**NC School District/830 Scotland County/Elementary School** 

# **North Laurinburg Elementary**

Final
Campus Assessment Report
March 11, 2017



# **Table of Contents**

Camn	ous Executive Summary	5
	ous Dashboard Summary	8
	ous Condition Summary	9
	Building Main	11
Ex	secutive Summary	11
	Dashboard Summary	12
	Condition Summary	13
Pł	noto Album	14
Co	ondition Detail	15
	System Listing	16
	System Notes	18
	Renewal Schedule	28
	Forecasted Sustainment Requirement	30
	Deficiency Summary By System	31
	Deficiency Summary By Priority	32
	Deficiency By Priority Investment	33
	Deficiency Summary By Category	34
	Deficiency Details By Priority	35
1962	<u>Building</u>	43
Ex	xecutive Summary	43
	Dashboard Summary	44
	Condition Summary	45
Pł	noto Album	46
Co	ondition Detail	47
	System Listing	48
	System Notes	50
	Renewal Schedule	59
	Forecasted Sustainment Requirement	61
	Deficiency Summary By System	62

# Campus Assessment Report

Deficiency Summary By Category Deficiency Details By Priority  1983 Media Center  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By Priority Deficiency Summary By Category Deficiency Details By Priority Deficiency Details By Priority Deficiency Summary By Category Deficiency Details By Priority  Executive Summary Condition Summary Dashboard Summary Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary Fhoto Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	Deficiency Summary By Priority	63
Deficiency Details By Priority  1983 Media Center  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By Priority Deficiency Summary By Priority Deficiency Summary By Category Deficiency Details By Priority Site  Executive Summary Dashboard Summary Condition Detail System Listing System System Site Executive Summary Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	Deficiency By Priority Investment	64
1983 Media Center       7         Executive Summary       7         Dashboard Summary       7         Condition Summary       7         Photo Album       7         Condition Detail       7         System Listing       7         System Notes       7         Renewal Schedule       8         Forecasted Sustainment Requirement       8         Deficiency Summary By System       8         Deficiency Summary By Priority       8         Deficiency Details By Priority       8         Site       8         Executive Summary       10         Dashboard Summary       10         Condition Summary       10         Photo Album       10         Condition Detail       10         System Listing       10         System Notes       10         Renewal Schedule       11         Forecasted Sustainment Requirement       11         Deficiency Summary By System       11	Deficiency Summary By Category	65
Executive Summary	Deficiency Details By Priority	66
Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System Deficiency Summary By Priority Deficiency By Priority Investment Deficiency Details By Priority Site Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	1983 Media Center	71
Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System Deficiency Summary By Priority Deficiency By Priority Investment Deficiency Summary By Category Deficiency Details By Priority  Site  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Renewal Schedule Forecasted Sustainment Requirement Indeficiency Summary By System	Executive Summary	71
Photo Album         7           Condition Detail         7           System Listing         7           System Notes         7           Renewal Schedule         8           Forecasted Sustainment Requirement         8           Deficiency Summary By System         9           Deficiency Summary By Priority         9           Deficiency By Priority Investment         9           Deficiency Details By Priority         9           Site         9           Executive Summary         9           Dashboard Summary         10           Condition Summary         10           Photo Album         10           Condition Detail         10           System Listing         10           System Notes         10           Renewal Schedule         11           Forecasted Sustainment Requirement         11           Deficiency Summary By System         11	Dashboard Summary	72
Condition Detail       7         System Listing       7         System Notes       7         Renewal Schedule       8         Forecasted Sustainment Requirement       8         Deficiency Summary By System       9         Deficiency Summary By Priority       9         Deficiency By Priority Investment       9         Deficiency Summary By Category       9         Deficiency Details By Priority       9         Site       9         Executive Summary       9         Dashboard Summary       10         Condition Summary       10         Photo Album       10         Condition Detail       10         System Listing       10         System Notes       10         Renewal Schedule       11         Forecasted Sustainment Requirement       11         Deficiency Summary By System       11	Condition Summary	73
System Listing       7         System Notes       7         Renewal Schedule       8         Forecasted Sustainment Requirement       8         Deficiency Summary By System       9         Deficiency Summary By Priority       9         Deficiency By Priority Investment       9         Deficiency Summary By Category       9         Deficiency Details By Priority       9         Site       9         Executive Summary       9         Dashboard Summary       10         Condition Summary       10         Condition Detail       10         System Listing       10         System Notes       10         Renewal Schedule       11         Forecasted Sustainment Requirement       11         Deficiency Summary By System       11	Photo Album	74
System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System Deficiency Summary By Priority Deficiency By Priority Investment Deficiency Summary By Category Deficiency Details By Priority  Executive Summary Dashboard Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System  11 Deficiency Summary By System	Condition Detail	75
Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System Deficiency Summary By Priority Deficiency By Priority Investment Deficiency Summary By Category Deficiency Details By Priority  Site  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System  110	System Listing	76
Forecasted Sustainment Requirement  Deficiency Summary By System  Deficiency Summary By Priority  Deficiency By Priority Investment  Deficiency Summary By Category  Deficiency Details By Priority  Executive Summary  Dashboard Summary  Condition Summary  Photo Album  Condition Detail  System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System  11  Deficiency Summary By System  11	System Notes	78
Deficiency Summary By System Deficiency Summary By Priority Deficiency By Priority Investment Deficiency Summary By Category Deficiency Details By Priority  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	Renewal Schedule	87
Deficiency Summary By Priority Deficiency By Priority Investment Deficiency Summary By Category Deficiency Details By Priority  Executive Summary Dashboard Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	Forecasted Sustainment Requirement	89
Deficiency By Priority Investment Deficiency Summary By Category Deficiency Details By Priority  Site  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	Deficiency Summary By System	90
Deficiency Summary By Category Deficiency Details By Priority  Site  Executive Summary Dashboard Summary Condition Summary Photo Album Condition Detail System Listing System Notes Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System	Deficiency Summary By Priority	91
Deficiency Details By Priority  Site  Executive Summary  Dashboard Summary  Condition Summary  Photo Album  Condition Detail  System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System	Deficiency By Priority Investment	92
Site         Secutive Summary         Secutive Summary           Dashboard Summary         10           Condition Summary         10           Photo Album         10           Condition Detail         10           System Listing         10           System Notes         10           Renewal Schedule         11           Forecasted Sustainment Requirement         11           Deficiency Summary By System         11	Deficiency Summary By Category	93
Executive Summary  Dashboard Summary  Condition Summary  Photo Album  Condition Detail  System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System	Deficiency Details By Priority	94
Dashboard Summary Condition Summary 10 Photo Album 10 Condition Detail System Listing System Notes 10 Renewal Schedule Forecasted Sustainment Requirement Deficiency Summary By System 11	<u>Site</u>	99
Condition Summary  Photo Album  Condition Detail  System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System	Executive Summary	99
Photo Album  Condition Detail  System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System	Dashboard Summary	100
Condition Detail  System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System  10  11	Condition Summary	101
System Listing  System Notes  Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System  10  11	Photo Album	102
System Notes 10 Renewal Schedule 11 Forecasted Sustainment Requirement 11 Deficiency Summary By System 11	Condition Detail	103
Renewal Schedule  Forecasted Sustainment Requirement  Deficiency Summary By System  11	System Listing	104
Forecasted Sustainment Requirement  Deficiency Summary By System  11	System Notes	105
Deficiency Summary By System	Renewal Schedule	110
	Forecasted Sustainment Requirement	111
Deficiency Summary By Priority	Deficiency Summary By System	112
	Deficiency Summary By Priority	113

# Campus Assessment Report

Deficiency By Priority Investment	114
Deficiency Summary By Category	115
Deficiency Details By Priority	116

### **Campus Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present scope. The **Repair Cost** (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Gross Area (SF): 46,992

Year Built: 1958

Last Renovation:

Replacement Value: \$10,756,826

Repair Cost: \$2,994,249.00

Total FCI: 27.84 %

Total RSLI: 24.43 %

FCA Score: 72.16



#### **Description:**

#### **GENERAL:**

North Laurinburg Elementary is located at 815 N Gill Street in Laurinburg, North Carolina. The 1 story, 46,992 square foot building was originally constructed in 1958. There have been 2 additions to the building. There were classrooms added in 1962 and classrooms and a media center added in 1982.

This report contains condition and adequacy data collected during the 2016-2017 Facility Condition Assessment (FCA). Detailed condition and deficiency statements are contained in this report for the site and building elements.

#### A. SUBSTRUCTURE

The building rests on slab-on grade and is assumed to have standard cast-in-place concrete foundations. The building does not have a basement.

#### **B. SUPERSTRUCTURE**

Roof construction is steel and metal decking. The exterior envelope is composed of walls of brick veneer over CMU. Exterior windows are aluminum frame with operable panes. Exterior doors are hollow metal steel mostly with glazing. Roofing is typically asphalt shingle roofing and a low slope thermoplastic polyolefin. Roof openings include a roof hatch with fixed ladder access. Most building entrances appear to comply with minimum ADA requirements.

#### C. INTERIORS

Interior partitions are typically CMU. Interior doors are generally solid core wood with wood frames. Interior fittings include the following items: lockers, white boards, toilet accessories, storage shelving, and fabricated toilet partitions. The interior wall finishes are typically painted CMU. Floor finishes throughout are typically vinyl composition tile, and ceramic tile in the restrooms. Ceiling finishes throughout are typically suspended acoustical tile.

#### CONVEYING:

The building does not include conveying equipment.

#### D. SERVICES

PLUMBING: Plumbing fixtures are typically non-low-flow water fixtures with manual control valves. Domestic water distribution is copper with electric hot water heating. Sanitary waste system is galvanized piping. Rain water drainage system is internal with roof drains.

#### HVAC:

Heating and Cooling is provided by wall mounted package units. And secondary heating is provided by a gas fired boiler. Ceiling mounted exhaust fans are installed in bathrooms and other required areas. Controls and instrumentation are digital and are centrally controlled by an energy management system.

#### FIRE PROTECTION:

The building does not have a fire sprinkler system. The building does have additional fire suppression systems, which include dry chemical for the kitchen hood protection. Fire extinguishers and cabinets are distributed near fire exits and corridors.

#### **ELECTRICAL:**

The main electrical service is fed from a pad mounted transformer to the main switchboard/distribution panel located in the building. Lighting is lay-in type, fluorescent light fixtures. Branch circuit wiring is typically copper serving electrical switches and receptacles. Emergency and life safety egress lighting systems are installed and exit signs are present at exit doors and near stairways and are typically illuminated.

