b>	

### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	5,000	SF	2	\$29,709	1291
The Panelboard Requires Replacement	Capital Renewal	2	Ea.	2	\$9,697	1086
Room Has Insufficient Electrical Outlets	Educational Adequacy	12	Ea.	5	\$6,028	Rollup
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$45,434</b>	

### Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	2902
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	5,000	SF	3	\$40,229	1290
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	2	Ea.	4	\$20,440	1296



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Custodial Mop Or Service Sink Requires Replacement <b>Note:</b> Mop sinks are corroded and leaking.	Capital Renewal	2	Ea.	4	\$5,153	1298
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	4	Ea.	4	\$12,724	1294
	<b>Sub Total for System</b>	<b>5</b>	<b>items</b>		<b>\$81,706</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	3	Ea.	3	\$17,321	Rollup
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$17,321</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs <b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.	Capital Renewal	3	Room	4	\$33,563	1177
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$33,563</b>	
	<b>Sub Total for Building 05 - Building 05</b>	<b>22</b>	<b>items</b>		<b>\$916,703</b>	

## Building: 06 - Administration Building

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement <b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.	Capital Renewal	2,500	SF	2	\$71,302	1196
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF) <b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.	Capital Renewal	2,500	SF	2	\$74,939	1185
The Metal Exterior Door Requires Replacement <b>Note:</b> Exterior doors are worn, chipped, and faded.	Capital Renewal	3	Door	2	\$19,252	1187
The Wood Window Requires Replacement <b>Note:</b> Single-pane windows from 1957.	Capital Renewal	60	SF	2	\$11,456	1186
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	96	SF	2	\$18,329	1198
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	288	SF	2	\$54,988	1199
	<b>Sub Total for System</b>	<b>5</b>	<b>items</b>		<b>\$178,964</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
12 x 12 Floor Tiles Are Lifting or Broken and Highly Likely Contain Asbestos	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Caulking - significant areas of broken pieces &/or deteriorating caulk	Hazardous Material	11,000	LF	4	\$209,153	Rollup
Ceiling Grid Requires Replacement <b>Note:</b> Grid system is original to the building and in need of replacement.	Capital Renewal	1,250	SF	4	\$14,826	1189
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	1,000	SF	4	\$9,507	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	1,700	SF	4	\$16,162	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 - square feet)	Hazardous Material	4,300	SF	4	\$40,880	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 - each)	Hazardous Material	2	Ea.	4	\$570	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	1,230	LF	4	\$28,065	Rollup
Room Is Excessively Reverberant <b>Note:</b> Gym	Acoustics	3,600	SF	4	\$31,316	4688
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,500	SF	5	\$16,518	Rollup
	<b>Sub Total for System</b>	<b>11</b>	<b>items</b>		<b>\$460,431</b>	



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2857
The Gas Furnace HVAC Component Requires Replacement <b>Note:</b> Heat exchangers are rusted.	Capital Renewal	2	Ea.	2	\$6,936	1089
The Window AC Unit Component Requires Replacement <b>Note:</b> Window units are aged and rusted.	Capital Renewal	5	Ea.	2	\$16,694	1096
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$60,383</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1302
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$5,799	1087
The Panelboard Requires Replacement	Capital Renewal	3	Ea.	2	\$14,546	1090
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$35,200</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	2859
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	2,500	SF	3	\$20,115	1305
The Custodial Mop Or Service Sink Requires Replacement <b>Note:</b> Mop sinks are corroded and leaking.	Capital Renewal	1	Ea.	4	\$2,576	1094
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	1	Ea.	4	\$7,377	2858
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	3	Ea.	4	\$9,543	1093
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$42,772</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Campus lacks security electronic access control. <b>Note:</b> No Access Control System add Access Control with 4 doors	Technology	4	Ea.	3	\$30,422	3943
Technology: Classroom AV/Multimedia systems are in need of improvements. <b>Note:</b> Refresh AV system in Library.	Technology	1	Ea.	3	\$9,507	3940
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. <b>Note:</b> Technology: Add new classroom AV/Multimedia systems to support digital formats.	Technology	24	Ea.	3	\$479,151	3941
Technology: Gymnasium sound system is nonexistent, inadequate, or near end of useful life. <b>Note:</b> Refresh gym audio system	Technology	1	Ea.	3	\$9,127	3945
Technology: Instructional spaces do not have local sound reinforcement. <b>Note:</b> Add sound reinforcement found in instructions spaces	Technology	24	Ea.	3	\$114,084	3938
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF Admin needs grounding system improvements.	Technology	1	Ea.	3	\$5,324	3929
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF Classroom needs grounding system improvements.	Technology	1	Ea.	3	\$5,324	3934
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF Admin needs to be rezoned.	Technology	1	Ea.	3	\$37,648	3928
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF Classroom add secure wall cabinet if not rezoning	Technology	1	Ea.	3	\$37,648	3933
Technology: Main Telecommunications Room ground system is inadequate or non-existent. <b>Note:</b> MDF has no ground system.	Technology	1	Ea.	3	\$6,655	3926
Technology: Main Telecommunications Room is not dedicated and/or inadequate. <b>Note:</b> miff - rezone and dedicate space	Technology	1	Ea.	3	\$50,197	3924
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> MDF Existing category 5 cables serviced by this space.	Technology	48	Ea.	3	\$20,535	3927
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> IDF Admin Existing category 5 cables serviced by this space.	Technology	10	Ea.	3	\$4,278	3931



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> IDF Classroom Existing category 5 cables serviced by this space.	Technology	10	Ea.	3	\$4,278	3936
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> Classrooms: Replace network cabling infrastructure.	Technology	48	Ea.	3	\$20,535	3948
Technology: Security cameras and recording system are inadequate and/or near end of useful life. <b>Note:</b> No video surveillance system. Add VMS and 18 IP Cameras	Technology	18	Ea.	3	\$85,563	3944
Technology: Special Space AV/Multimedia system is inadequate. <b>Note:</b> Add AV system to cafetorium.	Technology	1	Ea.	3	\$54,190	3939
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements. <b>Note:</b> MDF does not have dedicated AC unit, since it is MDF it is considered large size.	Technology	1	Ea.	3	\$7,606	3925
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF Admin needs dedicated AC unit.	Technology	1	Ea.	3	\$4,753	3930
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF Classroom needs dedicated AC unit.	Technology	1	Ea.	3	\$4,753	3935
Technology: Telecommunications Room fiber connectivity infrastructure is outdated and/or inadequate. <b>Note:</b> IDF Admin is connected via copper: Refresh Telecommunication Room fiber infrastructure, add 6 strand drop	Technology	1	Ea.	3	\$6,275	3932
Technology: Telecommunications Room fiber connectivity infrastructure is outdated and/or inadequate. <b>Note:</b> IDF Classroom is connected via copper: Refresh Telecommunication Room fiber infrastructure, add 6 strand drop	Technology	1	Ea.	3	\$6,275	3937
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. <b>Note:</b> Replace/add telephone handsets in classrooms and office spaces.	Technology	24	Ea.	3	\$36,507	3947
Technology: Telephone system is inadequate and/or non-existent. <b>Note:</b> Phone system is aging Toshiba Strata analog, replace.	Technology	1	Ea.	3	\$7,225	3946
<b>Sub Total for System</b>		<b>24</b>	<b>items</b>		<b>\$1,047,858</b>	
<b>Sub Total for Building 06 - Administration Building</b>		<b>52</b>	<b>items</b>		<b>\$1,896,910</b>	

## Building: 07 - Building 07

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement <b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.	Capital Renewal	2,500	SF	2	\$71,302	1210
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF) <b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.	Capital Renewal	2,500	SF	2	\$74,939	1201
The Metal Exterior Door Requires Replacement <b>Note:</b> Exterior doors are worn, chipped, and faded.	Capital Renewal	3	Door	2	\$19,252	1204
The Wood Window Requires Replacement <b>Note:</b> Single-pane windows from 1957.	Capital Renewal	96	SF	2	\$18,329	1203
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	40	SF	2	\$7,637	1211
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	60	SF	2	\$11,456	1212
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$131,613</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	2,250	SF	4	\$64,172	Rollup



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ceiling Grid Requires Replacement	Capital Renewal	2,500	SF	4	\$29,651	1206
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,500	SF	5	\$16,518	Rollup
	<b>Sub Total for System</b>	<b>4</b>	<b>items</b>		<b>\$139,603</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2861
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	2	Ea.	2	\$6,936	1163
<b>Note:</b> Heat exchangers are rusted.						
	<b>Sub Total for System</b>	<b>2</b>	<b>items</b>		<b>\$43,689</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1174
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1164
The Mounted Building Lighting Requires Replacement	Capital Renewal	1	Ea.	3	\$1,493	1100
<b>Note:</b> Building mounted lighting is corroded and non-functional.						
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
	<b>Sub Total for System</b>	<b>4</b>	<b>items</b>		<b>\$25,214</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	1166
<b>Note:</b> Water connections are corroding.						
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	2,500	SF	3	\$20,115	1171
<b>Note:</b> Corrosion at the soil line.						
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	1	Ea.	4	\$10,220	1188
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	1	Ea.	4	\$2,576	1190
<b>Note:</b> Mop sink is corroded and leaking.						
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	4	\$6,362	1184
<b>Note:</b> Restroom lavatories are stained and leaking.						
	<b>Sub Total for System</b>	<b>5</b>	<b>items</b>		<b>\$42,433</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$11,547</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs	Capital Renewal	2	Room	4	\$22,376	1209
<b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.						
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$22,376</b>	
	<b>Sub Total for Building 07 - Building 07</b>	<b>23</b>	<b>items</b>		<b>\$487,778</b>	

## Building: 08 - Building 08

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	2,500	SF	2	\$71,302	1236
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	2,500	SF	2	\$74,939	1214
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1217
<b>Note:</b> Exterior door at entrance is worn, chipped, and faded.						



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Wood Window Requires Replacement <b>Note:</b> Single-pane windows from 1957.	Capital Renewal	96	SF	2	\$18,329	1215
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	40	SF	2	\$7,637	1237
The Wood Window Requires Replacement <b>Note:</b> Windows are single-pane and likely original to the building.	Capital Renewal	60	SF	2	\$11,456	1239
<b>Sub Total for System</b>		<b>5 items</b>			<b>\$118,779</b>	

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Terrazzo Flooring Requires Replacement <b>Note:</b> Terrazzo is stained and likely original to building	Capital Renewal	125	SF	3	\$9,269	1232
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Ceiling Grid Requires Replacement <b>Note:</b> Grid system is original to the building and in need of replacement.	Capital Renewal	2,500	SF	4	\$29,651	1229
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,500	SF	5	\$16,518	Rollup
Room lacks appropriate sound control.	Educational Adequacy	100	SF	5	\$3,522	Rollup
<b>Sub Total for System</b>		<b>6 items</b>			<b>\$152,395</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2862
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	2	Ea.	2	\$6,936	1261
The Window AC Unit Component Requires Replacement	Capital Renewal	1	Ea.	2	\$3,339	1316
<b>Sub Total for System</b>		<b>3 items</b>			<b>\$47,028</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1314
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1264
The Mounted Building Lighting Requires Replacement <b>Note:</b> Building mounted lighting is corroded and non-functional.	Capital Renewal	1	Ea.	3	\$1,493	1101
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
<b>Sub Total for System</b>		<b>4 items</b>			<b>\$25,214</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	2926
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	2,500	SF	3	\$20,115	1313
The Custodial Mop Or Service Sink Requires Replacement <b>Note:</b> Mop sink is corroded and leaking.	Capital Renewal	1	Ea.	4	\$2,576	1263
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	1	Ea.	4	\$7,377	1260
<b>Sub Total for System</b>		<b>4 items</b>			<b>\$33,229</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
<b>Sub Total for System</b>		<b>1 items</b>			<b>\$11,547</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs <b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.	Capital Renewal	2	Room	4	\$22,376	1234
<b>Sub Total for System</b>		<b>1 items</b>			<b>\$22,376</b>	
<b>Sub Total for Building 08 - Building 08</b>		<b>25 items</b>			<b>\$481,869</b>	





## Building: 09 - Building 09

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	2,500	SF	2	\$71,302	1268
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	3,750	SF	2	\$112,408	1245
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1248
<b>Note:</b> Exterior door at entrance is worn, chipped, and faded.						
The Wood Window Requires Replacement	Capital Renewal	40	SF	2	\$7,637	1246
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	96	SF	2	\$18,329	1269
<b>Note:</b> Windows are single-pane and likely original to the building.						
The Wood Window Requires Replacement	Capital Renewal	87	SF	2	\$16,611	1270
<b>Note:</b> Windows are single-pane and likely original to the building.						
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$161,403</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
12 x 12 Floor Tiles Are Lifting or Broken and Highly Likely Contain Asbestos	Hazardous Material	4,500	SF	4	\$128,344	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	3,750	SF	4	\$43,892	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	3,750	SF	4	\$44,477	1250
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	238	SF	4	\$9,179	Rollup
Classroom Door Requires Vision Panel	Educational Adequacy	1	Ea.	5	\$2,309	Rollup
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	4,750	SF	5	\$31,385	Rollup
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>		<b>\$259,587</b>	

### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	5,000	SF	2	\$73,506	2863
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	4	Ea.	2	\$13,873	1325
<b>Note:</b> Heat exchangers are rusted.						
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$87,378</b>	

### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	5,000	SF	2	\$29,709	1318
The Panelboard Requires Replacement	Capital Renewal	3	Ea.	2	\$14,546	1326
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$5,799	1327
<b>Note:</b> Service is under-rated for use.						
The Mounted Building Lighting Requires Replacement	Capital Renewal	2	Ea.	3	\$2,985	1099
Room Has Insufficient Electrical Outlets	Educational Adequacy	16	Ea.	5	\$8,037	Rollup
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$61,076</b>	

### Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	1324
<b>Note:</b> Corrosion at connections.						
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	5,000	SF	3	\$40,229	1317
<b>Note:</b> Corrosion at the soil line.						
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	2	Ea.	4	\$5,153	1323
<b>Note:</b> Mop sinks are corroded and leaking.						
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	1	Ea.	4	\$7,377	1322



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	4	Ea.	4	\$12,724	1321
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$68,644</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	3	Ea.	3	\$17,321	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$17,321</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs	Capital Renewal	3	Room	4	\$33,563	1267
<b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$33,563</b>	
<b>Sub Total for Building 09 - Building 09</b>		<b>26</b>	<b>items</b>		<b>\$760,275</b>	

## Building: 10 - Building 10

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	11,175	SF	2	\$318,721	1284
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$318,721</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Wood Requires Replacement (Bldg SF)	Capital Renewal	10,995	SF	2	\$329,580	1272
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Storefront/Curtain Wall Requires Replacement (Bldg SF)	Capital Renewal	180	SF	2	\$14,511	1274
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	126	SF	2	\$24,057	1273
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	40	SF	2	\$7,637	1286
<b>Note:</b> Windows are single-pane and likely original to the building.						
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$375,786</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
12 x 12 Floor Tiles Are Lifting or Broken and Highly Likely Contain Asbestos	Hazardous Material	9,925	SF	4	\$283,070	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	400	SF	4	\$4,682	Rollup
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	6,510	SF	4	\$251,079	Rollup
The Wood Ceiling Tiles Require Replacement	Capital Renewal	11,175	SF	4	\$74,368	1276
<b>Note:</b> Wood ceiling shows signs of staining and wear and tear.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	5,588	SF	5	\$36,922	Rollup
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$650,121</b>	

### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	11,175	SF	2	\$164,285	2866
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	4	Ea.	2	\$40,492	1064
<b>Note:</b> Low efficiency units with pilot lights should be replaced.						
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$204,778</b>	

### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Switchgear Is Needed Or Requires Replacement	Capital Renewal	1	Ea.	2	\$19,280	1067
The Distribution Panel Requires Replacement	Capital Renewal	1	Ea.	2	\$29,129	1069
The Lighting Fixtures Require Replacement	Capital Renewal	11,175	SF	2	\$66,400	1328
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$5,799	1066
<b>Note:</b> Panel was previously used for stage lighting. Only the breakers are still functional.						



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$5,799	1068
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1071
The Mounted Building Lighting Requires Replacement	Capital Renewal	8	Ea.	3	\$11,941	1102
<b>Note:</b> Building mounted lighting is corroded and non-functional.						
Room Has Insufficient Electrical Outlets	Educational Adequacy	4	Ea.	5	\$2,009	Rollup
<b>Sub Total for System</b>		<b>8</b>	<b>items</b>		<b>\$145,207</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Backflow Preventer Requires Replacement	Capital Renewal	1	Ea.	2	\$3,921	1065
<b>Note:</b> Backflow preventer is corroded and leaking.						
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,160	2864
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	11,175	SF	3	\$89,913	1330
<b>Note:</b> Corrosion at meter.						
The Showers Plumbing Fixtures Require Replacement	Capital Renewal	4	Ea.	3	\$30,422	1070
The Urinal Plumbing Fixtures Require Replacement	Capital Renewal	1	Ea.	3	\$1,329	1337
<b>Note:</b> Urinal is non-functional.						
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	2	Ea.	4	\$14,755	1336
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	6	Ea.	4	\$19,086	1333
<b>Note:</b> Restroom lavatories are stained and leaking.						
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	4	\$6,362	1335
<b>Note:</b> Lavatories are stained and leaking.						
<b>Sub Total for System</b>		<b>8</b>	<b>items</b>		<b>\$168,948</b>	
<b>Sub Total for Building 10 - Building 10</b>		<b>28</b>	<b>items</b>		<b>\$1,863,561</b>	

## Building: 11 - Building 11

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Shingle Roof Requires Replacement	Capital Renewal	2,500	SF	2	\$71,302	1308
<b>Note:</b> Roof has not been replaced or fully repaired in recent memory and is likely original to building.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$71,302</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Metal Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$6,417	1299
The Wood Exterior Requires Replacement	Capital Renewal	2,500	SF Wall	2	\$56,281	1295
<b>Note:</b> Wood veneer is cracked, faded, and in need of replacement.						
The Wood Window Requires Replacement	Capital Renewal	96	SF	2	\$18,329	1297
<b>Note:</b> Single-pane windows from 1957.						
The Wood Window Requires Replacement	Capital Renewal	40	SF	2	\$7,637	1309
<b>Note:</b> Windows are single-pane and likely original to the building.						
The Wood Window Requires Replacement	Capital Renewal	60	SF	2	\$11,456	1310
<b>Note:</b> Windows are single-pane and likely original to the building.						
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$100,121</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Ceramic Tile Flooring Requires Replacement	Capital Renewal	125	SF	3	\$3,357	1306
<b>Note:</b> Tile is likely original to building, and is worn and chipped.						
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	2,500	SF	4	\$29,262	Rollup
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	2,250	SF	4	\$64,172	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	2,500	SF	4	\$29,651	1301
<b>Note:</b> Grid system is original to the building and in need of replacement.						
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	2,500	SF	5	\$16,518	Rollup
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$142,960</b>	



