Facility Condition Assessment

Woonsocket - Citizens Memorial School | *June 2017*

250 Winthrop Street, Woonsocket, RI 02895

Introduction

Citizens Memorial School, located at 250 Winthrop Street in Woonsocket, Rhode Island, was built in 1958. It comprises 45,860 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.

Citizens Memorial School serves grades 3 - 5, has 23 instructional spaces, and has an enrollment of 397. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for Citizens Memorial School is 625 with a resulting utilization of 64%.

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 Citizens Memorial School the 5-year need is $9,836,379. 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 Citizens 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 Citizens Memorial School campus, identified by discipline and building.

Site

The site level systems for this campus include:

Site	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Asphalt Pedestrian Pavement

Building Envelope

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

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

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

01 - Main Building:	EPDM Roofing
	Single Ply Membrane Ballasted Roofing
	Aluminum Canopy Roofing

Interior

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

01 - Main Building:	Wood Interior Doors
	Interior Door Hardware
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Adhered Acoustical Ceiling Tiles
	Non-Painted Plaster/Gypsum Board Ceiling
	Ceramic Tile Wall
	Wood Wall Paneling
	Brick/Stone Veneer
	Interior Wall Painting
	Ceramic Tile Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
	Terrazzo Flooring

Mechanical

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

01 - Main Building:	4,488 MBH Cast Iron Water Boiler
	Finned Wall Radiator
	Radiant Water Heater
	12 MBH Steam Unit Heater
	20 MBH Steam Unit Heater
	DDC Heating System Controls
	Window Units
	5 HP Pump
	2-Pipe Hot Water Hydronic Distribution System
	Ductwork
	Kitchen Exhaust Hoods
	Roof Exhaust Fan
	Fire Sprinkler System

Plumbing

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

01 - Main Building:	Gas Piping System
	50 Gallon Gas Water Heater
	Domestic Water Piping System
	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Non-Refrigerated Drinking Fountain
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Toilets
	Urinals

Electrical

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

01 - Main Building:	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.

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	-	-	$314,402	$671,393	$166,429	$1,152,224	16.94 %
Roofing	-	$151,731	-	-	-	$151,731	2.23 %
Structural	-	-	-	-	-	$0	0.00 %
Exterior	-	$1,109,158	$1,331	-	$6,548	$1,117,037	16.43 %
Interior	-	-	$617,142	$1,265,197	$9,507	$1,891,846	27.82 %
Mechanical	-	$824,613	-	-	-	$824,613	12.13 %
Electrical	-	$277,081	$26,867	-	-	$303,947	4.47 %
Plumbing	-	-	$2,658	$56,857	$2,036	$61,551	0.91 %
Fire and Life Safety	-	-	-	-	-	$0	0.00 %
Technology	-	-	$1,114,072	-	-	$1,114,072	16.38 %
Conveyances	-	-	-	-	-	$0	0.00 %
Specialties	-	-	-	$183,690	-	$183,690	2.70 %
Total	$0	$2,362,583	$2,076,472	$2,177,138	$184,520	$6,800,713	

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

The building systems with the most need include:

Interior	-	$1,891,846
Site	-	$1,152,224
Exterior	-	$1,117,037

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

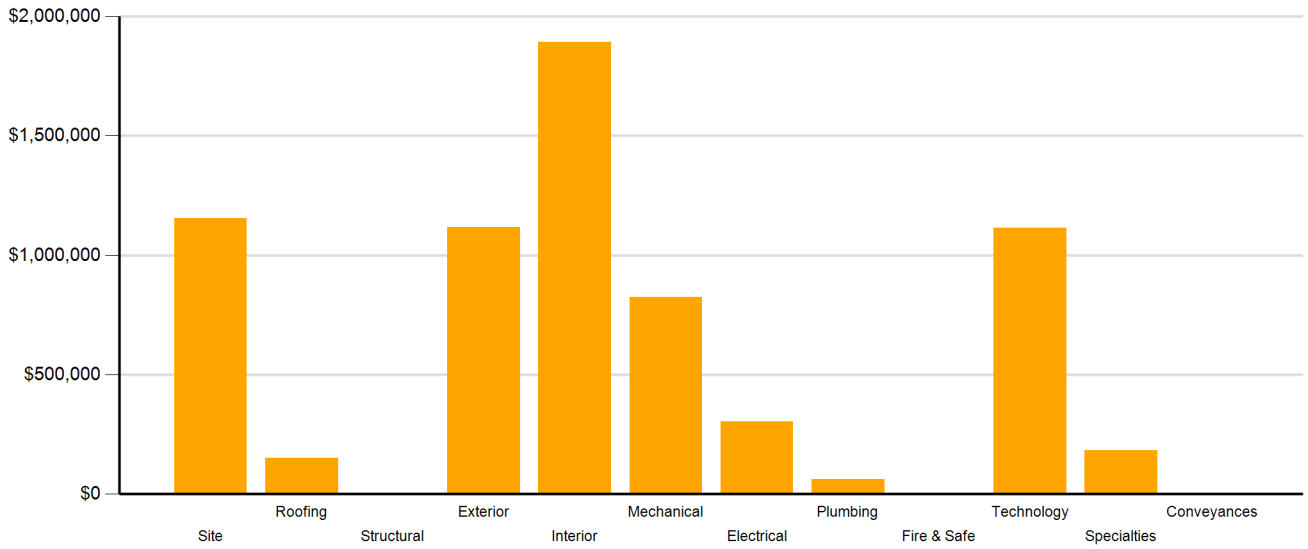

Figure 2: System Deficiencies

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	-	-	-	-	-	$0
Barrier to Accessibility	-	-	$87,771	-	-	$87,771
Capital Renewal	-	$1,101,694	$647,997	$1,128,700	$22,790	$2,901,181
Code Compliance	-	-	-	-	-	$0
Educational Adequacy	-	-	-	-	$152,223	$152,223
Functional Deficiency	-	$1,260,889	-	-	-	$1,260,889
Hazardous Material	-	-	-	$1,048,438	$9,507	$1,057,945
Technology	-	-	$1,114,072	-	-	$1,114,072
Traffic	-	-	$226,631	-	-	$226,631
Total	$0	$2,362,583	$2,076,472	$2,177,138	$184,520	$6,800,713

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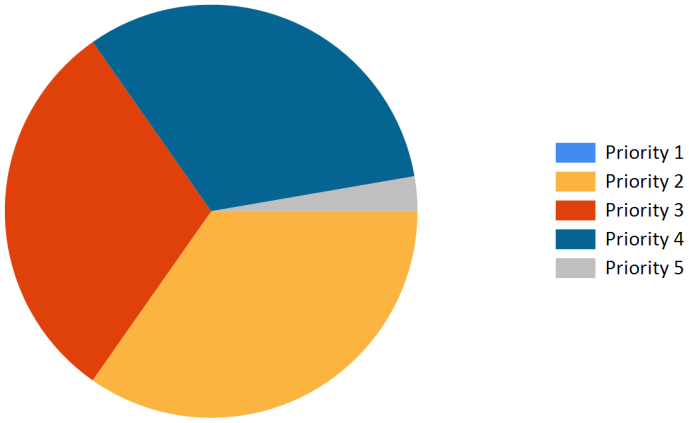