#### COMMUNICATIONS AND SECURITY:

The fire alarm system consists of audible/visual strobe annunciators in common spaces, balconies and interior corridors. The system is activated by manual pull stations and smoke detectors and the system is centrally monitored. The telephone and data systems are segregated and include dedicated equipment closets. This building does have a local area network (LAN). The building includes an internal security system that is actuated by the following items: contacts, infrared, optical or a combination of all devices. The building has controlled entry doors access provided by card readers; entry doors are secured with magnetic door locks. The security system has CCTV cameras and is centrally monitored; this building has a public address and paging system separate from the telephone system.

#### OTHER ELECTRICAL SYSTEMS:

This building does not have a separately derived emergency power system.

#### E. EQUIPMENT & FURNISHINGS:

This building includes the following items and equipment: fixed food service, library equipment, athletic equipment, theater and stage, audio-visual, fixed casework, window treatment, floor grilles and mats, and multiple seating furnishings.

#### G. SITE:

Campus site features include paved driveways and parking lots, pedestrian pavement, flag pole, landscaping, play areas, and fencing. Site mechanical and electrical features include water, sewer, natural gas, and site lighting.

### Campus Assessment Report - North Laurinburg Elementary

#### **Attributes:**

**General Attributes:** 

Condition Assessor: Terence Davis Assessment Date:

Suitability Assessor:

**School Inofrmation:** 

HS Attendance Area: LEA School No.:

No. of Mobile Units: 0 No. of Bldgs.: 1

SF of Mobile Units: Active Status: Active School Grades: 9.9 Site Acreage: 9.9

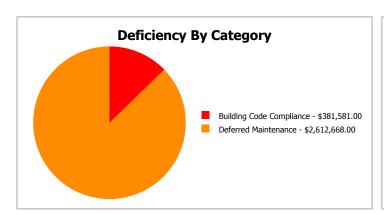
### **Campus Dashboard Summary**

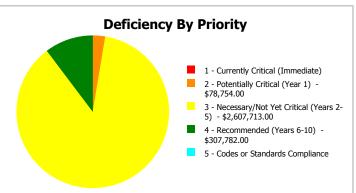
Gross Area: 46,992

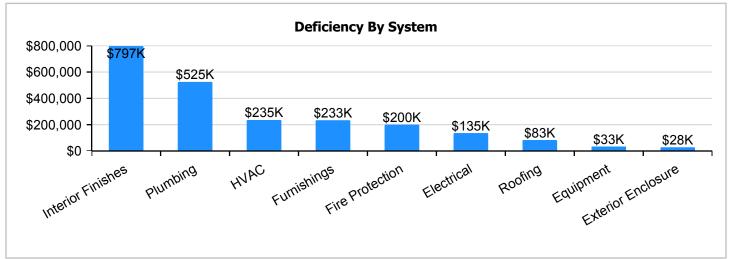
Year Built: 1958 Last Renovation:

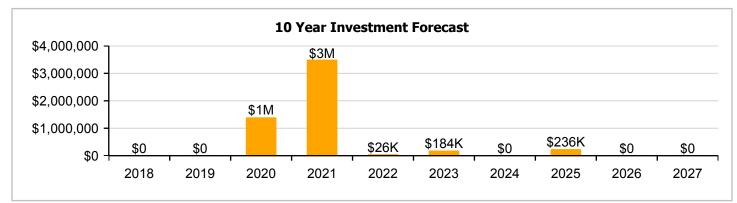
 Repair Cost:
 \$2,994,249
 Replacement Value:
 \$10,756,826

 FCI:
 27.84 %
 RSLI%:
 24.43 %









### **Campus Condition Summary**

The Table below shows the RSLI and FCI for each major system shown at the UNIFORMAT II classification Level 2. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

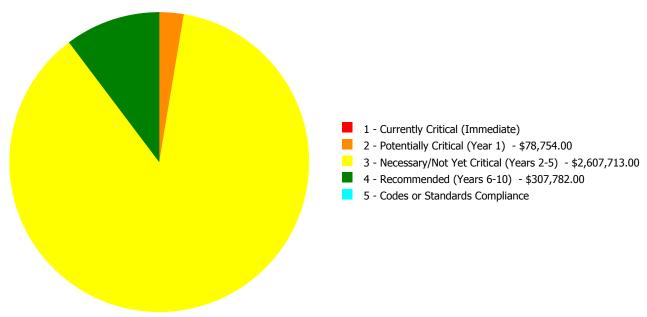
### **Current Investment Requirement and Condition by Uniformat Classification**

UNIFORMAT Classification	RSLI%	FCI %	<b>Current Repair</b>
A10 - Foundations	50.39 %	0.00 %	\$0.00
A20 - Basement Construction	50.39 %	0.00 %	\$0.00
B10 - Superstructure	50.39 %	0.00 %	\$0.00
B20 - Exterior Enclosure	30.45 %	3.83 %	\$36,477.00
B30 - Roofing	11.69 %	36.20 %	\$109,363.00
C10 - Interior Construction	23.63 %	0.00 %	\$0.00
C30 - Interior Finishes	8.27 %	87.28 %	\$1,051,260.00
D20 - Plumbing	1.68 %	96.74 %	\$692,578.00
D30 - HVAC	17.88 %	28.00 %	\$310,374.00
D40 - Fire Protection	0.00 %	110.00 %	\$263,625.00
D50 - Electrical	27.97 %	13.17 %	\$178,852.00
E10 - Equipment	5.66 %	68.53 %	\$44,157.00
E20 - Furnishings	0.00 %	110.00 %	\$307,563.00
G20 - Site Improvements	15.83 %	0.00 %	\$0.00
G30 - Site Mechanical Utilities	9.44 %	0.00 %	\$0.00
G40 - Site Electrical Utilities	45.43 %	0.00 %	\$0.00
Totals:	24.43 %	27.84 %	\$2,994,249.00

### **Condition Deficiency Priority**

Facility Name	Gross Area (S.F.)	FCI %	1 - Currently Critical (Immediate)	2 - Potentially Critical (Year 1)	3 - Necessary/Not Yet Critical (Years 2-5)	4 - Recommended (Years 6-10)	5 - Codes or Standards Compliance
1958 Building Main	20,692	35.14	\$0.00	\$78,754.00	\$1,242,762.00	\$160,239.00	\$0.00
1962 Building	10,300	25.20	\$0.00	\$0.00	\$482,772.00	\$57,783.00	\$0.00
1983 Media Center	16,000	30.81	\$0.00	\$0.00	\$882,179.00	\$89,760.00	\$0.00
Site	46,992	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total:		27.84	\$0.00	\$78,754.00	\$2,607,713.00	\$307,782.00	\$0.00

### **Deficiencies By Priority**



### **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present scope. The **Repair Cost** (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Function:	ES -Elementary School
Gross Area (SF):	20,692
Year Built:	1958
Last Renovation:	
Replacement Value:	\$4,217,024
Repair Cost:	\$1,481,755.00
Total FCI:	35.14 %
Total RSLI:	20.53 %
FCA Score:	64.86



#### **Description:**

The narrative for this building is included in the Executive Summary Description at the front of this report.

**Attributes:** This asset has no attributes.

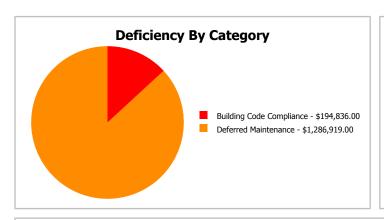
### **Dashboard Summary**

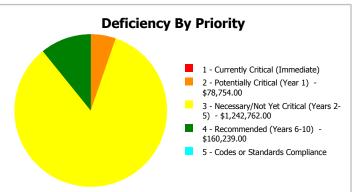
Function: ES -Elementary Gross Area: 20,692

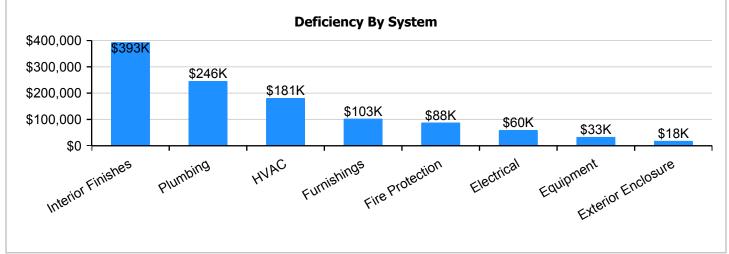
School

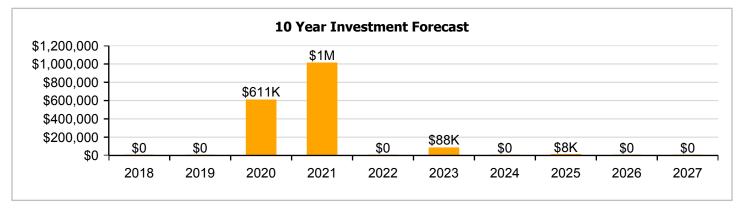
Year Built: 1958 Last Renovation:

Repair Cost: \$1,481,755 Replacement Value: \$4,217,024 FCI: 35.14 % RSLI%: 20.53 %









# **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	41.00 %	0.00 %	\$0.00
A20 - Basement Construction	41.00 %	0.00 %	\$0.00
B10 - Superstructure	41.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	25.76 %	5.81 %	\$24,354.00
B30 - Roofing	15.68 %	0.00 %	\$0.00
C10 - Interior Construction	17.78 %	0.00 %	\$0.00
C30 - Interior Finishes	3.32 %	97.81 %	\$518,728.00
D20 - Plumbing	1.42 %	99.60 %	\$324,803.00
D30 - HVAC	13.26 %	51.11 %	\$239,448.00
D40 - Fire Protection	0.00 %	110.00 %	\$116,082.00
D50 - Electrical	28.03 %	13.17 %	\$78,754.00
E10 - Equipment	2.01 %	95.27 %	\$44,157.00
E20 - Furnishings	0.00 %	110.00 %	\$135,429.00
Totals:	20.53 %	35.14 %	\$1,481,755.00

# **Photo Album**

The photo album consists of the various cardinal directions of the building..

