Facility Condition Assessment

Pawtucket - M. Virginia Cunningham School | *June 2017*

40 Baldwin Street, Pawtucket, RI 02860

Introduction

M. Virginia Cunningham School, located at 40 Baldwin Street in Pawtucket, Rhode Island, was built in 1965. It comprises 41,808 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.

M. Virginia Cunningham School serves grades KG - 5, has 28 instructional spaces, and has an enrollment of 536. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for M. Virginia Cunningham School is 597 with a resulting utilization of 90%.

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 M. Virginia Cunningham School the 5-year need is $9,161,949. 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 M. Virginia Cunningham 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 M. Virginia Cunningham School campus, identified by discipline and building.

Site

The site level systems for this campus include:

Site	Asphalt Parking Lot Pavement
	Concrete Pedestrian Pavement

Building Envelope

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

01 - Main Building:	Brick Exterior Wall
	Metal Panel Exterior Wall
	Pre-cast Concrete Panel Exterior Wall
	Painted Gypsum Soffit
	Aluminum Exterior Windows
	Steel Exterior Entrance Doors
02 - Storage:	CMU Exterior Wall
	Steel Exterior Entrance Doors

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

01 - Main Building:	Built-Up Roofing With Ballast
02 - Storage:	Composition Shingle Roofing

Interior

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

01 - Main Building:	Steel Interior Doors
	Wood Interior Doors
	Overhead Interior Coiling Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Ceramic Tile Wall
	Wood Wall Paneling
	Vinyl/Fabric Wall Covering
	CMU Wall
	Brick/Stone Veneer
	Interior Wall Painting
	Concrete Flooring
	Ceramic Tile Flooring
	Vinyl Composition Tile Flooring

01 - Main Building:	Carpet
	Metal Ceiling Panel
02 - Storage:	Wood Ceilings
	CMU Wall
	Concrete Flooring

Mechanical

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

01 - Main Building:	3,060 MBH Cast Iron Steam Boiler
	Finned Wall Radiator
	Steam/Hot Water Heating Unit Vent
	12 MBH Steam Unit Heater
	Pneumatic Heating System Controls
	Window Units
	2-Pipe Hot Water Hydronic Distribution System
	5 HP Pump
	2,000 CFM Interior AHU
	Ductwork
	Large Roof Exhaust Fan
	Small Roof Exhaust Fan
	Wall Exhaust Fan

Plumbing

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

01 - Main Building:	2" Backflow Preventers
	Gas Piping System
	80 Gallon Electric Water Heater
	60 Gallon Gas Water Heater
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
	Urinals
	Air Compressor (1 hp)

Electrical

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

01 - Main Building:	1,500 KVA Transformer

01 - Main Building:	Panelboard - 120/208 100A
	Panelboard - 120/208 225A
	400 Amp Distribution Panel
	Light Fixtures
	Building Mounted Lighting Fixtures
	Canopy 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.

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

Table 1: System by Priority

	Priority						
System	1	2	3	4	5	Total	% of Total
Site	-	-	$13,310	$859,078	$71,328	$943,717	12.61 %
Roofing	-	-	-	-	-	$0	0.00 %
Structural	-	-	-	-	-	$0	0.00 %
Exterior	-	$831,751	-	-	$96,610	$928,361	12.41 %
Interior	-	-	$1,050,528	$1,384,530	$32,894	$2,467,952	32.98 %
Mechanical	-	$670,634	-	$299,295	-	$969,929	12.96 %
Electrical	-	$34,265	$24,877	$7,180	$17,866	$84,187	1.12 %
Plumbing	-	$5,890	$21,953	$92,168	$21,292	$141,304	1.89 %
Fire and Life Safety	$135,338	-	-	-	-	$135,338	1.81 %
Technology	-	-	$1,314,417	-	-	$1,314,417	17.56 %
Conveyances	-	-	$158,450	-	-	$158,450	2.12 %
Specialties	-	-	$13,690	$326,311	-	$340,001	4.54 %
Total	$135,338	$1,542,540	$2,597,224	$2,968,562	$239,990	$7,483,655	

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

The building systems with the most need include:

Interior	-	$2,467,952
Technology	-	$1,314,417
Mechanical	-	$969,929

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

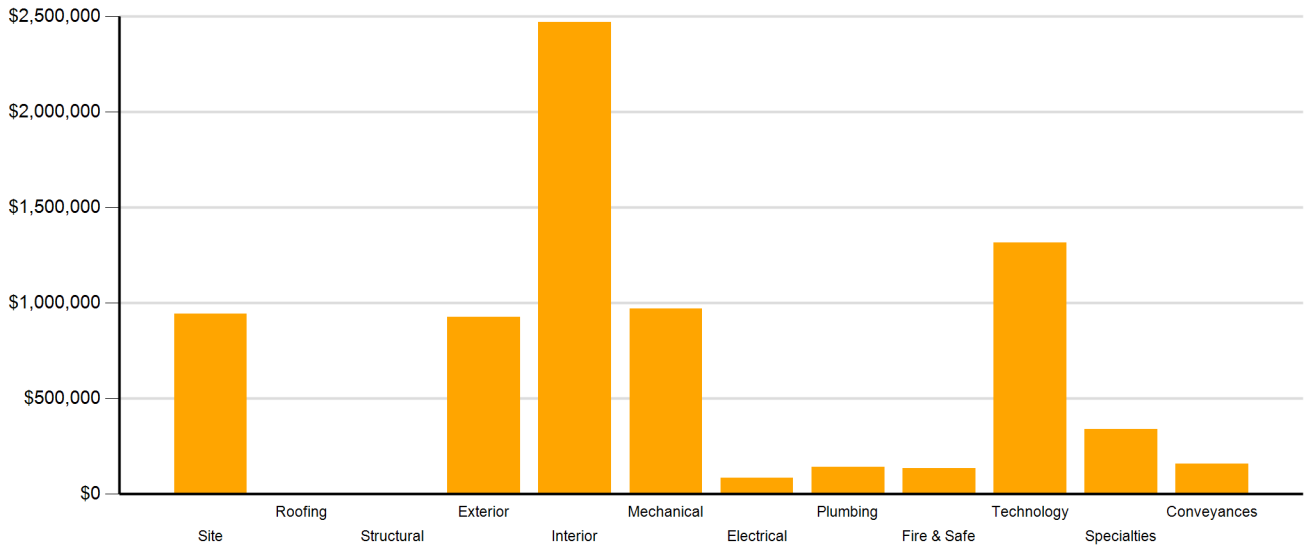


Figure 2: System Deficiencies

Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

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

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

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

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

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

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

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

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

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

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

Table 2: Deficiency Category by Priority

	Priority					
Category	**1**	**2**	**3**	**4**	**5**	**Total**
Acoustics	-	-	$403,056	-	-	$403,056
Barrier to Accessibility	-	-	$403,551	-	-	$403,551
Capital Renewal	$7,889	$1,542,540	$449,200	$2,004,463	$120,378	$4,124,469
Code Compliance	$127,450	-	-	-	-	$127,450
Educational Adequacy	-	-	$150,590	$51,579	$119,613	$321,782
Functional Deficiency	-	-	-	$7,180	-	$7,180
Hazardous Material	-	-	-	$905,341	-	$905,341
Technology	-	-	$1,177,517	-	-	$1,177,517
Traffic	-	-	$13,310	-	-	$13,310
Total	$135,338	$1,542,540	$2,597,224	$2,968,562	$239,990	$7,483,655