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	2,500	SF	2	\$36,753	2867
The Gas Furnace HVAC Component Requires Replacement	Capital Renewal	2	Ea.	2	\$6,936	1338
<b>Note:</b> Heat exchangers are rusted.						
<b>Sub Total for System</b>		<b>2 items</b>			<b>\$43,689</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	2,500	SF	2	\$14,855	1342
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$4,849	1339
Room Has Insufficient Electrical Outlets	Educational Adequacy	8	Ea.	5	\$4,018	Rollup
<b>Sub Total for System</b>		<b>3 items</b>			<b>\$23,722</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	\$3,113	1340
<b>Note:</b> Corrosion at connections.						
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	2,500	SF	3	\$20,115	1343
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	1	Ea.	4	\$10,220	1347
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	1	Ea.	4	\$2,576	1346
<b>Note:</b> Mop sink is corroded and leaking.						
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	4	\$6,362	1344
<b>Note:</b> Restroom lavatories are stained, rusted, and leaking.						
<b>Sub Total for System</b>		<b>5 items</b>			<b>\$42,386</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	2	Ea.	3	\$11,547	Rollup
<b>Sub Total for System</b>		<b>1 items</b>			<b>\$11,547</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Cabinetry In Classes/Labs	Capital Renewal	2	Room	4	\$22,376	1307
<b>Note:</b> Cabinetry is worn with surfaces peeling, chipped, or missing.						
<b>Sub Total for System</b>		<b>1 items</b>			<b>\$22,376</b>	
<b>Sub Total for Building 11 - Building 11</b>		<b>23 items</b>			<b>\$458,103</b>	
<b>Total for Campus</b>		<b>296 items</b>			<b>\$9,975,380</b>	



## Dr. Harry L. Halliwell Memorial 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)	470	LF	\$31,597	3
Roadway Pavement	Asphalt	86	CAR	\$284,533	3
Parking Lot Pavement	Asphalt	182	CAR	\$602,151	3
Parking Lot Lighting	Pole Mounted Fixtures (Ea.)	3	Ea.	\$23,205	5
Playfield Areas	ES Playgrounds	1	Ea.	\$44,588	5
Pedestrian Pavement	Sidewalks - Asphalt	3,000	SF	\$25,636	5
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$1,011,709</b>	
<b>Sub Total for Building -</b>		<b>6</b>	<b>items</b>	<b>\$1,011,709</b>	

### Building: 01 - Building 01

#### Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heat Generation	Furnace - Gas (150 MBH)	2	Ea.	\$6,936	4
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$6,936</b>	

#### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Note:</b> Sensors and pull stations					
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 01 - Building 01</b>		<b>2</b>	<b>items</b>	<b>\$14,264</b>	

### Building: 02 - Building 02

#### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 02 - Building 02</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	

### Building: 03 - Building 03

#### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 03 - Building 03</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	

### Building: 04 - Building 04

#### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 04 - Building 04</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	

### Building: 05 - Building 05

#### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	5,000	SF	\$14,655	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$14,655</b>	
<b>Sub Total for Building 05 - Building 05</b>		<b>1</b>	<b>items</b>	<b>\$14,655</b>	



## Building: 06 - Administration Building

### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 06 - Administration Building</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	

## Building: 07 - Building 07

### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 07 - Building 07</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	

## Building: 08 - Building 08

### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 08 - Building 08</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	

## Building: 09 - Building 09

### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	5,000	SF	\$14,655	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$14,655</b>	
<b>Sub Total for Building 09 - Building 09</b>		<b>1</b>	<b>items</b>	<b>\$14,655</b>	

## Building: 10 - Building 10

### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Paneling	Wood Panel wall	5,587	SF	\$50,991	5
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$50,991</b>	

### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	11,175	SF	\$32,754	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$32,754</b>	
<b>Sub Total for Building 10 - Building 10</b>		<b>2</b>	<b>items</b>	<b>\$83,745</b>	

## Building: 11 - Building 11

### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,500	SF	\$7,328	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Sub Total for Building 11 - Building 11</b>		<b>1</b>	<b>items</b>	<b>\$7,328</b>	
<b>Total for: Dr. Harry L. Halliwell Memorial School</b>		<b>19</b>	<b>items</b>	<b>\$1,190,320</b>	



## Supporting Photos



Site Aerial



Displaced Roof Shingles



Kitchen Sink



Building Mounted Light



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Exterior Door



Exterior Windows



Window Unit



Single Pane Window



Typical Lavatory Fixture



Mop Sink





# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Aged Panel



Wood Exterior



Urinal Out Of Service



Typical Classroom



Typical Acoustic Tile



Aged Panelboard



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Fence Falling Down



Building 4 Roof



Typical Worn VCT



Typical Worn Handrail



Rudimentary ECS



Lavatory



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Gymnasium/Cafeteria And Stage



Building 8 Roof



Furnace



Backflow Preventer



Building Mounted Light



Typical Window



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Stained Wood Exterior



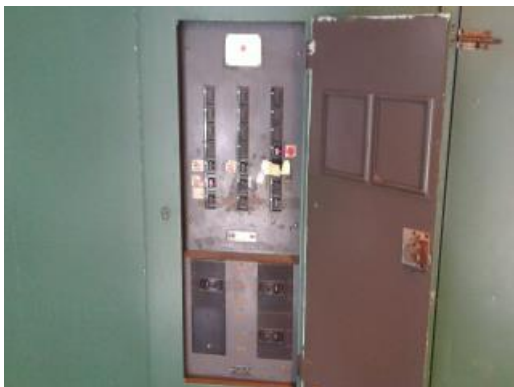
Shingles Missing From Building 2 Roof



Aged Panelboard



Faded Exterior Door



Aged Panelboard



Playground



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Water Heater



Weathered Wood Exterior



Chipped And Faded Exterior Door



Stained Service Sink



Exterior Wood Panel



Furnace



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Typical Window



Chipped And Faded Interior Walls



Missing Tiles



Composition Roof



Chipped And Worn Cabinetry



Furnace And Water Heater



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Stained Wood Decking



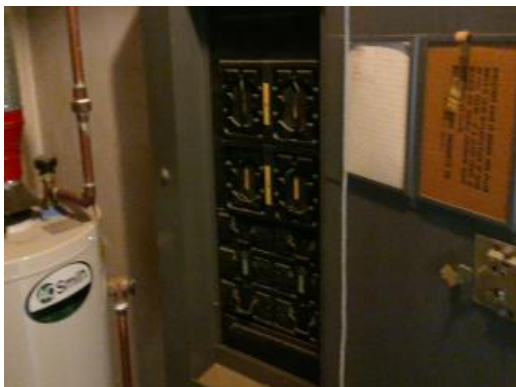
Exterior Finishes



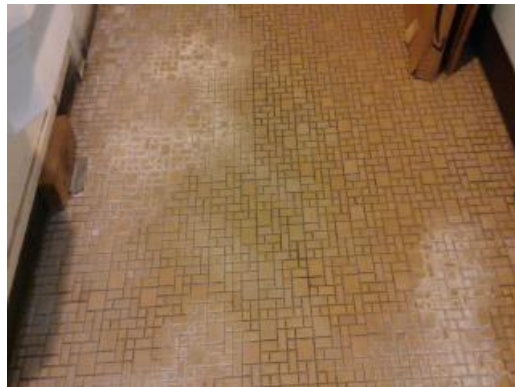
Faded Exterior Door



Original Grid System



Aged Panelboard



Stained And Faded VCT



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Library



Corroding Furnace



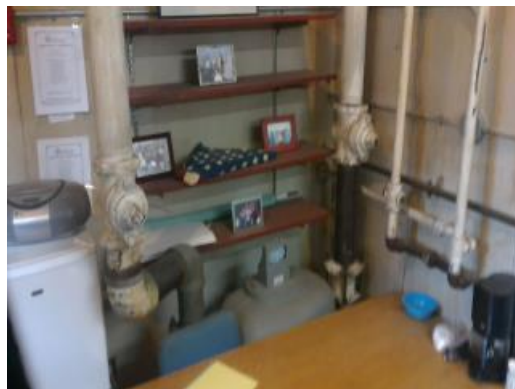
Shingle Roof



Main Disconnect



Rusted Water Heater



Gas Service Valve





# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Basketball Goal



Building Mounted Light



Typical Student Restroom



Exterior Door



Exterior Door



Typical Service Sink



# Facility Condition Assessment

North Smithfield - Dr. Harry L. Halliwell Memorial School



Typical Wood Veneer Fading



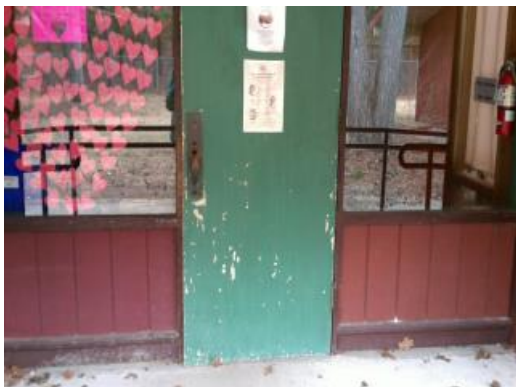
Music Room



Water Fountain



Furnace



Chipped And Faded Exterior Door



Aged Furnaces



# Facility Condition Assessment

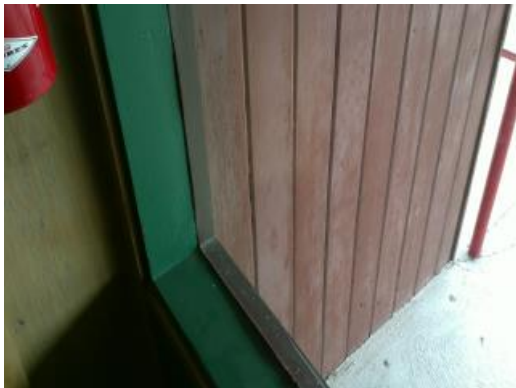
North Smithfield - Dr. Harry L. Halliwell Memorial School



Gym Furnaces



Building 10



Original Single Pane Window



Drinking Fountain



Building 3 Exterior

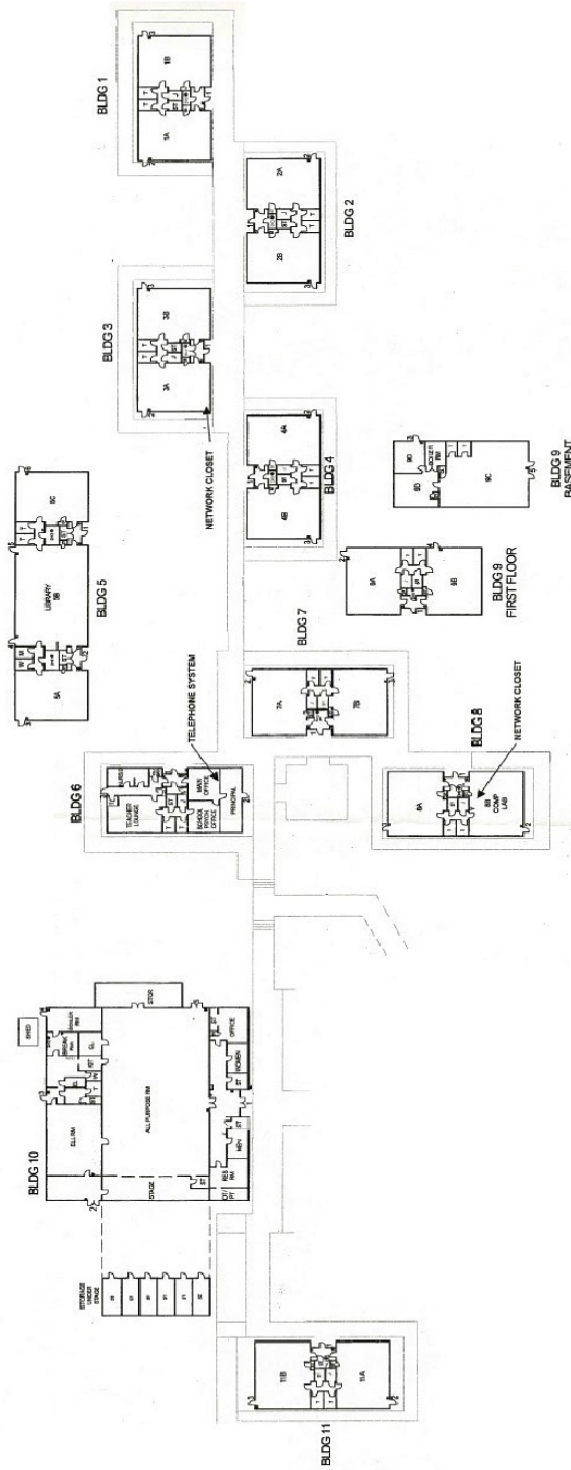
Dr. Harry L. Halliwell Memorial Elementary



Floor\_Plan



Dr. Harry L. Halliwell Memorial Elementary



Floor\_Plan



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School

June 2017

2214 Providence Pike, North Smithfield, RI 02896





## Introduction

North Smithfield Elementary School, located at 2214 Providence Pike in North Smithfield, Rhode Island, was built in 1989. It comprises 75,000 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.

North Smithfield Elementary School serves grades PK - 3, has 40 instructional spaces, and has an enrollment of 424. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for North Smithfield Elementary School is 605 with a resulting utilization of 70%.

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 North Smithfield Elementary School the 5-year need is \$10,074,534. 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 North Smithfield 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 North Smithfield Elementary School campus, identified by discipline and building.

### Site

The site level systems for this campus include:

<b>Site</b>	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Concrete Pedestrian Pavement

### Building Envelope

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

<b>01 - Main Building:</b>	Brick Exterior Wall
	CMU Exterior Wall
	Aluminum Exterior Windows
	Storefront / Curtain Wall
	Steel Exterior Entrance Doors

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

<b>01 - Main Building:</b>	Composition Shingle Roofing
	EPDM Roofing

### Interior

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

<b>01 - Main Building:</b>	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Door Hardware
	Painted Ceilings
	Ceramic Tile Wall
	CMU Wall
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring
	Epoxy Coated Flooring
	Carpet
	Athletic/Sport Flooring





## Mechanical

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

<b>01 - Main Building:</b>	1,275 MBH Cast Iron Water Boiler
	3,264 MBH Cast Iron Water Boiler
	Steam/Hot Water Heating Unit Vent
	Fin Tube Water Radiant Heater
	Pneumatic Heating System Controls
	3 Ton Condensing Unit
	5 Ton Package DX Unit
	Make-up Air Unit
	5 HP Pump
	10 HP Pump
	2-Pipe Hot Water Hydronic Distribution System
	Roof Exhaust Fan

## Plumbing

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

<b>01 - Main Building:</b>	1,000 Gallon Water Storage Tank
	250 Gallon Water Storage Tank
	Gas Piping System
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
	Urinals
	Air Compressor (2 hp)

## Electrical

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

<b>01 - Main Building:</b>	800 Amp Switchgear
	400 Amp Distribution Panel
	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	Light Fixtures
	Building Mounted Lighting 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.



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School

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

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	-	-	\$435,885	\$1,231,891	\$5,878	\$1,673,653	20.72 %
Roofing	-	\$2,045,815	-	-	-	\$2,045,815	25.33 %
Structural	-	-	-	-	-	\$0	0.00 %
Exterior	-	-	\$7,837	-	-	\$7,837	0.10 %
Interior	-	-	-	\$1,868,271	\$119,004	\$1,987,275	24.61 %
Mechanical	-	-	\$31,585	\$503,191	-	\$534,776	6.62 %
Electrical	-	-	\$148,398	-	\$75,837	\$224,235	2.78 %
Plumbing	-	\$189	-	-	\$33,919	\$34,108	0.42 %
Fire and Life Safety	\$218,345	-	-	-	-	\$218,345	2.70 %
Technology	-	-	\$1,350,215	-	-	\$1,350,215	16.72 %
Conveyances	-	-	-	-	-	\$0	0.00 %
Specialties	-	-	-	-	-	\$0	0.00 %
<b>Total</b>	\$218,345	\$2,046,004	\$1,973,919	\$3,603,353	\$234,639	\$8,076,259	

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

The building systems with the most need include:

Roofing	-	\$2,045,815
Interior	-	\$1,987,275
Site	-	\$1,673,653

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

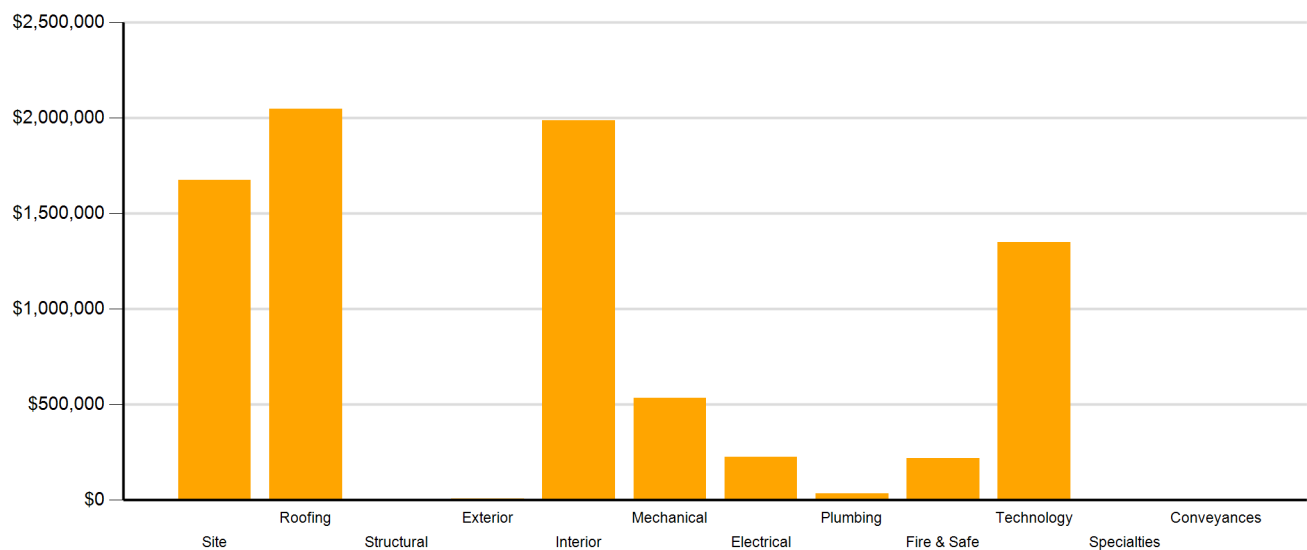


Figure 2: System Deficiencies



## Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

- **Acoustics** deficiencies relate to room acoustics, sound insulation, 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.



