



Facility Condition Assessment

Coventry - Coventry High School

June 2017

40 Reservoir Road, Coventry, RI 02816





Introduction

Coventry High School, located at 40 Reservoir Road in Coventry, Rhode Island, was built in 1975. It comprises 298,890 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.

Coventry High School serves grades 9 - 12, has 111 instructional spaces, and has an enrollment of 1,505. Instructional spaces are defined as rooms in which a student receives education. The LEA reported capacity for Coventry High School is 2,032 with a resulting utilization of 74%.

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 Coventry High School the 5-year need is \$22,320,807. 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 Coventry High School



Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

Current Deficiencies: Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

Life Cycle Forecast: Life cycle analysis evaluates ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

Discipline Specialists

All assessment teams produced current deficiencies associated with each school. The assessment for the school facilities at the Rhode Island Department of Education included several specialties:

Facility Condition Assessment: Architectural, mechanical, and electrical engineering professionals observed conditions via a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, the assessment incorporated input provided by district facilities and maintenance staff where applicable. The assessment team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified the priority of the repair in accordance with parameters defined during the planning phase. The team took digital photos at each school to better identify significant deficiencies.

Technology: Technology specialists visited RIDE facilities and met with technology directors to observe and assess each facility's technology infrastructure. The assessment included network architecture, major infrastructure components, classroom instructional systems, necessary building space and support for technology. The technology assessment took into account the desired technology outcome and best practices and processes to ensure results can be attained effectively.

Hazardous Materials: Schools constructed prior to 1990 were assessed by specialists to identify the presence of hazardous materials. The team focused on identifying asbestos containing building materials (ACBMs), lead-based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. If sampling and analysis was required, these activities were recommended but not included in the scope of work.

Traffic: A traffic specialist performed an in-office review of aerial imagery of the traffic infrastructure around the facilities in accordance with section 1.05-7 in the Rhode Island School Construction Regulations and reviewed data collected on site during the facility condition assessment. Based on this information, deficiencies and corrective actions were identified. High problem areas were identified for consideration of more detailed site-specific study and analysis in the future.

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

Educational Program Space Assessment: Teams evaluated schools to ensure that that all spaces adequately support the districts educational program. Standards are established for each classroom type or instructional space. Each space is evaluated to determine if it meets those standards and a listing of alterations that should be made to make the space a better environment for teaching and learning was created.



System Summaries

The following tables summarize major building systems at the Coventry High School campus, identified by discipline and building.

Site

The site level systems for this campus include:

Site	Asphalt Parking Lot Pavement
	Asphalt Roadway Pavement
	Concrete Pedestrian Pavement

Building Envelope

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

01 - Main Building:	Brick Exterior Wall
	Clear Polycarbonate Exterior Wall
	E.I.F.S. Exterior Wall
	Metal Panel Exterior Wall
	Pre-cast Concrete Panel Exterior Wall
	Wood Siding Exterior Wall
	Steel Exterior Windows
	Vinyl on Wood Frame Exterior Windows
	Wood Exterior Doors
	Steel Exterior Entrance Doors
	Overhead Exterior Utility Doors
02 - Concession / RR - Under Construction:	Vinyl Siding Exterior Wall
	Vinyl on Wood Frame Exterior Windows
	Steel Exterior Entrance Doors
03 - Press Box:	Wood Siding Exterior Wall
	Steel Exterior Entrance Doors
04 - Maintenance/Equipment Storage:	Painted Exterior Wall
	Wood Siding Exterior Wall
	Steel Exterior Entrance Doors
	Overhead Exterior Utility Doors

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

01 - Main Building:	Clear Polycarbonate Roofing
	Composition Shingle Roofing
	Modified Bitumen Roofing
	Single Ply Roofing
02 - Concession / RR - Under Construction:	Composition Shingle Roofing
03 - Press Box:	Composition Shingle Roofing
04 - Maintenance/Equipment Storage:	Composition Shingle Roofing



Interior

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

01 - Main Building:	Steel Interior Doors
	Aluminum/Glass Storefront Interior Doors
	Wood Interior Doors
	Overhead Interior Coiling Doors
	Interior Door Hardware
	Exposed Metal Structure Ceiling
	Suspended Acoustical Grid System
	Suspended Acoustical Ceiling Tile
	Painted Ceilings
	Ceramic Tile Wall
	Acoustical Wall Paneling
	Metal Wall Paneling
	Wood Wall Paneling
	Vinyl/Fabric Wall Covering
	Brick/Stone Veneer
	Interior Wall Painting
	Concrete Flooring
	Quarry Tile Flooring
	Ceramic Tile Flooring
	Wood Flooring
	Vinyl Composition Tile Flooring
	Rubber Tile Flooring
	Epoxy Coated Flooring
	Carpet
	Athletic/Sport Flooring
02 - Concession / RR - Under Construction:	Wood Ceilings
	Interior Wall Painting
	Concrete Flooring
03 - Press Box:	Wood Ceilings
	Concrete Flooring
	Wood Flooring
04 - Maintenance/Equipment Storage:	Wood Ceilings
	Wood Wall Paneling
	Concrete Flooring