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

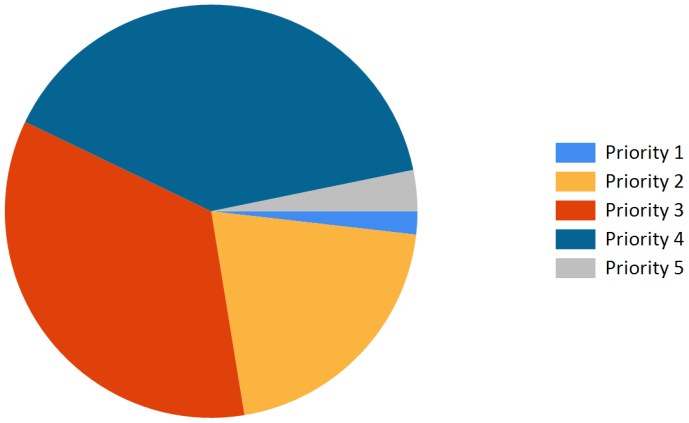


Figure 3: Current deficiencies by priority

Life Cycle Capital Renewal Forecast

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

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

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

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

Table 3: Capital Renewal Forecast

		Life Cycle Capital Renewal Projections						
System	Current Deficiencies	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	LC Yr. 1-5 Total	Total 5-Year Need
Site	$943,717	$0	$0	$0	$44,588	$7,735	$52,323	$996,040
Roofing	$0	$0	$0	$0	$0	$0	$0	$0
Structural	$0	$0	$0	$0	$0	$0	$0	$0
Exterior	$928,361	$0	$0	$0	$0	$0	$0	$928,361
Interior	$2,467,952	$0	$0	$0	$0	$525,403	$525,403	$2,993,355
Mechanical	$969,929	$0	$0	$0	$0	$738,826	$738,826	$1,708,755
Electrical	$84,187	$0	$0	$0	$0	$0	$0	$84,187
Plumbing	$141,304	$0	$0	$0	$0	$357,822	$357,822	$499,126
Fire and Life Safety	$135,338	$0	$0	$0	$0	$0	$0	$135,338
Technology	$1,314,417	$0	$0	$0	$0	$0	$0	$1,314,417
Conveyances	$158,450	$0	$0	$0	$0	$0	$0	$158,450
Specialties	$340,001	$0	$0	$0	$0	$0	$0	$340,001
Total	**$7,483,655**	**$0**	**$0**	**$0**	**$44,588**	**$1,629,786**	**$1,674,374**	**$9,158,029**

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

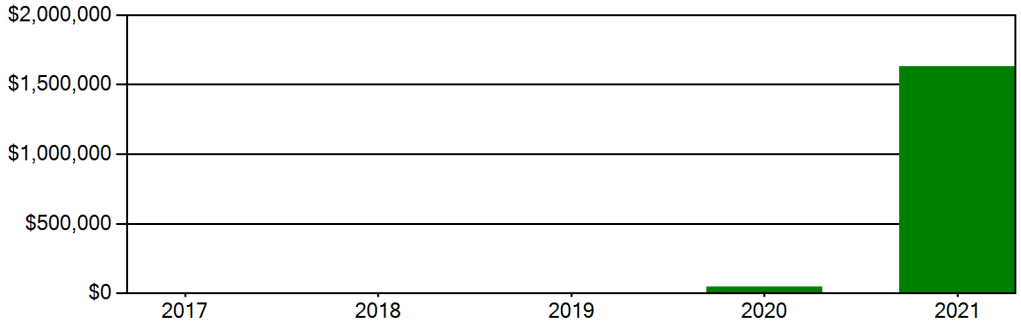
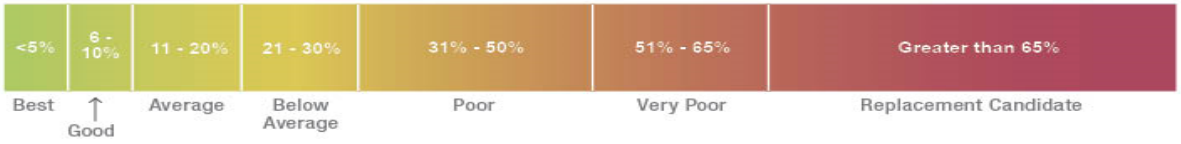


Figure 4: Life Cycle Capital Renewal Forecast

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 $14,632,800. For planning purposes, the total 5-year need at the M. Virginia Cunningham School is $9,161,949 (Life Cycle Years 1-5 plus the FCI deficiency cost). The M. Virginia Cunningham School facility has a 5-year FCI of 62.59%.

