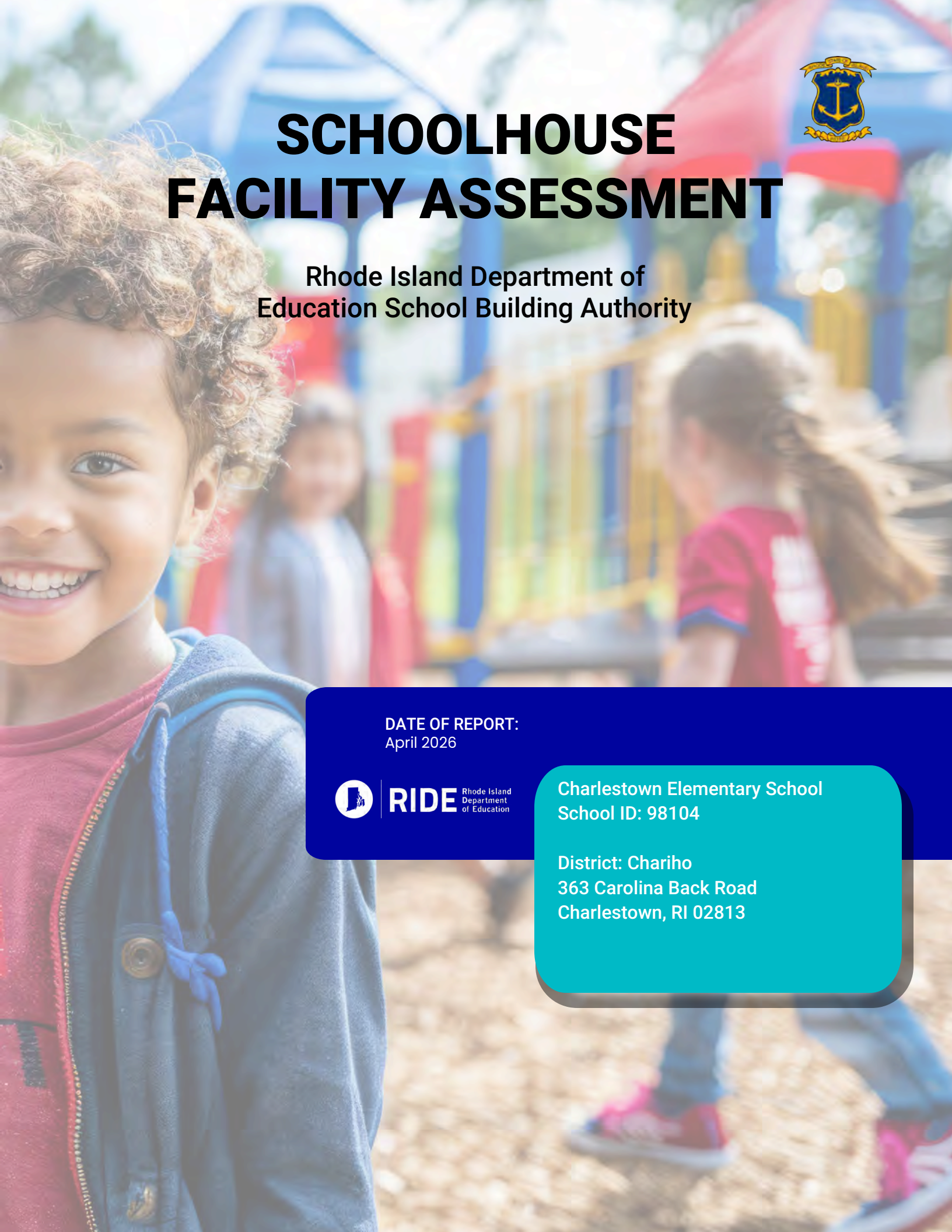


SCHOOLHOUSE FACILITY ASSESSMENT

Rhode Island Department of Education School Building Authority

DATE OF REPORT:
April 2026

RIDE Rhode Island Department of Education

Charlestown Elementary School
School ID: 98104

District: Chariho
363 Carolina Back Road
Charlestown, RI 02813



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2. FACILITY FACT SHEET

Charlestown Elementary School located at 363 Carolina Back Road Charlestown, RI 02813, was assessed in 2024 and the information contained within this report represents recommendations and cost projections for replacement. The table below contains the evaluated information particular to Charlestown Elementary School.



FACILITY CONDITION INDEX (FCI)

92%

FCI is a measure of aged systems in a building relative to the overall building value; a lower score indicates better condition. See section 7.1.2 for an explanation of condition as indicated by FCI.

GENERAL INFORMATION	
Local Education Agency (LEA) or District	**Chariho**
Facility	**Charlestown Elementary School**
Green Ribbon Facility	Green Ribbon
Year Built	1954
Size	54,235 SF
Grade Configuration	Elementary School
Capacity	
LEA Reported	443
Functional	241
Aspirational	301
October 2024 Enrollment	246
October 2024 LEA Utilization	56%
2017 5-Year Need	$6,181,959
2017 5-Year Need, adjusted to 2024 dollars*	$8,920,566
2025 5-Year Need	$21,837,700
Replacement Value	$23,754,930

* To enable comparison of costs identified in the current assessment with those stated in the 2017 Jacobs report, BV used an inflationary multiplier of 144.3%, based on the Producer Price Index (Published by U.S. Bureau of Labor Statistics).

3. APPROACH AND METHODOLOGY

3.1 Introduction

The Facility Condition Assessment methodology integrates life cycle analysis with the identification of current deficiencies to provide a comprehensive evaluation of building needs. This approach builds upon the prior assessments by incorporating both observed conditions and long-term capital planning considerations. Facility needs are identified through two primary components: current deficiencies and a life cycle forecast. Current deficiencies include systems or components that are broken, obsolete, non-compliant, or beyond their useful life and require repair or replacement. These are identified through site observations and assigned priorities based on condition and impact.