Figure 3: Current deficiencies by priority

Life Cycle Capital Renewal Forecast

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

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

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

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

Table 3: Capital Renewal Forecast

		Life Cycle Capital Renewal Projections						
System	Current Deficiencies	Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021	LC Yr. 1-5 Total	Total 5-Year Need
Site	$1,152,224	$0	$0	$12,818	$0	$0	$12,818	$1,165,042
Roofing	$151,731	$0	$114,084	$0	$0	$0	$114,084	$265,815
Structural	$0	$0	$0	$0	$0	$0	$0	$0
Exterior	$1,117,037	$0	$64,172	$0	$0	$0	$64,172	$1,181,209
Interior	$1,891,846	$0	$151,506	$0	$0	$1,376,567	$1,528,073	$3,419,919
Mechanical	$824,613	$0	$0	$891,039	$23,882	$115,194	$1,030,115	$1,854,728
Electrical	$303,947	$0	$0	$0	$0	$23,825	$23,825	$327,772
Plumbing	$61,551	$0	$0	$19,033	$108,727	$0	$127,760	$189,311
Fire and Life Safety	$0	$0	$0	$0	$131,895	$0	$131,895	$131,895
Technology	$1,114,072	$0	$0	$0	$0	$0	$0	$1,114,072
Conveyances	$0	$0	$0	$0	$0	$0	$0	$0
Specialties	$183,690	$0	$0	$0	$0	$0	$0	$183,690
Total	**$6,800,713**	**$0**	**$329,762**	**$922,890**	**$264,504**	**$1,515,586**	**$3,032,742**	**$9,833,455**

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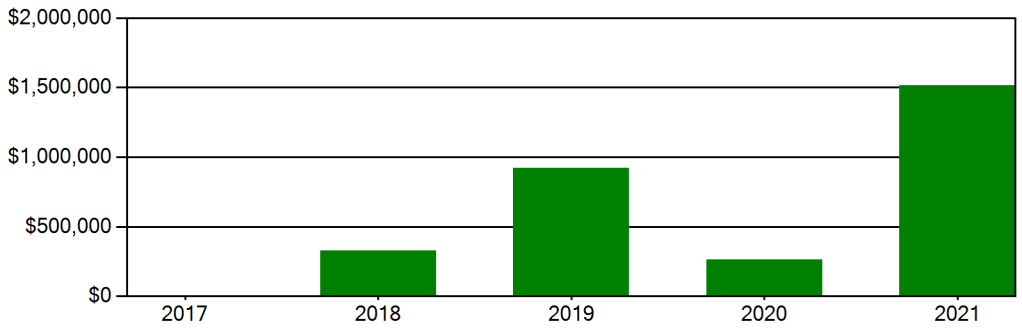
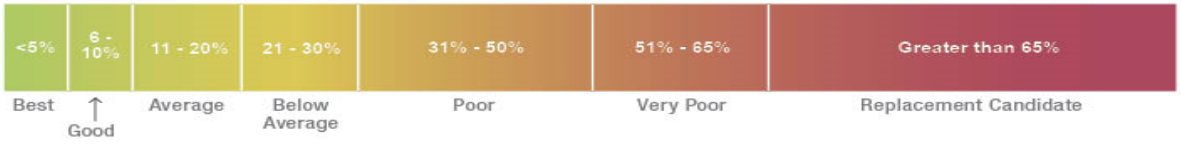


Figure 4: Life Cycle Capital Renewal Forecast

Facility Condition Index (FCI)

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



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

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

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Providence, Rhode Island area. The estimated replacement cost for this facility is $16,051,000. For planning purposes, the total 5-year need at the Citizens Memorial School is $9,836,379 (Life Cycle Years 1-5 plus the FCI deficiency cost). The Citizens Memorial School facility has a 5-year FCI of 61.26%.

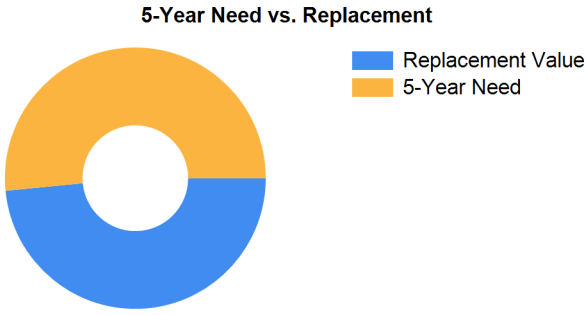


Figure 5: 5-Year FCI

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 255 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 Citizens Memorial School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be $0.