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School

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

Category	Priority					Total
	1	2	3	4	5	
Acoustics	-	-	-	\$13,938	-	\$13,938
Barrier to Accessibility	-	-	-	-	-	\$0
Capital Renewal	-	\$2,046,004	\$293,390	\$1,812,434	\$115,506	\$4,267,333
Code Compliance	\$218,345	-	-	-	-	\$218,345
Educational Adequacy	-	-	\$28,674	\$28,674	\$119,132	\$176,480
Functional Deficiency	-	-	-	-	-	\$0
Hazardous Material	-	-	-	\$1,748,307	-	\$1,748,307
Technology	-	-	\$1,321,541	-	-	\$1,321,541
Traffic	-	-	\$330,314	-	-	\$330,314
<b>Total</b>	<b>\$218,345</b>	<b>\$2,046,004</b>	<b>\$1,973,919</b>	<b>\$3,603,353</b>	<b>\$234,639</b>	<b>\$8,076,259</b>

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

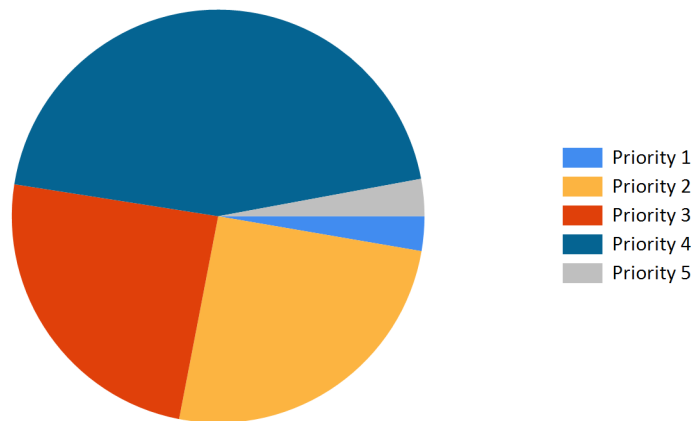


Figure 3: Current deficiencies by priority



## 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

System	Current Deficiencies	Life Cycle Capital Renewal Projections					LC Yr. 1-5 Total	Total 5-Year Need
		Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021		
Site	\$1,673,653	\$0	\$0	\$44,588	\$0	\$0	\$44,588	\$1,718,241
Roofing	\$2,045,815	\$0	\$0	\$0	\$0	\$0	\$0	\$2,045,815
Structural	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$7,837	\$0	\$0	\$0	\$0	\$0	\$0	\$7,837
Interior	\$1,987,275	\$0	\$163,171	\$3,803	\$190,316	\$55,216	\$412,506	\$2,399,781
Mechanical	\$534,776	\$0	\$0	\$14,416	\$913,399	\$106,008	\$1,033,823	\$1,568,599
Electrical	\$224,235	\$0	\$0	\$0	\$0	\$492,603	\$492,603	\$716,838
Plumbing	\$34,108	\$0	\$0	\$14,755	\$0	\$0	\$14,755	\$48,863
Fire and Life Safety	\$218,345	\$0	\$0	\$0	\$0	\$0	\$0	\$218,345
Technology	\$1,350,215	\$0	\$0	\$0	\$0	\$0	\$0	\$1,350,215
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$8,076,259</b>	<b>\$0</b>	<b>\$163,171</b>	<b>\$77,562</b>	<b>\$1,103,715</b>	<b>\$653,827</b>	<b>\$1,998,275</b>	<b>\$10,074,534</b>

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

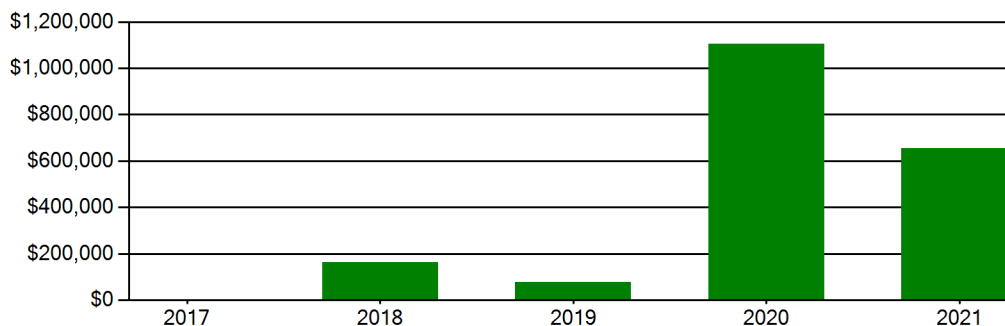
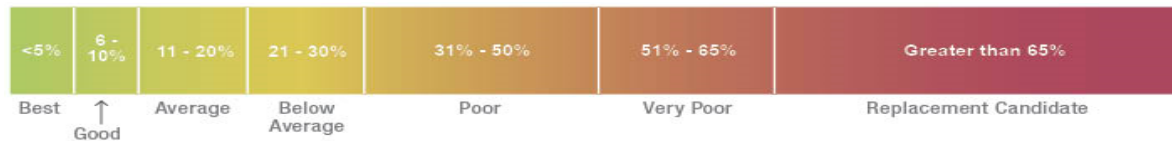


Figure 4: Life Cycle Capital Renewal Forecast



## 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 \$26,250,000. For planning purposes, the total 5-year need at the North Smithfield Elementary School is \$10,074,534 (Life Cycle Years 1-5 plus the FCI deficiency cost). The North Smithfield Elementary School facility has a 5-year FCI of 38.38%.

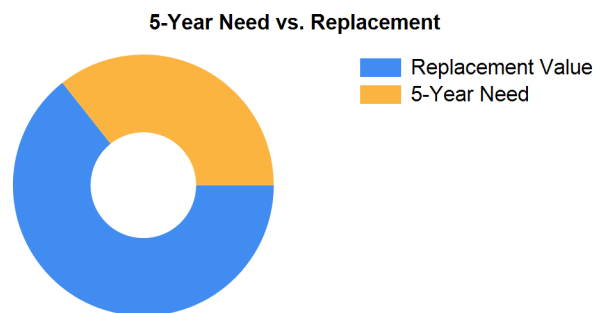


Figure 5: 5-Year FCI

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 469 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 North Smithfield Elementary School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be \$286,146.





## Summary of Findings

The North Smithfield Elementary School comprises 75,000 square feet and was constructed in 1989. Current deficiencies at this school total \$8,076,259. Five year capital renewal costs total \$1,998,275. The total identified need for the North Smithfield Elementary School (current deficiencies and 5-year capital renewal costs) is \$10,074,534. The 5-year FCI is 38.38%.

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
North Smithfield Elementary School Totals	75,000	1989	\$8,076,259	\$1,998,275	\$10,074,534	38.38%

*\*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.



## Site Level Deficiencies

### Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Concrete Walks Require Replacement <b>Note:</b> Cracked and broken.	Capital Renewal	5,200	SF	3	\$105,570	1886
Install New Paving <b>Note:</b> Add second entrance from Mowry Farms Lane	Traffic	15,900	SF	3	\$330,314	4459
Asphalt Paving Requires Replacement <b>Note:</b> Cracking pavement	Capital Renewal	116	CAR	4	\$381,204	1530
Asphalt Paving Requires Replacement <b>Note:</b> Paved play areas splitting and cracking.	Capital Renewal	95	CAR	4	\$312,193	1531
Asphalt Paving Requires Replacement <b>Note:</b> Cracking, splitting, and failing.	Capital Renewal	146	CAR	4	\$479,791	1544
Backstops Require Replacement <b>Note:</b> Backstops Require Replacement	Educational Adequacy	1	Ea.	4	\$28,674	28526
Exterior Basketball Goals Require Replacement <b>Note:</b> Basketball goals are damaged.	Capital Renewal	2	Ea.	4	\$15,260	1542
Fencing Requires Replacement (4' Chain Link Fence) <b>Note:</b> Fence falling and requires replacement.	Capital Renewal	230	LF	4	\$14,769	1543
Exterior Basketball Goals are Required <b>Note:</b> Exterior Basketball Goals are Required	Educational Adequacy	1	Ea.	5	\$5,878	28768
<b>Sub Total for System</b>		<b>9</b>	<b>items</b>		<b>\$1,673,653</b>	

### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Pole Lighting Requires Replacement <b>Note:</b> Pole and units rusted.	Capital Renewal	17	Ea.	3	\$130,607	1522
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$130,607</b>	
<b>Sub Total for School and Site Level</b>		<b>10</b>	<b>items</b>		<b>\$1,804,261</b>	

## Building: 01 - Main Building

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
EPDM Roofing Requires Replacement (Bldg SF) <b>Note:</b> Original roof.	Capital Renewal	5,000	SF	2	\$62,796	1554
Shingle Roof Requires Replacement <b>Note:</b> Roof is original to both 1989 and 2002 buildings.	Capital Renewal	70,000	SF	2	\$1,983,020	1553
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$2,045,815</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Exterior Metal Door Requires Repainting <b>Note:</b> Metal exit doors are chipped and faded and should be repainted. <b>Location:</b> 1989 Building	Capital Renewal	30	Door	3	\$6,187	1550
Exterior Metal Door Requires Repainting <b>Note:</b> Doors are chipped, worn, faded, and should be repainted. <b>Location:</b> 2002 Addition	Capital Renewal	8	Door	3	\$1,650	1555
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$7,837</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
12 x 12 Floor Tiles Are Lifting or Broken and Highly Likely Contain Asbestos	Hazardous Material	45,010	SF	4	\$1,275,082	Rollup
Acoustic ceiling tile - large area (>10%) of broken or falling broken tiles	Hazardous Material	39,600	SF	4	\$460,383	Rollup
Caulking - significant areas of broken pieces &/or deteriorating caulk	Hazardous Material	400	LF	4	\$7,554	Rollup
Ceiling Grid Requires Replacement <b>Note:</b> Portions of the grid system in wings A and B are bent out of shape.	Capital Renewal	9,000	SF	4	\$106,026	1551



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Paint (probable pre-1978 in base layer(s)) -large areas (> 10 sq. ft.)of peeling/damage & area in active use-adults only (measurement unit - square feet)	Hazardous Material	200	SF	4	\$1,889	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 - each)	Hazardous Material	12	Ea.	4	\$3,399	Rollup
Partitions Provide Insufficient Sound Isolation <b>Note:</b> All walls adjacent to gym	Acoustics	492	SF	4	\$13,938	4714
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	17,600	SF	5	\$115,506	Rollup
Room lacks appropriate sound control.	Educational Adequacy	100	SF	5	\$3,498	Rollup
<b>Sub Total for System</b>		<b>9 items</b>			<b>\$1,987,275</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Make Up Air Equipment Requires Replacement	Capital Renewal	2	Ea.	3	\$31,585	1477
Existing Controls Are Inadequate And Should Be Replaced With DDC Controls <b>Note:</b> Pneumatics system is leaking.	Capital Renewal	75,000	SF	4	\$503,191	1872
<b>Sub Total for System</b>		<b>2 items</b>			<b>\$534,776</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Mounted Building Lighting Requires Replacement <b>Note:</b> Units broken or missing.	Capital Renewal	12	Ea.	3	\$17,791	1524
Room Has Insufficient Electrical Outlets	Educational Adequacy	152	Ea.	5	\$75,837	Rollup
<b>Sub Total for System</b>		<b>2 items</b>			<b>\$93,628</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Gas Piping Requires Repair <b>Note:</b> Piping and main valves rusted and in need of paint.	Capital Renewal	100	LF	2	\$189	1545
Room lacks a drinking fountain.	Educational Adequacy	19	Ea.	5	\$21,066	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	12	Ea.	5	\$12,853	Rollup
<b>Sub Total for System</b>		<b>3 items</b>			<b>\$34,108</b>	

## 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) <b>Note:</b> Sensors and pulls failing.	Code Compliance	75,000	SF	1	\$218,345	1547
<b>Sub Total for System</b>		<b>1 items</b>			<b>\$218,345</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	5	Ea.	3	\$28,674	Rollup
Technology: Campus lacks security electronic access control. <b>Note:</b> Key scan Access Control System add Access Control with 2doors	Technology	2	Ea.	3	\$15,109	3919
Technology: Classroom AV/Multimedia systems are in need of improvements. <b>Note:</b> Refresh AV system in Library.	Technology	1	Ea.	3	\$9,443	3916
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. <b>Note:</b> Technology: Add new classroom AV/Multimedia systems to support digital formats.	Technology	30	Ea.	3	\$594,906	3917
Technology: Gymnasium sound system is nonexistent, inadequate, or near end of useful life. <b>Note:</b> Refresh gym audio system	Technology	1	Ea.	3	\$9,065	3921
Technology: Instructional spaces do not have local sound reinforcement. <b>Note:</b> Add sound reinforcement found in instructions spaces	Technology	50	Ea.	3	\$236,074	3914
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF Admin needs grounding system improvements.	Technology	1	Ea.	3	\$5,288	3911



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF Admin needs to be rezoned. space isn't dedicated, hard to access, equipment on surge protector, room house 110 pa access control	Technology	1	Ea.	3	\$37,394	3910
Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent. <b>Note:</b> IDF Admin: Add Intermediate Telecommunications Room UPS.	Technology	1	Ea.	3	\$4,721	3913
Technology: Main Telecommunications Room ground system is inadequate or non-existent. <b>Note:</b> MDF has no ground system.	Technology	1	Ea.	3	\$6,610	3908
Technology: Main Telecommunications Room is not dedicated and/or inadequate. <b>Note:</b> Miff - storage UPS on floor, servers and KVM is on adjacent shelves. Dedicate/create new space	Technology	1	Ea.	3	\$49,859	3906
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> MDF Existing category 5 cables serviced by this space.	Technology	114	Ea.	3	\$48,442	3909
Technology: Number of current, up to date, network switch ports are insufficient to support campus technology. <b>Note:</b> Classrooms have 3 connections, expand port availability.	Technology	144	Ea.	3	\$67,989	24961
Technology: Security cameras and recording system are inadequate and/or near end of useful life. <b>Note:</b> Analog/Digital Hybrid camera system with 5 analog Cameras refresh and add 25 additional IP Cameras	Technology	25	Ea.	3	\$118,037	3920
Technology: Special Space AV/Multimedia system is inadequate. <b>Note:</b> Add AV system to cafetorium.	Technology	1	Ea.	3	\$53,825	3915
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements. <b>Note:</b> MDF does not have dedicated AC unit, since it is MDF it is considered large size.	Technology	1	Ea.	3	\$7,554	3907
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF Admin needs dedicated AC unit.	Technology	1	Ea.	3	\$4,721	3912
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. <b>Note:</b> Replace/add telephone handsets in classrooms and office spaces.	Technology	30	Ea.	3	\$45,326	3923
Technology: Telephone system is inadequate and/or non-existent. <b>Note:</b> Phone system is aging Toshiba Strata analog, replace.	Technology	1	Ea.	3	\$7,177	3922
	<b>Sub Total for System</b>	<b>19</b>	<b>items</b>		<b>\$1,350,215</b>	
	<b>Sub Total for Building 01 - Main Building</b>	<b>40</b>	<b>items</b>		<b>\$6,271,998</b>	
	<b>Total for Campus</b>	<b>50</b>	<b>items</b>		<b>\$8,076,259</b>	



## North Smithfield 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
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$44,588</b>	
<b>Sub Total for Building -</b>		<b>1</b>	<b>items</b>	<b>\$44,588</b>	

### Building: 01 - Main Building

#### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Carpeting	Carpet	7,500	SF	\$163,171	2
Fluid-Applied Flooring	Epoxy Coating	200	SF	\$3,803	3
Resilient Flooring	Vinyl Composition Tile Flooring	16,590	SF	\$190,316	4
Suspended Plaster and	Painted ceilings	13,200	SF	\$55,216	5
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>	<b>\$412,507</b>	

#### Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Decentralized Cooling	Package DX Unit ( 5 Ton)	1	Ea.	\$14,416	3
Decentralized Heating Equipment	Heating Unit Vent - Steam/Hot water	54	Ea.	\$913,399	4
Exhaust Air	Roof Exhaust Fan	19	Ea.	\$98,878	5
Decentralized Cooling	Condensing Unit (3 Ton)	1	Ea.	\$7,130	5
<b>Note:</b> Tied into PC lab					
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>	<b>\$1,033,824</b>	

#### Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Electrical Service	Switchgear - Main Dist Panel (800 Amps)	2	Ea.	\$46,964	5
Lighting Fixtures	Light Fixtures (Bldg SF)	75,000	SF	\$445,639	5
<b>Note:</b> Sensors added for occupancy					
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>	<b>\$492,604</b>	

#### Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Refrigerated Drinking Fountain	2	Ea.	\$14,755	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$14,755</b>	
<b>Sub Total for Building 01 - Main Building</b>		<b>11</b>	<b>items</b>	<b>\$1,953,689</b>	
<b>Total for: North Smithfield Elementary School</b>		<b>12</b>	<b>items</b>	<b>\$1,998,277</b>	



**Supporting Photos**



Site Aerial



Damaged Asphalt



Pneumatics System Leaking



Typical Boys Restroom - 1989 Building



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Ceiling Tile Falling Out Of Grid



Rusted Pole Mounted Lights



Gymnasium



Typical Girls Restroom - 2002 Addition



Missing Or Stained Ceiling Tiles



Damaged Fence



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



2002 Dedication Plaque



Typical Classroom - 1989 Building



Original Building Exterior Finishes



Main Distribution Panel



PH Controls & Tank



2002 Addition Exterior





# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Typical Worn Metal Exterior Doors