The life cycle forecast evaluates building systems using Expected Useful Life (EUL) benchmarks from industry sources. Remaining Useful Life (RUL) is determined by comparing a system's effective age to its EUL, accounting for factors such as maintenance, usage, environmental conditions, and installation quality. Where historical data is limited, estimates or details are unavailable, budgetary costs are developed using industry benchmarks, including square footage-based estimates, and include design, procurement, construction, and project management.



3.1.1 GREEN RIBBON SCHOOLS

Green Ribbon Schools was a federal US Department of Education program that recognized honors schools, districts and postsecondary institutions that save energy, reduce costs, incorporated environmentally sustainable learning feature environmentally sustainable learning spaces, protected health, fostered wellness, and offered environmental education to boost academic achievement and community engagement.

While the Green Ribbon program was not renewed by the federal government after 2025, its essential goals and concepts remain an important focus of school construction in Rhode Island. Recognizing the importance of this framework, Rhode Island has brought this recognition to the state level through the Rhode Island Green Ribbon Schools award to continue celebrating and advancing these principles.



PILLAR I : REDUCE ENVIRONMENTAL IMPACT

Focus on reducing greenhouse gases, improving water efficiency and quality, minimizing waste, and promoting alternative transportation.

PILLAR II: ENHANCE HEALTH

Implement a school health program that covers pest management, contaminant control, ventilation, nutrition, fitness, and outdoor activities.

PILLAR III: STRENGTHEN ENVIRONMENTAL EDUCATION

Develop environmental education to boost student engagement and achievement, especially in STEM, through integrated, real-world learning experiences.

Rhode Island had been at the forefront of the green school movement and the environmental education (EE) movement; in 2007, Rhode Island's school construction regulations set high standards for energy efficiency and resource-friendly construction. Additionally, in both EE and school construction, successful partnerships have been forged between the Rhode Island Department of Education (RIDE), the Rhode Island Department of Environmental Management, educators, nonprofit organizations, the building and construction industries, food-service industries, and federal agencies such as the US Department of Education and the Environmental Protection Agency. With this support, every Rhode Island school has the potential to serve as an example of sustainability on the national stage.

Rhode Island is the top state in the Nation for Green Ribbon - awarded Schools per 1,000 schools. RIDE school construction bonds, and the Article 9 provisions made many of these projects possible.

Historically each year, more Rhode Island schools earned the Green Ribbon School award from the U.S. Department of Education. Since 2012, Rhode Island has had twenty-three (23) winners. In addition, the Rhode Island Department of Education School Building Authority (SBA) received the ED-GRS Director's Award in 2021.

Rhode Island's commitment to sustainability is reaping rewards. Since 2007, the State has taken a two-fold approach to ensure PreK-12 students learn in schools that are safe, clean and (increasingly) environment-friendly: regulations that ensure uniformity and equity in school construction and compliance with Northeast Collaborative for High Performance Schools Protocol (NECHPS) requirements. **As a result, Rhode Island public schools built or renovated over the last 15 years, on average, use about 30% less energy and 20% less water than buildings designed to basic standards and have diverted at least 50% of construction waste from landfills.**

3.2 FACILITY SYSTEM EVALUATIONS

The assessment that BV completed for the school facilities at RIDE 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 and identified lifecycle projections based on age, observed condition, problems, and deficiencies. Conditions that warranted evaluation of a more in-depth investigation of hazardous material or conditions (lead paint, asbestos, mold, etc.) were identified and funds allotted for abatement. Each building system was identified by system name, classification, unit cost, estimated planning cost and quantity, The priority of the repair was determined in accordance with parameters defined during the planning phase.

Site Assessment: An evaluation of the facility site pertaining to the condition, educational opportunity, protection and safeguarding was conducted. These items included traffic flow, directional signage, parking, lighting/illumination, sport program opportunities, outdoor classrooms, and general site conditions.

Technology: Technology specialists visited RIDE facilities and met with school administrators to observe and assess each facility's technological infrastructure. The assessment included network architecture, major infrastructure components, classroom instructional systems, necessary building space and support for technology.

Hazardous Materials: Schools constructed prior to 1990 were assessed to identify the presence of hazardous materials. The team focused on identifying known or suspected asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). If sampling and analysis was required, these activities were recommended but not included in the scope of this assessment.

The technology assessment considered the desired technology outcome and best practices and processes to ensure results could be attained effectively.

Traffic: A traffic analysis 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 the findings, deficiencies and corrective actions were identified and problem areas were flagged for a more detailed site-specific study and analysis in the future.

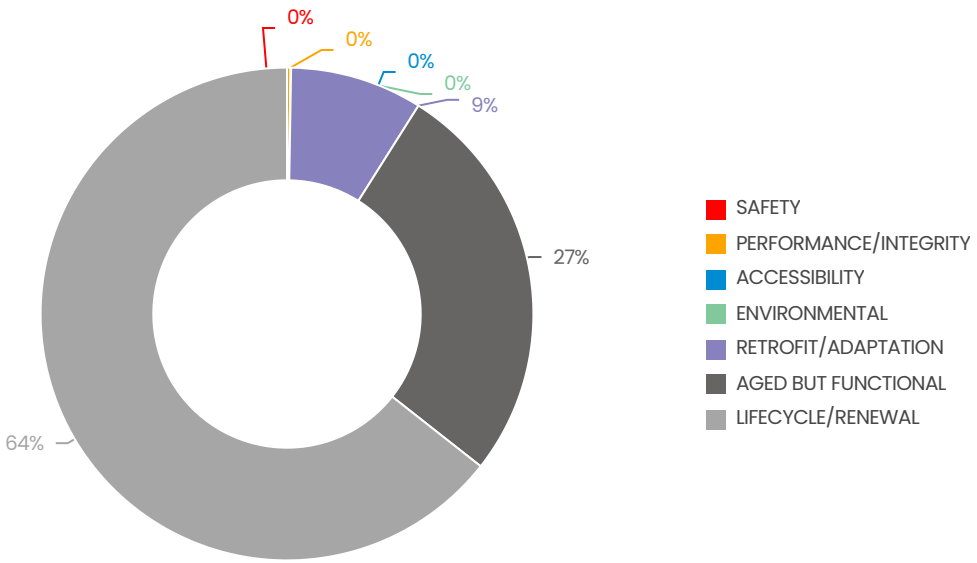
Acoustics: Specialists assessed each school's acoustic performance, including architectural acoustics, mechanical system noise and vibration, and environmental noise. The assessment team evaluated room acoustics with particular attention to the intelligibility of speech in learning spaces, interior and exterior sound isolation, and mechanical system noise and vibration control.