Mechanical

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

01 - Main Building:	7,500 MBH Copper Tube Boiler
	Steam/Hot Water Heating Unit Vent



01 - Main Building:	Gas Fired Radiant Tube Heater
	Radiant Water Heater
	Electronic Heating System Controls
	300 Ton Metal Cooling Tower
	200 Ton Indoor Water Cooled Chiller
	3 Ton Computer Room A/C
	Window Units
	Make-up Air Unit
	5 HP Pump
	10 HP Pump
	2-Pipe Hot Water Hydronic Distribution System
	20,000 CFM Interior AHU
	Ductwork
	15 Ton DX Gas Roof Top Unit
	Kitchen Exhaust Hoods
	Roof Exhaust Fan
	Large Roof Exhaust Fan
	Small Roof Exhaust Fan
	Fire Sprinkler System

Plumbing

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

01 - Main Building:	250 Gallon Water Storage Tank
	4" Backflow Preventers
	Gas Piping System
	66 Gallon Electric Water Heater
	100 Gallon Gas Water Heater
02 - Concession / RR - Under Construction:	40 Gallon Electric Water Heater
01 - Main Building:	Domestic Water Piping System
02 - Concession / RR - Under Construction:	Domestic Water Piping System
01 - Main Building:	Classroom Lavatories
	Lavatories
	Mop/Service Sinks
	Refrigerated Drinking Fountain
	Restroom Lavatories
	Showers
	Toilets
	Urinals
02 - Concession / RR - Under Construction:	Lavatories
	Restroom Lavatories
	Toilets
	Urinals



01 - Main Building:	Air Compressor (10 hp)
	Air Compressor (5 hp)

Electrical

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

01 - Main Building:	150 kW Emergency Generator
	Automatic Transfer Switch
	1,200 Amp Switchgear
	2,000 Amp Switchgear
	112.5 KVA Transformer
	225 KVA Transformer
	30 KVA Transformer
	45 KVA Transformer
	75 KVA Transformer
	400 Amp Distribution Panel
	600 Amp Distribution Panel
	Panelboard - 120/208 100A
	Panelboard - 120/208 125A
	Panelboard - 120/208 225A
	Panelboard - 120/208 400A
	Panelboard - 277/480 100A
	Panelboard - 277/480 225A
	Panelboard - 277/480 400A
	Building Mounted Lighting Fixtures
	Canopy Mounted Lighting Fixtures
	Light Fixtures
02 - Concession / RR - Under Construction:	Panelboard - 120/208 100A
	Light Fixtures
03 - Press Box:	Panelboard - 120/208 100A
	Light Fixtures
04 - Maintenance/Equipment Storage:	Panelboard - 120/208 125A
	Light Fixtures



Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

Priority 1 – Mission Critical Concerns: Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

Priority 2 - Indirect Impact to Educational Mission: Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

Priority 3 - Short-Term Conditions: Deficiencies that are necessary to the school's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

Priority 4 - Long-Term Requirements: Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

Priority 5 - Enhancements: Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.



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

Table 1: System by Priority

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	-	-	\$6,799	\$28,650	-	\$35,449	0.60 %
Roofing	-	-	\$11,714	-	\$406	\$12,120	0.20 %
Structural	-	-	-	-	-	\$0	0.00 %
Exterior	-	\$1,889	\$4,116	-	\$21,719	\$27,723	0.47 %
Interior	-	-	\$651,246	\$745,858	\$1,723,366	\$3,120,470	52.49 %
Mechanical	-	-	-	\$131,027	-	\$131,027	2.20 %
Electrical	\$1,403	\$134,279	-	-	\$7,887	\$143,568	2.42 %
Plumbing	-	-	-	\$1,681	\$107,168	\$108,849	1.83 %
Fire and Life Safety	\$56,658	-	-	-	-	\$56,658	0.95 %
Technology	-	-	\$1,991,027	-	-	\$1,991,027	33.49 %
Conveyances	-	-	-	-	-	\$0	0.00 %
Specialties	-	-	\$49,859	\$133,462	\$134,279	\$317,599	5.34 %
Total	\$58,060	\$136,167	\$2,714,761	\$1,040,677	\$1,994,825	\$5,944,490	

*Displayed totals may not sum exactly due to mathematical rounding

The building systems with the most need include:

Interior	-	\$3,120,470
Technology	-	\$1,991,027
Specialties	-	\$317,599

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

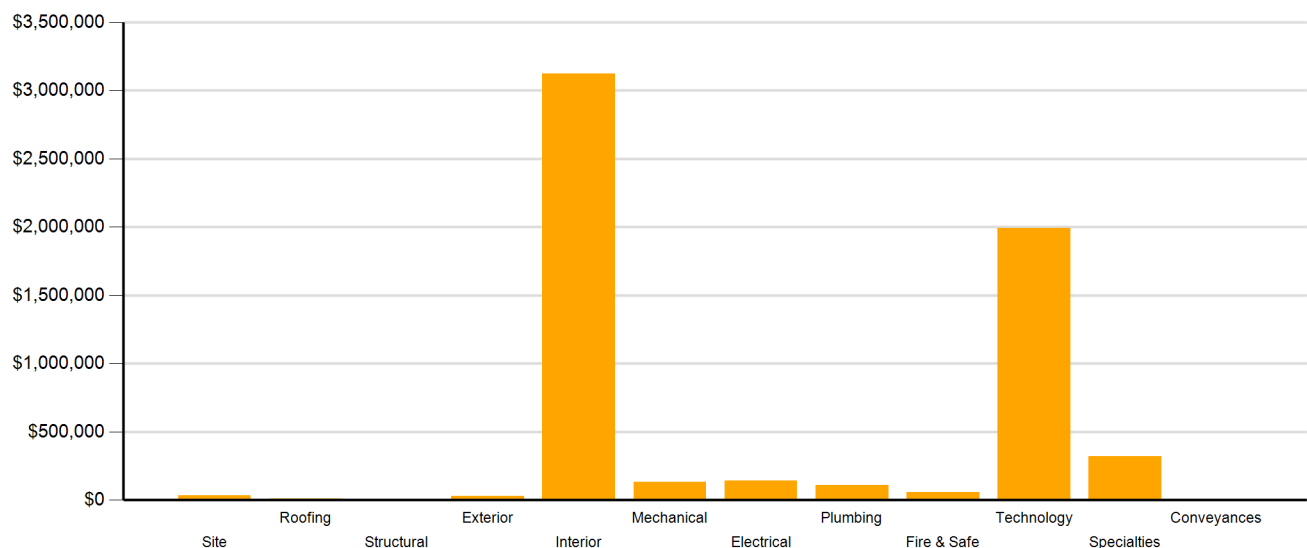


Figure 2: System Deficiencies



Current Deficiencies by Category

Deficiencies have been further grouped according to the observed category.

- **Acoustics** deficiencies relate to room acoustics, sound insulation, and mechanical systems and vibration control modeled after ANSI/ASA Standard S12.60-2010 and ASHRAE Handbook, Chapter 47 on Sound and Vibration Control.
- **Barrier to Accessibility** deficiencies relate to the Americans with Disabilities Act and the Rhode Island Governors Commission on Disability. Additional items related to accessibility may be included other categories.
- **Capital Renewal** items have reached or exceeded serviceable life and require replacement. These are current and do not include life cycle capital renewal forecasts. Also included are deficiencies correcting planned work postponed beyond its regular life expectancy.
- **Code Compliance** deficiencies related to current codes. Many may fall under grandfather clauses, which allow buildings to continue operating under codes effective at the time of construction. However, there are instances where the level of renovation requires full compliance which are reflected in the master plan.
- **Educational Adequacy** deficiencies identify where facilities do not align with the Basic Education Program and the RIDE School Construction Regulations.
- **Functional Deficiencies** are deficiencies for components or systems that have failed before the end of expected life or are not the right application, size, or design.
- **Hazardous Materials** include deficiencies for building systems or components containing potentially hazardous material. The team focused on identifying asbestos containing building materials (ACBMs), lead based painted (LBP) areas, polychlorinated biphenyls (PCBs), and chlorofluorocarbons (CFCs). As part of an indoor air and exterior air quality assessment, the team noted evidence of mold, water intrusion, mercury, and oil and hazardous materials (OHMs) exposure. With other scopes of work there may be other costs associated with hazardous materials.
- **Technology** deficiencies relate to network architecture, technology infrastructure, classroom systems, and support. Examples of technology deficiencies include: security cameras, secure electronic access, telephone handsets, and dedicated air conditioning for telecommunication rooms.
- **Traffic** deficiencies relate to vehicle or pedestrian traffic, such as bus loops, crosswalks, and pavement markings.