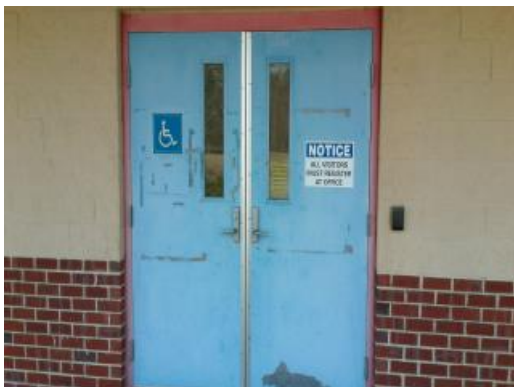
Propane Tanks



Cracking Asphalt Paving



Main Entrance



Typical Exterior Doors



1989 Dedication Plaque



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Cafeteria And Stage



Boys 2002 Addition Restroom



Boilers



Music Room



Entry Sign On Driveway



Damaged Basketball Goals



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Pressure Pumps



Typical Worn VCT



Pressure Tank



Original Shingle Roof



Bent Ceiling Grid



Broken Building Mounted Light



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Cracks In Painted Walls



Controls



Water Treatment



Damaged Play Area Asphalt



Make Up Air



Cracked, Worn Play Area Asphalt

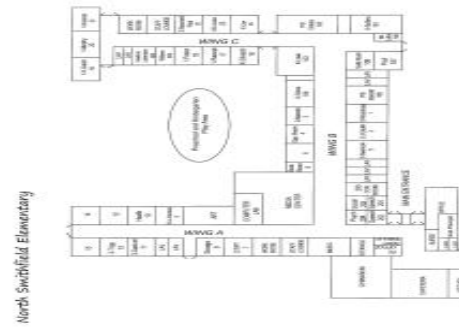


# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Library



Floor\_Plan

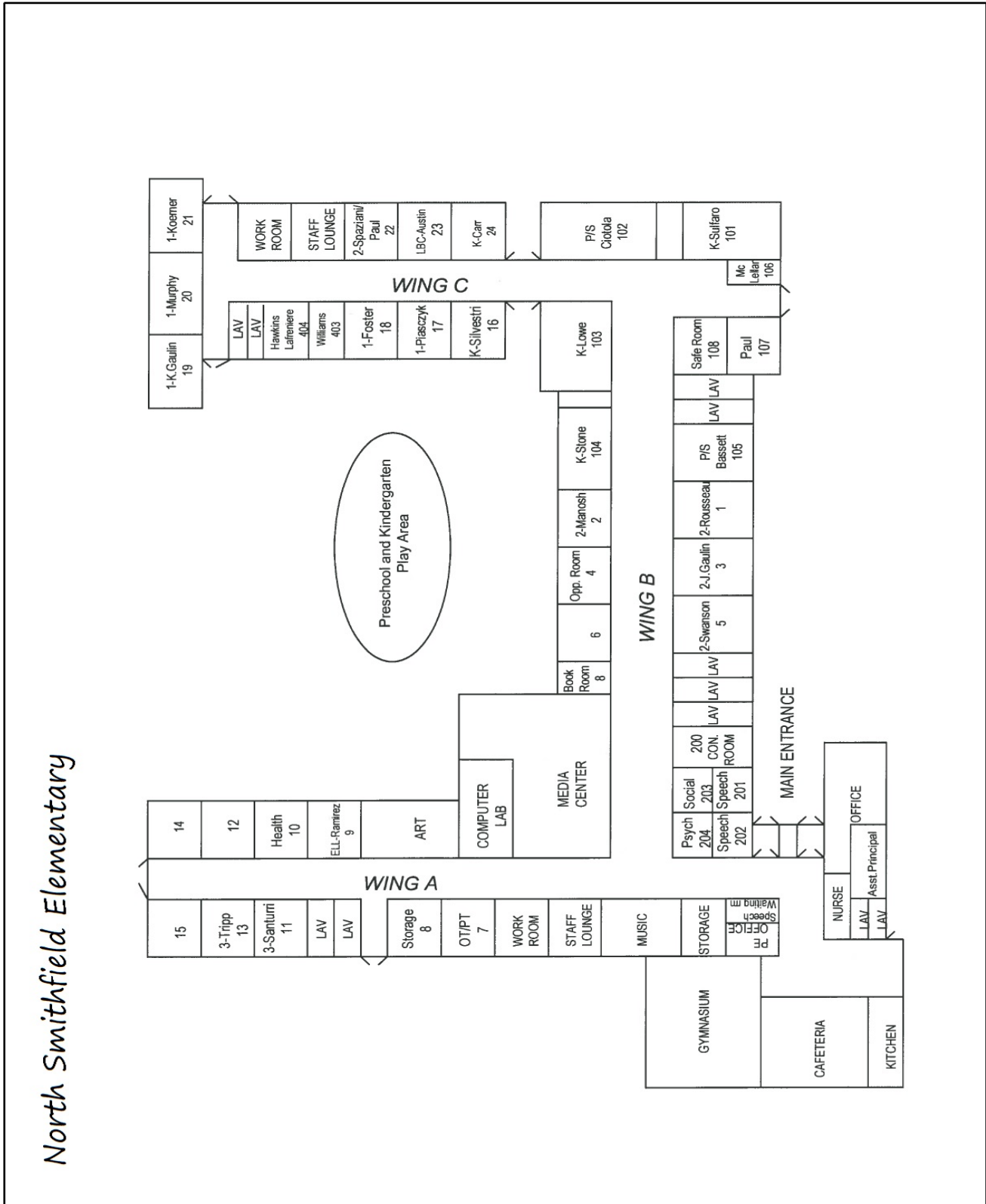


Front Elevation



# Facility Condition Assessment

North Smithfield - North Smithfield Elementary School



Floor\_Plan



# Facility Condition Assessment

North Smithfield - North Smithfield High School

June 2017

412 Greenville Road, North Smithfield, RI 02896





## Introduction

North Smithfield High School, located at 412 Greenville Road in North Smithfield, Rhode Island, was built in 1967. It comprises 147,970 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.

North Smithfield High School serves grades 9 - 12, has 53 instructional spaces, and has an enrollment of 496. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for North Smithfield High School is 690 with a resulting utilization of 72%.

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 North Smithfield High School the 5-year need is \$19,633,087. 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 North Smithfield 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 North Smithfield High School campus, identified by discipline and building.

### Site

The site level systems for this campus include:

<b>Site</b>	Asphalt Parking Lot Pavement
	Asphalt Pedestrian Pavement
	Concrete Pedestrian Pavement

### Building Envelope

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

<b>01 - Main Building:</b>	Brick Exterior Wall
	Metal Panel Exterior Wall
	Aluminum Exterior Windows
	Wood Exterior Windows
	Storefront / Curtain Wall
	Storefront Entrance Doors
	Steel Exterior Entrance Doors
	Overhead Exterior Utility Doors
<b>02 - Maintenance Shed:</b>	CMU Exterior Wall
	Aluminum Exterior Windows
	Wood Exterior Doors
	Overhead Exterior Utility Doors
<b>03 - Fire Pump House:</b>	Metal Panel Exterior Wall
	Steel Exterior Entrance Doors
<b>04 - Concession Stand:</b>	Wood Siding Exterior Wall
	Wood Exterior Doors
<b>06 - Well Pump House:</b>	Pre-cast Concrete Panel Exterior Wall
	Wood Exterior Doors

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

<b>01 - Main Building:</b>	EPDM Roofing
<b>02 - Maintenance Shed:</b>	Composition Shingle Roofing
<b>03 - Fire Pump House:</b>	EPDM Roofing
<b>04 - Concession Stand:</b>	Composition Shingle Roofing
<b>06 - Well Pump House:</b>	Cast In Place Concrete Roofing

### Interior

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

<b>01 - Main Building:</b>	Steel Interior Doors
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# Facility Condition Assessment

North Smithfield - North Smithfield High School

<b>01 - Main Building:</b>	Wood Interior Doors
	Overhead Interior Coiling Doors
	Interior Door Hardware
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Painted Ceilings
	Ceramic Tile Wall
	Wood Wall Paneling
	CMU Wall
	Brick/Stone Veneer
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Quarry Tile Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
	Terrazzo Flooring
	Carpet
	Athletic/Sport Flooring
<b>02 - Maintenance Shed:</b>	Wood Ceilings
	CMU Wall
	Concrete Flooring
	Wood Flooring
<b>03 - Fire Pump House:</b>	Metal Wall Paneling
	Concrete Flooring
	Metal Ceiling Panel
<b>04 - Concession Stand:</b>	Wood Ceilings
	Wood Wall Paneling
	Concrete Flooring
<b>06 - Well Pump House:</b>	Painted Ceilings
	CMU Wall
	Concrete Flooring

## Mechanical

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

<b>01 - Main Building:</b>	400 MBH Cast Iron Steam Boiler
	3,264 MBH Cast Iron Water Boiler
	Finned Wall Radiator
	Steam/Hot Water Heating Unit Vent
	20 kW Electric Unit Heater
	20 MBH Steam Unit Heater



# Facility Condition Assessment

North Smithfield - North Smithfield High School

<b>01 - Main Building:</b>	DDC Heating System Controls
	1 Ton Ductless Split System
	Window Units
	2-Pipe Hot Water Hydronic Distribution System
	1 HP or Smaller Pump
	5 HP Pump
	2,000 CFM Interior AHU
	5,000 CFM Interior AHU
	Ductwork
	Kitchen Exhaust Hoods
	Laboratory Fume Hood
	Roof Exhaust Fan
<b>02 - Maintenance Shed:</b>	80 MBH Gas Unit Heater
<b>03 - Fire Pump House:</b>	20 kW Electric Unit Heater
	>100 HP Pump
	Wall Exhaust Fan
<b>06 - Well Pump House:</b>	20 kW Electric Unit Heater
	5 HP Pump

## Plumbing

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

<b>01 - Main Building:</b>	250 Gallon Water Storage Tank
<b>02 - Maintenance Shed:</b>	Gas Piping System
<b>01 - Main Building:</b>	Domestic Water Piping System
<b>06 - Well Pump House:</b>	Domestic Water Piping System
<b>01 - Main Building:</b>	Classroom Lavatories
	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Showers
	Toilets
	Urinals
	Sump Pump
	10,000 Gallon Above Ground Fuel Oil Storage Tank

## Electrical

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

<b>01 - Main Building:</b>	150 kW Emergency Generator
	2,000 kW Inverter
	Solar Panels



# Facility Condition Assessment

North Smithfield - North Smithfield High School

<b>01 - Main Building:</b>	Automatic Transfer Switch
	1,600 Amp Switchgear
	Panelboard - 120/208 100A
	Panelboard - 120/208 125A
	Panelboard - 120/208 400A
	Panelboard - 120/240 225A
	Panelboard - 400+ Amps
	Electrical Disconnect
	Building Mounted Lighting Fixtures
	Canopy Mounted Lighting Fixtures
	Light Fixtures
<b>02 - Maintenance Shed:</b>	Panelboard - 120/208 225A
	Building Mounted Lighting Fixtures
	Light Fixtures
<b>03 - Fire Pump House:</b>	Automatic Transfer Switch
	15 KVA Transformer
	Panelboard - 120/208 225A
	Electrical Disconnect
	Light Fixtures
	Building Mounted Lighting Fixtures
<b>04 - Concession Stand:</b>	Panelboard - 120/208 100A
	Panelboard - 277/480 400A
	Building Mounted Lighting Fixtures
	Light Fixtures
<b>06 - Well Pump House:</b>	Panelboard - 120/208 225A
	Electrical Disconnect
	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.



# Facility Condition Assessment

North Smithfield - North Smithfield High School

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

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	-	-	-	\$521,610	-	\$521,610	2.71 %
Roofing	-	-	-	-	-	\$0	0.00 %
Structural	-	-	-	-	-	\$0	0.00 %
Exterior	-	\$1,370,013	\$4,950	\$1,558	-	\$1,376,521	7.14 %
Interior	-	-	\$2,843,891	\$4,867,771	\$37,504	\$7,749,167	40.19 %
Mechanical	-	\$4,529,420	\$321,413	\$387,313	-	\$5,238,146	27.17 %
Electrical	\$4,260	\$312,477	-	-	\$106,995	\$423,731	2.20 %
Plumbing	-	-	\$1,482,852	\$396,938	\$53,764	\$1,933,554	10.03 %
Fire and Life Safety	\$45,878	-	-	-	-	\$45,878	0.24 %
Technology	-	-	\$1,831,874	-	-	\$1,831,874	9.50 %
Conveyances	-	-	\$94,430	-	-	\$94,430	0.49 %
Specialties	-	-	\$13,764	\$9,077	\$43,011	\$65,851	0.34 %
<b>Total</b>	\$50,138	\$6,211,910	\$6,593,173	\$6,184,268	\$241,274	\$19,280,763	

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

The building systems with the most need include:

Interior	-	\$7,749,167
Mechanical	-	\$5,238,146
Plumbing	-	\$1,933,554

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

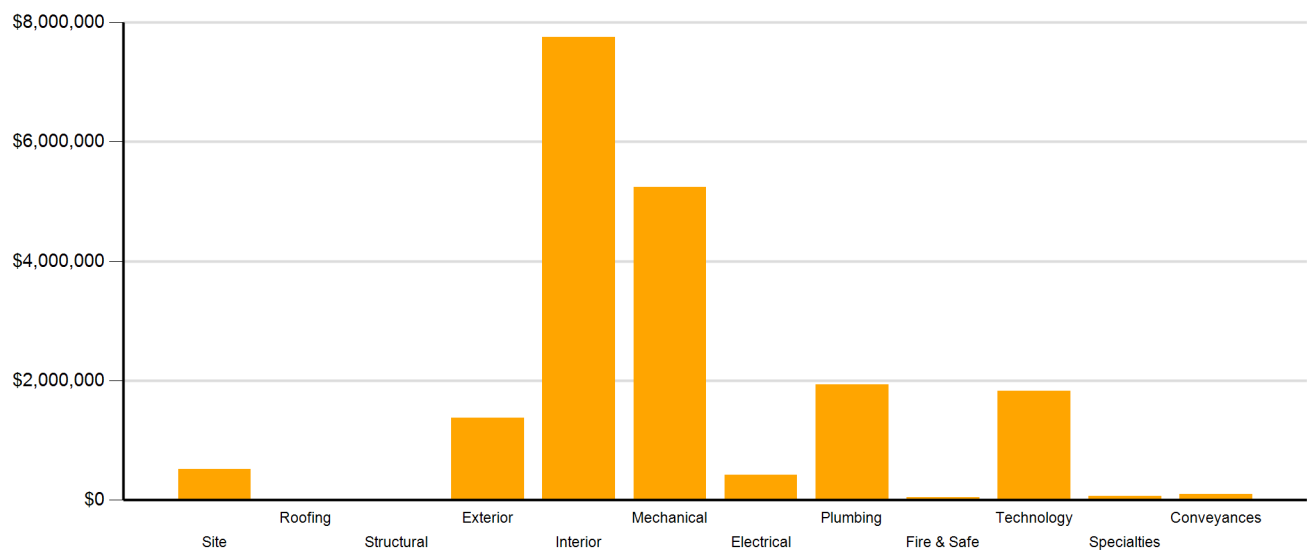


Figure 2: System Deficiencies



## Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

- **Acoustics** deficiencies relate to room acoustics, sound insulation, 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

Category	Priority					Total
	1	2	3	4	5	
Acoustics	-	-	\$321,413	-	-	\$321,413
Barrier to Accessibility	-	-	\$590,184	-	-	\$590,184
Capital Renewal	-	\$6,211,910	\$3,835,938	\$3,755,150	\$13,196	\$13,816,193
Code Compliance	-	-	-	-	-	\$0
Educational Adequacy	\$50,138	-	\$48,172	\$148,768	\$204,451	\$451,530
Functional Deficiency	-	-	-	-	-	\$0
Hazardous Material	-	-	-	\$2,280,350	\$23,626	\$2,303,976
Technology	-	-	\$1,797,466	-	-	\$1,797,466
Traffic	-	-	-	-	-	\$0
<b>Total</b>	\$50,138	\$6,211,910	\$6,593,173	\$6,184,268	\$241,274	\$19,280,763

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

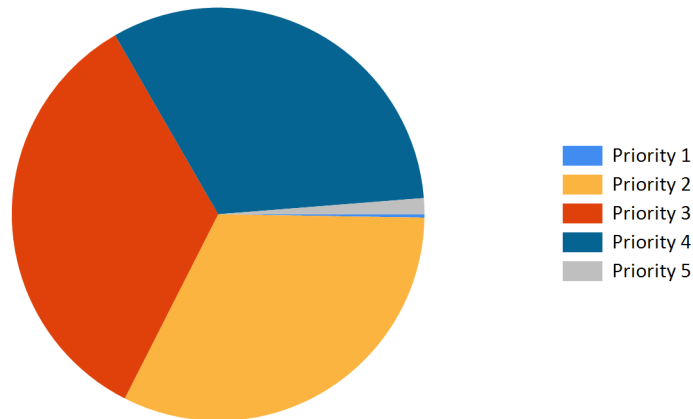


Figure 3: Current deficiencies by priority



## 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

System	Current Deficiencies	Life Cycle Capital Renewal Projections					LC Yr. 1-5 Total	Total 5-Year Need
		Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021		
Site	\$521,610	\$0	\$0	\$0	\$0	\$208,153	\$208,153	\$729,763
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Structural	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$1,376,521	\$0	\$0	\$0	\$0	\$0	\$0	\$1,376,521
Interior	\$7,749,167	\$0	\$0	\$0	\$0	\$66,169	\$66,169	\$7,815,336
Mechanical	\$5,238,146	\$0	\$0	\$0	\$0	\$31,928	\$31,928	\$5,270,074
Electrical	\$423,731	\$0	\$0	\$0	\$0	\$0	\$0	\$423,731
Plumbing	\$1,933,554	\$0	\$0	\$0	\$0	\$46,074	\$46,074	\$1,979,628
Fire and Life Safety	\$45,878	\$0	\$0	\$0	\$0	\$0	\$0	\$45,878
Technology	\$1,831,874	\$0	\$0	\$0	\$0	\$0	\$0	\$1,831,874
Conveyances	\$94,430	\$0	\$0	\$0	\$0	\$0	\$0	\$94,430
Specialties	\$65,851	\$0	\$0	\$0	\$0	\$0	\$0	\$65,851
<b>Total</b>	<b>\$19,280,763</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$352,324</b>	<b>\$352,324</b>	<b>\$19,633,087</b>

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

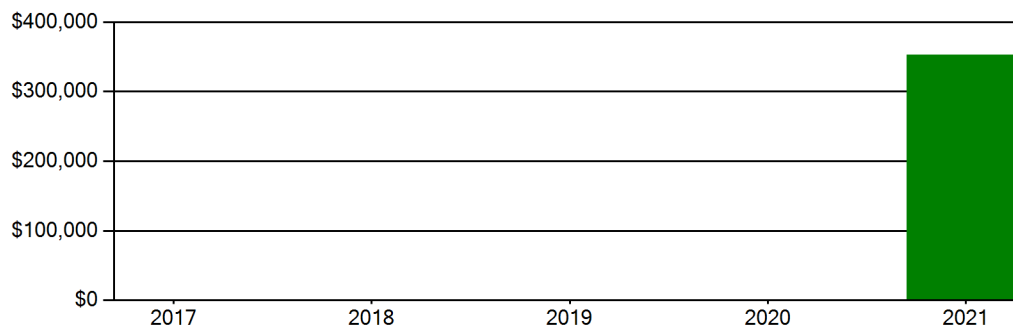
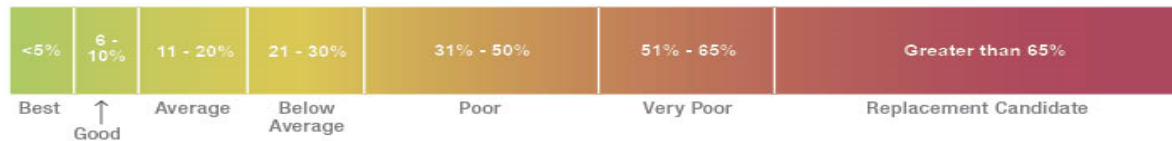


Figure 4: Life Cycle Capital Renewal Forecast



## 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 \$53,269,200. For planning purposes, the total 5-year need at the North Smithfield High School is \$19,633,087 (Life Cycle Years 1-5 plus the FCI deficiency cost). The North Smithfield High School facility has a 5-year FCI of 36.86%.