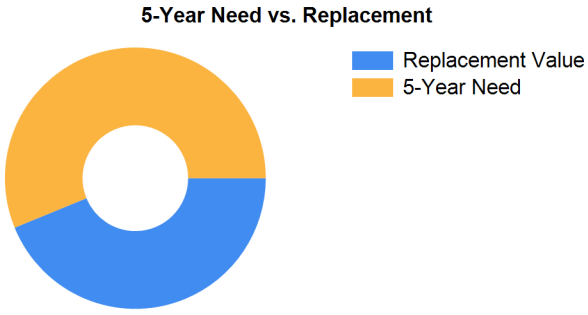


Figure 5: 5-Year FCI

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 232 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 M. Virginia Cunningham School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be $412,020.

Summary of Findings

The M. Virginia Cunningham School comprises 41,808 square feet and was constructed in 1965. Current deficiencies at this school total $7,487,575. Five year capital renewal costs total $1,674,374. The total identified need for the M. Virginia Cunningham School (current deficiencies and 5-year capital renewal costs) is $9,161,949. The 5-year FCI is 62.59%.

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
M. Virginia Cunningham School Totals	41,808	1965	$7,487,575	$1,674,374	$9,161,949	62.59%

**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
Crosswalk Requires Repainting	Traffic	2	Ea.	3	$1,901	16941
Note: Repaint crosswalks at intersection of Hicks St and Mineral Springs Ave						
Traffic Signage Is Required	Traffic	4	Ea.	3	$11,408	16940
Note: Add school zone signage on adjacent streets						
Asphalt Paving Requires Replacement	Capital Renewal	40	CAR	4	$165,426	12769
Note: Asphalt paving is cracked with potholes.						
Backstops Require Replacement	Educational Adequacy	1	Ea.	4	$35,651	28537
Note: Backstops Require Replacement						
Fencing Requires Replacement (Ornamental Fence)	Capital Renewal	490	LF	4	$658,001	12768
Note: Ornamental fencing is rusted and should be replaced.						
Exterior Basketball Goals are Required	Educational Adequacy	1	Ea.	5	$7,308	28775
Note: Exterior Basketball Goals are Required						
PE / Recess Playfield is Missing and is Needed	Educational Adequacy	1	Ea.	5	$64,020	54915
Note: PE / Recess Playfield is Missing and is Needed						
	Sub Total for System	**7**	**items**		**$943,717**	
	Sub Total for School and Site Level	**7**	**items**		**$943,717**	

Building: 01 - Main Building

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Aluminum Window Requires Replacement	Capital Renewal	1,030	SF	2	$181,563	12771
Note: 206 @ 1'x5' windows are aged and rusted.						
The Aluminum Window Requires Replacement	Capital Renewal	3,675	SF	2	$647,811	12772
Note: 147 @ 5'x5' windows are aged and rusted.						
The Brick Exterior Requires Replacement (Bldg SF)	Capital Renewal	50	SF	2	$2,377	12798
Note: Replace cracked bricks.						
The Exterior Requires Cleaning	Capital Renewal	34,230	SF Wall	5	$96,610	12797
Note: Pressure wash brick to remove graffiti and paint covering it.						
	Sub Total for System	**4**	**items**		**$928,361**	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Classroom Entry Doors Provide Insufficient Sound Isolation	Acoustics	30	Ea.	3	$274,811	19878
Note: All classrooms						
Classroom Interior Doors Provide Insufficient Sound Isolation	Acoustics	14	Ea.	3	$128,245	19879
Note: All classrooms						
The Acoustical Ceiling Tiles Require Replacement	Capital Renewal	36,735	SF	3	$345,601	12773
The Carpet Flooring Requires Replacement	Capital Renewal	2,505	SF	3	$56,770	12774
Note: Old carpet is stained and worn.						
The Interior Door Hardware Requires Replacement	Barrier to Accessibility	75	Door	3	$245,102	12786
Note: Non-compliant door hardware should be replaced.						
Asbestos 9x9 Tile is Present. Limited Areas of Lifting or Broken Tiles Exist	Hazardous Material	27,968	SF	4	$830,909	Rollup
Caulking - significant areas of broken pieces &/or deteriorating caulk	Hazardous Material	200	LF	4	$3,961	Rollup
Ceiling Grid Requires Replacement	Capital Renewal	36,735	SF	4	$453,850	12800
Note: Ceiling grid is aged and stained.						
Light Deterioration or Damage of 9x9 Asbestos Floor Tile is Present	Hazardous Material	150	SF	4	$4,456	Rollup
Paint (probable pre-1978 in base (layers(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - each)	Hazardous Material	84	Ea.	4	$24,956	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	320	LF	4	$7,606	Rollup