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

Table 2: Deficiency Category by Priority

Category	Priority					Total
	1	2	3	4	5	
Acoustics	-	-	-	\$377,246	-	\$377,246
Barrier to Accessibility	-	-	\$607,654	-	-	\$607,654
Capital Renewal	-	\$136,167	\$59,423	\$5,642	\$1,731,780	\$1,933,012
Code Compliance	-	-	-	-	-	\$0
Educational Adequacy	\$58,060	-	\$95,185	\$317,440	\$263,045	\$733,730
Functional Deficiency	-	-	-	-	-	\$0
Hazardous Material	-	-	-	\$340,348	-	\$340,348
Technology	-	-	\$1,945,701	-	-	\$1,945,701
Traffic	-	-	\$6,799	-	-	\$6,799
Total	\$58,060	\$136,167	\$2,714,761	\$1,040,677	\$1,994,825	\$5,944,490

*Displayed totals may not sum exactly due to mathematical rounding

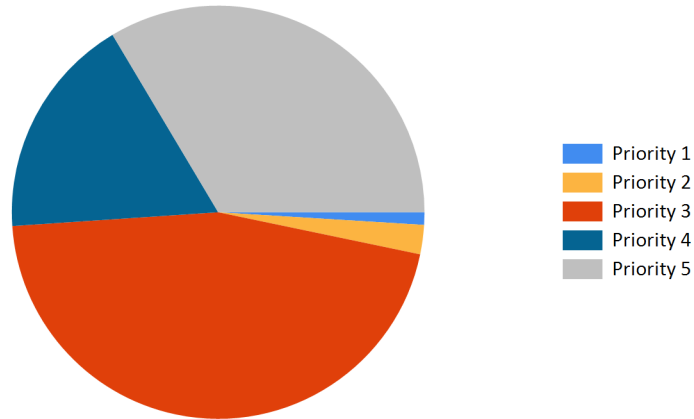


Figure 3: Current deficiencies by priority



Life Cycle Capital Renewal Forecast

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

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

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

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

Table 3: Capital Renewal Forecast

System	Current Deficiencies	Life Cycle Capital Renewal Projections					LC Yr. 1-5 Total	Total 5-Year Need
		Year 1 2017	Year 2 2018	Year 3 2019	Year 4 2020	Year 5 2021		
Site	\$35,449	\$0	\$0	\$0	\$2,550,869	\$0	\$2,550,869	\$2,586,318
Roofing	\$12,120	\$0	\$0	\$0	\$0	\$11,751	\$11,751	\$23,871
Structural	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$27,723	\$0	\$0	\$0	\$632,973	\$39,960	\$672,933	\$700,656
Interior	\$3,120,470	\$0	\$0	\$0	\$2,963,640	\$2,265,922	\$5,229,562	\$8,350,032
Mechanical	\$131,027	\$0	\$0	\$5,774,976	\$10,017	\$756,914	\$6,541,907	\$6,672,934
Electrical	\$143,568	\$0	\$0	\$0	\$0	\$579,623	\$579,623	\$723,191
Plumbing	\$108,849	\$0	\$0	\$11,785	\$474,816	\$4,326	\$490,927	\$599,776
Fire and Life Safety	\$56,658	\$0	\$0	\$0	\$0	\$0	\$0	\$56,658
Technology	\$1,991,027	\$0	\$0	\$0	\$0	\$0	\$0	\$1,991,027
Conveyances	\$0	\$0	\$0	\$285,209	\$0	\$0	\$285,209	\$285,209
Specialties	\$317,599	\$0	\$0	\$0	\$0	\$0	\$0	\$317,599
Total	\$5,944,490	\$0	\$0	\$6,071,970	\$6,632,315	\$3,658,496	\$16,362,781	\$22,307,271

*Displayed totals may not sum exactly due to mathematical rounding

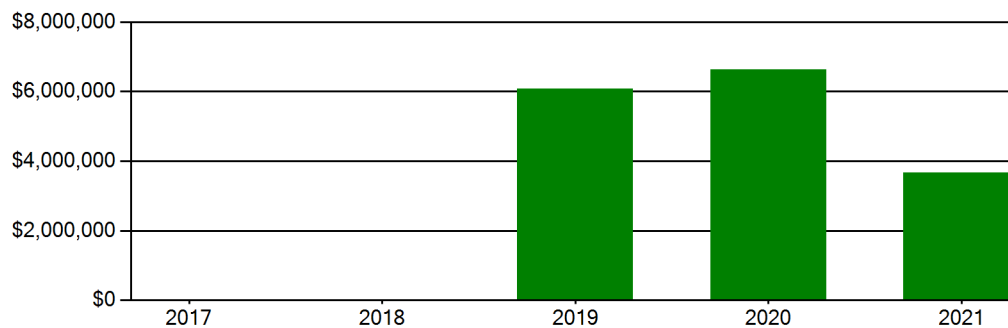
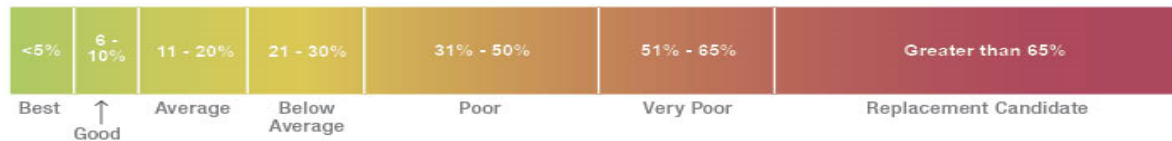


Figure 4: Life Cycle Capital Renewal Forecast



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 \$107,600,400. For planning purposes, the total 5-year need at the Coventry High School is \$22,320,807 (Life Cycle Years 1-5 plus the FCI deficiency cost). The Coventry High School facility has a 5-year FCI of 20.73%.