1). South Elevation - Jan 09, 2017



2). West Elevation - Jan 09, 2017



3). West Elevation - Jan 09, 2017



4). East Elevation - Jan 09, 2017



5). East Elevation - Jan 09, 2017



### **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
- 2. System Description: A brief description of a system present in the building.
- 3. Unit Price \$: The unit price of the system.
- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

# **System Listing**

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$4.88	S.F.	20,692	100	1958	2058		41.00 %	0.00 %	41			\$100,977
A1030	Slab on Grade	\$8.61		20,692	100	1958	2058		41.00 %	0.00 %	41			\$178,158
A2010	Basement Excavation	\$1.95	S.F.	20,692	100	1958	2058		41.00 %	0.00 %	41			\$40,349
A2020	Basement Walls	\$13.35	S.F.	20,692	100	1958	2058		41.00 %	0.00 %	41			\$276,238
B1010	Floor Construction	\$1.66	S.F.	20,692	100	1958	2058		41.00 %	0.00 %	41			\$34,349
B1020	Roof Construction	\$16.08	S.F.	20,692	100	1958	2058		41.00 %	0.00 %	41			\$332,727
B2010	Exterior Walls	\$9.61	S.F.	20,692	100	1958	2058		41.00 %	0.00 %	41			\$198,850
B2020	Exterior Windows	\$9.57	S.F.	20,692	30	1983	2013	2021	13.33 %	0.00 %	4			\$198,022
B2030	Exterior Doors	\$1.07	S.F.	20,692	30	1983	2013		0.00 %	110.00 %	-4		\$24,354.00	\$22,140
B3010120	Single Ply Membrane	\$6.98	S.F.	20,692	20	2000	2020		15.00 %	0.00 %	3			\$144,430
B3020	Roof Openings	\$0.29	S.F.	20,692	25	2000	2025		32.00 %	0.00 %	8			\$6,001
C1010	Partitions	\$11.01	S.F.	20,692	75	1958	2033		21.33 %	0.00 %	16			\$227,819
C1020	Interior Doors	\$2.59	S.F.	20,692	30	1983	2013	2021	13.33 %	0.00 %	4			\$53,592
C1030	Fittings	\$9.94	S.F.	20,692	20	2000	2020		15.00 %	0.00 %	3			\$205,678
C3010	Wall Finishes	\$2.84	S.F.	20,692	10	2010	2020		30.00 %	0.00 %	3			\$58,765
C3020	Floor Finishes	\$11.60	S.F.	20,692	20	1983	2003		0.00 %	110.00 %	-14		\$264,030.00	\$240,027
C3030	Ceiling Finishes	\$11.19	S.F.	20,692	25	1983	2008		0.00 %	110.00 %	-9		\$254,698.00	\$231,543
D2010	Plumbing Fixtures	\$11.71	S.F.	20,692	30	1983	2013		0.00 %	110.00 %	-4		\$266,534.00	\$242,303
D2020	Domestic Water Distribution	\$0.99	S.F.	20,692	30	1958	1988		0.00 %	110.00 %	-29		\$22,534.00	\$20,485
D2030	Sanitary Waste	\$1.57	S.F.	20,692	30	1958	1988		0.00 %	110.00 %	-29		\$35,735.00	\$32,486
D2090	Other Plumbing Systems -Nat Gas	\$1.49	S.F.	20,692	40	1983	2023		15.00 %	0.00 %	6			\$30,831
D3020	Heat Generating Systems	\$4.26	S.F.	20,692	30	1983	2013		0.00 %	110.00 %	-4		\$96,963.00	\$88,148
D3040	Distribution Systems	\$6.26	S.F.	20,692	30	1983	2013		0.00 %	110.00 %	-4		\$142,485.00	\$129,532
D3050	Terminal & Package Units	\$10.14	S.F.	20,692	15	2000	2015	2021	26.67 %	0.00 %	4			\$209,817
D3060	Controls & Instrumentation	\$1.98	S.F.	20,692	20	2000	2020		15.00 %	0.00 %	3			\$40,970
D4010	Sprinklers	\$4.41	S.F.	20,692	30			2016	0.00 %	110.00 %	-1		\$100,377.00	\$91,252
D4020	Standpipes	\$0.69	S.F.	20,692	30			2016	0.00 %	110.00 %	-1		\$15,705.00	\$14,277
D5010	Electrical Service/Distribution	\$1.73	S.F.	20,692	40	1983	2023		15.00 %	0.00 %	6			\$35,797
D5020	Branch Wiring	\$5.20	S.F.	20,692	30	1958	1988	2021	13.33 %	0.00 %	4			\$107,598
D5020	Lighting	\$12.12	S.F.	20,692	30	1983	2013	2021	13.33 %	0.00 %	4			\$250,787
D5030810	Security & Detection Systems	\$1.91	S.F.	20,692	15	2015	2030		86.67 %	0.00 %	13			\$39,522
D5030910	Fire Alarm Systems	\$3.46	S.F.	20,692	15	1983	1998		0.00 %	110.00 %	-19		\$78,754.00	\$71,594
D5030920	Data Communication	\$4.47		20,692	15	2015	2030		86.67 %	0.00 %	13			\$92,493
E1020	Institutional Equipment	\$0.30		20,692	20	2000	2020		15.00 %	0.00 %	3			\$6,208
E1090	Other Equipment	\$1.94		20,692	20	1983	2003		0.00 %	110.00 %	-14		\$44,157.00	\$40,142
E2010	Fixed Furnishings	\$5.95		20,692	20	1990	2010		0.00 %	110.00 %	-7		\$135,429.00	\$123,117
	1							Total	20.53 %	35.14 %			\$1,481,755.00	\$4,217,024

# **System Notes**

The facility description in the executive summary contains an overview of each system. The photos of each system and any associated notes listed below provide additional information on select systems found within the facility:

System: B2010 - Exterior Walls







Note:

**System:** B2020 - Exterior Windows







Note:

**System:** B2030 - Exterior Doors







**System:** B3010120 - Single Ply Membrane







### Note:

**System:** B3020 - Roof Openings





Note:

**System:** C1010 - Partitions







**System:** C1020 - Interior Doors







Note:

System: C1030 - Fittings







Note:

**System:** C3010 - Wall Finishes







Note:

**System:** C3020 - Floor Finishes







Note:

**System:** C3030 - Ceiling Finishes







Note:

**System:** D2010 - Plumbing Fixtures







Note:

**System:** D2020 - Domestic Water Distribution







### Note:

**System:** D2030 - Sanitary Waste







### Note:

**System:** D2090 - Other Plumbing Systems -Nat Gas





**System:** D3020 - Heat Generating Systems







Note:

**System:** D3040 - Distribution Systems







Note:

**System:** D3050 - Terminal & Package Units







Note:

**System:** D3060 - Controls & Instrumentation



Note:

**System:** D5010 - Electrical Service/Distribution







Note:

**System:** D5020 - Branch Wiring







System: D5020 - Lighting







### Note:

**System:** D5030810 - Security & Detection Systems







### Note:

**System:** D5030910 - Fire Alarm Systems







**System:** D5030920 - Data Communication







### Note:

**System:** E1020 - Institutional Equipment





### Note:

**System:** E1090 - Other Equipment







**System:** E2010 - Fixed Furnishings







# **Renewal Schedule**

eCOMET forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

Inflation Rate: 3%

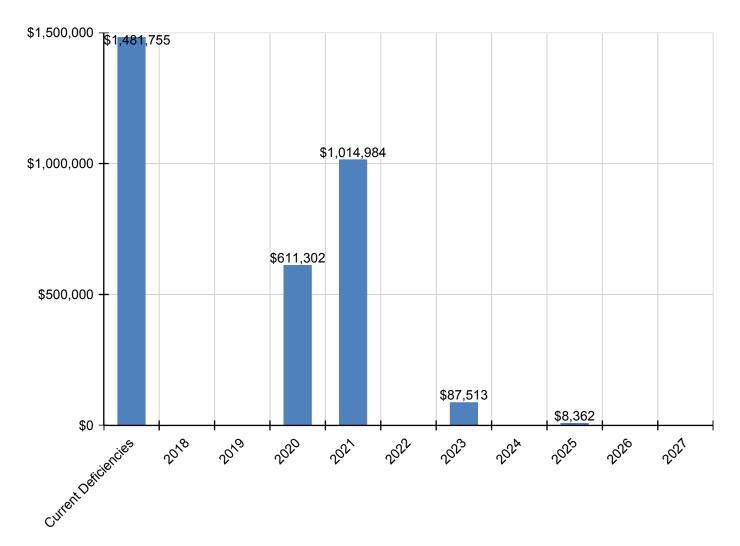
System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	\$1,481,755	\$0	\$0	\$611,302	\$1,014,984	\$0	\$87,513	\$0	\$8,362	\$0	\$0	\$3,203,916
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1010 - Standard Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B2010 - Exterior Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2020 - Exterior Windows	\$0	\$0	\$0	\$0	\$245,164	\$0	\$0	\$0	\$0	\$0	\$0	\$245,164
B2030 - Exterior Doors	\$24,354	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,354
B30 - Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010120 - Single Ply Membrane	\$0	\$0	\$0	\$236,734	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236,734
B3020 - Roof Openings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,362	\$0	\$0	\$8,362
C - Interiors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C10 - Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* C1010 - Partitions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1020 - Interior Doors	\$0	\$0	\$0	\$0	\$66,351	\$0	\$0	\$0	\$0	\$0	\$0	\$66,351
C1030 - Fittings	\$0	\$0	\$0	\$247,225	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$247,225
C30 - Interior Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

C3010 - Wall Finishes	\$0	\$0	\$0	\$70,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,636
C3020 - Floor Finishes	\$264,030	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$264,030
C3030 - Ceiling Finishes	\$254,698	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$254,698
D - Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$266,534	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$266,534
D2020 - Domestic Water Distribution	\$22,534	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$22,534
D2030 - Sanitary Waste	\$35,735	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,735
D2090 - Other Plumbing Systems -Nat Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$40,495	\$0	\$0	\$0	\$0	\$40,495
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3020 - Heat Generating Systems	\$96,963	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$96,963
D3040 - Distribution Systems	\$142,485	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$142,485
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$259,766	\$0	\$0	\$0	\$0	\$0	\$0	\$259,766
D3060 - Controls & Instrumentation	\$0	\$0	\$0	\$49,246	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,246
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$100,377	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,377
D4020 - Standpipes	\$15,705	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,705
D50 - Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5010 - Electrical Service/Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$47,018	\$0	\$0	\$0	\$0	\$47,018
D5020 - Branch Wiring	\$0	\$0	\$0	\$0	\$133,213	\$0	\$0	\$0	\$0	\$0	\$0	\$133,213
D5020 - Lighting	\$0	\$0	\$0	\$0	\$310,490	\$0	\$0	\$0	\$0	\$0	\$0	\$310,490
D5030 - Communications and Security	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030810 - Security & Detection Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030910 - Fire Alarm Systems	\$78,754	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$78,754
D5030920 - Data Communication	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E - Equipment & Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E10 - Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1020 - Institutional Equipment	\$0	\$0	\$0	\$7,461	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,461
E1090 - Other Equipment	\$44,157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,157
E20 - Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E2010 - Fixed Furnishings	\$135,429	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135,429

<sup>\*</sup> Indicates non-renewable system

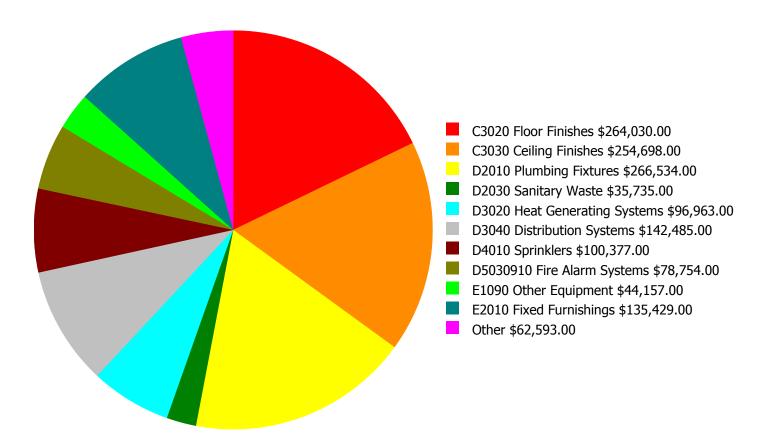
# **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and forecasting capital renewal or sustainment requirements over the next ten years.