Summary of Findings

The Citizens Memorial School comprises 45,860 square feet and was constructed in 1958. Current deficiencies at this school total $6,803,637. Five year capital renewal costs total $3,032,742. The total identified need for the Citizens Memorial School (current deficiencies and 5-year capital renewal costs) is $9,836,379. The 5-year FCI is 61.26%.

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
Citizens Memorial School Totals	45,860	1958	$6,803,637	$3,032,742	$9,836,379	61.26%

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

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

Cost Estimating

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

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

LEA Feedback

Educational Space Assessor was turned away from this campus, prohibiting the completion of their assessment.

Site Level Deficiencies

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Install New Bus Drop Or Parent Drop Area	Traffic	1	Ea.	3	$151,087	4427
Note: Add designated parent drop off/pick up area (possibly in the lot in front of school)						
Install New Playground Equipment	Barrier to Accessibility	1	SF	3	$87,771	54961
Note: Install New Playground Equipment						
Traffic Signage Is Required	Traffic	2	Ea.	3	$75,544	4429
Note: Update school zone signage						
Asphalt Paving Requires Replacement	Capital Renewal	55	CAR	4	$180,743	645
Note: Driveway						
Asphalt Paving Requires Replacement	Capital Renewal	141	CAR	4	$463,360	2459
Fencing Requires Replacement (4' Chain Link Fence)	Capital Renewal	425	LF	4	$27,290	623
Exterior Basketball Goals are Required	Educational Adequacy	1	Ea.	5	$5,807	28831
Note: Exterior Basketball Goals are Required						
Exterior Basketball Goals Require Repair	Capital Renewal	2	Ea.	5	$1,133	636
Paved Play Requires Recoating And Resurfacing	Capital Renewal	500	SF	5	$15,109	640
Note: Paved play area is cracked and worn.						
PE / Recess Playfield is Missing and is Needed	Educational Adequacy	1	Ea.	5	$64,020	54962
Note: PE / Recess Playfield is Missing and is Needed						
The school lacks a paved play area.	Educational Adequacy	1	Ea.	5	$80,360	28037
Note: The school lacks a paved play area.						
	Sub Total for System	**11**	**items**		**$1,152,224**	
	Sub Total for School and Site Level	**11**	**items**		**$1,152,224**	

Building: 01 - Main Building

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
EPDM Roofing Requires Replacement (Bldg SF)	Functional Deficiency	12,000	SF	2	$151,731	631
Note: Evidence of leaking in classrooms.						
	Sub Total for System	**1**	**items**		**$151,731**	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Storefront/Curtain Wall Requires Replacement (Bldg SF)	Functional Deficiency	13,758	SF	2	$1,109,158	625
Note: Glazing is currently failing, glass is cloudy						
The Brick Exterior Requires Repair	Capital Renewal	20	SF Wall	3	$1,331	648
Note: Outside wall of cafeteria						
The Exterior Soffit Requires Repair	Capital Renewal	300	SF	5	$6,548	632
Note: Soffit shows signs of water damage						
	Sub Total for System	**3**	**items**		**$1,117,037**	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Doors Require Replacement	Capital Renewal	66	Door	3	$304,318	613
Note: Doors and frames are aged and worn and hardware is not compliant.						
The Ceramic Tile Flooring Requires Replacement	Capital Renewal	1,000	SF	3	$26,854	633
Note: Tile floors in bathrooms in original building						
The Terrazzo Flooring Requires Replacement	Capital Renewal	2,000	SF	3	$148,309	634
Location: Lobby						
The Vinyl Composition Tile Requires Replacement	Capital Renewal	12,000	SF	3	$137,661	638
9x9 Asbestos Tile Present and In Active Use, Greater than 25 Percent has Significant Deterioration	Hazardous Material	16,051	SF	4	$457,789	Rollup