PLAN TYPES

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance and highest priority on the list below.

PLAN TYPE DESCRIPTION & DISTRIBUTION	
SAFETY	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents a potential liability risk
PERFORMANCE/INTEGRITY	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system
ACCESSIBILITY	Does not meet ADA, UFAS, and/or other accessibility requirements
ENVIRONMENTAL	Improvements to air or water quality, including removal of hazardous materials from the building or site
RETROFIT/ADAPTATION	Components, systems, or spaces recommended for upgrades in order to meet current standards, facility usage, or client/occupant
AGED BUT FUNCTIONAL	Any component or system that has aged past its industry-average expected useful life (EUL) but is not currently deficient or problematic
LIFECYCLE/RENEWAL	Any component or system that is neither deficient nor aged past EUL but for which future replacement or repair is anticipated and budgeted

Plan Type	5-Year Total*
SAFETY	$0
PERFORMANCE/INTEGRITY	$50,400
ACCESSIBILITY	$0
ENVIRONMENTAL	$8,125
RETROFIT/ADAPTATION	$1,898,225
AGED BUT FUNCTIONAL	$5,818,125
LIFECYCLE/RENEWAL	$14,062,817



5-Year Total* : $21,837,700

* The values shown on this page are only inclusive of building system costs.

3.3 CONDITION RATINGS

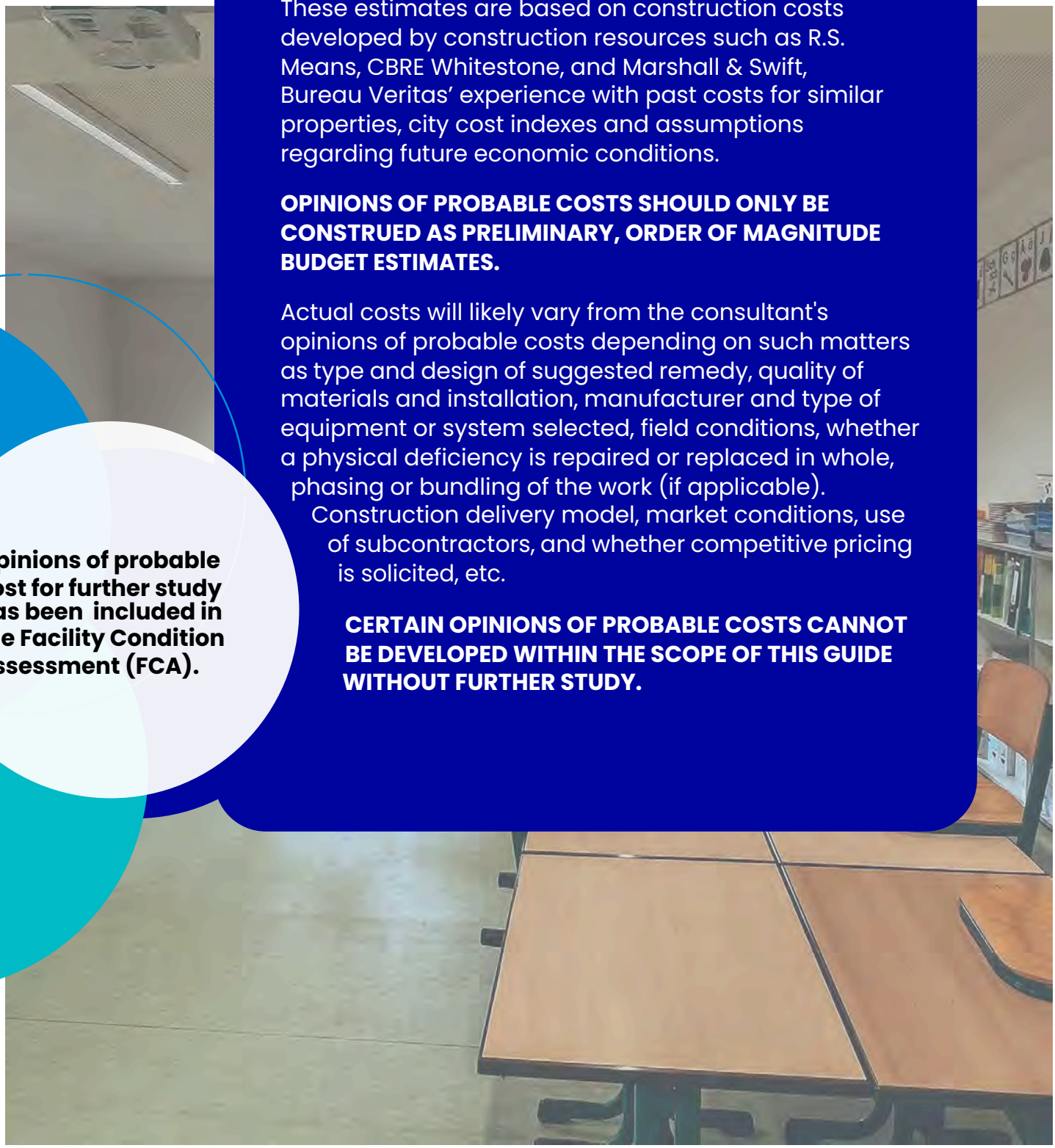
BV was retained by RIDE SBA to provide a 'snapshot' in time of the facility's condition and render an opinion as to the property's current general physical condition on the day of the site visit. Based on the observations, interviews, and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which may affect the property's use. Opinions are rendered as to its structural integrity, building system condition and the property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are categorized into one of five condition ratings. Note that these ratings apply to individual systems, and not the building as a whole. For the purpose of this report, the following definitions are used:

SYSTEM CONDITION RATINGS	
EXCELLENT	**New or recent construction.** Component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
GOOD	**Satisfactory / As-Is.** Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs or normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
AVERAGE	**Showing signs of wear and use but still Satisfactory / As-Is.** Typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
BELOW AVERAGE	**Components or systems are significantly aged, flawed, functioning intermittently or unreliably** displays obvious signs of deferred maintenance and shows evidence of previous repair or workmanship not in compliance with commonly accepted standards has become obsolete; or exhibits inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
REPLACE	**Components or systems have ceased functioning or performing as intended.** Replacement, repair, or other significant corrective action is recommended or required.
NOT APPLICABLE	**Assigning a condition does not apply or make logical sense,** most commonly due to the item in question not being present.

3.4 OPINIONS OF PROBABLE COST

Cost estimates are attached throughout this report, including the Replacement Reserves in the Appendix.



These estimates are based on construction costs developed by construction resources such as R.S. Means, CBRE Whitestone, and Marshall & Swift, Bureau Veritas' experience with past costs for similar properties, city cost indexes and assumptions regarding future economic conditions.

OPINIONS OF PROBABLE COSTS SHOULD ONLY BE CONSTRUED AS PRELIMINARY, ORDER OF MAGNITUDE BUDGET ESTIMATES.

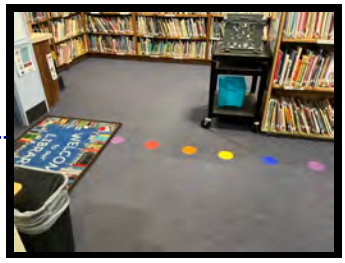
Actual costs will likely vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable). Construction delivery model, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc.

CERTAIN OPINIONS OF PROBABLE COSTS CANNOT BE DEVELOPED WITHIN THE SCOPE OF THIS GUIDE WITHOUT FURTHER STUDY.

Opinions of probable cost for further study has been included in the Facility Condition Assessment (FCA).

4. BUILDING ASSESSMENT SUMMARY





4.1 Building Summary

The Building Assessment Summary is a breakdown of key building systems, identifying general configurations of the systems and their current observed condition.

Building Summary for Charlestown Elementary School

SYSTEM	DESCRIPTION	CONDITION
STRUCTURE	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete strip/wall footing foundation system	Average
FACADE	Primary Wall Finish: Brick Windows: Aluminum	Average
ROOF	Primary: Flat construction with built-up finish	Average
INTERIORS	Walls: Painted gypsum board, painted CMU Floors: Carpet, VCT, ceramic tile, coated concrete Ceilings: Painted gypsum board, ACT, exposed structure	Below Average
ELEVATORS	None	Not Applicable
PLUMBING	Distribution: Copper supply and cast iron and PVC waste & venting Hot Water: Oil-fired water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Below Average
HVAC	Central System: Boilers and air handlers feeding unit ventilators Non-Central System: Packaged units Supplemental components: Window A/C units	Average
FIRE SUPPRESSION	Fire extinguishers only	Average
ELECTRICAL	Source & Distribution: Main switchboard panel with copper wiring Interior Lighting: LED, linear fluorescent Emergency Power: Natural gas generator	Average

Building Components Summary

SYSTEM	DESCRIPTION	CONDITION
FIRE ALARM	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Average
EQUIPMENT/SPECIAL	Commerical Kitchen Equipment	Average
SITE PAVEMENT	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, and ramp	Average
SITE DEVELOPMENT	Building-mounted, Property entrance signage Playgrounds and sports fields and courts with partial fencing, and site lighting Limited Park benches, picnic tables, trash receptacles	Average
LANDSCAPING & TOPOGRAPHY	Limited landscaping features including lawns, trees, bushes, and planters Irrigation not present Brick retaining walls Low to moderate site slopes throughout	Average
UTILITIES	Municipal water and sewer Local utility-provided electric with fuel oil tanks	Average
SITE LIGHTING	Pole-mounted: LED Building-mounted: LED Pedestrian walkway and landscape accent lighting	Average
ANCILLARY STRUCTURES	Garages, storage sheds, gazebo	Average

Ancillary Information

ADDITIONAL STUDIES	No additional studies are currently recommended for the building.
AREAS OBSERVED	Most of the interior spaces were observed to gain a clear understanding of the facility's overall condition. Other areas accessed and assessed included the exterior equipment and assets directly serving the buildings, the exterior walls of the facility, and the roof.
KEY SPACES NOT OBSERVED	All key areas of the facility were accessible and observed.

4.2 SITE

BV conducted an evaluation for existence and condition of the general site features supporting safeguarding, protection and educational opportunities. **The facilities team observed and recorded data on traffic flow, parking and signage with a specific focus on student, staff and parent safety.** Specific security measures including fencing, lighting, locking gates and camera systems were evaluated. The team addressed playgrounds, athletic fields, and other recreational spaces on the site.