### **Deficiency Summary by System**

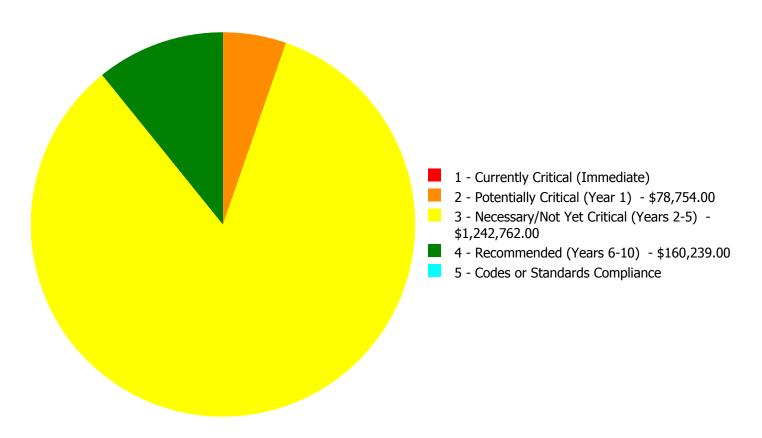
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



**Budget Estimate Total: \$1,481,755.00** 

### **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



**Budget Estimate Total: \$1,481,755.00** 

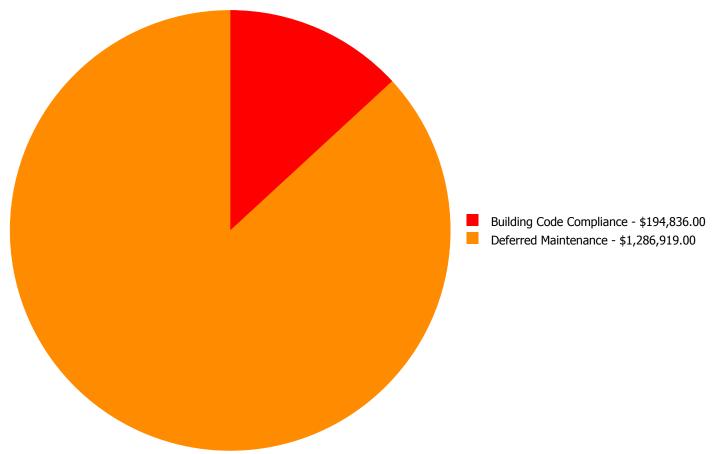
# **Deficiency By Priority Investment Table**

The table below shows the current investment cost grouped by deficiency priority and building system.

System Code	System Description	1 - Currently Critical (Immediate)	2 - Potentially Critical (Year 1)	3 - Necessary/Not Yet Critical (Years 2-5)	4 - Recommended (Years 6-10)	5 - Codes or Standards Compliance	Total
B2030	Exterior Doors	\$0.00	\$0.00	\$24,354.00	\$0.00	\$0.00	\$24,354.00
C3020	Floor Finishes	\$0.00	\$0.00	\$264,030.00	\$0.00	\$0.00	\$264,030.00
C3030	Ceiling Finishes	\$0.00	\$0.00	\$254,698.00	\$0.00	\$0.00	\$254,698.00
D2010	Plumbing Fixtures	\$0.00	\$0.00	\$266,534.00	\$0.00	\$0.00	\$266,534.00
D2020	Domestic Water Distribution	\$0.00	\$0.00	\$22,534.00	\$0.00	\$0.00	\$22,534.00
D2030	Sanitary Waste	\$0.00	\$0.00	\$35,735.00	\$0.00	\$0.00	\$35,735.00
D3020	Heat Generating Systems	\$0.00	\$0.00	\$96,963.00	\$0.00	\$0.00	\$96,963.00
D3040	Distribution Systems	\$0.00	\$0.00	\$142,485.00	\$0.00	\$0.00	\$142,485.00
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$100,377.00	\$0.00	\$100,377.00
D4020	Standpipes	\$0.00	\$0.00	\$0.00	\$15,705.00	\$0.00	\$15,705.00
D5030910	Fire Alarm Systems	\$0.00	\$78,754.00	\$0.00	\$0.00	\$0.00	\$78,754.00
E1090	Other Equipment	\$0.00	\$0.00	\$0.00	\$44,157.00	\$0.00	\$44,157.00
E2010	Fixed Furnishings	\$0.00	\$0.00	\$135,429.00	\$0.00	\$0.00	\$135,429.00
	Total:	\$0.00	\$78,754.00	\$1,242,762.00	\$160,239.00	\$0.00	\$1,481,755.00

# **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



Budget Estimate Total: \$1,481,755.00

### **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### **Priority 2 - Potentially Critical (Year 1):**

System: D5030910 - Fire Alarm Systems



Location: Throughout the building.
 Distress: Beyond Service Life
 Category: Building Code Compliance
 Priority: 2 - Potentially Critical (Year 1)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$78,754.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

Notes: The original fire alarm system operating as designed, but is beyond its service life and should be replaced.

### Priority 3 - Necessary/Not Yet Critical (Years 2-5):

#### System: B2030 - Exterior Doors



**Location:** Exterior

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$24,354.00 **Assessor Name:** Eduardo Lopez

**Date Created:** 01/13/2017

Notes: The original metal exterior doors are aged, rusted, damaged and should be replaced with energy efficient doors

#### System: C3020 - Floor Finishes



**Location:** Throughout

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$264,030.00 **Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** The original flooring is in poor conditions, with different areas bubbling or separating seams, and should be replaced.

### System: C3030 - Ceiling Finishes



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$254,698.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/04/2017

**Notes:** The ceiling tiles have been replaced as needed. However the grid shows signs of aging and most tiles are sagging or damaged and should be replaced.

### System: D2010 - Plumbing Fixtures



**Location:** Restroom/Classroom **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$266,534.00 **Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** The plumbing fixtures are original beyond its service life, not efficient or low flow fixtures.

### System: D2020 - Domestic Water Distribution



**Location:** Throughout the building. **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$22,534.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/13/2017

**Notes:** There are no reported issues or observed deficiencies with the domestic water piping. Due to the age of the pipe there can be internal pitting corrosion that may be a costly problem that leads to the formation of pinhole leaks and possible water contamination.

### System: D2030 - Sanitary Waste



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$35,735.00 **Assessor Name:** Eduardo Lopez

**Date Created:** 01/13/2017

**Notes:** There are no reported issues or observed deficiencies with the sanitary waste piping. The aging sanitary sewer piping in subject to leaks, infiltration, and it can even collapse in the interior walls. The system should be inspected with cameras to ensure that none of these deficiencies exist.

### System: D3020 - Heat Generating Systems



**Location:** Mechanical Room **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$96,963.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/09/2017

**Notes:** The original gas fired boiler is aged, rusted, inefficient, becoming logistically unsupportable and should be replaced with an energy efficient model.

#### System: D3040 - Distribution Systems



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$142,485.00 **Assessor Name:** Eduardo Lopez **Date Created:** 01/13/2017

Notes: The exhaust fans, and hot water supply distribution system is aged, in marginal condition, and should be replaced.

### **System: E2010 - Fixed Furnishings**



**Location:** Classroom **Distress:** Damaged

**Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$135,429.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/04/2017

Notes: The building casework is aged and worn and should be replaced.

### **Priority 4 - Recommended (Years 6-10):**

### System: D4010 - Sprinklers

This deficiency has no image. **Location:** Throughout the building

**Distress:** Missing

**Category:** Building Code Compliance **Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$100,377.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** There are no sprinklers in the building.

### System: D4020 - Standpipes

This deficiency has no image. **Location:** Throughout the building

**Distress:** Missing

**Category:** Building Code Compliance **Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$15,705.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** There are no sprinklers in the building.

### **System: E1090 - Other Equipment**



**Location:** Kitchen

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 20,692.00

**Unit of Measure:** S.F.

**Estimate:** \$44,157.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/04/2017

**Notes:** The kitchen equipment is beyond its expected service life, becoming logistically unsupportable and should be replaced.

### **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present scope. The **Repair Cost** (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Function:	ES -Elementary School
Gross Area (SF):	10,300
Year Built:	1962
Last Renovation:	
Replacement Value:	\$2,145,284
Repair Cost:	\$540,555.00
Total FCI:	25.20 %
Total RSLI:	24.53 %
FCA Score:	74.80



### **Description:**

The narrative for this building is included in the Executive Summary Description at the front of this report.

**Attributes:** This asset has no attributes.

### **Dashboard Summary**

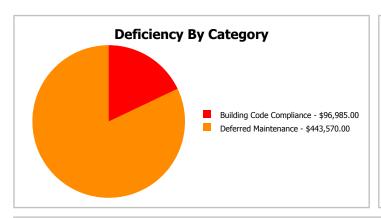
Function: ES -Elementary Gross Area: 10,300

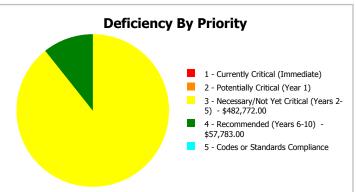
School

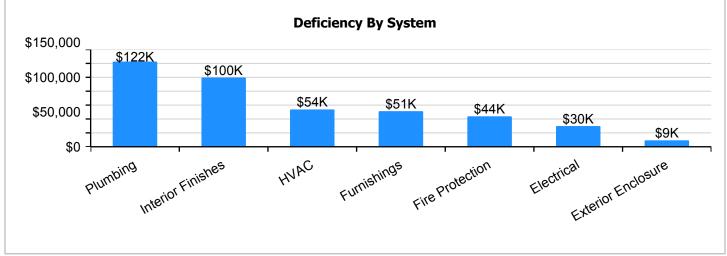
Year Built: 1962 Last Renovation:

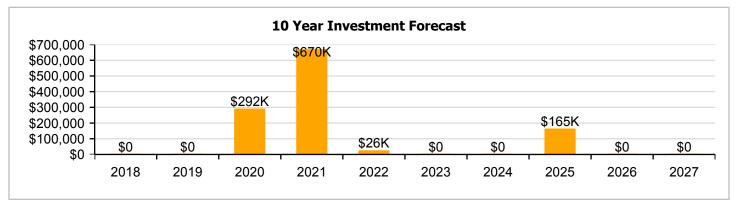
 Repair Cost:
 \$540,555
 Replacement Value:
 \$2,145,284

 FCI:
 25.20 %
 RSLI%:
 24.53 %









# **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	45.00 %	0.00 %	\$0.00
A20 - Basement Construction	45.00 %	0.00 %	\$0.00
B10 - Superstructure	45.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	27.66 %	5.81 %	\$12,123.00
B30 - Roofing	15.68 %	0.00 %	\$0.00
C10 - Interior Construction	20.27 %	0.00 %	\$0.00
C30 - Interior Finishes	17.30 %	49.79 %	\$131,428.00
D20 - Plumbing	1.20 %	100.11 %	\$161,679.00
D30 - HVAC	20.62 %	24.46 %	\$70,926.00
D40 - Fire Protection	0.00 %	110.00 %	\$57,783.00
D50 - Electrical	27.73 %	13.17 %	\$39,202.00
E10 - Equipment	15.00 %	0.00 %	\$0.00
E20 - Furnishings	0.00 %	110.00 %	\$67,414.00
Totals:	24.53 %	25.20 %	\$540,555.00

# **Photo Album**

The photo album consists of the various cardinal directions of the building..