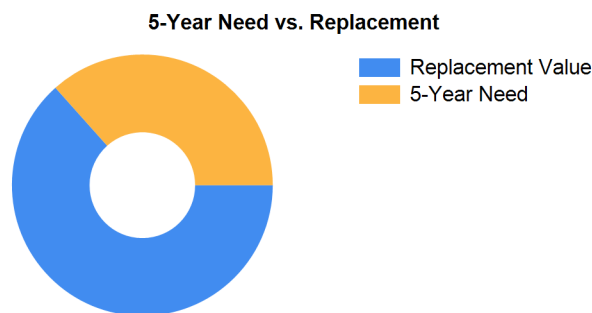


Figure 5: 5-Year FCI

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 747 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 North Smithfield High School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be \$999,605.



## Summary of Findings

The North Smithfield High School comprises 147,970 square feet and was constructed in 1967. Current deficiencies at this school total \$19,280,763. Five year capital renewal costs total \$352,324. The total identified need for the North Smithfield High School (current deficiencies and 5-year capital renewal costs) is \$19,633,087. The 5-year FCI is 36.86%.

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
North Smithfield High School Totals	147,970	1967	\$19,280,763	\$352,324	\$19,633,087	36.86%

*\*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.



## Site Level Deficiencies

### Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Asphalt Paving Requires Replacement <b>Note:</b> Asphalt is weathered and cracking.	Capital Renewal	150	CAR	4	\$492,936	2557
Backstops Require Replacement <b>Note:</b> Backstops Require Replacement	Educational Adequacy	1	Ea.	4	\$28,674	28525
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$521,610</b>	
<b>Sub Total for School and Site Level</b>		<b>2</b>	<b>items</b>		<b>\$521,610</b>	

## Building: 01 - Main Building

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Aluminum Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane.	Capital Renewal	4,725	SF	2	\$794,199	2579
The Aluminum Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane.	Capital Renewal	945	SF	2	\$158,840	2581
The Aluminum Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane.	Capital Renewal	54	SF	2	\$9,077	2582
The Aluminum Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane.	Capital Renewal	135	SF	2	\$22,691	2587
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	50	SF	2	\$9,482	2563
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	936	SF	2	\$177,509	2564
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	192	SF	2	\$36,412	2565
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames that are aged and cracking.	Capital Renewal	252	SF	2	\$47,791	2571
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	72	SF	2	\$13,655	2572
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	24	SF	2	\$4,552	2574
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	12	SF	2	\$2,276	2576
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	80	SF	2	\$15,172	2577
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames.	Capital Renewal	24	SF	2	\$4,552	2578
The Wood Window Requires Replacement <b>Note:</b> Windows are original to the building and are single-pane in wood frames. Some have missing panes in the cafeteria.	Capital Renewal	302	SF	2	\$57,273	2585
Exterior Metal Door Requires Repainting <b>Note:</b> Metal doors are faded and chipping.	Capital Renewal	24	Door	3	\$4,950	2610
Handrail Requires Repainting <b>Note:</b> Exterior metal handrails require repainting.	Capital Renewal	150	LF	4	\$1,558	2609
<b>Sub Total for System</b>		<b>16</b>	<b>items</b>		<b>\$1,359,987</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Existing Door Hardware Is Not ADA Compliant <b>Note:</b> The wood interior doors are original to the building and are not ADA compliant.	Barrier to Accessibility	175	Door	3	\$495,755	2603
The Acoustical Ceiling Tiles Require Replacement <b>Note:</b> Ceiling tiles are stained, bulging, and torn from previous pipe and roof leaks.	Capital Renewal	122,525	SF	3	\$1,099,148	2604
The Carpet Flooring Requires Replacement <b>Note:</b> Carpet is worn and faded.	Capital Renewal	7,250	SF	3	\$156,670	2601



# Facility Condition Assessment

North Smithfield - North Smithfield High School

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Ceramic Tile Flooring Requires Replacement <b>Note:</b> Ceramic tile is generally worn with various pieces missing throughout.	Capital Renewal	21,750	SF	3	\$580,136	2596
The Vinyl Composition Tile Requires Replacement <b>Note:</b> VCT shows sign of wear and tear.	Capital Renewal	44,950	SF	3	\$512,182	2598
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	50,750	SF	4	\$1,437,689	Rollup
Caulking - significant areas of broken pieces &/or deteriorating caulk	Hazardous Material	17,360	LF	4	\$327,859	Rollup
Ceiling Grid Requires Replacement <b>Note:</b> Ceiling grid is mostly original and is stained throughout.	Capital Renewal	122,525	SF	4	\$1,443,422	2590
Interior Ceramic Walls Require Repair Or Replacement <b>Note:</b> Tile walls are buckling and pieces are breaking off.	Capital Renewal	50,750	SF	4	\$1,121,398	2593
Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each)	Hazardous Material	47	Ea.	4	\$13,315	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	7,220	LF	4	\$163,627	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	9,475	SF	4	\$89,472	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. AND NOT in children-accessible area (measurement unit - linear feet)	Hazardous Material	30	LF	4	\$680	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	212	Ea.	4	\$60,057	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	1,030	LF	4	\$23,343	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 - square feet)	Hazardous Material	3,650	SF	4	\$34,467	Rollup
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	590	SF	4	\$22,602	Rollup
Wall/ceiling materials - large areas (> 10 sq. ft.) of damage & area in active use - children	Hazardous Material	9,750	SF	4	\$92,069	Rollup
Wall/ceiling materials -large areas (> 10 sq. ft.) of damage & area in active use-adults only	Hazardous Material	4,000	SF	4	\$37,772	Rollup
Classroom Door Requires Vision Panel	Educational Adequacy	3	Ea.	5	\$6,882	Rollup
Interior Walls Require Repainting (Bldg SF)	Hazardous Material	3,600	SF	5	\$23,626	Rollup
Room lacks appropriate sound control.	Educational Adequacy	200	SF	5	\$6,996	Rollup
<b>Sub Total for System</b>		<b>22 items</b>			<b>\$7,749,167</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis) <b>Note:</b> Ductwork is original to the building.	Capital Renewal	145,000	SF	2	\$2,117,314	2551
Electric Unit Heater Requires Replacement <b>Note:</b> Electric unit heaters are original to the building and according to the occupants perform poorly.	Capital Renewal	4	Ea.	2	\$16,125	2523
Steam/HW Unit Heater Requires Replacement <b>Note:</b> Hallway and cabinet unit heaters are original to the building. Units are obsolete and replacement parts are no longer available. They fail regularly according to building occupants.	Capital Renewal	26	Ea.	2	\$72,722	2496
Steam/HW Unit Heater Requires Replacement <b>Note:</b> Most cabinet unit heaters in classrooms have failed.	Capital Renewal	51	Ea.	2	\$142,647	2497
The Air Handler HVAC Component Requires Replacement <b>Note:</b> Heating units located above the ceiling.	Capital Renewal	4	Ea.	2	\$171,386	2529
The Air Handler HVAC Component Requires Replacement <b>Note:</b> AHUs are original to the building and are visually deteriorating. Equipment is obsolete and replacement parts are no longer available.	Capital Renewal	6	Ea.	2	\$603,456	2532
The Fin Tube Water Radiant Heater Requires Replacement <b>Note:</b> Finned wall radiators are original to the building and should be replaced. Casings are visually deteriorating throughout the building. Hot water system is very corrosive, per the building manager.	Capital Renewal	155	Ea.	2	\$257,896	2489
The Mechanical / HVAC Piping / System Is Beyond Its Useful Life <b>Note:</b> Heating hot water piping showing signs of corrosion and failure. Valves and other components are corroded due to poor water quality.	Capital Renewal	145,000	SF	2	\$1,110,161	2502
The Window AC Unit Component Requires Replacement <b>Note:</b> Window units no longer function.	Capital Renewal	10	Ea.	2	\$33,164	2517
Unit Ventilators Are Excessively Noisy <b>Note:</b> All classrooms	Acoustics	51	Ea.	3	\$321,413	4715



# Facility Condition Assessment

North Smithfield - North Smithfield High School

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Lab lacks an appropriate fume hood.	Educational Adequacy	4	Ea.	4	\$88,415	Rollup
Small HVAC Circulating Pump Requires Replacement <b>Note:</b> Pumps are original and should be replaced. If they fail domestic hot water may not be available to the building.	Capital Renewal	4	Ea.	4	\$30,308	2521
The Chemistry Lab Fume Hood(s) Require Replacement <b>Note:</b> Fume hoods are obsolete and no longer operable.	Capital Renewal	2	Ea.	4	\$56,658	2514
The Exhaust Hood Requires Replacement <b>Note:</b> Exhaust fans are original to the building and get re-built as they fail, but are constantly requiring service and attention.	Capital Renewal	41	Ea.	4	\$211,932	2534
<b>Sub Total for System</b>		<b>14</b>	<b>items</b>		<b>\$5,233,597</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room last power shut-off valves for utilities	Educational Adequacy	3	Ea.	1	\$4,260	Rollup
The Panelboard Requires Replacement <b>Note:</b> Branch panels are obsolete and original to building. Branch panels, breakers, etc. should be updated.	Capital Renewal	11	Ea.	2	\$52,975	2490
The Panelboard Requires Replacement <b>Note:</b> Branch panels are obsolete and original to building. Branch panels, breakers, etc. should be updated.	Capital Renewal	16	Ea.	2	\$99,718	2874
The Panelboard Requires Replacement <b>Note:</b> Branch panels are obsolete and original to building. Branch panels, breakers, etc. should be updated.	Capital Renewal	14	Ea.	2	\$133,523	2875
The Panelboard Requires Replacement <b>Note:</b> Branch panels are obsolete and original to building. Branch panels, breakers, etc. should be updated.	Capital Renewal	1	Ea.	2	\$17,668	2876
Remove Abandoned Equipment <b>Note:</b> Abandoned domestic hot water equipment	Capital Renewal	2	Ea.	5	\$6,598	2511
Remove Abandoned Equipment <b>Note:</b> Abandoned electrical disconnects	Capital Renewal	2	Ea.	5	\$6,598	2515
Room Has Insufficient Electrical Outlets	Educational Adequacy	188	Ea.	5	\$93,798	Rollup
<b>Sub Total for System</b>		<b>8</b>	<b>items</b>		<b>\$415,138</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Sump Pump Requires Replacement <b>Note:</b> Inoperable	Capital Renewal	1	Ea.	3	\$1,439	2501
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life <b>Note:</b> Domestic water piping is original to building. Poor water quality is observed.	Capital Renewal	145,000	SF	3	\$1,158,797	2509
The Showers Plumbing Fixtures Require Replacement <b>Note:</b> Locker room showers are original and obsolete. Many no longer function. When they fail replacement parts cannot be located.	Capital Renewal	40	Ea.	3	\$302,174	2505
The Urinal Plumbing Fixtures Require Replacement <b>Note:</b> Urinals and flush valves are original to the building and require replacement. They are showing signs of corrosion and fail regularly.	Capital Renewal	15	Ea.	3	\$19,802	2495
Non-Refrigerated Drinking Fountain Requires Replacement <b>Note:</b> Non-functional	Capital Renewal	4	Ea.	4	\$40,605	2507
The Classroom Lavatories Plumbing Fixtures Require Replacement <b>Note:</b> Classroom sinks are original to the building and are showing signs of corrosion and failure due to poor water quality.	Capital Renewal	25	Ea.	4	\$67,517	2503
The Classroom Lavatories Plumbing Fixtures Require Replacement <b>Note:</b> Trough sinks are aged, stained, and should be replaced.	Capital Renewal	3	Ea.	4	\$8,102	2518
The Custodial Mop Or Service Sink Requires Replacement <b>Note:</b> Mop sinks are deteriorated and failing.	Capital Renewal	10	Ea.	4	\$25,590	2513
The Refrigerated Water Cooler Requires Replacement <b>Note:</b> Water fountains are non-functional.	Capital Renewal	18	Ea.	4	\$131,899	2506
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	39	Ea.	4	\$123,225	2865
Room lacks a drinking fountain.	Educational Adequacy	6	Ea.	5	\$6,652	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	31	Ea.	5	\$47,111	Rollup
<b>Sub Total for System</b>		<b>12</b>	<b>items</b>		<b>\$1,932,914</b>	





## Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks shut-off valves for utilities. (International Fuel Gas Code, Section 409.6)	Educational Adequacy	4	Ea.	1	\$45,878	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$45,878</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	6	Ea.	3	\$34,409	Rollup
Technology: Campus lacks security electronic access control. <b>Note:</b> Key scan Access Control System add Access Control with 10 doors	Technology	8	Ea.	3	\$60,435	3879
Technology: Classroom AV/Multimedia systems are in need of improvements. <b>Note:</b> Refresh AV system in Library.	Technology	1	Ea.	3	\$9,443	3876
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. <b>Note:</b> Technology: Add new classroom AV/Multimedia systems to support digital formats.	Technology	31	Ea.	3	\$614,736	3877
Technology: Gymnasium sound system is nonexistent, inadequate, or near end of useful life. <b>Note:</b> Refresh gym audio system	Technology	1	Ea.	3	\$9,065	3882
Technology: Instructional spaces do not have local sound reinforcement. <b>Note:</b> Add sound reinforcement found in instructions spaces	Technology	50	Ea.	3	\$236,074	3874
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF Conf1 needs grounding system improvements.	Technology	1	Ea.	3	\$5,288	3862
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF Storage needs grounding system improvements.	Technology	1	Ea.	3	\$5,288	3865
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF 215 needs grounding system improvements.	Technology	1	Ea.	3	\$5,288	3870
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF Conf1 needs to be rezoned. Shared space, ups on floor	Technology	1	Ea.	3	\$37,394	3861
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF Storage needs to be rezoned.	Technology	1	Ea.	3	\$37,394	3864
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF 215 needs to be rezoned.	Technology	1	Ea.	3	\$37,394	3869
Technology: Main Telecommunications Room ground system is inadequate or non-existent. <b>Note:</b> MDF has no ground system.	Technology	1	Ea.	3	\$6,610	3858
Technology: Main Telecommunications Room is not dedicated and/or inadequate. <b>Note:</b> miff - Custodian Room shared with janitorial staff, has sink and drain, used for storage	Technology	1	Ea.	3	\$49,859	3856
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> MDF Existing category 5 cables serviced by this space.	Technology	60	Ea.	3	\$25,496	3859
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> IDF Storage Existing category 5 cables serviced by this space.	Technology	140	Ea.	3	\$59,491	3867
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards. <b>Note:</b> IDF 215 Existing category 5 cables serviced by this space.	Technology	118	Ea.	3	\$50,142	3872
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life. <b>Note:</b> PA/Bell/Clock system is aging analog, replace.	Technology	145,000	SF	3	\$246,461	3881
Technology: Security cameras and recording system are inadequate and/or near end of useful life. <b>Note:</b> Digital camera system with 20 IP Cameras refresh and add 28 additional IP Cameras	Technology	28	Ea.	3	\$132,201	3880
Technology: Special Space AV/Multimedia system is inadequate. <b>Note:</b> Add AV system to cafetorium.	Technology	1	Ea.	3	\$53,825	3875
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements. <b>Note:</b> MDF does not have dedicated AC unit, since it is MDF it is considered large size.	Technology	1	Ea.	3	\$7,554	3857



# Facility Condition Assessment

North Smithfield - North Smithfield High School

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF Conf1 needs dedicated AC unit.	Technology	1	Ea.	3	\$4,721	3863
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF Storage needs dedicated AC unit.	Technology	1	Ea.	3	\$4,721	3866
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF 215 needs dedicated AC unit.	Technology	1	Ea.	3	\$4,721	3871
Technology: Telecommunications Room fiber connectivity infrastructure is outdated and/or inadequate. <b>Note:</b> MDF Allowance to refresh Telecommunication Room fiber infrastructure.	Technology	1	Ea.	3	\$6,232	3860
Technology: Telecommunications Room fiber connectivity infrastructure is outdated and/or inadequate. <b>Note:</b> IDF Storage Allowance to refresh Telecommunication Room fiber infrastructure.	Technology	1	Ea.	3	\$6,232	3868
Technology: Telecommunications Room fiber connectivity infrastructure is outdated and/or inadequate. <b>Note:</b> IDF 215 Allowance to refresh Telecommunication Room fiber infrastructure.	Technology	1	Ea.	3	\$6,232	3873
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. <b>Note:</b> Replace/add telephone handsets in classrooms and office spaces.	Technology	45	Ea.	3	\$67,989	3884
Technology: Telephone system is inadequate and/or non-existent. <b>Note:</b> Phone system is aging Toshiba Strata analog, replace.	Technology	1	Ea.	3	\$7,177	3883
<b>Sub Total for System</b>		<b>29</b>	<b>items</b>		<b>\$1,831,874</b>	

## Conveyances

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Access Is Not ADA Compliant And Requires A Platform Lift <b>Note:</b> Lifts are inoperable.	Barrier to Accessibility	2	Ea.	3	\$94,430	2492
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$94,430</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	3	Ea.	3	\$13,764	Rollup
Welding Bays Are Required	Educational Adequacy	1	Ea.	4	\$5,448	Rollup
Work Tables Are Required	Educational Adequacy	1	Ea.	4	\$3,629	Rollup
Room lacks an appropriate refrigerator.	Educational Adequacy	5	Ea.	5	\$43,011	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$65,851</b>	
<b>Sub Total for Building 01 - Main Building</b>		<b>107</b>	<b>items</b>		<b>\$18,728,836</b>	

## Building: 02 - Maintenance Shed

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Wood Exterior Door Requires Replacement <b>Note:</b> Door is weathered and cracking.	Capital Renewal	1	Door	2	\$8,267	2543
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$8,267</b>	

### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Gas Unit Heater Requires Replacement <b>Note:</b> Second floor unit heater is inoperable.	Capital Renewal	1	Ea.	2	\$4,550	2485
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$4,550</b>	
<b>Sub Total for Building 02 - Maintenance Shed</b>		<b>2</b>	<b>items</b>		<b>\$12,817</b>	



### Building: 06 - Well Pump House

#### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Wood Exterior Door Requires Replacement	Capital Renewal	1	Door	2	\$8,267	2879
<b>Note:</b> Door is chipped and weathered and should be replaced.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$8,267</b>	

#### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	480	SF	2	\$2,833	2486
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	\$5,760	2487
<b>Note:</b> Panel is outdated and equipment is obsolete.						
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$8,593</b>	

#### Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Plumbing / Domestic Water Piping System Is Beyond Its Useful Life	Capital Renewal	80	SF	3	\$639	2488
<b>Note:</b> Piping from inlet of pump to well is original and showing signs of corrosion and failure.						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$639</b>	
<b>Sub Total for Building 06 - Well Pump House</b>		<b>4</b>	<b>items</b>		<b>\$17,500</b>	
<b>Total for Campus</b>		<b>115</b>	<b>items</b>		<b>\$19,280,763</b>	

#### Buildings with no reported deficiencies

- 03 - Fire Pump House
- 04 - Concession Stand



## North Smithfield 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	Wood	470	LF	\$116,175	5
Pedestrian Pavement	Sidewalks - Concrete	4,500	SF	\$91,978	5
		<b>Sub Total for System</b>		<b>2 items</b>	<b>\$208,153</b>
		<b>Sub Total for Building -</b>		<b>2 items</b>	<b>\$208,153</b>