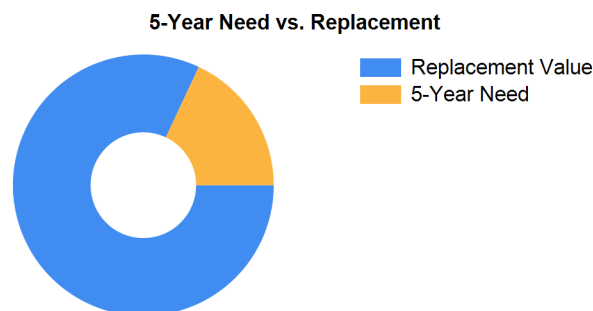


Figure 5: 5-Year FCI

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 1,616 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 Coventry High School cafeteria and/or library/media center to the size prescribed by the SCRs is estimated to be \$564,538.



Summary of Findings

The Coventry High School comprises 298,890 square feet and was constructed in 1975. Current deficiencies at this school total \$5,958,026. Five year capital renewal costs total \$16,362,781. The total identified need for the Coventry High School (current deficiencies and 5-year capital renewal costs) is \$22,320,807. The 5-year FCI is 20.73%.

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
Coventry High School Totals	298,890	1975	\$5,958,026	\$16,362,781	\$22,320,807	20.73%

**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 Note: Repaint crosswalks at intersection of Club House Rd and Reservoir Rd	Traffic	2	Ea.	3	\$1,511	22000
Crosswalk Requires Repainting Note: Repaint crosswalk at end of school driveway on Reservoir Rd	Traffic	1	Ea.	3	\$755	22001
Traffic Signage Is Required Note: Add school zone signage on Club House Rd	Traffic	2	Ea.	3	\$4,533	21999
Backstops Require Replacement Note: Backstops Require Replacement	Educational Adequacy	1	Ea.	4	\$28,329	28431
Fencing Requires Replacement (4' Chain Link Fence) Note: The fence at the northeast corner of the building is missing chain link. It should be replaced.	Capital Renewal	5	LF	4	\$321	17791
Sub Total for System		5	items		\$35,449	
Sub Total for School and Site Level		5	items		\$35,449	

Building: 01 - Main Building

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Roof Access Ladder Requires Replacement Note: The raised roof section over the auditorium requires a ladder.	Capital Renewal	3	LF	3	\$10,765	17807
The Metal Downspouts Require Installation or Replacement Note: The downspout at the mechanical penthouse at the roof is damaged. Replacement is recommended.	Capital Renewal	15	LF	3	\$949	17793
Splash Blocks Are Required Note: A splash block is needed at the mechanical penthouse on the roof.	Capital Renewal	1	Ea.	5	\$406	17800
Sub Total for System		3	items		\$12,120	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Dryvit Exterior Requires Replacement Location: North side of the building and on the west side of the gym	Capital Renewal	20	SF Wall	2	\$1,889	17801
The Wood Exterior Requires Repair Note: The wood siding at the roof over the new cafeteria is weathered and should be repaired.	Capital Renewal	300	SF Wall	3	\$4,116	17802
The Exterior Requires Painting Note: The metal panel at the mechanical penthouse on the roof should be repainted.	Capital Renewal	2,432	SF Wall	5	\$13,298	17810
Sub Total for System		3	items		\$19,303	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior CMU Walls Require Repair Note: There are moderate cracks in the CMU at the Vice Principal's office that should be repaired.	Capital Renewal	20	SF	3	\$721	17792
Interior Doors Require Replacement Note: Interior doors are missing at the west end of the gym near the locker rooms, between the cafeteria and office area, in the typing/repro area, and in Room 325.	Capital Renewal	8	Door	3	\$36,639	17795
The Interior Door Hardware Requires Replacement Note: Non-compliant door hardware should be replaced.	Barrier to Accessibility	195	Door	3	\$607,654	17803
The Interior Door Hardware Requires Replacement Note: Doors in the mechanical room and Room 401 are missing hardware.	Capital Renewal	2	Door	3	\$6,232	17806
Interior Toilet Partition Requires Replacement Note: There is a toilet partition with a missing door in the women's restroom near the auditorium.	Capital Renewal	1	Ea.	4	\$4,344	17799
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	837	Ea.	4	\$237,112	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	2,024	LF	4	\$45,870	Rollup