5. CAPACITY, ENROLLMENT AND UTILIZATION

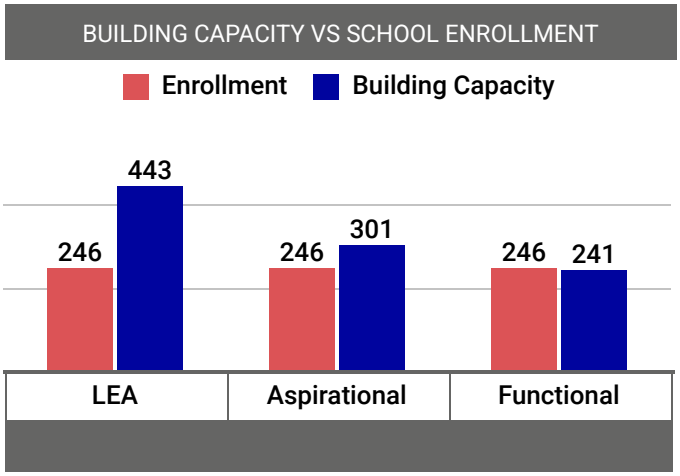
The **Approximate School Grade Level Enrollment Projection** was developed beginning with October 2023-2024 RIDE reported enrollment data and then factored by the percentage of increase or decrease established at the Districtwide Grade Level Enrollment Projection. The capacity of a school reflects how many students the school's physical facility can effectively serve. There are multiple methodologies that exist to calculate capacity.

OUR STUDY REVIEWED THREE CAPACITIES:

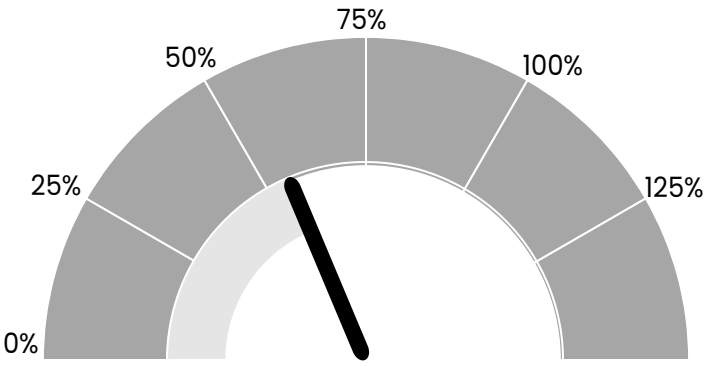
LEA Reported Capacity: The LEA reported capacities are self-reported and were compiled from the LEA annual asset protection submission to RIDE.

Aspirational Capacity: The aspirational capacity is calculated based on building size and the gross square feet per student identified in the RI School Construction Regulations

Functional Capacity: An approach to calculating capacity as an inventory of all instructional spaces and their current use.
This information was collected as part of the educational program space assessment.



Building capacity informs decisions about enrollment and facility upgrades and can be used to prevent overcrowding or underutilization. It allows for the strategic allocation of resources and supports long-term planning.



56%

LEA Utilization for Charlestown Elementary School - Moderate

The school uses its spaces well, with most areas occupied throughout the day. However, some spaces occasionally remain unoccupied, suggesting room for improvement in scheduling. Overall, utilization is moderate, indicating effective resource balancing, but a more strategic approach could optimize space usage.

Facility utilization involves comparing the school's enrollment with its design capacity. It is a measure of how effective the school's physical resources are being employed to meet the educational needs of its students.

High utilization, ranging from 100% to over 125%, indicates that the school is leveraging its facilities to their fullest extent, with classrooms, common areas, and specialized spaces consistently in use.

Low utilization (under 75%) indicates excess space not effectively used, with classrooms and common areas often vacant or partially occupied. This inefficiency may offer future growth potential but suggests a misalignment between facility capacity and current needs. Addressing this can involve reconfiguring or repurposing spaces to better support the school's objectives, enhancing the learning environment.

6. SYSTEM SUMMARIES & EVALUATIONS

6.1 FACILITY SYSTEM EXPENDITURE FORECAST

The table below shows the anticipated costs by trade or building system over the next 5 years. The system summary shows various breakdowns of costs by system, time frame and priority, allowing dissemination of condition and needs at specific granular levels.

System Expenditure Forecast for Charlestown Elementary School

SYSTEM	IMMEDIATE	SHORT TERM 1-2 YEARS	NEAR TERM 3-5 YEARS	TOTAL
STRUCTURE	-	-	-	-
FACADE	-	-	$1,166,200	$1,166,200
ROOFING	-	-	$3,002,400	$3,002,400
INTERIORS	$50,400	-	$7,043,400	$7,093,800
CONVEYING	-	-	-	-
PLUMBING	-	-	-	-
HVAC	-	$178,200	$2,010,300	$2,188,500
FIRE PROTECTION	-	-	$1,898,200	$1,898,200
ELECTRICAL	-	-	$3,807,800	$3,807,800
FIRE ALARM & ELECTRONIC SYSTEMS	-	-	$705,100	$705,100
EQUIPMENT & FURNISHINGS	-	-	$968,100	$968,100
EQUIPMENT / SPECIAL	-	-	-	-
SITE PAVEMENT	-	-	$456,000	$456,000
SITE DEVELOPMENT	-	-	$543,500	$543,500
ADDITIONAL STUDIES	$8,100	-	-	$8,100
ACCESSIBILITY	-	-	-	-
TOTAL*	$58,500	$178,200	$21,601,000	$21,837,700

*Totals have been rounded to the nearest $100.

BV utilizes a priority scoring algorithm to assign priorities to the findings identified in this report.

In the 2017 Jacobs study, a priority system was utilized that addressed Mission Critical Concerns, Impact to Educational Mission, Short and Long Term Concerns, and Enhancements. In that survey, a set of priorities were being used that correlate with the statutory priorities identified in Title 16, Chapter 105 of the R.I. Gen. Laws.

The SBA has determined that the following priorities will be used in categorizing and summarizing project costs identified in the Schoolhouse Facility Assessment.

DEFICIENCIES HAVE BEEN GROUPED ACCORDING TO THE OBSERVED CATEGORY. *See chart below.*

Capital Renewal items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts.

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.