### Building: 01 - Main Building

#### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Paneling	Wood Panel wall	7,250	SF	\$66,169	5
		<b>Sub Total for System</b>		<b>1 items</b>	<b>\$66,169</b>

#### Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exhaust Air	Kitchen Exhaust Hoods	2	Ea.	\$31,928	5
		<b>Sub Total for System</b>		<b>1 items</b>	<b>\$31,928</b>
		<b>Sub Total for Building 01 - Main Building</b>		<b>2 items</b>	<b>\$98,097</b>

### Building: 02 - Maintenance Shed

#### Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Gas Piping System (BldgSF)	2,128	SF	\$46,074	5
		<b>Sub Total for System</b>		<b>1 items</b>	<b>\$46,074</b>
		<b>Sub Total for Building 02 - Maintenance Shed</b>		<b>1 items</b>	<b>\$46,074</b>
		<b>Total for: North Smithfield High School</b>		<b>5 items</b>	<b>\$352,324</b>



## Supporting Photos



Site Aerial



Pump House - Weathered Exterior Door



Pump House - Exterior



Main Building - Consumer Science Classroom



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Main Building - Auditorium



Main Building - Girls Locker Room



Main Building - Roof General Condition



Main Building - Exterior



Main Building - Band Room



Main Building - Weight Room



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Main Building - Stage



Main Building - Typical Restroom Fixtures And Finishes



Main Building - Cafeteria



Site - Baseball Field



Main Building - Gymnasium



Main Building - Boys Locker Room



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Site - Weathered Asphalt Paving



Site - Basketball Courts



Main Building - Dedication Plaque



Site - Track And Field



Main Building - Entrance



Site - Cracked And Worn Asphalt Parking Lot





Main Building - Typical Science Classroom



Main Building - Library



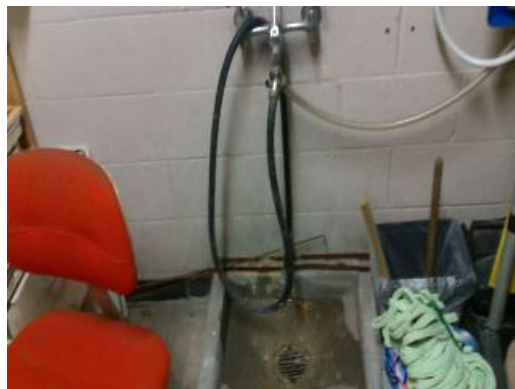
Main Building - Cafeteria Exterior



Main Building - Typical Classroom



Main Building - Stained And Leaking Trough Sink Fixture



Main Building - Aged Mop Sink



Main Building - Original Hallway Unit Heater



Main Building - Inoperable Sump Pump



Main Building - Abandoned Storage Tank



Main Building - Urinals Out Of Service



Main Building - Worn And Faded Carpet



Main Building - Original Radiator



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Main Building - Faded Metal Exterior Doors



Main Building - Stained Ceiling Tiles



Main Building - Heating Hot Water Piping



Main Building - Failed Classroom Unit Heater



Main Building - Original AHU



Main Building - Typical Aged Panelboard



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Main Building - Cracked And Missing VCT



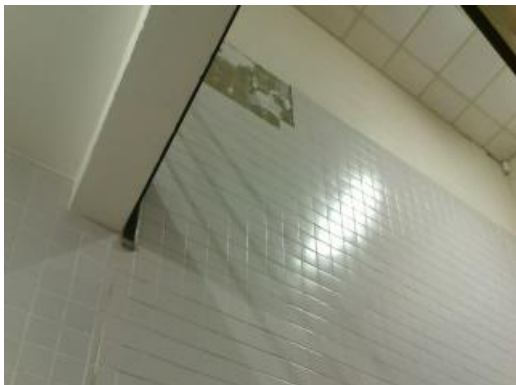
Main Building - Cracking Wood Framed Window



Main Building - Cracked And Separating 9x9 Tile



Main Building - Typical Single-Pane Wood Framed Window



Main Building - Damaged Ceramic Tile Wall



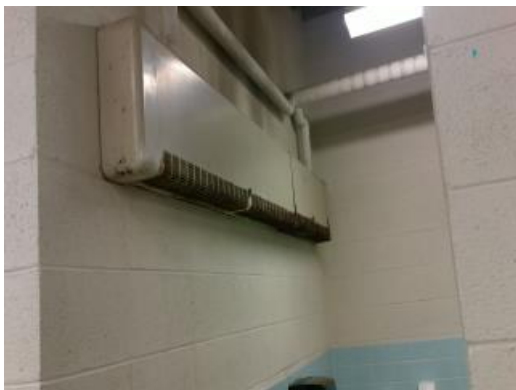
Main Building - Inoperable Fume Hood Used As Storage



Main Building - Corroded Classroom Sink



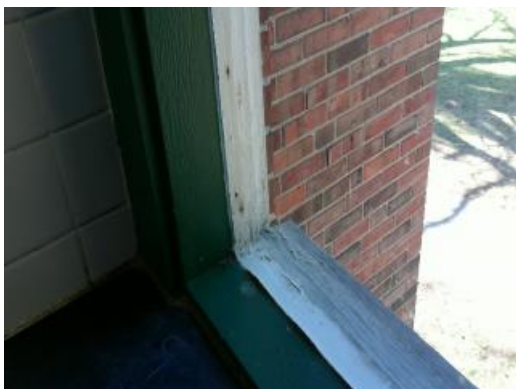
Main Building - Damaged Painted Classroom Wall



Main Building - Original Radiator



Main Building - Corrosion On Water Piping



Main Building - Weathered Wood Frame Window



Main Building - Abandoned Electrical Disconnects



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Main Building - Typical Single-Pane Window



Main Building - Aged Heating Unit Ventilator



Main Building - Non-Functional Drinking Fountain



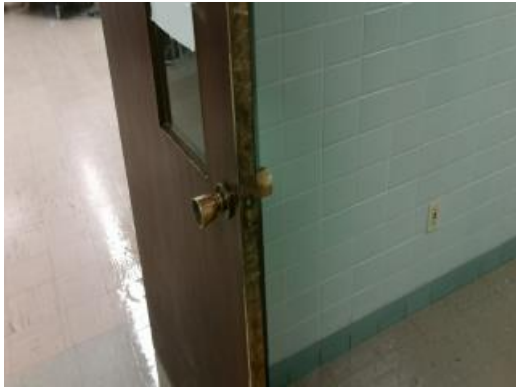
Main Building - Typical Exhaust Fans



Main Building - Typical Original Wood Windows Weathered And Cracking



Main Building - Paint Peeling And Bubbling On Ceiling



Main Building - Non-Compliant Hardware



Main Building - Abandoned Circulators



Main Building - Aged Single-Pane Window



Main Building - Failing Shower Fixtures



Main Building - Poorly Functioning Unit Heater



Main Building - Stained Ceiling Grid And Tiles



# Facility Condition Assessment

North Smithfield - North Smithfield High School



Main Building - Missing Ceramic Tiles



Main Building - Windows With Missing Pane



Main Building - Non-Functional Window Unit



Main Building - Corroded Classroom Sink



Main Building - Chipped Paint On Handrail



Main Building - Original AHU





# Facility Condition Assessment

North Smithfield - North Smithfield High School



Maintenance Shed - Interior Storage



Maintenance Shed - Damaged Exterior Door



Maintenance Shed - Non-Functional Unit Heater



Maintenance Shed - Elevation



Fire Pump House - Exterior



Fire Pump House - Interior



Concession Stand - Exterior



Concession Stand - Interior



Main Building - Original Pump



Pump House - Interior



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

June 2017

1850 Providence Pike, North Smithfield, RI 02896





## Introduction

North Smithfield Middle School, located at 1850 Providence Pike in North Smithfield, Rhode Island, was built in 1928. It comprises 116,400 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.

North Smithfield Middle School serves grades 6 - 8, has 43 instructional spaces, and has an enrollment of 454. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for North Smithfield Middle School is 550 with a resulting utilization of 83%.

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 North Smithfield Middle School the 5-year need is \$2,413,808. 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.

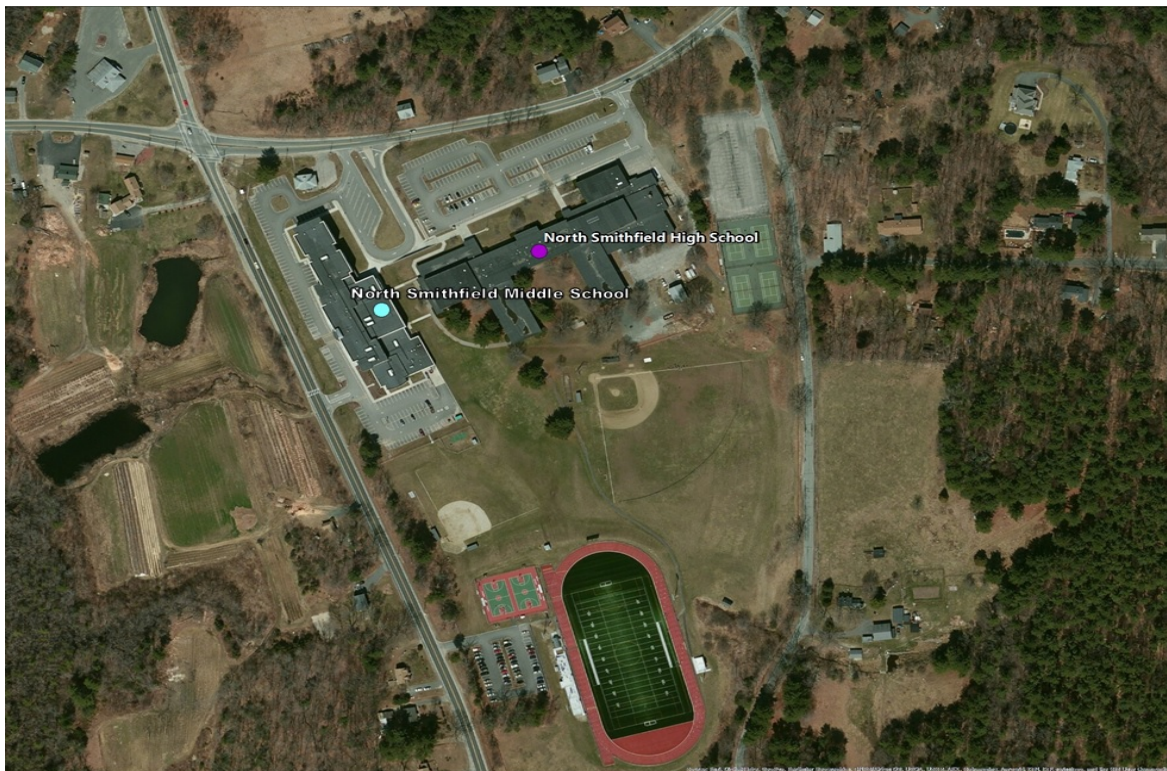


Figure 1: Aerial view of North Smithfield Middle School



## 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 North Smithfield Middle School campus, identified by discipline and building.

### Site

The site level systems for this campus include:

<b>Site</b>	Asphalt Parking Lot Pavement
	Concrete Pedestrian Pavement

### Building Envelope

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

<b>01 - Main Building:</b>	Brick Exterior Wall
	Metal Panel Exterior Wall
	Aluminum Exterior Windows
	Storefront / Curtain Wall
	Storefront Entrance Doors
	Steel Exterior Entrance Doors
	Overhead Exterior Utility Doors
<b>02 - Building 02:</b>	Brick Exterior Wall
	Wood Exterior Windows
	Storefront Entrance Doors

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

<b>01 - Main Building:</b>	EPDM Roofing
<b>02 - Building 02:</b>	Composition Shingle Roofing

### Interior

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

<b>01 - Main Building:</b>	Steel Interior Doors
	Wood Interior Doors
	Overhead Interior Coiling Doors
	Interior Door Hardware
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Painted Ceilings
	Ceramic Tile Wall
	Acoustical Wall Paneling
	Vinyl/Fabric Wall Covering
	CMU Wall
	Interior Wall Painting



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

<b>01 - Main Building:</b>	Concrete Flooring
	Ceramic Tile Flooring
	Wood Flooring
	Rubber Tile Flooring
	Vinyl Composition Tile Flooring
	Carpet
<b>02 - Building 02:</b>	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Wood Ceilings
	Wood Wall Paneling
	Interior Wall Painting
	Concrete Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
	Carpet

## Mechanical

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

<b>01 - Main Building:</b>	4,200 MBH Cast Iron Steam Boiler
	1,200 MBH Copper Tube Boiler
	Finned Wall Radiator
	Steam/Hot Water Heating Unit Vent
	DDC Heating System Controls
	2 Ton Ductless Split System
	3 Ton Fan Coil - Water Cool/Water Heat
	3 Ton Outside Air Cooled Condenser
	4,000 CFM Energy Recovery Unit
	15 HP VFD
	2-Pipe Hot Water Hydronic Distribution System
	10 HP Pump
	2,000 CFM Interior AHU
	Ductwork
	Large Roof Exhaust Fan
	Small Roof Exhaust Fan
	Supply Fan
	Kitchen Exhaust Hoods
	Fire Sprinkler System
<b>02 - Building 02:</b>	Finned Wall Radiator
	Electronic Heating System Controls
	3 Ton Condensing Unit



<b>02 - Building 02:</b>	Window Units
	1 HP or Smaller Pump
	Ductwork
	5,000 CFM Interior AHU
	Small Roof Exhaust Fan

## Plumbing

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

<b>01 - Main Building:</b>	3/4" Backflow Preventers
	Gas Piping System
<b>02 - Building 02:</b>	10 Gallon Electric Water Heater
<b>01 - Main Building:</b>	Domestic Water Piping System
<b>02 - Building 02:</b>	Domestic Water Piping System
<b>01 - Main Building:</b>	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Showers
	Toilets
	Urinals
<b>02 - Building 02:</b>	Lavatories
	Restroom Lavatories
	Toilets
	275 Gallon Above Ground Fuel Oil Storage Tank

## Electrical

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

<b>01 - Main Building:</b>	300 kW Emergency Generator
	Automatic Transfer Switch
	2,000 Amp Switchgear
	112.5 KVA Transformer
	15 KVA Transformer
	225 KVA Transformer
	75 KVA Transformer
	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	Panelboard - 120/208 400A
	Panelboard - 277/480 100A
	Panelboard - 277/480 400A
	Electrical Disconnect
	Building Mounted Lighting Fixtures





# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

<b>01 - Main Building:</b>	Canopy Mounted Lighting Fixtures
	Light Fixtures
<b>02 - Building 02:</b>	Panelboard - 120/240 225A
	Building 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.



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

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

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	-	-	-	\$38,533	-	\$38,533	2.06 %
Roofing	-	-	\$396	-	-	\$396	0.02 %
Structural	-	-	-	-	-	\$0	0.00 %
Exterior	-	-	\$4,563	-	-	\$4,563	0.24 %
Interior	-	-	\$57,031	\$102,974	\$432,001	\$592,007	31.62 %
Mechanical	-	\$63,749	-	\$16,211	-	\$79,960	4.27 %
Electrical	-	-	-	-	\$19,957	\$19,957	1.07 %
Plumbing	-	\$38,028	\$1,331	\$3,181	\$23,780	\$66,320	3.54 %
Fire and Life Safety	\$34,409	-	-	-	-	\$34,409	1.84 %
Technology	-	-	\$1,005,868	-	-	\$1,005,868	53.72 %
Conveyances	-	-	-	-	-	\$0	0.00 %
Specialties	-	-	\$4,588	-	\$25,807	\$30,394	1.62 %
<b>Total</b>	<b>\$34,409</b>	<b>\$101,776</b>	<b>\$1,073,777</b>	<b>\$160,900</b>	<b>\$501,545</b>	<b>\$1,872,408</b>	

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

The building systems with the most need include:

Technology	-	\$1,005,868
Interior	-	\$592,007
Mechanical	-	\$79,960

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

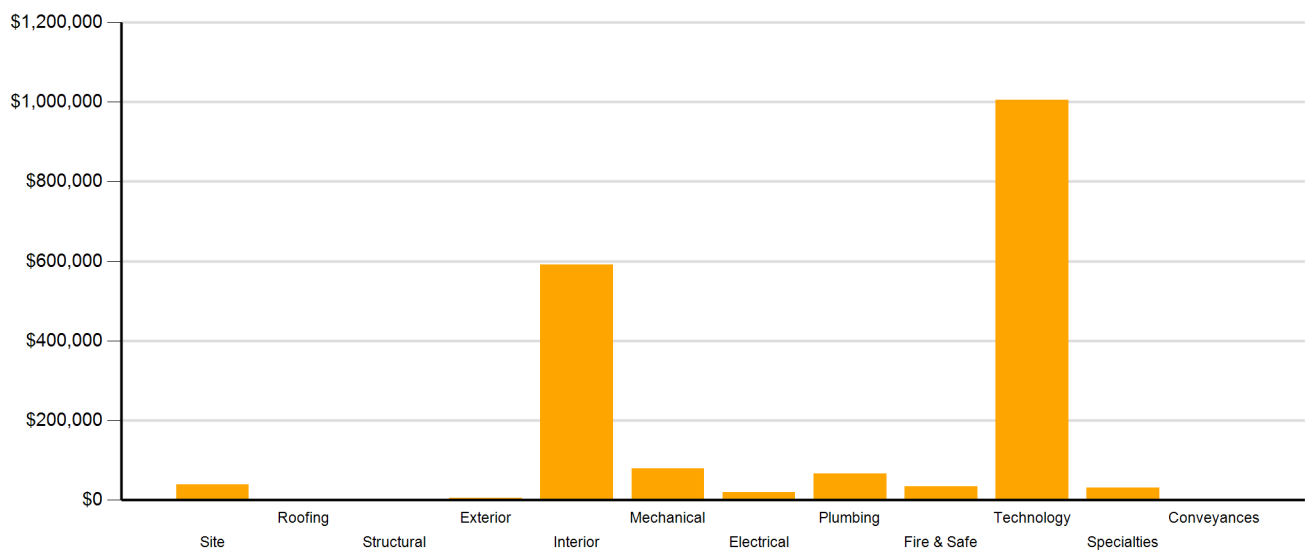


Figure 2: System Deficiencies



## Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

- **Acoustics** deficiencies relate to room acoustics, sound insulation, 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

Category	Priority					Total
	1	2	3	4	5	
Acoustics	-	-	-	\$67,384	-	\$67,384
Barrier to Accessibility	-	-	\$1,331	-	-	\$1,331
Capital Renewal	-	\$63,749	\$61,991	\$64,842	\$424,654	\$615,235
Code Compliance	-	-	-	-	-	\$0
Educational Adequacy	\$34,409	-	\$10,323	\$28,674	\$76,891	\$150,297
Functional Deficiency	-	\$38,028	-	-	-	\$38,028
Hazardous Material	-	-	-	-	-	\$0
Technology	-	-	\$1,000,133	-	-	\$1,000,133
Traffic	-	-	-	-	-	\$0
<b>Total</b>	\$34,409	\$101,776	\$1,073,777	\$160,900	\$501,545	\$1,872,408