Facility Condition Assessment

Coventry - Coventry High School

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Paint (probable pre-1978 in base layer(s)) - large areas (> 10 sq. ft.) of peeling/damage & area in active use - children (measurement unit - square feet)	Hazardous Material	2,700	SF	4	\$25,496	Rollup
Paint (probable pre-1978 in base layer(s)) - damaged area < 9 sq. ft. AND NOT in children-accessible area (measurement unit - square feet)	Hazardous Material	3,375	SF	4	\$31,870	Rollup
Room Is Excessively Reverberant Location: Gym	Acoustics	17,000	SF	4	\$377,246	27938
Room Lighting Is Inadequate Or In Poor Condition.	Educational Adequacy	632	SF	4	\$23,920	Rollup
Classroom Door Requires Vision Panel	Educational Adequacy	3	Ea.	5	\$6,799	Rollup
Interior Walls Require Repainting (Bldg SF)	Capital Renewal	260,505	SF	5	\$1,709,655	Rollup
Room lacks appropriate sound control.	Educational Adequacy	200	SF	5	\$6,912	Rollup
Sub Total for System		14	items		\$3,120,470	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Lab lacks an appropriate fume hood.	Educational Adequacy	6	Ea.	4	\$131,027	Rollup
Sub Total for System		1	items		\$131,027	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room last power shut-off valves for utilities	Educational Adequacy	1	Ea.	1	\$1,403	Rollup
Generator Requires Replacement Note: generator is original equipment, difficult to get parts and keep unit in service	Capital Renewal	1	Ea.	2	\$122,758	17809
The Panelboard Requires Replacement Note: Panelboards in the carpentry shop should be sealed units. Carpenter shop dust inside the panelboards creates a fire safety hazard.	Capital Renewal	2	Ea.	2	\$11,520	17808
Room Has Insufficient Electrical Outlets	Educational Adequacy	16	Ea.	5	\$7,887	Rollup
Sub Total for System		4	items		\$143,568	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Floor Drains Are Required	Educational Adequacy	2	Ea.	4	\$1,681	Rollup
Room lacks a drinking fountain.	Educational Adequacy	6	Ea.	5	\$6,572	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	67	Ea.	5	\$100,596	Rollup
Sub Total for System		3	items		\$108,849	

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks shut-off valves for utilities. (International Fuel Gas Code, Section 409.6)	Educational Adequacy	5	Ea.	1	\$56,658	Rollup
Sub Total for System		1	items		\$56,658	

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks Interactive White Board	Educational Adequacy	8	Ea.	3	\$45,326	Rollup
Technology: Auditorium AV/Multimedia system is in need of minor improvements.	Technology	1	Room	3	\$94,430	18870
Technology: Campus network switching electronics are antiquated and/or do not meet standards.	Technology	504	Ea.	3	\$237,962	18867
Technology: Gymnasium sound system is nonexistent, inadequate, or near end of useful life.	Technology	1	Ea.	3	\$9,065	18869
Technology: Instructional spaces do not have local sound reinforcement.	Technology	68	Ea.	3	\$321,060	18874
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	\$5,288	18857



Facility Condition Assessment

Coventry - Coventry High School

Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	\$5,288	18860
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	\$5,288	18862
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	\$5,288	18864
Technology: Intermediate Telecommunications Room grounding system is inadequate or non-existent.	Technology	1	Ea.	3	\$5,288	18866
Technology: Intermediate Telecommunications Room is not dedicated and/or inadequate.	Technology	1	Ea.	3	\$44,948	18856
Technology: Intermediate Telecommunications Room needs minor improvements.	Technology	1	Ea.	3	\$16,620	18859
Technology: Intermediate Telecommunications Room needs minor improvements.	Technology	1	Ea.	3	\$16,620	18861
Technology: Intermediate Telecommunications Room needs minor improvements.	Technology	1	Ea.	3	\$16,620	18863
Technology: Intermediate Telecommunications Room needs minor improvements.	Technology	1	Ea.	3	\$16,620	18865
Technology: Intermediate Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	\$4,721	18858
Technology: Main Telecommunications Room ground system is inadequate or non-existent.	Technology	1	Ea.	3	\$6,610	18854
Technology: Main Telecommunications Room is not dedicated and/or inadequate.	Technology	1	Ea.	3	\$49,859	18853
Technology: Main Telecommunications Room UPS does not meet standards, is inadequate, or non-existent.	Technology	1	Ea.	3	\$8,971	18855
Technology: Network cabling infrastructure is outdated (Cat 5 or less) and/or does not meet standards.	Technology	606	Ea.	3	\$257,509	18868
Technology: Network system inadequate and/or near end of useful life	Technology	24	Ea.	3	\$181,305	18872
Technology: Network system inadequate and/or near end of useful life	Technology	28	Ea.	3	\$132,201	18873
Technology: PA/Bell/Clock system is inadequate and/or near end of useful life.	Technology	296,600	SF	3	\$504,140	18871
Sub Total for System		23	items		\$1,991,027	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient writing area.	Educational Adequacy	11	Ea.	3	\$49,859	Rollup
Backdrop is Required	Educational Adequacy	1	Ea.	4	\$1,416	Rollup
Separate Student Kitchen Stations Are Required	Educational Adequacy	1	Ea.	4	\$3,702	Rollup
The Metal Student Lockers Require Replacement	Capital Renewal	2	Ea.	4	\$977	17811
Note: There are two lockers that are missing doors - one in the original main building and one in the 1991 addition.						
Walk In Cooler/Freezer Is Required	Educational Adequacy	1	Ea.	4	\$89,708	Rollup
Welding Bays Are Required	Educational Adequacy	3	Ea.	4	\$16,147	Rollup
Work Tables Are Required	Educational Adequacy	6	Ea.	4	\$21,511	Rollup
Room lacks an appropriate refrigerator.	Educational Adequacy	11	Ea.	5	\$93,485	Rollup
The room lacks a washer and/or dryer.	Educational Adequacy	3	Ea.	5	\$40,794	Rollup
Sub Total for System		9	items		\$317,599	
Sub Total for Building 01 - Main Building		61	items		\$5,900,621	