1). North Elevation - Jan 06, 2017







3). West Elevation - Jan 06, 2017



4). South Elevation - Jan 06, 2017



### **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
- 2. System Description: A brief description of a system present in the building.
- 3. Unit Price \$: The unit price of the system.
- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

# System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$4.88	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$50,264
A1030	Slab on Grade	\$8.61	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$88,683
A2010	Basement Excavation	\$1.95	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$20,085
A2020	Basement Walls	\$13.35	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$137,505
B1010	Floor Construction	\$1.66	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$17,098
B1020	Roof Construction	\$16.08	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$165,624
B2010	Exterior Walls	\$9.61	S.F.	10,300	100	1962	2062		45.00 %	0.00 %	45			\$98,983
B2020	Exterior Windows	\$9.57	S.F.	10,300	30	1983	2013	2021	13.33 %	0.00 %	4			\$98,571
B2030	Exterior Doors	\$1.07	S.F.	10,300	30	1983	2013		0.00 %	110.00 %	-4		\$12,123.00	\$11,021
B3010120	Single Ply Membrane	\$6.98	S.F.	10,300	20	2000	2020		15.00 %	0.00 %	3			\$71,894
B3020	Roof Openings	\$0.29	S.F.	10,300	25	2000	2025		32.00 %	0.00 %	8			\$2,987
C1010	Partitions	\$11.01	S.F.	10,300	75	1962	2037		26.67 %	0.00 %	20			\$113,403
C1020	Interior Doors	\$2.59	S.F.	10,300	30	1983	2013	2021	13.33 %	0.00 %	4			\$26,677
C1030	Fittings	\$9.94	S.F.	10,300	20	2000	2020		15.00 %	0.00 %	3			\$102,382
C3010	Wall Finishes	\$2.84	S.F.	10,300	10	2010	2020		30.00 %	0.00 %	3			\$29,252
C3020	Floor Finishes	\$11.60	S.F.	10,300	20	1983	2003		0.00 %	110.00 %	-14		\$131,428.00	\$119,480
C3030	Ceiling Finishes	\$11.19	S.F.	10,300	25	2000	2025		32.00 %	0.00 %	8			\$115,257
D2010	Plumbing Fixtures	\$11.71	S.F.	10,300	30	1983	2013		0.00 %	110.00 %	-4		\$132,674.00	\$120,613
D2020	Domestic Water Distribution	\$0.99	S.F.	10,300	30	1962	1992		0.00 %	110.00 %	-25		\$11,217.00	\$10,197
D2030	Sanitary Waste	\$1.57	S.F.	10,300	30	1962	1992		0.00 %	110.00 %	-25		\$17,788.00	\$16,171
D2040	Rain Water Drainage	\$1.41	S.F.	10,300	30	1962	1992	2021	13.33 %	0.00 %	4			\$14,523
D3040	Distribution Systems	\$6.26	S.F.	10,300	30	1962	1992		0.00 %	110.00 %	-25		\$70,926.00	\$64,478
D3050	Terminal & Package Units	\$19.91	S.F.	10,300	15	2002	2017	2021	26.67 %	0.00 %	4			\$205,073
D3060	Controls & Instrumentation	\$1.98	S.F.	10,300	20	2002	2022		25.00 %	0.00 %	5			\$20,394
D4010	Sprinklers	\$4.41	S.F.	10,300	30			2016	0.00 %	110.00 %	-1		\$49,965.00	\$45,423
D4020	Standpipes	\$0.69	S.F.	10,300	30			2016	0.00 %	110.00 %	-1		\$7,818.00	\$7,107
D5010	Electrical Service/Distribution	\$1.73	S.F.	10,300	40	1962	2002	2021	10.00 %	0.00 %	4			\$17,819
D5020	Branch Wiring	\$5.20	S.F.	10,300	30	1962	1992	2021	13.33 %	0.00 %	4			\$53,560
D5020	Lighting	\$12.12	S.F.	10,300	30	1983	2013	2021	13.33 %	0.00 %	4			\$124,836
D5030810	Security & Detection Systems	\$1.91	S.F.	10,300	15	2015	2030		86.67 %	0.00 %	13			\$19,673
D5030910	Fire Alarm Systems	\$3.46	S.F.	10,300	15	1983	1998		0.00 %	110.00 %	-19		\$39,202.00	\$35,638
D5030920	Data Communication	\$4.47	S.F.	10,300	15	2015	2030		86.67 %	0.00 %	13			\$46,041
E1020	Institutional Equipment	\$1.29	S.F.	10,300	20	2000	2020		15.00 %	0.00 %	3			\$13,287
E2010	Fixed Furnishings	\$5.95	S.F.	10,300	20	1983	2003		0.00 %	110.00 %	-14		\$67,414.00	\$61,285
								Total	24.53 %	25.20 %			\$540,555.00	\$2,145,284

# **System Notes**

The facility description in the executive summary contains an overview of each system. The photos of each system and any associated notes listed below provide additional information on select systems found within the facility:

System: B2010 - Exterior Walls







### Note:

**System:** B2020 - Exterior Windows



### Note:

**System:** B2030 - Exterior Doors







**System:** B3010120 - Single Ply Membrane





### Note:

**System:** B3020 - Roof Openings



### Note:

**System:** C1010 - Partitions





**System:** C1020 - Interior Doors









Note:

**System:** C1030 - Fittings





Note:

**System:** C3010 - Wall Finishes







**System:** C3020 - Floor Finishes







Note:

**System:** C3030 - Ceiling Finishes







Note:

**System:** D2010 - Plumbing Fixtures







Note:

**System:** D2020 - Domestic Water Distribution



### Note:

**System:** D2030 - Sanitary Waste





### Note:

**System:** D2040 - Rain Water Drainage



**System:** D3040 - Distribution Systems







### Note:

**System:** D3050 - Terminal & Package Units





### Note:

**System:** D3060 - Controls & Instrumentation



**System:** D5010 - Electrical Service/Distribution







Note:

**System:** D5020 - Branch Wiring







Note:

System: D5020 - Lighting







Note:

**System:** D5030810 - Security & Detection Systems







### Note:

**System:** D5030910 - Fire Alarm Systems



### Note:

**System:** D5030920 - Data Communication





**System:** E1020 - Institutional Equipment

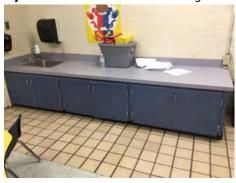






### Note:

**System:** E2010 - Fixed Furnishings







# **Renewal Schedule**

eCOMET forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

Inflation Rate: 3%

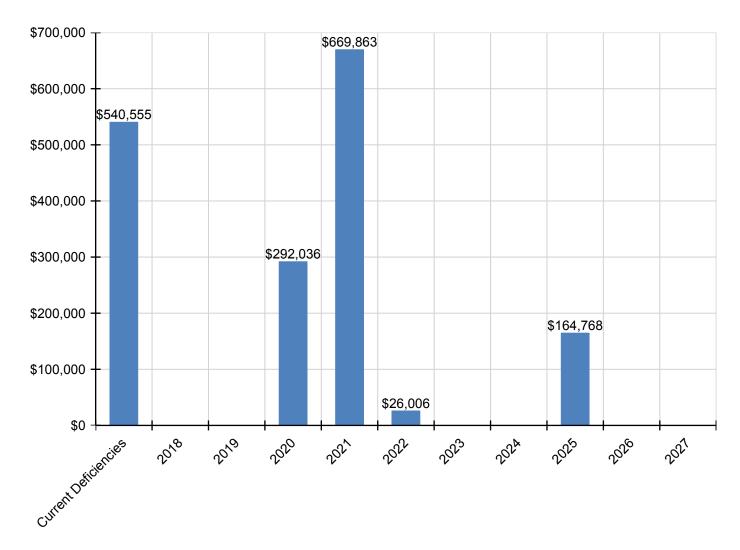
System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	\$540,555	\$0	\$0	\$292,036	\$669,863	\$26,006	\$0	\$0	\$164,768	\$0	\$0	\$1,693,228
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1010 - Standard Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B2010 - Exterior Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2020 - Exterior Windows	\$0	\$0	\$0	\$0	\$122,037	\$0	\$0	\$0	\$0	\$0	\$0	\$122,037
B2030 - Exterior Doors	\$12,123	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,123
B30 - Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010120 - Single Ply Membrane	\$0	\$0	\$0	\$117,841	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,841
B3020 - Roof Openings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,163	\$0	\$0	\$4,163
C - Interiors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C10 - Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* C1010 - Partitions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1020 - Interior Doors	\$0	\$0	\$0	\$0	\$33,028	\$0	\$0	\$0	\$0	\$0	\$0	\$33,028
C1030 - Fittings	\$0	\$0	\$0	\$123,063	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$123,063
C30 - Interior Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