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

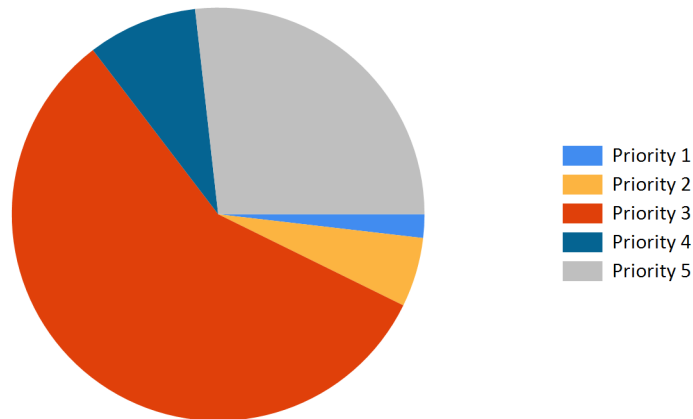


Figure 3: Current deficiencies by priority



## 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

System	Current Deficiencies	Life Cycle Capital Renewal Projections					LC Yr. 1-5 Total	Total 5-Year Need
		Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021		
Site	\$38,533	\$0	\$0	\$0	\$0	\$0	\$0	\$38,533
Roofing	\$396	\$0	\$0	\$34,225	\$0	\$0	\$34,225	\$34,621
Structural	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$4,563	\$0	\$0	\$90,126	\$0	\$109,520	\$199,646	\$204,209
Interior	\$592,007	\$0	\$0	\$43,098	\$124,010	\$66,974	\$234,082	\$826,089
Mechanical	\$79,960	\$0	\$0	\$0	\$7,628	\$9,767	\$17,395	\$97,355
Electrical	\$19,957	\$0	\$14,260	\$9,602	\$0	\$0	\$23,862	\$43,819
Plumbing	\$66,320	\$0	\$0	\$0	\$951	\$1,829	\$2,780	\$69,100
Fire and Life Safety	\$34,409	\$0	\$0	\$7,034	\$0	\$0	\$7,034	\$41,443
Technology	\$1,005,868	\$0	\$0	\$0	\$0	\$0	\$0	\$1,005,868
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$30,394	\$0	\$0	\$22,376	\$0	\$0	\$22,376	\$52,770
<b>Total</b>	<b>\$1,872,408</b>	<b>\$0</b>	<b>\$14,260</b>	<b>\$206,461</b>	<b>\$132,589</b>	<b>\$188,090</b>	<b>\$541,400</b>	<b>\$2,413,808</b>

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

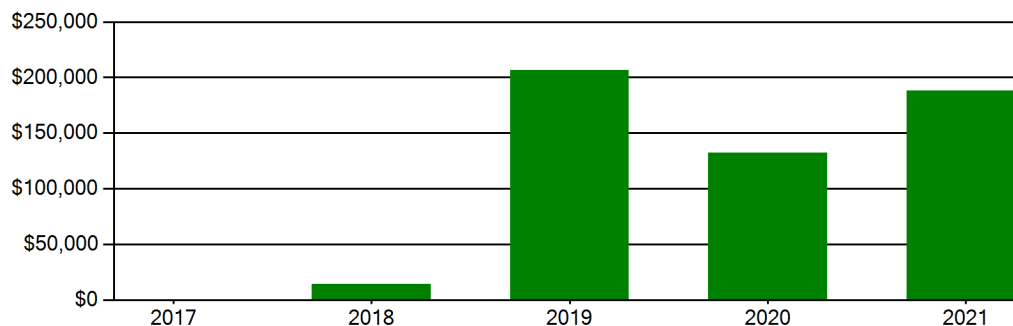
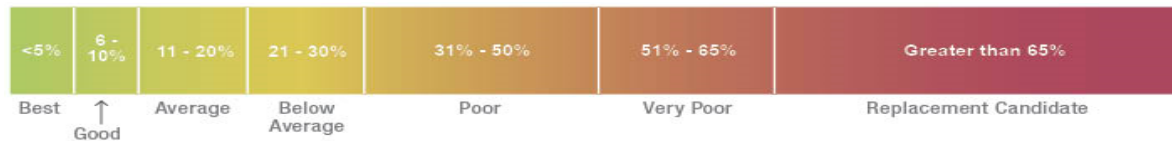


Figure 4: Life Cycle Capital Renewal Forecast



## 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 \$38,412,000. For planning purposes, the total 5-year need at the North Smithfield Middle School is \$2,413,808 (Life Cycle Years 1-5 plus the FCI deficiency cost). The North Smithfield Middle School facility has a 5-year FCI of 6.28%.

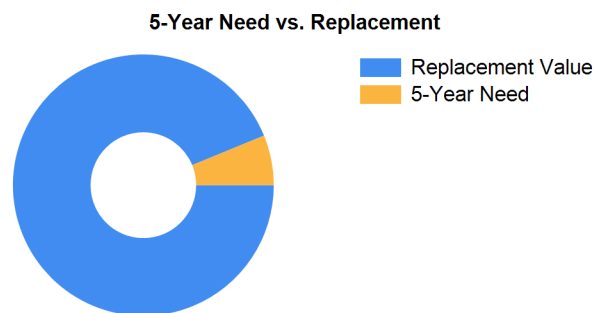


Figure 5: 5-Year FCI

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 654 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 North Smithfield Middle School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be \$1,294,801.





### Summary of Findings

The North Smithfield Middle School comprises 116,400 square feet and was constructed in 1928. Current deficiencies at this school total \$1,872,408. Five year capital renewal costs total \$541,400. The total identified need for the North Smithfield Middle School (current deficiencies and 5-year capital renewal costs) is \$2,413,808. The 5-year FCI is 6.28%.

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
North Smithfield Middle School Totals	116,400	1928	\$1,872,408	\$541,400	\$2,413,808	6.28%

*\*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.



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

## Site Level Deficiencies

### Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Asphalt Paving Requires Replacement <b>Note:</b> Cracking at the northern side main drain.	Capital Renewal	3	CAR	4	\$9,859	4599
Backstops Require Replacement <b>Note:</b> Backstops Require Replacement	Educational Adequacy	1	Ea.	4	\$28,674	28523
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$38,533</b>	
<b>Sub Total for School and Site Level</b>		<b>2</b>	<b>items</b>		<b>\$38,533</b>	

## Building: 01 - Main Building

### Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Roof Drains Require Cleaning <b>Note:</b> Roof drains are blocked allowing ice to form on the roof.	Capital Renewal	10	Ea.	3	\$396	4617
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$396</b>	

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Caulking Requires Replacement <b>Note:</b> Sealant around windows is failing and allowing for water infiltration. <b>Location:</b> Rooms 340 and 103	Capital Renewal	300	LF	3	\$4,563	4602
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$4,563</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior CMU Walls Require Repair <b>Note:</b> Several large cracks exist in the CMU that should be repaired. <b>Location:</b> Hallways	Capital Renewal	1,000	SF	3	\$36,317	4611
The Acoustical Ceiling Tiles Require Replacement	Capital Renewal	200	SF	3	\$1,806	4603
The Interior Door Hardware Requires Replacement <b>Note:</b> Lock is missing. <b>Location:</b> Room 341	Capital Renewal	1	Door	3	\$3,137	4610
The Vinyl Composition Tile Requires Replacement <b>Note:</b> There are large cracks, particularly near expansion joints, gapping at seams, and corrosion and tile displacement.	Capital Renewal	310	SF	3	\$3,556	4606
Interior Gypsum Board Walls Require Repair <b>Note:</b> Gypsum board wall is cracking at windows.	Capital Renewal	100	SF Wall	4	\$731	4618
Interior Toilet Partition Requires Repair <b>Note:</b> Toilet partition was installed crooked and should be repaired. <b>Location:</b> Third floor boys restroom	Capital Renewal	1	Ea.	4	\$523	4609
Room Is Excessively Reverberant <b>Location:</b> Gym	Acoustics	3,000	SF	4	\$67,384	27957
The Concrete Flooring Requires Replacement <b>Note:</b> Floor slab is not sloping to the drain in the shower/toilet room in the boy's locker room office on the first floor.	Capital Renewal	30	SF	4	\$391	4619
Classroom Door Requires Vision Panel	Educational Adequacy	2	Ea.	5	\$3,849	Rollup
Interior Walls Require Repainting (Bldg SF) Room lacks appropriate sound control.	Capital Renewal	64,270	SF	5	\$424,654	Rollup
	Educational Adequacy	100	SF	5	\$3,498	Rollup
<b>Sub Total for System</b>		<b>11</b>	<b>items</b>		<b>\$545,846</b>	

### Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room Has Insufficient Electrical Outlets	Educational Adequacy	40	Ea.	5	\$19,957	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$19,957</b>	



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Booster Pump Is Missing And Needed <b>Note:</b> The drinking fountains on the first floor do not have adequate pressure. A booster pump should be installed to provide adequate capacity to the drinking fountains.	Functional Deficiency	1	Ea.	2	\$38,028	4615
The Existing Lavatory/Sink Pipes Are Not Insulated Correctly <b>Note:</b> Sinks are missing pipe insulation.	Barrier to Accessibility	28	LF	3	\$1,331	4608
Room lacks a drinking fountain.	Educational Adequacy	5	Ea.	5	\$5,544	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	12	Ea.	5	\$18,237	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$63,139</b>	

## Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks shut-off valves for utilities. (International Fuel Gas Code, Section 409.6)	Educational Adequacy	3	Ea.	1	\$34,409	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$34,409</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	1	Ea.	3	\$5,735	Rollup
Technology: Campus lacks security electronic access control. <b>Note:</b> Keyscan Access Control System add 2 doors	Technology	2	Ea.	3	\$15,211	3900
Technology: Classroom AV/Multimedia systems are in need of improvements. <b>Note:</b> Refresh AV system in Library.	Technology	1	Ea.	3	\$9,507	3897
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life. <b>Note:</b> Technology: Add new classroom AV/Multimedia systems to support digital formats.	Technology	20	Ea.	3	\$399,293	3898
Technology: Gymnasium sound system is nonexistent, inadequate, or near end of useful life. <b>Note:</b> Refresh gym audio system	Technology	1	Ea.	3	\$9,127	3903
Technology: Instructional spaces do not have local sound reinforcement. <b>Note:</b> Add sound reinforcement found in instructions spaces	Technology	30	Ea.	3	\$142,605	3895
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF 338 needs grounding system improvements.	Technology	1	Ea.	3	\$5,324	3887
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF 134 needs grounding system improvements.	Technology	1	Ea.	3	\$5,324	3889
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent. <b>Note:</b> IDF 160A needs grounding system improvements.	Technology	1	Ea.	3	\$5,324	3892
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF 134 needs to be rezoned. Room to small	Technology	1	Ea.	3	\$37,648	3888
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements. <b>Note:</b> IDF 160A needs to be rezoned. Room to small	Technology	1	Ea.	3	\$37,648	3891
Technology: Main Telecommunications Room ground system is inadequate or non-existent. <b>Note:</b> MDF has no ground system.	Technology	1	Ea.	3	\$6,655	3886
Technology: Main Telecommunications Room needs minor improvements. <b>Note:</b> MDF 238- Very minor improvements	Technology	1	Ea.	3	\$21,676	3885
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life. <b>Note:</b> Add integration with phone system to PA/Bell/Clock system. Expand coverage.	Technology	10,000	SF	3	\$17,113	3902
Technology: Security cameras and recording system are inadequate and/or near end of useful life. <b>Note:</b> Digital camera system with 10 IP Cameras refresh and add 18 additional IP Cameras	Technology	28	Ea.	3	\$133,098	3901
Technology: Special Space AV/Multimedia system is inadequate. <b>Note:</b> Add AV system to cafetorium.	Technology	1	Ea.	3	\$54,190	3896



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Special Space AV/Multimedia systems are in need of minor improvements. <b>Note:</b> Technology: Improve special space AV/Multimedia systems.	Technology	2	Room	3	\$38,028	3899
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF 134 needs dedicated AC unit.	Technology	1	Ea.	3	\$4,753	3890
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements. <b>Note:</b> IDF 160A needs dedicated AC unit.	Technology	1	Ea.	3	\$4,753	3893
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus. <b>Note:</b> Replace/add telephone handsets in classrooms and office spaces.	Technology	30	Ea.	3	\$45,633	3905
Technology: Telephone system is inadequate and/or non-existent. <b>Note:</b> Phone system is aging Toshiba Strata analog, replace.	Technology	1	Ea.	3	\$7,225	3904
<b>Sub Total for System</b>		<b>21</b>	<b>items</b>		<b>\$1,005,868</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	1	Ea.	3	\$4,588	Rollup
Room lacks an appropriate refrigerator.	Educational Adequacy	3	Ea.	5	\$25,807	Rollup
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$30,394</b>	
<b>Sub Total for Building 01 - Main Building</b>		<b>42</b>	<b>items</b>		<b>\$1,704,573</b>	

## Building: 02 - Building 02

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Acoustical Ceiling Tiles Require Replacement <b>Note:</b> Tiles are missing and sagging.	Capital Renewal	1,200	SF	3	\$10,838	8355
The Vinyl Composition Tile Requires Replacement <b>Note:</b> VCT is outdated and worn. <b>Location:</b> Basement	Capital Renewal	120	SF	3	\$1,377	8356
Ceiling Grid Requires Replacement <b>Note:</b> Original ceiling grid.	Capital Renewal	1,200	SF	4	\$14,233	8357
Interior Wood Walls Require Replacement <b>Note:</b> Wood panels are in disrepair.	Capital Renewal	2,160	SF	4	\$19,714	8358
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$46,161</b>	

### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis) <b>Note:</b> Ductwork is no longer sealed at the joints and rust is beginning to appear.	Capital Renewal	2,400	SF	2	\$35,283	4624
The Fin Tube Water Radiant Heater Requires Replacement <b>Note:</b> Baseboard heaters are old and damaged.	Capital Renewal	15	Ea.	2	\$25,127	4623
The Window AC Unit Component Requires Replacement <b>Note:</b> Aged window unit is not operational.	Capital Renewal	1	Ea.	2	\$3,339	4622
Existing Controls Are Inadequate And Should Be Replaced With DDC Controls <b>Note:</b> Non-functional thermostats.	Capital Renewal	2,400	SF	4	\$16,211	4625
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$79,960</b>	

### Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Restroom Lavatories Plumbing Fixtures Require Replacement <b>Note:</b> Sink is aged and stained.	Capital Renewal	1	Ea.	4	\$3,181	4620
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$3,181</b>	
<b>Sub Total for Building 02 - Building 02</b>		<b>9</b>	<b>items</b>		<b>\$129,302</b>	
<b>Total for Campus</b>		<b>53</b>	<b>items</b>		<b>\$1,872,408</b>	



## North Smithfield Middle School - Life Cycle Summary Yrs 1-5

### Building: 01 - Main Building

#### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Carpeting	Carpet	5,700	SF	\$124,010	4
<b>Sub Total for System</b>			<b>1 items</b>	<b>\$124,010</b>	
<b>Sub Total for Building 01 - Main Building</b>			<b>1 items</b>	<b>\$124,010</b>	

### Building: 02 - Building 02

#### Roofing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Steep Slope Roofing	Composition Shingle	1,200	SF	\$34,225	3
<b>Sub Total for System</b>			<b>1 items</b>	<b>\$34,225</b>	

#### Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Operating Windows	Wood - Windows per SF	360	SF	\$68,735	3
Exterior Entrance Doors	Storefront Doors - Glass/Aluminum	3	Door	\$21,391	3
Exterior Wall Veneer	Brick - Bldg SF basis	2,400	SF	\$109,520	5
<b>Sub Total for System</b>			<b>3 items</b>	<b>\$199,646</b>	

#### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	240	SF	\$1,586	3
Wood Flooring	Wood Flooring - All Types	1,000	SF	\$33,179	3
	<b>Note:</b> Original flooring				
Carpeting	Carpet	200	SF	\$4,351	3
Wood Flooring	Wood Flooring - All Types	120	SF	\$3,982	3
	<b>Note:</b> Original plywood floor				
Interior Swinging Doors	Wood	6	Door	\$27,665	5
Interior Door Supplementary Components	Door Hardware	6	Door	\$18,824	5
Flooring Treatment	Concrete Floor - Finished	960	SF	\$12,499	5
	<b>Note:</b> Original floor in basement				
Specialty Suspended Ceilings	Ceiling - Wood	1,200	SF	\$7,986	5
<b>Sub Total for System</b>			<b>8 items</b>	<b>\$110,072</b>	

#### Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Facility Hydronic Distribution	Pump - 1HP or Less (Ea.)	1	Ea.	\$7,628	4
	<b>Note:</b> Fuel oil pump				
Decentralized Cooling	Condensing Unit (3 Ton)	1	Ea.	\$7,130	5
Exhaust Air	Roof Exhaust Fan - Small	1	Ea.	\$2,637	5
<b>Sub Total for System</b>			<b>3 items</b>	<b>\$17,396</b>	

#### Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	2,400	SF	\$14,260	2
Power Distribution	Panelboard - 120/240 225A	1	Ea.	\$9,602	3
<b>Sub Total for System</b>			<b>2 items</b>	<b>\$23,863</b>	

#### Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fuel Storage Tanks	Above Ground Fuel Oil StorageTank ( 275 Gal)	2	Ea.	\$951	4
Domestic Water Equipment	Water Heater - Electric - 10 gallon	1	Ea.	\$1,829	5
<b>Sub Total for System</b>			<b>2 items</b>	<b>\$2,780</b>	

#### Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	2,400	SF	\$7,034	3
<b>Sub Total for System</b>			<b>1 items</b>	<b>\$7,034</b>	



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School

## Specialties

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Casework	Fixed Cabinetry	2	Room	\$22,376	3
			<b>1 items</b>	<b>\$22,376</b>	
			<b>21 items</b>	<b>\$417,392</b>	
			<b>22 items</b>	<b>\$541,402</b>	