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Adhered Acoustical Ceiling Tile Requires Replacement	Capital Renewal	18,344	SF	4	$198,920	622
Location: Original Building						
Caulking - significant areas of broken pieces &/or deteriorating caulk	Hazardous Material	10,250	LF	4	$194,893	Rollup
Glazing Putty is Broken or Deteriorating	Hazardous Material	10,000	LF	4	$190,139	Rollup
Interior Ceramic Walls Require Repair Or Replacement	Capital Renewal	600	SF	4	$13,348	610
Note: Tiles are missing or broken.						
Location: Cafeteria						
Interior Wood Walls Require Replacement	Capital Renewal	250	SF	4	$2,282	620
Location: Principal's Office						
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	212	Ea.	4	$60,464	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	445	LF	4	$10,153	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	13,800	SF	4	$131,196	Rollup
The Gypsum Board Ceilings Require Repair	Capital Renewal	20	SF	4	$266	642
Location: Room 3						
The Wood Flooring Requires Repair	Capital Renewal	600	SF	4	$864	637
Location: Gymnasium						
The Wood Flooring Requires Repair	Capital Renewal	750	SF	4	$1,080	647
Note: Refinish wood platform in cafeteria						
Wall/ceiling materials - area < 9 sq. ft. AND in children-accessible area	Hazardous Material	400	SF	4	$3,803	Rollup
Wall/ceiling materials - area < 9 sq. ft. AND NOT in children-accessible area	Hazardous Material	1,000	SF	5	$9,507	Rollup
	Sub Total for System	**18**	**items**		**$1,891,846**	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Ductwork Requires Replacement (SF Basis)	Capital Renewal	10,000	SF	2	$147,012	1905
Location: Bathrooms						
Steam/HW Unit Heater Requires Replacement	Capital Renewal	22	Ea.	2	$52,539	599
Steam/HW Unit Heater Requires Replacement	Capital Renewal	3	Ea.	2	$8,448	604
Note: Original unit heaters						
Steam/HW Unit Heater Requires Replacement	Capital Renewal	1	Ea.	2	$2,388	614
Note: Original unit heater						
The Fin Tube Water Radiant Heater Requires Replacement	Capital Renewal	28	Ea.	2	$46,904	2463
Location: Original Building						
The Steam/Hot Water Radiant Heater Requires Replacement	Capital Renewal	104	Ea.	2	$537,273	600
Note: Radiant heaters are original to the building and should be replaced.						
The Window AC Unit Component Requires Replacement	Capital Renewal	9	Ea.	2	$30,050	598
	Sub Total for System	**7**	**items**		**$824,613**	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Lighting Fixtures Require Replacement	Capital Renewal	15,000	SF	2	$89,128	617
Note: H8 light hanging fixtures						
Location: 4th & 5th classrooms						
The Lighting Fixtures Require Replacement	Capital Renewal	30,000	SF	2	$178,256	618
Note: Fluorescent lighting						
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	$4,849	628
Location: Gymnasium						
The Panelboard Requires Replacement	Capital Renewal	1	Ea.	2	$4,849	630
Note: 4th Grade Hallway Panel						
The Mounted Building Lighting Requires Replacement	Capital Renewal	18	Ea.	3	$26,867	624
Note: Upgrade lighting. Replace lights with brighter, more energy efficient ones.						