C3010 - Wall Finishes	\$0	\$0	\$0	\$35,161	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,161
C3020 - Floor Finishes	\$131,428	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$131,428
C3030 - Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160,605	\$0	\$0	\$160,605
D - Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$132,674	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$132,674
D2020 - Domestic Water Distribution	\$11,217	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,217
D2030 - Sanitary Waste	\$17,788	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,788
D2040 - Rain Water Drainage	\$0	\$0	\$0	\$0	\$17,980	\$0	\$0	\$0	\$0	\$0	\$0	\$17,980
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3040 - Distribution Systems	\$70,926	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$70,926
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$253,892	\$0	\$0	\$0	\$0	\$0	\$0	\$253,892
D3060 - Controls & Instrumentation	\$0	\$0	\$0	\$0	\$0	\$26,006	\$0	\$0	\$0	\$0	\$0	\$26,006
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$49,965	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,965
D4020 - Standpipes	\$7,818	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,818
D50 - Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5010 - Electrical Service/Distribution	\$0	\$0	\$0	\$0	\$22,061	\$0	\$0	\$0	\$0	\$0	\$0	\$22,061
D5020 - Branch Wiring	\$0	\$0	\$0	\$0	\$66,310	\$0	\$0	\$0	\$0	\$0	\$0	\$66,310
D5020 - Lighting	\$0	\$0	\$0	\$0	\$154,555	\$0	\$0	\$0	\$0	\$0	\$0	\$154,555
D5030 - Communications and Security	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030810 - Security & Detection Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030910 - Fire Alarm Systems	\$39,202	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,202
D5030920 - Data Communication	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E - Equipment & Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E10 - Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1020 - Institutional Equipment	\$0	\$0	\$0	\$15,971	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,971
E20 - Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E2010 - Fixed Furnishings	\$67,414	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,414

<sup>\*</sup> Indicates non-renewable system

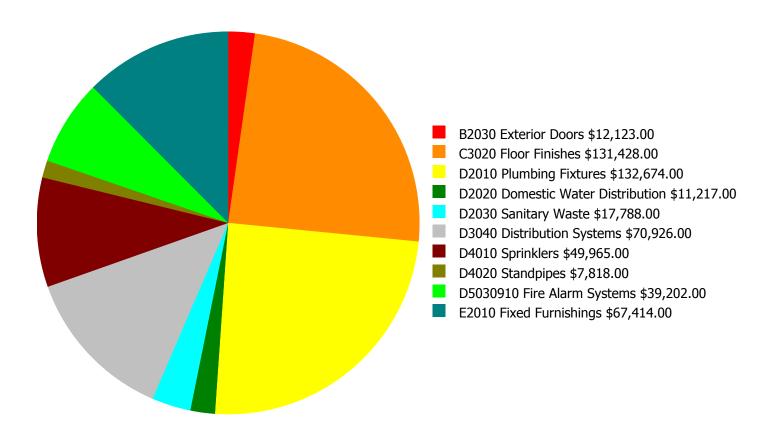
# **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and forecasting capital renewal or sustainment requirements over the next ten years.



### **Deficiency Summary by System**

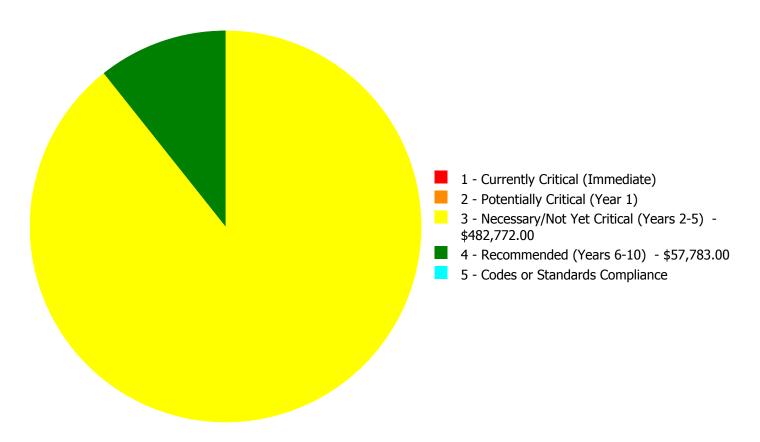
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



**Budget Estimate Total: \$540,555.00** 

### **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



**Budget Estimate Total: \$540,555.00** 

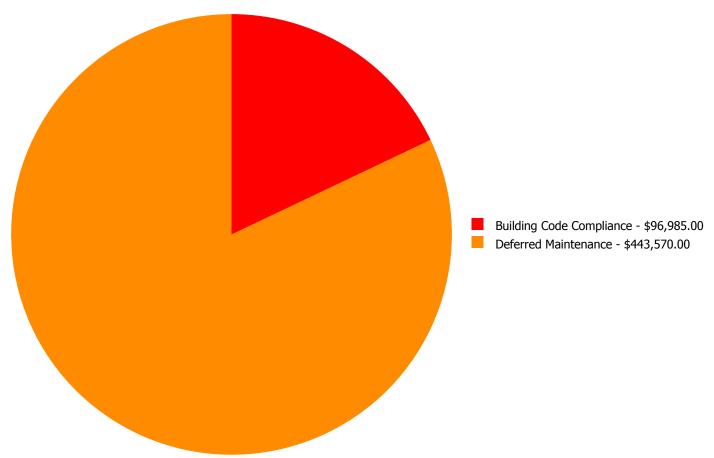
# **Deficiency By Priority Investment Table**

The table below shows the current investment cost grouped by deficiency priority and building system.

System Code	System Description	1 - Currently Critical (Immediate)	2 - Potentially Critical (Year 1)	3 - Necessary/Not Yet Critical (Years 2-5)	4 - Recommended (Years 6-10)	5 - Codes or Standards Compliance	Total
B2030	Exterior Doors	\$0.00	\$0.00	\$12,123.00	\$0.00	\$0.00	\$12,123.00
C3020	Floor Finishes	\$0.00	\$0.00	\$131,428.00	\$0.00	\$0.00	\$131,428.00
D2010	Plumbing Fixtures	\$0.00	\$0.00	\$132,674.00	\$0.00	\$0.00	\$132,674.00
D2020	Domestic Water Distribution	\$0.00	\$0.00	\$11,217.00	\$0.00	\$0.00	\$11,217.00
D2030	Sanitary Waste	\$0.00	\$0.00	\$17,788.00	\$0.00	\$0.00	\$17,788.00
D3040	Distribution Systems	\$0.00	\$0.00	\$70,926.00	\$0.00	\$0.00	\$70,926.00
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$49,965.00	\$0.00	\$49,965.00
D4020	Standpipes	\$0.00	\$0.00	\$0.00	\$7,818.00	\$0.00	\$7,818.00
D5030910	Fire Alarm Systems	\$0.00	\$0.00	\$39,202.00	\$0.00	\$0.00	\$39,202.00
E2010	Fixed Furnishings	\$0.00	\$0.00	\$67,414.00	\$0.00	\$0.00	\$67,414.00
	Total:	\$0.00	\$0.00	\$482,772.00	\$57,783.00	\$0.00	\$540,555.00

# **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



**Budget Estimate Total: \$540,555.00** 

### **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### **Priority 3 - Necessary/Not Yet Critical (Years 2-5):**

### System: B2030 - Exterior Doors



**Location:** Exterior

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 10,300.00

Unit of Measure: S.F.

**Estimate:** \$12,123.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/13/2017

Notes: The original metal exterior doors are aged, rusted, damaged and should be replaced with energy efficient doors

### System: C3020 - Floor Finishes



**Location:** Throughout

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

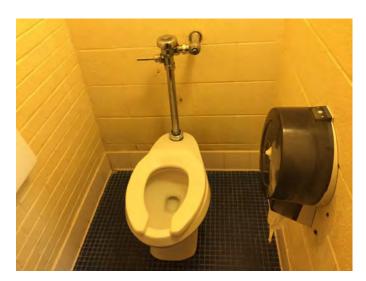
**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$131,428.00 **Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** The flooring is beyond its service life and should be inspected and replaced.

### System: D2010 - Plumbing Fixtures



**Location:** Restrooms

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$132,674.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/04/2017

**Notes:** The plumbing fixtures are original, not efficient or low flow fixtures.

#### System: D2020 - Domestic Water Distribution



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$11,217.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/13/2017

**Notes:** There are no reported issues or observed deficiencies with the domestic water piping. Due to the age of the pipe there can be internal pitting corrosion that may be a costly problem that leads to the formation of pinhole leaks and possible water contamination.

#### System: D2030 - Sanitary Waste



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System **Qty:** 10,300.00

20,1 20,000

**Unit of Measure:** S.F.

**Estimate:** \$17,788.00 **Assessor Name:** Eduardo Lopez

**Date Created:** 01/13/2017

**Notes:** There are no reported issues or observed deficiencies with the sanitary waste piping. The aging sanitary sewer piping in subject to leaks, infiltration, and it can even collapse in the interior walls. The system should be inspected with cameras to ensure that none of these deficiencies exist.

### **System: D3040 - Distribution Systems**



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$70,926.00 **Assessor Name:** Eduardo Lopez **Date Created:** 01/13/2017

Notes: The exhaust fans, and hot water supply distribution system is aged, in marginal condition, and should be replaced.

### System: D5030910 - Fire Alarm Systems



Location: Throughout

Distress: Beyond Service Life **Category:** Building Code Compliance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$39,202.00

**Assessor Name:** Eduardo Lopez

**Date Created:** 01/04/2017

Notes: The original alarm system is operating but is aged. The system should be inspected and repaired or replaced to ensure that the life safety codes are preserved.

### System: E2010 - Fixed Furnishings



Location: Classrooms **Distress:** Damaged

Category: Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$67,414.00

Assessor Name: Eduardo Lopez

01/04/2017 Date Created:

**Notes:** The building casework is aged and worn and should be replaced.

### **Priority 4 - Recommended (Years 6-10):**

### System: D4010 - Sprinklers

This deficiency has no image. **Location:** Throughout the building

**Distress:** Missing

**Category:** Building Code Compliance **Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 10,300.00

**Unit of Measure:** S.F.

**Estimate:** \$49,965.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** There are no sprinklers in the building.

### System: D4020 - Standpipes

This deficiency has no image. **Location:** Throughout the building

**Distress:** Missing

**Category:** Building Code Compliance **Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 10,300.00

Unit of Measure: S.F.

**Estimate:** \$7,818.00

**Assessor Name:** Eduardo Lopez **Date Created:** 01/04/2017

**Notes:** There are no sprinklers in the building.

### **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present scope. The **Repair Cost** (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Function:	ES -Elementary School
Gross Area (SF):	16,000
Year Built:	1983
Last Renovation:	
Replacement Value:	\$3,154,400
Repair Cost:	\$971,939.00
Total FCI:	30.81 %
Total RSLI:	31.37 %
FCA Score:	69.19



### **Description:**

The narrative for this building is included in the Executive Summary Description at the front of this report.