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

PRIORITY 1:
PROJECTS TO REPLACE OR RENOVATE A BUILDING, OR MAJOR COMPONENTS OF A BUILDING

PRIORITY 2:
PROJECTS RESULTING FROM CONDITIONS OF A PHYSICAL NATURE

PRIORITY 3:
PROJECTS NEEDED FOR THE REPLACEMENT, RENOVATION, OR MODERNIZATION OF THE HVAC OR OTHER SIGNIFICANT SYSTEMS

PRIORITY 4:
PROJECTS NEEDED TO REPLACE OR ADD TO OBSOLETE OR INADEQUATE BUILDINGS

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, oil, and hazardous materials (OHMs) exposure. Within other scopes of work there may be other costs associated with mitigation of hazardous materials.

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

Learning Environment components include physical and learning accessibility, technology integration, classroom and specialized learning areas, support facilities, and environmental qualities. These focus on the physical aspects of the facility and how these contribute to an inclusive, supportive and effective learning environment.

Protection and Safety components include physical security measures, emergency provisions, environmental safety and how these contribute to the overall safety and security of the occupants.

PROJECTED PRIORITY LEVEL TABLE

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best fit", typically the one with the greatest significance and highest on the list below.

PRIORITY	1	2	3	4	TOTAL
Facility System Expenditure Forecast					
Facility Capital Renewal	$50,400	$15,961,000	$8,100	$5,818,100	$21,837,700
Future Learning Environment and Security Forecasted Cost					
Code Regulation Compliance	-	-	-	-	-
Educational Adequacy	-	-	-	-	-
Hazardous Material	-	-	-	-	-
Parking, Traffic, and Site	-	-	-	-	-
Learning Environment	-	-	-	-	-
Protection and Safety	-	-	-	-	-
Total	$50,400	$15,961,000	$8,100	$5,818,100	$21,837,700



6.2 FACILITY CONDITION INDEX (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. **The FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility.**

THIS CHART PRESENTS THE INDUSTRY STANDARD RANGES AND CUT-OFF POINTS.

FCI RANGES & DESCRIPTION	
Best	Less than 5% FCI
Good	6% to 10% FCI
Average	11% to 20% FCI
Below Average	21% to 30% FCI
Poor	31% to 50% FCI
Very Poor	51% to 65% FCI
Replacement Candidate	Greater than 65% FCI



The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCIs have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such, the 3-year and 5-year FCIs are calculated by dividing the anticipated needs of those respective time periods by current replacement value.

5 Year FCI Analysis for Charlestown Elementary School

Replacement Value $23,754,930		Total Square Footage 54,235			Cost/SF $438
Report Source	**Report Year**	**Total Repair Cost (5 year)**	**Replacement Value**	**FCI**	**FCI Description**
Jacobs Report	2017	$6,182,000	$18,982,250	33%	Poor
Bureau Veritas	2025	$21,837,700	$23,754,930	92%	Replacement Candidate
			DETERIORATION	59%	

7. CERTIFICATION

Rhode Island Department of Education (RIDE) (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Charlestown Elementary School, 363 Carolina Back Road, Charlestown, RI 02813, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the Purpose and Scope section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walkthrough observations were performed, not all areas may have been observed. There may be defects in the Property which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the Client and Bureau Veritas.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by another person or entity for any purpose without the advance written consent of Bureau Veritas. Any reuse or distribution without such consent shall be at the client's or recipient's sole risk without liability to Bureau Veritas.

Prepared by: Bureau Veritas

Reviewed by: _____

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Program Manager
800.733.0660 x7540
Thomas.Bart@BureauVeritas.com

9. APPENDICES

Appendix A: Photographic Record
Appendix B: Replacement Reserves
Appendix C: Definitions