Building: 03 - Press Box

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Requires Painting	Capital Renewal	890	SF Wall	5	\$4,866	17812

Note: Paint is chipped and worn.

Sub Total for System	1 items	\$4,866
Sub Total for Building 03 - Press Box	1 items	\$4,866

Building: 04 - Maintenance/Equipment Storage

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Requires Painting	Capital Renewal	650	SF Wall	5	\$3,554	17813

Note: The exterior paint is chipped and worn.

Sub Total for System	1 items	\$3,554
Sub Total for Building 04 - Maintenance/Equipment Storage	1 items	\$3,554
Total for Campus	68 items	\$5,944,490

Buildings with no reported deficiencies

02 - Concession / RR - Under Construction



Coventry High School - Life Cycle Summary Yrs 1-5

Site Level Life Cycle Items

Site

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Roadway Pavement	Asphalt	200	CAR	\$661,704	4
Parking Lot Pavement	Asphalt	571	CAR	\$1,889,165	4
Sub Total for System		2	items	\$2,550,869	
Sub Total for Building -		2	items	\$2,550,869	

Building: 01 - Main Building

Roofing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Steep Slope Roofing	Clear Polycarbonate (Greenhouse)	618	SF	\$11,751	5
Sub Total for System		1	items	\$11,751	

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Wall Veneer	E.I.F.S. - Bldg SF basis	30,682	SF	\$632,973	4
Exterior Wall Veneer	Clear Polycarbonate (Greenhouse) walls	220	SF	\$8,366	5
Exterior Wall Veneer	Wood Siding - Bldg SF basis	1,054	SF	\$31,594	5
Sub Total for System		3	items	\$672,934	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Resilient Flooring	Vinyl Composition Tile Flooring	231,244	SF	\$2,652,772	4
Wall Painting and Coating	Painting/Staining (Bldg SF)	25,538	SF	\$168,738	4
Fluid-Applied Flooring	Epoxy Coating	1,112	SF	\$21,144	4
Carpeting	Carpet	5,561	SF	\$120,986	4
Wall Paneling	Wood Panel wall	4,565	SF	\$41,663	5
Wall Paneling	Metal Panel wall	935	SF	\$10,219	5
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	237,292	SF	\$2,143,132	5
Suspended Plaster and	Painted ceilings	13,050	SF	\$54,589	5
Resilient Flooring	Rubber Tile Flooring	556	SF	\$10,387	5
Sub Total for System		9	items	\$5,223,629	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Decentralized Heating Equipment	Heating Unit Vent - Steam/Hot water	168	Ea.	\$2,841,687	3
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	296,600	SF	\$2,003,445	3
HVAC Air Distribution	AHU 20,000 CFM Interior	5	Ea.	\$929,844	3
Decentralized Cooling	Window Units	3	Ea.	\$10,017	4
Air Distribution	Make-up Air Unit	1	Ea.	\$15,899	5
Decentralized Cooling	Computer Room A/C (3 ton)	1	Ea.	\$28,521	5
HVAC Air Distribution	Roof Top Unit - DX Gas (15 Ton)	12	Ea.	\$619,292	5
Exhaust Air	Roof Exhaust Fan - Large	5	Ea.	\$69,467	5
Exhaust Air	Roof Exhaust Fan - Small	9	Ea.	\$23,735	5
Sub Total for System		9	items	\$6,541,907	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	30	Ea.	\$41,355	5
Transfer Switches	Automatic Transfer Switch (Amps)	600	Amps	\$21,431	5
Power Distribution	Distribution Panels (400 Amps)	2	Ea.	\$51,338	5
	Note: GE original equipment				
Power Distribution	Panelboard - 120/208 225A	9	Ea.	\$52,193	5
Power Distribution	Panelboard - 120/208 100A	10	Ea.	\$48,486	5
	Note: Original equipment				
Power Distribution	Panelboard - 277/480 400A	2	Ea.	\$35,575	5
Electrical Service	Transformer (75 KVA)	1	Ea.	\$10,520	5
	Note: Original equipment				
Electrical Service	Switchgear - Main Dist Panel (2000 Amps)	1	Ea.	\$72,339	5