Location: Exterior						
	Sub Total for System	**5**	**items**		**$303,947**	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Urinal Plumbing Fixtures Require Replacement	Capital Renewal	2	Ea.	3	$2,658	605
Non-Refrigerated Drinking Fountain Requires Replacement	Capital Renewal	1	Ea.	4	$10,220	629
Location: Gymnasium						
The Classroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	5	Ea.	4	$13,595	608
The Custodial Mop Or Service Sink Requires Replacement	Capital Renewal	3	Ea.	4	$7,729	1901
Location: Janitors closet						
The Refrigerated Water Cooler Requires Replacement	Capital Renewal	3	Ea.	4	$22,132	603
The Restroom Lavatories Plumbing Fixtures Require Replacement	Capital Renewal	1	Ea.	4	$3,181	601
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	2	Ea.	5	$2,036	Rollup
	Sub Total for System	**7**	**items**		**$61,551**	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Campus network switching electronics are antiquated and/or do not meet standards.	Technology	216	Ea.	3	$102,675	8271
Technology: Campus wireless infrastructure inadequate.	Technology	24	Ea.	3	$31,943	8275
Technology: Campus wireless infrastructure meets standards but does not cover all areas of campus.	Technology	5	Ea.	3	$6,655	8274
Technology: Classroom AV/Multimedia systems are in need of improvements.	Technology	24	Ea.	3	$228,167	8282
Technology: Gymnasium sound system is nonexistent, inadequate, or near end of useful life.	Technology	1	Ea.	3	$9,127	8283
Technology: Instructional spaces do not have local sound reinforcement.	Technology	26	Ea.	3	$123,591	8284
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	$5,324	8267
Technology: Intermediate Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$37,648	8266
Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	$4,753	8269
Technology: Main Telecommunications Room ground system is inadequate or non-existent.	Technology	1	Ea.	3	$6,655	8265
Technology: Main Telecommunications Room is not dedicated. Room requires partial walls and/or major improvements.	Technology	1	Ea.	3	$42,591	8262
Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	$9,032	8263
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards.	Technology	184	Ea.	3	$78,718	8270
Technology: Network cabling infrastructure is partially outdated and/or needs expansion.	Technology	72	Ea.	3	$30,803	8276
Technology: Network system inadequate and/or near end of useful life	Technology	1	Ea.	3	$7,606	8280
Technology: Network system inadequate and/or near end of useful life	Technology	25	Ea.	3	$118,837	8281
Technology: Number of current, up to date, network switch ports are insufficient to support campus technology.	Technology	72	Ea.	3	$34,225	8277
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life.	Technology	45,860	SF	3	$78,478	8279
Technology: Special Space AV/Multimedia system is inadequate.	Technology	1	Ea.	3	$54,190	8272
Technology: Special Space AV/Multimedia system is inadequate.	Technology	1	Ea.	3	$54,190	8278
Technology: Telecommunications Room (large size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	$7,606	8264