APPENDIX A:
Photographic Record

Photographic Overview



1 - FRONT ELEVATION



2 - RIGHT ELEVATION



3 - LEFT ELEVATION



4 - REAR ELEVATION



5 - * CHARLESTOWN ELEMENTARY SCHOOL (PHOTOI



6 - BUILDING FACADE

Photographic Overview



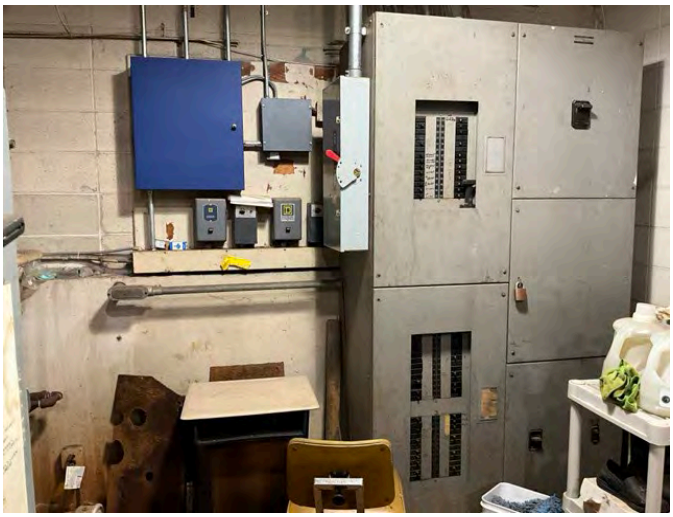
7 - PRIMARY ROOF



8 - STRUCTURAL ELEMENT



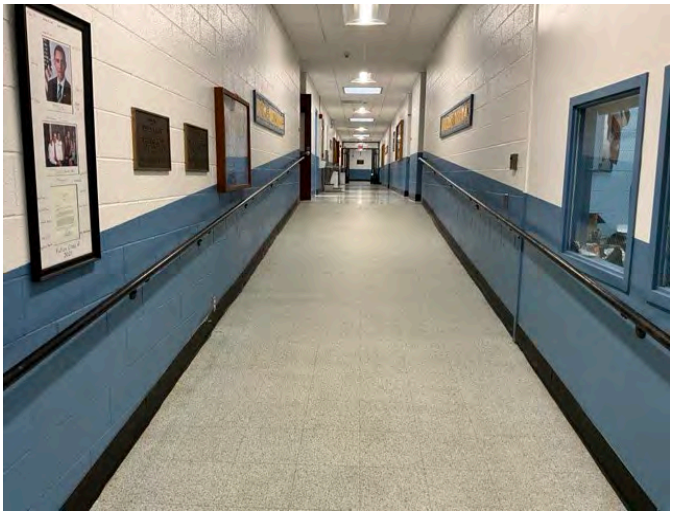
9 - MAIN ELECTRICAL ROOM



10 - SECONDARY ELECTRICAL ROOM

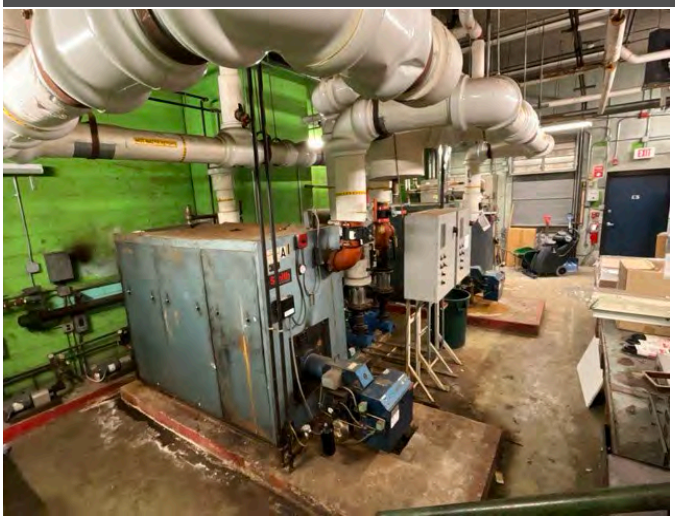


11 - CAFETERIA



12 - CORRIDOR

Photographic Overview



13 - MECHANICAL ROOM



14 - RESTROOM



15 - ART CLASSROOM



16 - TYPICAL CLASSROOM

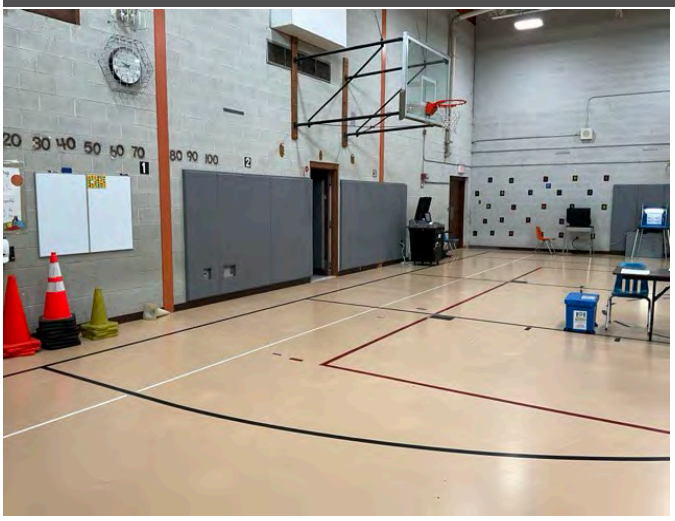


17 - MUSIC ROOM



18 - FRONT OFFICE

Photographic Overview



19 - GYMNASIUM



20 - NURSE ROOM



21 - LIBRARY



22 - PLAYGROUND



23 - MAIN PARKING AREA



24 - FIRE ALARM PANNEL

APPENDIX B:
Replacement Reserves

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Replacement Reserves

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit Cost	Deficienecy Repair Estimate	2025 - 2026	2027	2028	2029	2030
		TOTAL UNESCALATED Charlestown Elementary School						$21,837,692	$58,525	$178,190		$6,019,080	$15,581,897
B2020	8160028	Skin | Window, Metal-Frame	30	26	4	2,640	$216	$570,240					$570,240
B2050	8160030	Skin | Exterior Door, Aluminum-Framed Fully-Glazed	40	36	4	16	$10,840	$173,440					$173,440
B2050	8160032	Skin | Exterior Door, Steel	40	36	4	19	$22,238	$422,522					$422,522
B3010	8160039	Roofs | Built-Up Roof	20	17	3	54,235	$55	$2,980,755				$2,980,755	
B3010	8160044	Roofs | Roof Skylight	30	27	3	182	$119	$21,612				$21,612	
C1010	8160022	Interior Construction | Concrete Block (CMU) Interior Wall	50	46	4	73,685	$62	$4,592,049					$4,592,049
C1030	8160036	Interior Doors and Hardware | Steel w/Glazing - Interior Door	40	36	4	12	$6,875	$82,500					$82,500
C1030	8160053	Interior Doors and Hardware | Wood Solid-Core - Interior Door	40	36	4	21	$5,000	$105,000					$105,000
C1070	8160050	Suspended Ceilings | Hard Tile, ACM Abatement & Replacement w/ ACT | Replace	25	25	0	1,800	$28	$50,400	$50,400				
C2010	8966562		10	7	3	86,776	$4	$326,277				$326,277	
C2030	8160023	Flooring | Vinyl Composition Tile (VCT) Floor	20	16	4	39,709	$16	$635,344					$635,344
C2030	8160040	Flooring | Vinyl Sheeting Floor	15	11	4	4,800	$23	$110,400					$110,400
C2030	8160051	Flooring | Concrete - Painted Floor	10	6	4	1,100	$18	$19,612					$19,612
C2030	8160054	Flooring | Ceramic Tile Floor	40	36	4	5,820	$135	$783,313					$783,313
C2030	8160057	Flooring | Carpet	12	8	4	2,806	$27	$74,527					$74,527
C2050	8160021	Ceilings | Fiberglass Panel Ceiling	25	22	3	4,800	$50	$240,000				$240,000	
C2050	8160027	Ceilings | Gypsum Board/Plaster Ceiling	30	26	4	2,545	$29	$74,339					$74,339
D3020	8160045	HVAC | Boiler(s)/System - Fuel Oil	30	27	3	6,344	$317	$2,010,286				$2,010,286	
D3050	8160037	HVAC | Package Units (RTUs)	20	19	1	5	$35,638	$178,190		$178,190			
D3050	8160048	HVAC | Piped System - Unit Ventilators/Fan Coils, 2-Pipe	30	25	5	52,235	$49	None					
D4010	8160033		40	36	4	54,235	$35	$1,898,225					$1,898,225
D5020	8160035	Electrical Distribution | Switchgear w/Sub Panels/Gen/UPS - High Density	40	36	4	54,235	$70	$3,807,839					$3,807,839
D5020	8160042	Electrical Distribution | Electrical Service - MDP - Standard Density	40	35	5	54,235	$88	None					