**Attributes:** This asset has no attributes.

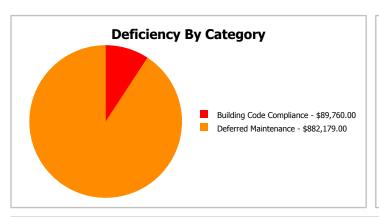
### **Dashboard Summary**

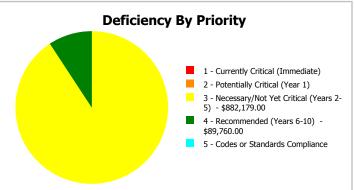
Function: ES -Elementary Gross Area: 16,000

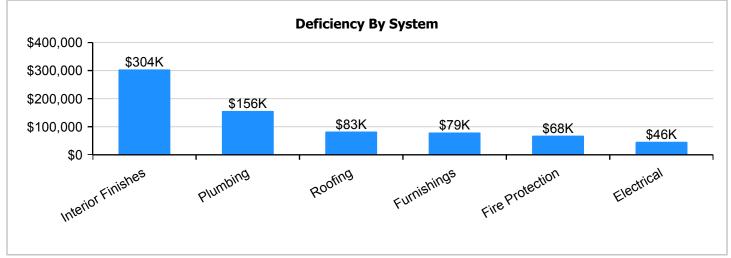
School

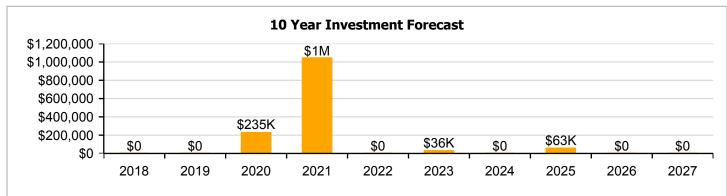
Year Built: 1983 Last Renovation:

Repair Cost: \$971,939 Replacement Value: \$3,154,400 FCI: 30.81 % RSLI%: 31.37 %









## **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	66.00 %	0.00 %	\$0.00
A20 - Basement Construction	66.00 %	0.00 %	\$0.00
B10 - Superstructure	66.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	38.33 %	0.00 %	\$0.00
B30 - Roofing	0.00 %	142.40 %	\$109,363.00
C10 - Interior Construction	33.37 %	0.00 %	\$0.00
C30 - Interior Finishes	8.86 %	97.81 %	\$401,104.00
D20 - Plumbing	2.39 %	90.27 %	\$206,096.00
D30 - HVAC	21.80 %	0.00 %	\$0.00
D40 - Fire Protection	0.00 %	110.00 %	\$89,760.00
D50 - Electrical	28.03 %	13.17 %	\$60,896.00
E10 - Equipment	15.00 %	0.00 %	\$0.00
E20 - Furnishings	0.00 %	110.00 %	\$104,720.00
Totals:	31.37 %	30.81 %	\$971,939.00

## **Photo Album**

The photo album consists of the various cardinal directions of the building..

1). East Elevation - Jan 10, 2017



2). South Elevation - Jan 10, 2017



3). West Elevation - Jan 10, 2017



4). North Elevation - Jan 10, 2017



### **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
- 2. System Description: A brief description of a system present in the building.
- 3. Unit Price \$: The unit price of the system.
- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$4.88	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$78,080
A1030	Slab on Grade	\$8.61	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$137,760
A2010	Basement Excavation	\$1.95	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$31,200
A2020	Basement Walls	\$13.35	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$213,600
B1010	Floor Construction	\$1.66	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$26,560
B1020	Roof Construction	\$16.08	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$257,280
B2010	Exterior Walls	\$9.61	S.F.	16,000	100	1983	2083		66.00 %	0.00 %	66			\$153,760
B2020	Exterior Windows	\$9.57	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$153,120
B2030	Exterior Doors	\$1.07	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$17,120
B3010140	Asphalt Shingles	\$4.32	S.F.	16,000	20	1983	2003		0.00 %	146.00 %	-14		\$100,915.00	\$69,120
B3020	Roof Openings	\$0.48	S.F.	16,000	20	1983	2003		0.00 %	110.00 %	-14		\$8,448.00	\$7,680
C1010	Partitions	\$11.01	S.F.	16,000	75	1983	2058		54.67 %	0.00 %	41			\$176,160
C1020	Interior Doors	\$2.59	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$41,440
C1030	Fittings	\$9.94	S.F.	16,000	20	2000	2020		15.00 %	0.00 %	3			\$159,040
C3010	Wall Finishes	\$2.84	S.F.	16,000	10	2015	2025		80.00 %	0.00 %	8			\$45,440
C3020	Floor Finishes	\$11.60	S.F.	16,000	20	1983	2003		0.00 %	110.00 %	-14		\$204,160.00	\$185,600
C3030	Ceiling Finishes	\$11.19	S.F.	16,000	25	1983	2008		0.00 %	110.00 %	-9		\$196,944.00	\$179,040
D2010	Plumbing Fixtures	\$11.71	S.F.	16,000	30	1983	2013		0.00 %	110.00 %	-4		\$206,096.00	\$187,360
D2020	Domestic Water Distribution	\$0.99	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$15,840
D2030	Sanitary Waste	\$1.57	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$25,120
D3040	Distribution Systems	\$6.26	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$100,160
D3050	Terminal & Package Units	\$13.65	S.F.	16,000	15	2000	2015	2021	26.67 %	0.00 %	4			\$218,400
D3060	Controls & Instrumentation	\$1.98	S.F.	16,000	20	2000	2020		15.00 %	0.00 %	3			\$31,680
D4010	Sprinklers	\$4.41	S.F.	16,000	30			2016	0.00 %	110.00 %	-1		\$77,616.00	\$70,560
D4020	Standpipes	\$0.69	S.F.	16,000	30			2016	0.00 %	110.00 %	-1		\$12,144.00	\$11,040
D5010	Electrical Service/Distribution	\$1.73	S.F.	16,000	40	1983	2023		15.00 %	0.00 %	6			\$27,680
D5020	Branch Wiring	\$5.20	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$83,200
D5020	Lighting	\$12.12	S.F.	16,000	30	1983	2013	2021	13.33 %	0.00 %	4			\$193,920
D5030810	Security & Detection Systems	\$1.91	S.F.	16,000	15	2015	2030		86.67 %	0.00 %	13			\$30,560
D5030910	Fire Alarm Systems	\$3.46	S.F.	16,000	15	1983	1998		0.00 %	110.00 %	-19		\$60,896.00	\$55,360
D5030920	Data Communication	\$4.47	S.F.	16,000	15	2015	2030		86.67 %	0.00 %	13			\$71,520
E1020	Institutional Equipment	\$0.30	S.F.	16,000	20	2000	2020		15.00 %	0.00 %	3			\$4,800
E2010	Fixed Furnishings	\$5.95	S.F.	16,000	20	1983	2003		0.00 %	110.00 %	-14		\$104,720.00	\$95,200
								Total	31.37 %	30.81 %			\$971,939.00	\$3,154,400

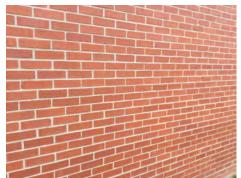
## **System Notes**

The facility description in the executive summary contains an overview of each system. The photos of each system and any associated notes listed below provide additional information on select systems found within the facility:

System: B2010 - Exterior Walls







Note:

System: B2020 - Exterior Windows







Note:

**System:** B2030 - Exterior Doors







**System:** B3010140 - Asphalt Shingles







### Note:

**System:** B3020 - Roof Openings



### Note:

**System:** C1010 - Partitions







**System:** C1020 - Interior Doors







### Note:

**System:** C1030 - Fittings







### Note:

**System:** C3010 - Wall Finishes

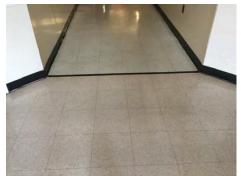




**System:** C3020 - Floor Finishes







Note:

**System:** C3030 - Ceiling Finishes







Note:

**System:** D2010 - Plumbing Fixtures







Note:

**System:** D2020 - Domestic Water Distribution



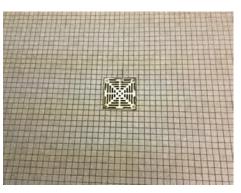




### Note:

**System:** D2030 - Sanitary Waste







### Note:

**System:** D3040 - Distribution Systems







**System:** D3050 - Terminal & Package Units





Note:

**System:** D3060 - Controls & Instrumentation





Note:

**System:** D5010 - Electrical Service/Distribution







Note:

**System:** D5020 - Branch Wiring







Note:

System: D5020 - Lighting







Note:

**System:** D5030810 - Security & Detection Systems







Note:

**System:** D5030910 - Fire Alarm Systems







Note:

**System:** D5030920 - Data Communication







Note:

**System:** E1020 - Institutional Equipment







Note:

**System:** E2010 - Fixed Furnishings







## **Renewal Schedule**

eCOMET forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

Inflation Rate: 3%

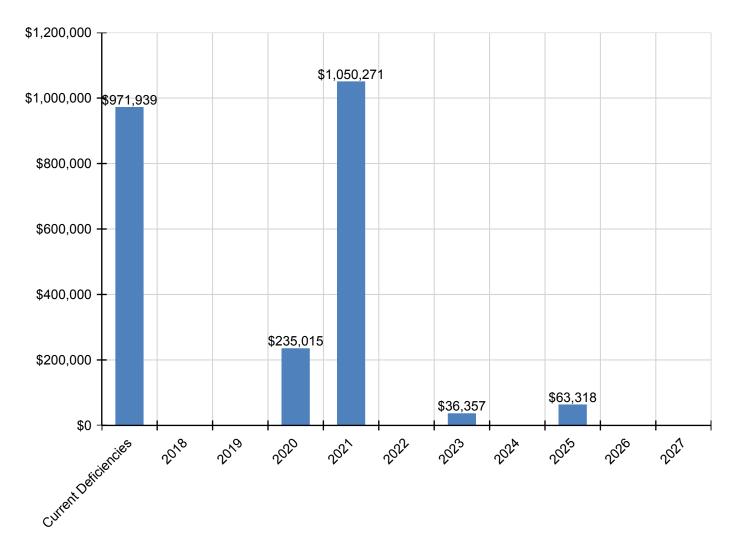
System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	\$971,939	\$0	\$0	\$235,015	\$1,050,271	\$0	\$36,357	\$0	\$63,318	\$0	\$0	\$2,356,900
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1010 - Standard Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B2010 - Exterior Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2020 - Exterior Windows	\$0	\$0	\$0	\$0	\$189,572	\$0	\$0	\$0	\$0	\$0	\$0	\$189,572
B2030 - Exterior Doors	\$0	\$0	\$0	\$0	\$21,196	\$0	\$0	\$0	\$0	\$0	\$0	\$21,196
B30 - Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010140 - Asphalt Shingles	\$100,915	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,915
B3020 - Roof Openings	\$8,448	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,448
C - Interiors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C10 - Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* C1010 - Partitions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1020 - Interior Doors	\$0	\$0	\$0	\$0	\$51,305	\$0	\$0	\$0	\$0	\$0	\$0	\$51,305
C1030 - Fittings	\$0	\$0	\$0	\$191,166	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$191,166
C30 - Interior Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