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Telecommunications Room (small size room) needs dedicated cooling system improvements.	Technology	1	Ea.	3	$4,753	8268
Technology: Telephone handsets are inadequate and sparsely deployed throughout the campus.	Technology	24	Ea.	3	$36,507	8273
	Sub Total for System	**23**	**items**		**$1,114,072**	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Basketball Goal System Requires Replacement	Capital Renewal	2	Ea.	4	$49,436	2414
Location: Gymnasium						
Replace Cabinetry In Classes/Labs	Capital Renewal	12	Room	4	$134,254	619
	Sub Total for System	**2**	**items**		**$183,690**	
	Sub Total for Building 01 - Main Building	**66**	**items**		**$5,648,488**	
	Total for Campus	**77**	**items**		**$6,800,713**	

Citizens 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
Pedestrian Pavement	Sidewalks - Asphalt	1,500	SF	$12,818	3
Note:	Looks to be in good condition, no need to replace yet				
	Sub Total for System	**1**	**items**	**$12,818**	
	Sub Total for Building -	**1**	**items**	**$12,818**	

Building: 01 - Main Building

Roofing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Canopy Roofing	Aluminum panels SF	600	SF	$114,084	2
	Sub Total for System	**1**	**items**	**$114,084**	

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Entrance Doors	Steel - Insulated and Painted	10	Door	$64,172	2
	Sub Total for System	**1**	**items**	**$64,172**	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	22,930	SF	$151,506	2
Acoustical Suspended Ceilings	Ceilings - Acoustical Grid System	18,344	SF	$217,569	5
Suspended Plaster and	Non Painted - Plaster/Gypsum Board Finish	9,172	SF	$104,638	5
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	18,344	SF	$165,676	5
Tile Flooring	Ceramic Tile	1,293	SF	$34,722	5
Terrazzo Flooring	Terrazzo	11,516	SF	$853,962	5
	Sub Total for System	**6**	**items**	**$1,528,073**	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Water-Based Fire-Suppression	Fire Sprinkler System (Bldg.SF)	45,860	SF	$871,979	3
Facility Hydronic Distribution	Pump - 5HP	2	Ea.	$19,060	3
Decentralized Heating Equipment	Unit Heater Steam/HW (12 MBH)	10	Ea.	$23,882	4
Note:	Unit heater with fan and hot water				
Exhaust Air	Roof Exhaust Fan	16	Ea.	$83,266	5
Note:	For all areas				
Exhaust Air	Kitchen Exhaust Hoods	2	Ea.	$31,928	5
	Sub Total for System	**5**	**items**	**$1,030,114**	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	2,000	SF	$11,884	5
Note:	Large halogen gym light fixtures				
Lighting Fixtures	Building Mounted Fixtures (Ea.)	8	Ea.	$11,941	5
	Sub Total for System	**2**	**items**	**$23,824**	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Classroom Lavatories	7	Ea.	$19,033	3
Note:	In original building				
Plumbing Fixtures	Refrigerated Drinking Fountain	1	Ea.	$7,377	4
Plumbing Fixtures	Restroom Lavatories	7	Ea.	$22,267	4
Plumbing Fixtures	Toilets	24	Ea.	$68,450	4
Plumbing Fixtures	Urinals	8	Ea.	$10,633	4
	Sub Total for System	**5**	**items**	**$127,760**	

Fire and Life Safety

Uniformat Description	LC Type Description		Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm		45,000	SF	$131,895	4
		Sub Total for System	**1**	**items**	**$131,895**	
		Sub Total for Building 01 - Main Building	**21**	**items**	**$3,019,922**	
		Total for: Citizens Memorial School	**22**	**items**	**$3,032,740**	

Supporting Photos

Site Aerial

Original Building Mounted Lights

Original Radiant Heater

Boiler Room Panels


Gym Backboard


West Elevation


Lobby

Gym Panelboard


Front Elevation


Failing Chain Link Fence


Clouded Storefront Windows


Kitchen Hand Washing Sink


Typical Classroom


Damaged Radiant Heater


Exterior Windows


Damaged Ceramic Tile Wall


South Elevation


Restroom Fixtures And Finishes

Hot Water Boilers


Cracked VCT


Hallway/Corridor Lighting


East/Front


Original Radiant Heater


Heating Hot Water Pumps


Kitchen Panel


Chipped And Cracked 9X9 Tile


Plaque


Art/Music Classroom


Damaged Wood Panel Walls


Old Wing Classroom Lighting


Andover Controls System


Urinals


Cracked Asphalt


Original Unit Heater


Original Water Cooler


Kitchen Unit Heater


Cafetorium


Building Mounted Light


Damaged Brick Wall


Aged Panelboard


Broken Drinking Fountain


Main Entrance

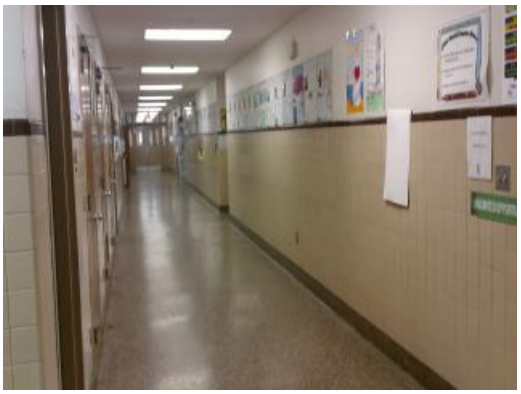

Water Damaged Soffit


Separating VCT Flooring


Missing Ceramic Tiles


Kitchen Hood

Library


Original Corridor


Exhaust Diffuser


Paved Play Area


Original Sink


Leaking Roof Drain


Original Classroom Lavatory


Cracked Terrazzo


Typical Classroom

Plaque


Gym


Unit Heater


Worn Play Area Asphalt


Supply Diffuser


East/Front


Worn Gym Floor


Original Unit Heater

Interior Wood Door

Discolored and Falling Adhered Ceiling Tiles