**Supporting Photos**



Site Aerial



Damaged Baseboard Heater



School Signage



Front Entrance



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



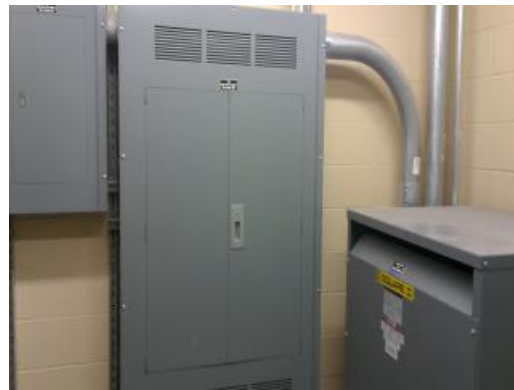
Fire Protection Entrance



Generator



Half-Bradley Wash Basin



Distribution Panel



DDC Control Panel



Cafeteria





# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



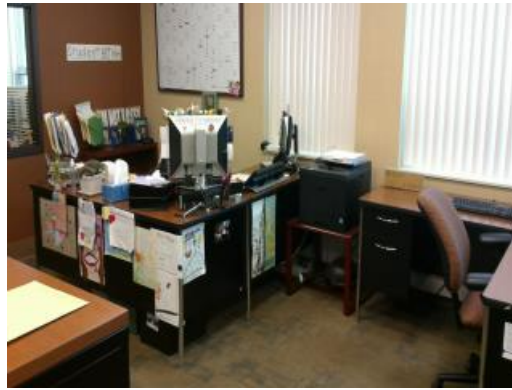
Transformer



Shower Stalls



Variable Frequency Drive



Typical Office



Staff Restroom Fixtures And Finishes



Rooftop Unit



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



Cracking At Asphalt Joint



Domestic Water Boilers



Sealant Failing At Window



Separating Vinyl Tiles



Stained Ceiling Tile



Cracking Asphalt At Main Drain



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



Worn And Stained VCT



Failed Sealant Allowing Leaks



Dedication Plaque



Cracked VCT Floor



Pipe Missing Insulation



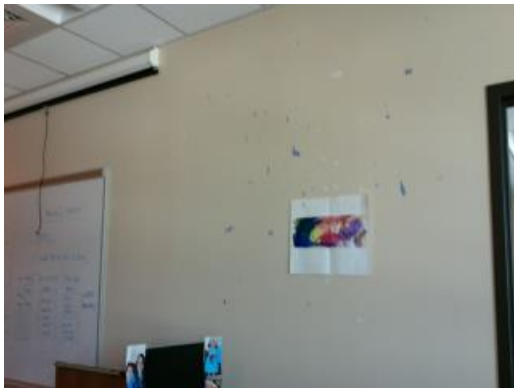
Crooked Toilet Partition



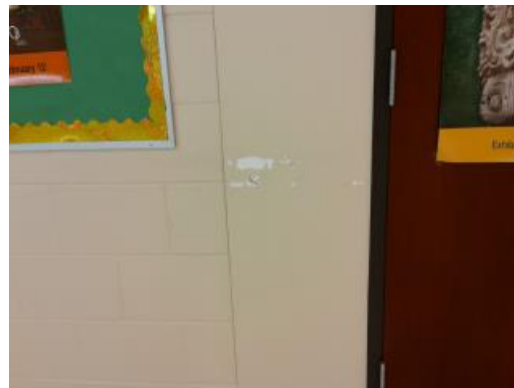
Missing Door Lock



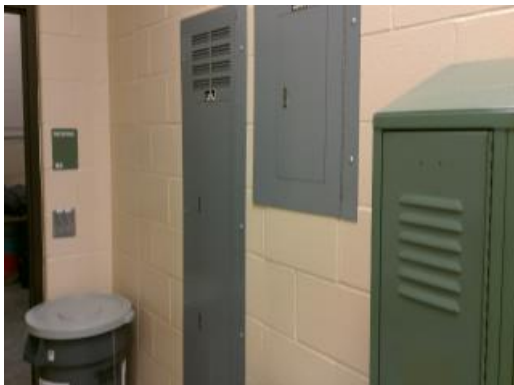
Cracked CMU Wall



Typical Chipped Paint



Typical Chipped Paint



Typical Electrical Panels



Heating Water Boilers



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



Exterior Finishes



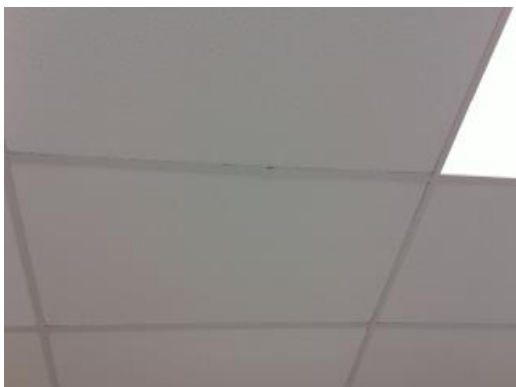
Typical Drinking Fountains



Restroom Fixtures And Finishes



Hallway Finishes



Room 350



Typical Classroom



Blocked Roof Drain



Kitchen



Water Damage Due To Floor Slope At Shower



Room 350



Cafeteria/Gymnasium



Damaged Gypsum Board Wall



# Facility Condition Assessment

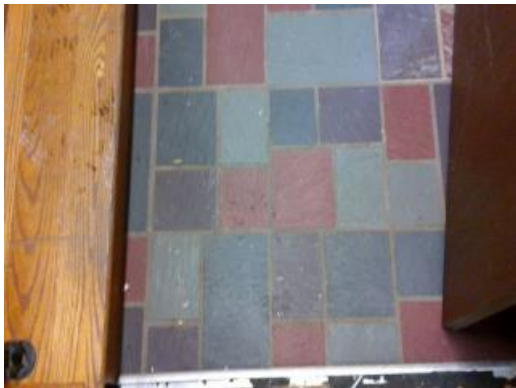
North Smithfield - North Smithfield Middle School



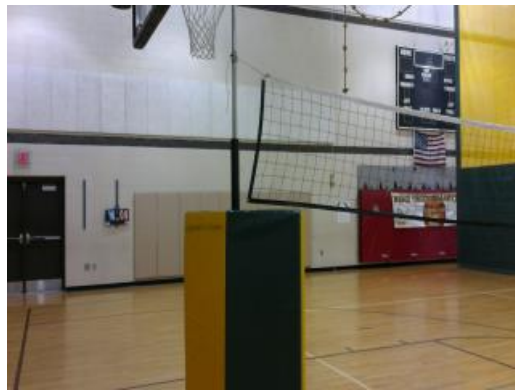
Science Lab



Exterior Finishes



Worn Vinyl Tile



Gymnasium



Electrical Service



Fuel Oil Storage Tanks



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



Water Heater



Rear Elevation



Furnace



Side Elevation



Elevation



Casework





# Facility Condition Assessment

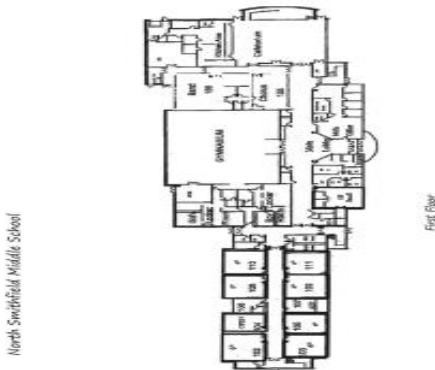
North Smithfield - North Smithfield Middle School



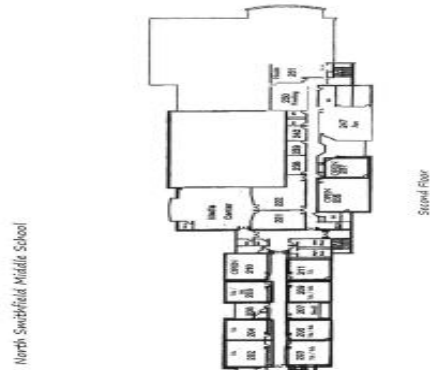
Hardwood Floor



Elevation



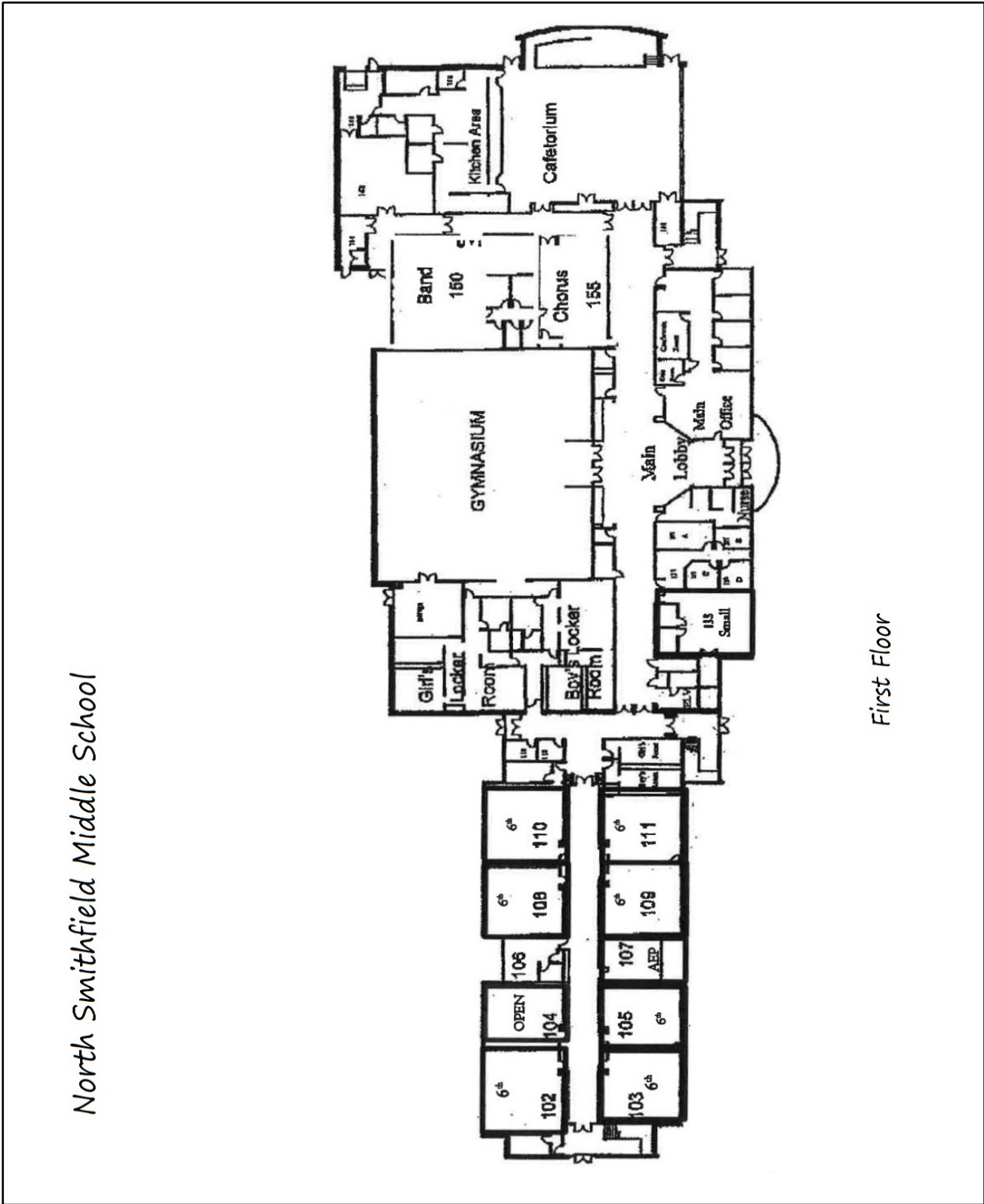
Floor\_Plan\_01\_First



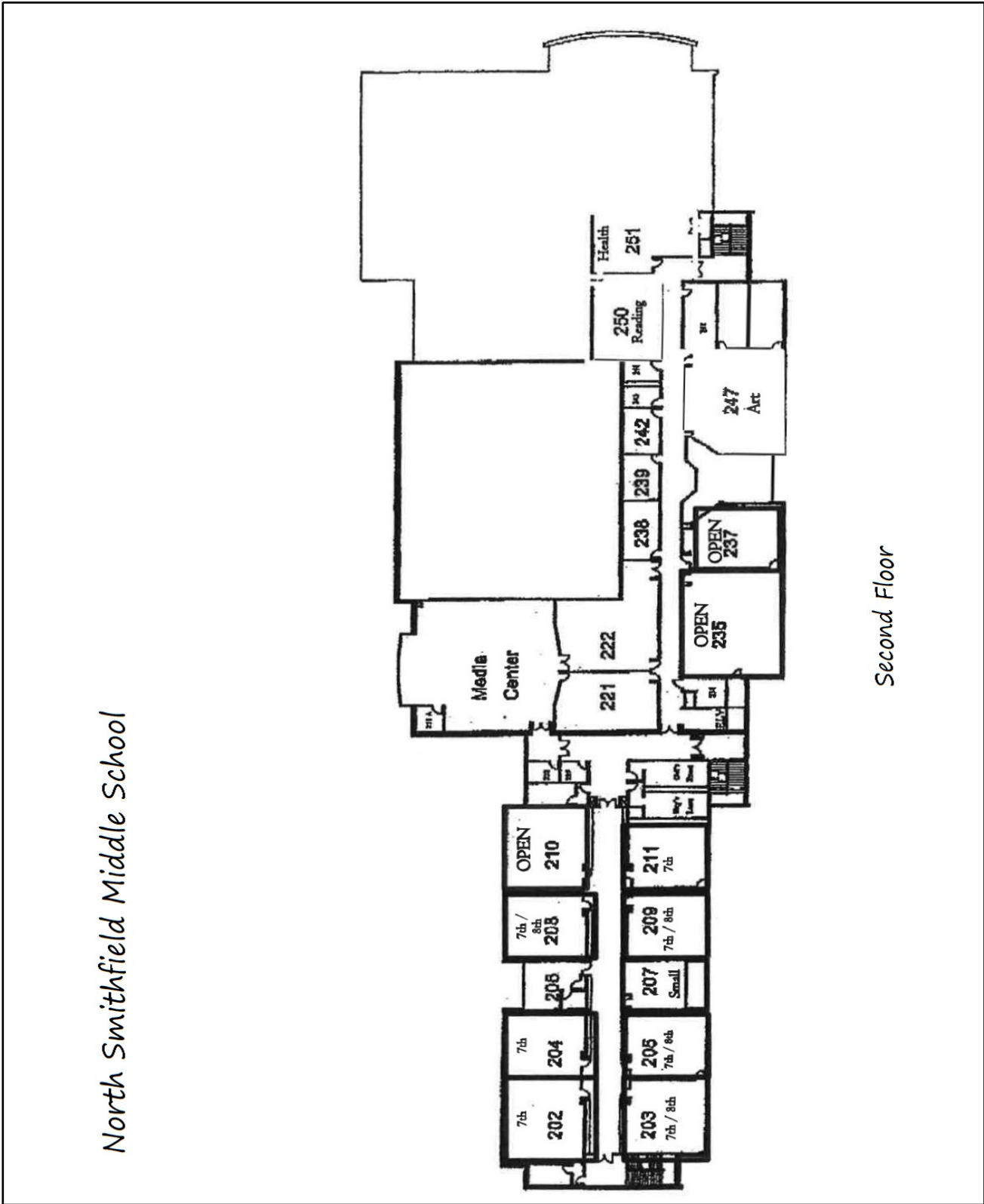
Floor\_Plan\_02\_Second



Floor\_Plan\_03\_Third



Floor\_Plan\_01\_First

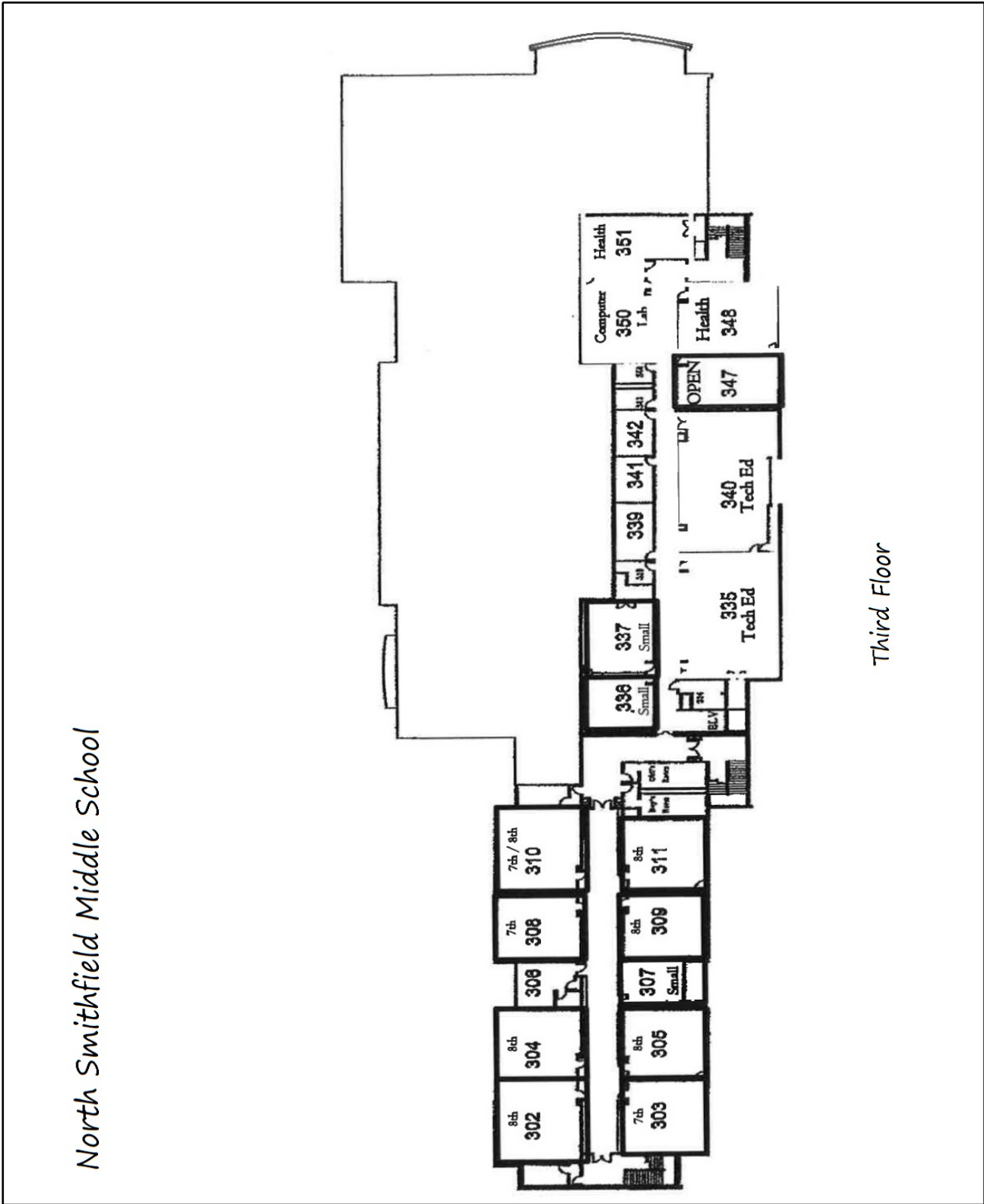


Floor\_Plan\_02\_Second



# Facility Condition Assessment

North Smithfield - North Smithfield Middle School



Floor\_Plan\_03\_Third