Facility Condition Assessment

Coventry - Coventry High School

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Electrical Service	Switchgear - Main Dist Panel (1200 Amps)	2	Ea.	\$138,117	5
Power Distribution	Panelboard - 277/480 225A	7	Ea.	\$83,718	5
Power Distribution	Panelboard - 277/480 100A	2	Ea.	\$15,401	5
		Sub Total for System		\$570,473	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Compressed-Air Systems	Air Compressor (5 hp)	1	Ea.	\$11,785	3
	Note: Speedaire brand air compressor				
Plumbing Fixtures	Refrigerated Drinking Fountain	19	Ea.	\$140,171	4
Plumbing Fixtures	Showers	44	Ea.	\$334,645	4
	Note: Locker room showers not used				
Domestic Water Equipment	Water Heater - Electric - 66 gallon	1	Ea.	\$4,326	5
		Sub Total for System		\$490,927	

Conveyances

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Elevators	Hydraulic (Passenger Elev)	1	Ea.	\$285,209	3
		Sub Total for System		\$285,209	
		Sub Total for Building 01 - Main Building		\$13,796,829	

Building: 03 - Press Box

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	890	SF	\$5,288	5
		Sub Total for System		\$5,288	
		Sub Total for Building 03 - Press Box		\$5,288	

Building: 04 - Maintenance/Equipment Storage

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Paneling	Wood Panel wall	650	SF	\$5,932	5
		Sub Total for System		\$5,932	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	650	SF	\$3,862	5
		Sub Total for System		\$3,862	
		Sub Total for Building 04 - Maintenance/Equipment Storage		\$9,795	
		Total for: Coventry High School		\$16,362,782	



Supporting Photos



Site Aerial



Damaged Chain Link



CMU Wall Crack

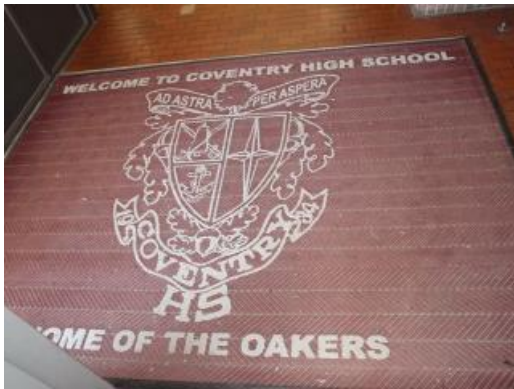


Rusted And Deteriorated Downspout



Facility Condition Assessment

Coventry - Coventry High School



School Banner



Building Signage



Plaque



Typical Classroom



Concession Building



Exterior Finishes



Facility Condition Assessment

Coventry - Coventry High School



Concession Building



Concession Building



Missing Partition Door



Concession Building



Damaged And Stained Exterior Roof Trim



Missing Splash Block



Facility Condition Assessment

Coventry - Coventry High School



Carpentry Shop Panelboards



Weathered Wood Edge Trim



Rooftop Mechanical Enclosure



1975 Generator



Worn Exterior Paint



Press Box



Facility Condition Assessment

Coventry - Coventry High School



Press Box Interior



Press Box



Field Storage Interior



Grounds Equipment Storage Building



Storage Building Interior



Grounds Equipment Storage Building



Facility Condition Assessment

Coventry - Coventry High School



Grounds Equipment Storage Building



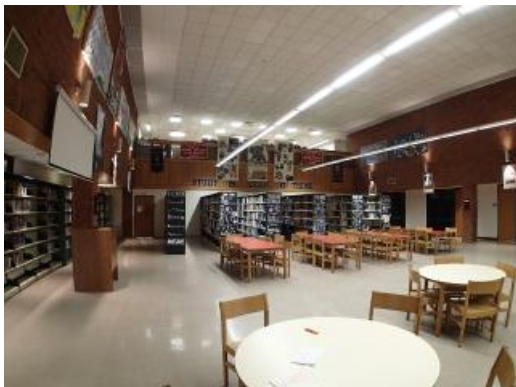
Exterior Driveway View



Exterior Entrance Doors



Exterior Elevation



Library



Elevation



Facility Condition Assessment

Coventry - Coventry High School



Cafeteria



Asphalt Parking



Media Center



Gymnasium



Entrance Canopy



Front Elevation



Facility Condition Assessment

Coventry - Coventry High School



Exterior Finishes



Fitness Room



Cafeteria



Asphalt Parking Area



Auditorium



Library



Facility Condition Assessment

Coventry - Coventry High School



Pedestrian Paving



Asphalt Parking



Asphalt Driveway



Composition Shingle Roof



Missing Door