APPENDIX B:
Replacement Reserves

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit Cost	Deficienecy Repair Estimate	2025 - 2026	2027	2028	2029	2030
D7030	8160029	Electrical Distribution | Security & Low Voltage Systems - High Density	15	10	5	54,235	$28	None					
D7050	8160020	Life Safety | Fire Alarm System, Standard Addressable	20	16	4	54,235	$13	$705,055					$705,055
E1030	8160046	Program Support Equipment | Commercial Kitchen Equipment - Cooking	15	11	4	1	$964,653	$964,653					$964,653
E2010	8660533		20	16	4	1	$3,465	$3,464					$3,464
G2020	8160031	Site | Asphalt Pavement - Vehicular	25	22	3	37,400	$10	$383,350				$383,350	
G2030	8160026	Site | Asphalt Pavement - Pedestrian	30	26	4	3,750	$19	$72,675					$72,675
G2050	8160041	Site | Athletic Surface - Lawn Area	15	11	4	77,500	$6	$486,700					$486,700
G2050	8160055	Site | Playground Surface - Wood Chips	15	12	3	7,100	$8	$56,800				$56,800	
P2030	8660115		100	0	0	1	$8,125	$8,125	$8,125				

APPENDIX C:
Defintions

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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.

AGED BUT FUNCTIONAL
A system that is aged near or beyond its designed expected useful life but has been well-maintained or refurbished such that it has some remaining useful life.

CAPACITY
The capacity of a school reflects how many students the school's physical facility can effectively serve. There are multiple methodologies that exist to calculate capacity. Our study reviewed three:

1. **LEA Reported Capacity** - LEA reported capacities were compiled from the LEA annual asset protection submission to RIDE.
2. **Aspirational Capacity** - Capacity calculated based on building size and designed to conform to the RI School Construction Regulations, which outline the allowed gross square feet per student at each school type.
3. **Functional Capacity** - An approach based on an inventory of all instructional spaces and their current use. This information was collected as part of the educational program space assessment.

COMBINED FIVE-YEAR NEED
Combines the current educational program space deficiencies and condition repair costs with the five-year life cycle renewal forecast to indicate total statewide need. These figures exclude any expansion for classroom additions or new construction for additional enrollment growth.

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. 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 in 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.

DEFICIENCY COST
Costs associated with bringing current systems and components back to a functional state as installed do not account for additional funds required to adapt facilities to current design standards.

EDUCATIONAL PROGRAM SPACE ASSESSMENT
Each space is evaluated to a standards-based approach that identifies the degree to which a school facility can adequately support the instructional mission and methods, based on the RI School Construction Regulations.

FACILITY CONDITION INDEX
General indicator of a building's health derived by dividing the total repair cost for a facility (including site and educational program space needs) by the total replacement cost for the facility. A facility with a higher FCI percentage has more need than one with a lower FCI.

FIVE YEAR FACILITY CONDITION INDEX
For planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined to provide an understanding of current needs of a facility as well as the projected needs in the near future. This is calculated by dividing the combined five-year need by the total replacement cost. Costs associated with new construction are not included in this calculation.

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 the work.

IMMEDIATE NEEDS
Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost. For database and reporting purposes the line items with Remaining Useful Life (RUL)=0, and commonly associated with Safety or Performance/Integrity Plan Types, are considered Immediate Needs.

KEY FINDINGS
A subsection of Key Findings is included within the Executive Summary section of this report in an effort to highlight the most significant cost items found in the extensive Replacement Reserves report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

LIFE CYCLE
A system's life cycle predicts future facility costs based on the expected remaining life of individual building systems. While a particular building component may not require immediate replacement, it is quite possible for it to reach its end of useful life before or during the commencement of a planned capital construction project. This results in additional costs, which must be accounted for in the planning process.

REPLACEMENT RESERVES
Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The Replacement Reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered. Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning systems or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as **Immediate Needs.**

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Immediate, Short Term (years 1-2), and Near Term (years 3-5).

SITE
An evaluation of the facility site pertaining systems condition, educational opportunity and protection and safeguarding were evaluated. These items included traffic flow, directional signage, parking, lighting/ illumination, sport program opportunities, outdoor classrooms and general site conditions.

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.

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 considered the desired technology outcome and best practices and processes to ensure results can be attained effectively.

UTILIZATION
Facility utilization is determined by dividing the current enrollment by the calculated LEA reported capacity of a facility so that governing bodies can identify locations where severe under or over utilization exists.



We must thank the LEAs, Superintendents, Facility Directors, Principals, and all the staff for their assistance throughout the process. The information each LEA and its staff provided was extremely valuable in conducting the Study. Without access to the buildings and the cooperation of all involved this study would not have been possible.

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PROJECT TEAM
Bureau Veritas
Studio Jaed

Shaping a World of Trust

Bureau Veritas is a Business to Business to Society company, contributing to transforming the world we live in. A world leader in testing, inspection, certification, we help clients across all industries address challenges in quality, health & safety, environmental protection and social responsibility.

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