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 - children (measurement unit - square feet)	Hazardous Material	730	SF	4	$7,229	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	20	Ea.	4	$5,942	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	20	LF	4	$475	Rollup
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	418	SF	4	$15,927	Rollup
Stair Treads Require Replacement	Capital Renewal	216	LF	4	$9,412	12802
Wall/ceiling materials -large areas (> 10 sq. ft.) of damage & area in active use-adults only	Hazardous Material	2,000	SF	4	$19,806	Rollup
Classroom Door Requires Vision Panel	Educational Adequacy	4	Ea.	5	$9,127	Rollup
Interior Toilet Partition Requires Repainting	Capital Renewal	1,200	SF Wall	5	$23,767	12782
Note: Toilet partitions are rusting.						
	Sub Total for System	**19**	**items**		**$2,467,952**	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Replace Unit Vent	Capital Renewal	30	Ea.	2	$528,588	12801
Steam/HW Unit Heater Requires Replacement	Capital Renewal	1	Ea.	2	$2,488	12794
The Fin Tube Water Radiant Heater Requires Replacement	Capital Renewal	74	Ea.	2	$129,124	12795
The Window AC Unit Component Requires Replacement	Capital Renewal	3	Ea.	2	$10,434	12789
Exhaust Fan Ventilation Requires Replacement	Capital Renewal	2	Ea.	4	$5,578	12778
Existing Controls Are Inadequate And Should Be Replaced With DDC Controls	Capital Renewal	41,744	SF	4	$293,717	12796
	Sub Total for System	**6**	**items**		**$969,929**	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Panelboard Requires Replacement	Capital Renewal	2	Ea.	2	$10,101	12791
The Panelboard Requires Replacement	Capital Renewal	4	Ea.	2	$24,164	12792
Note: Panelboards are original to the building, rusting, and should be replaced.						
The Mounted Building Lighting Requires Replacement	Capital Renewal	16	Ea.	3	$24,877	12777
Note: Building mounted lights are aged, with clouded lenses. Many are broken or have pieces missing.						
The Canopy Lighting Requires Replacement	Functional Deficiency	5	Ea.	4	$7,180	12776
Note: Canopy fixtures are missing or broken and should be replaced.						
Room Has Insufficient Electrical Outlets	Educational Adequacy	36	Ea.	5	$17,866	Rollup
	Sub Total for System	**5**	**items**		**$84,187**	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Electric Water Heater Requires Replacement	Capital Renewal	1	Ea.	2	$5,890	12790
Location: Kitchen						
The Gas Water Heater Requires Replacement	Capital Renewal	1	Ea.	3	$3,955	12793
Location: Boiler room						
The Urinal Plumbing Fixtures Require Replacement	Capital Renewal	13	Ea.	3	$17,998	12788
The Classroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	18	Ea.	4	$50,981	12770
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	3	Ea.	4	$8,051	12785
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	4	Ea.	4	$13,254	12779
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	6	Ea.	4	$19,881	12780
Room lacks a drinking fountain.	Educational Adequacy	11	Ea.	5	$12,131	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	9	Ea.	5	$9,161	Rollup
	Sub Total for System	**9**	**items**		**$141,304**	

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Fire Alarm Is Missing Or Inadequate (NFPA 72 and NFPA 101, Section 9.6)	Code Compliance	41,744	SF	1	$127,450	12787
Note: Fire alarm system is aged and is scheduled to be replaced according to site staff.						

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Wall Pack Lighting Requires Replacement	Capital Renewal	7	Ea.	1	$7,889	12784
	Sub Total for System	**2**	**items**		**$135,338**	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	24	Ea.	3	$136,900	Rollup
Technology: Campus network switching electronics are antiquated and/or do not meet standards.	Technology	96	Ea.	3	$47,535	13349
Technology: Classroom AV/Multimedia systems are inadequate and/or near end of useful life.	Technology	27	Ea.	3	$561,505	13353
Technology: Instructional spaces do not have local sound reinforcement.	Technology	27	Ea.	3	$133,692	13357
Technology: Main Telecommunications Room ground system is inadequate or non-existent.	Technology	1	Ea.	3	$6,932	13346
Technology: Main Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$44,366	13345
Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	$9,408	13347
Technology: Network system inadequate and/or near end of useful life	Technology	25	Ea.	3	$123,789	13356
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life.	Technology	41,744	SF	3	$74,411	13355
Technology: Special Space AV/Multimedia system is inadequate.	Technology	1	Ea.	3	$56,448	13350
Technology: Special Space AV/Multimedia system is inadequate.	Technology	1	Ea.	3	$56,448	13354
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	$7,922	13348
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus.	Technology	30	Ea.	3	$47,535	13352
Technology: Telephone system is inadequate and/or non-existent.	Technology	1	Ea.	3	$7,526	13351
	Sub Total for System	**14**	**items**		**$1,314,417**	

Conveyances

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Elevator Is Missing And Needed	Barrier to Accessibility	2	FLOOR	3	$158,450	12783
Note: Multi-story building is missing elevator.						
	Sub Total for System	**1**	**items**		**$158,450**	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	3	Ea.	3	$13,690	Rollup
Replace Cabinetry In Classes/Labs	Capital Renewal	28	Room	4	$326,311	12799
Note: Cabinetry is aged, scratched, and worn.						
	Sub Total for System	**2**	**items**		**$340,001**	
	Sub Total for Building 01 - Main Building	**62**	**items**		**$6,539,938**	
	Total for Campus	**69**	**items**		**$7,483,655**	

Buildings with no reported deficiencies

02 - Storage

M. Virginia Cunningham 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	4
Parking Lot Lighting	Pole Lighting		1	Ea.	$7,735	5
		Sub Total for System	**2**	**items**	**$52,323**	
		Sub Total for Building -	**2**	**items**	**$52,323**	

Building: 01 - Main Building

Interior

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Interior Swinging Doors	Wood		88	Door	$405,757	5
Wall Paneling	Wood Panel wall		417	SF	$3,806	5
Wall Painting and Coating	Painting/Staining (Bldg SF)		17,532	SF	$115,840	5
		Sub Total for System	**3**	**items**	**$525,403**	

Mechanical

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Heat Generation	Boiler - Cast Iron - Steam (3060 MBH)		1	Ea.	$170,342	5
Note:	2498 MBH					
Facility Hydronic Distribution	2-Pipe Water System (Hot)		41,744	SF	$321,771	5
HVAC Air Distribution	Ductwork (Bldg.SF)		4,174	SF	$61,363	5
HVAC Air Distribution	AHU 2,000 CFM Interior		2	Ea.	$86,274	5
Exhaust Air	Roof Exhaust Fan - Small		4	Ea.	$10,549	5
Exhaust Air	Roof Exhaust Fan - Large		5	Ea.	$69,467	5
Facility Hydronic Distribution	Pump - 5HP		2	Ea.	$19,060	5
Note:	3 HP					
		Sub Total for System	**7**	**items**	**$738,825**	

Plumbing

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Lavatories		5	Ea.	$15,905	5
Domestic Water Piping	Domestic Water Piping System (Bldg.SF)		41,744	SF	$335,867	5
Compressed-Air Systems	Air Compressor (1 hp)		1	Ea.	$6,050	5
Note:	Rebuilt in 2014					
		Sub Total for System	**3**	**items**	**$357,823**	
		Sub Total for Building 01 - Main Building	**13**	**items**	**$1,622,051**	
		Total for: M. Virginia Cunningham School	**15**	**items**	**$1,674,374**	

Supporting Photos


Elevation


Unit Heater


Fined Wall Tube Heater


Rusted Ornamental Fencing

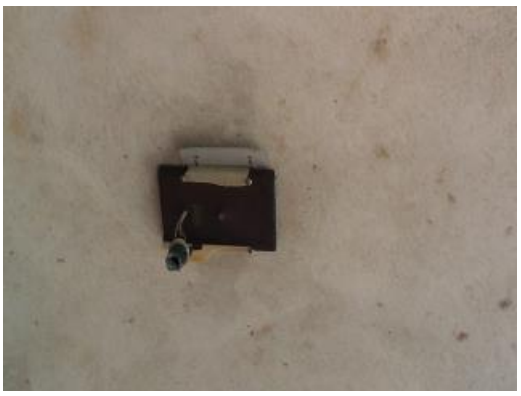

Weathered Parking Lot Pavement


Cracks And Pothole In Parking Lot


Classroom Lavatory


Typical Classroom Lavatory


Broken Building Mounted Fixture


Broken Canopy Fixture


Half Bradley Sink


Typical Wall Exhaust Fan


Damaged Controls


Restroom Lavatory


Broken And Missing Urinals


Fined Wall Tube Heater


Aged Window Unit


Typical Unit Vent Heat


Aged Panelboard

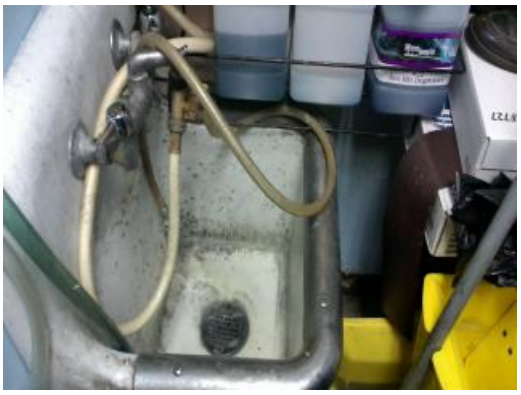

Typical And Broken Urinal


60 Gallon Water Heater


120 Gallon Water Heater


Restroom Lavatory


Rusted Panelboard


Typical Mop Sink


Typical Emergency Light


Site Aerial


Fire Alarm


Exterior Finishes


Typical Classroom


Hallway Finishes


Restroom Finishes

School Sign


Exterior


Playground Equipment

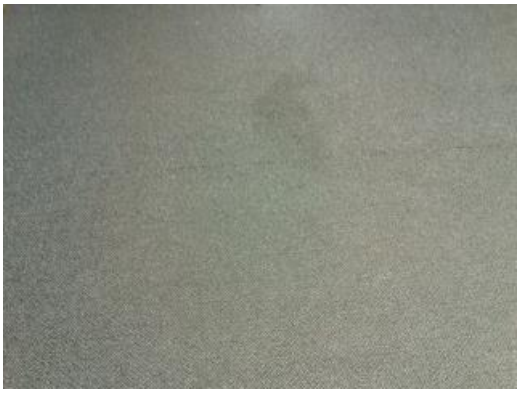

Gym/Cafeteria

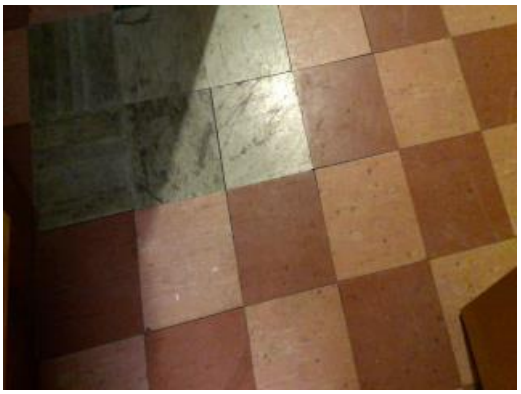

Library


Aged And Rusted Windows


Aged Aluminum Windows


Stained Ceiling Tiles


Worn Carpet


Worn VCT


Chipped VCT


Rusted Toilet Partition


Brick Exterior


Aged Cabinetry


Stained Ceiling Grid


Worn Or Missing Stair Tread


Storage Building