C3010 - Wall Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63,318	\$0	\$0	\$63,318
C3020 - Floor Finishes	\$204,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$204,160
C3030 - Ceiling Finishes	\$196,944	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$196,944
D - Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$206,096	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$206,096
D2020 - Domestic Water Distribution	\$0	\$0	\$0	\$0	\$19,611	\$0	\$0	\$0	\$0	\$0	\$0	\$19,611
D2030 - Sanitary Waste	\$0	\$0	\$0	\$0	\$31,100	\$0	\$0	\$0	\$0	\$0	\$0	\$31,100
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3040 - Distribution Systems	\$0	\$0	\$0	\$0	\$124,004	\$0	\$0	\$0	\$0	\$0	\$0	\$124,004
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$270,392	\$0	\$0	\$0	\$0	\$0	\$0	\$270,392
D3060 - Controls & Instrumentation	\$0	\$0	\$0	\$38,079	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,079
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$77,616	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$77,616
D4020 - Standpipes	\$12,144	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,144
D50 - Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5010 - Electrical Service/Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$36,357	\$0	\$0	\$0	\$0	\$36,357
D5020 - Branch Wiring	\$0	\$0	\$0	\$0	\$103,007	\$0	\$0	\$0	\$0	\$0	\$0	\$103,007
D5020 - Lighting	\$0	\$0	\$0	\$0	\$240,085	\$0	\$0	\$0	\$0	\$0	\$0	\$240,085
D5030 - Communications and Security	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030810 - Security & Detection Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030910 - Fire Alarm Systems	\$60,896	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,896
D5030920 - Data Communication	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E - Equipment & Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E10 - Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1020 - Institutional Equipment	\$0	\$0	\$0	\$5,770	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,770
E20 - Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E2010 - Fixed Furnishings	\$104,720	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104,720

<sup>\*</sup> Indicates non-renewable system

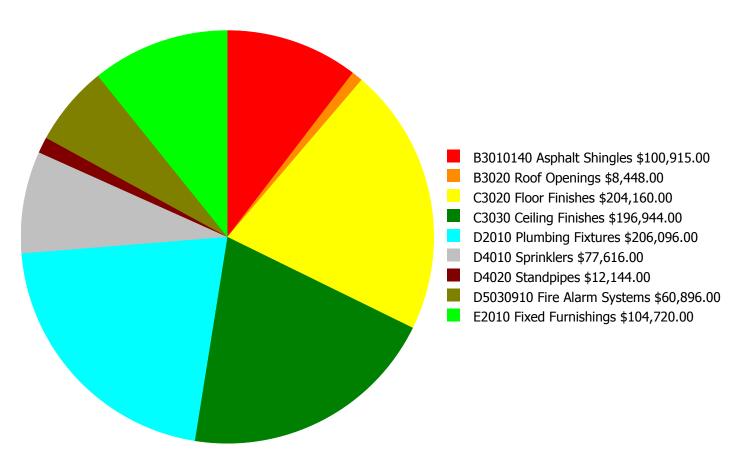
## **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and forecasting capital renewal or sustainment requirements over the next ten years.



### **Deficiency Summary by System**

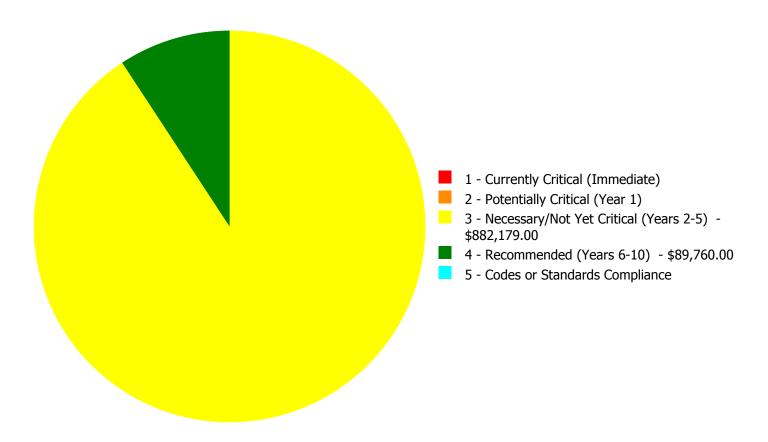
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.



**Budget Estimate Total: \$971,939.00** 

### **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



**Budget Estimate Total: \$971,939.00** 

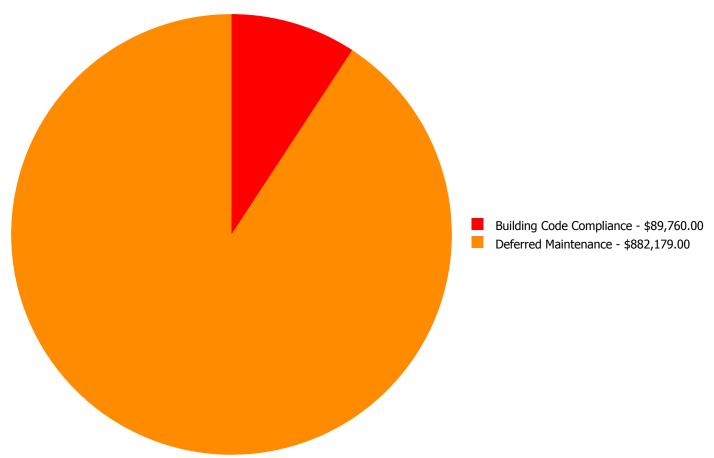
## **Deficiency By Priority Investment Table**

The table below shows the current investment cost grouped by deficiency priority and building system.

System Code	System Description	1 - Currently Critical (Immediate)	2 - Potentially Critical (Year 1)	3 - Necessary/Not Yet Critical (Years 2-5)	4 - Recommended (Years 6-10)	5 - Codes or Standards Compliance	Total
B3010140	Asphalt Shingles	\$0.00	\$0.00	\$100,915.00	\$0.00	\$0.00	\$100,915.00
B3020	Roof Openings	\$0.00	\$0.00	\$8,448.00	\$0.00	\$0.00	\$8,448.00
C3020	Floor Finishes	\$0.00	\$0.00	\$204,160.00	\$0.00	\$0.00	\$204,160.00
C3030	Ceiling Finishes	\$0.00	\$0.00	\$196,944.00	\$0.00	\$0.00	\$196,944.00
D2010	Plumbing Fixtures	\$0.00	\$0.00	\$206,096.00	\$0.00	\$0.00	\$206,096.00
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$77,616.00	\$0.00	\$77,616.00
D4020	Standpipes	\$0.00	\$0.00	\$0.00	\$12,144.00	\$0.00	\$12,144.00
D5030910	Fire Alarm Systems	\$0.00	\$0.00	\$60,896.00	\$0.00	\$0.00	\$60,896.00
E2010	Fixed Furnishings	\$0.00	\$0.00	\$104,720.00	\$0.00	\$0.00	\$104,720.00
	Total:	\$0.00	\$0.00	\$882,179.00	\$89,760.00	\$0.00	\$971,939.00

## **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



**Budget Estimate Total: \$971,939.00** 

### **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

### **Priority 3 - Necessary/Not Yet Critical (Years 2-5):**

### System: B3010140 - Asphalt Shingles



**Location:** Roof **Distress:** Damaged

Category: Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 16,000.00

Unit of Measure: S.F.

**Estimate:** \$100,915.00

**Assessor Name:** Terence Davis **Date Created:** 01/10/2017

**Notes:** The roofing is aged, has reported leaks and should be replaced.

#### System: B3020 - Roof Openings



**Distress:** 1983 Media Center **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

Correction: Renew System

**Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$8,448.00

**Assessor Name:** Terence Davis

**Date Created:** 02/21/2017

#### System: C3020 - Floor Finishes



**Location:** Throughout the building **Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System **Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$204,160.00 **Assessor Name:** Terence Davis

**Date Created:** 01/04/2017

#### Notes:

### System: C3030 - Ceiling Finishes



**Location:** Throughout the building **Distress:** Beyond Service Life Category: Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System **Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$196,944.00 **Assessor Name:** Terence Davis **Date Created:** 01/04/2017

**Notes:** The ceiling finishes are beyond their service life and should be replaced.

#### System: D2010 - Plumbing Fixtures



**Location:** Restroom

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$206,096.00

**Assessor Name:** Terence Davis

**Date Created:** 01/04/2017

**Notes:** The plumbing fixtures are original, not efficient or low flow fixtures.

#### System: D5030910 - Fire Alarm Systems



**Location:** Throughout

**Distress:** Beyond Service Life **Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 16,000.00

**Unit of Measure:** S.F.

**Assessor Name:** \$60,896.00 **Assessor Name:** Terence Davis **Date Created:** 01/04/2017

**Notes:** The original alarm system is operating but is aged. The system should be inspected and repaired or replaced to ensure that the life safety codes are preserved.

### **System: E2010 - Fixed Furnishings**



**Location:** Classrooms **Distress:** Damaged

**Category:** Deferred Maintenance

**Priority:** 3 - Necessary/Not Yet Critical (Years 2-5)

**Correction:** Renew System

**Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$104,720.00

**Assessor Name:** Terence Davis

**Date Created:** 01/04/2017

**Notes:** The building casework is aged and worn and should be replaced.

### **Priority 4 - Recommended (Years 6-10):**

#### System: D4010 - Sprinklers

This deficiency has no image. **Location:** Throughout the building

**Distress:** Missing

**Category:** Building Code Compliance **Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$77,616.00

**Assessor Name:** Terence Davis **Date Created:** 01/04/2017

**Notes:** There are no sprinklers in the building.

#### System: D4020 - Standpipes

This deficiency has no image. **Location:** Throughout the building

**Distress:** Missing

**Category:** Building Code Compliance **Priority:** 4 - Recommended (Years 6-10)

**Correction:** Renew System

**Qty:** 16,000.00

Unit of Measure: S.F.

**Estimate:** \$12,144.00

**Assessor Name:** Terence Davis **Date Created:** 01/04/2017

**Notes:** There are no sprinklers in the building.

### **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present scope. The **Repair Cost** (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Function:	ES -Elementary School
Gross Area (SF):	46,992
Year Built:	1958
Last Renovation:	
Replacement Value:	\$1,240,118
Repair Cost:	\$0.00
Total FCI:	0.00 %
Total RSLI:	19.90 %
FCA Score:	100.00



#### **Description:**

The narrative for this site is included in the Executive Summary Description at the front of this report.

**Attributes:** This asset has no attributes.

## **Dashboard Summary**

Function: ES -Elementary Gross Area: 46,992

School

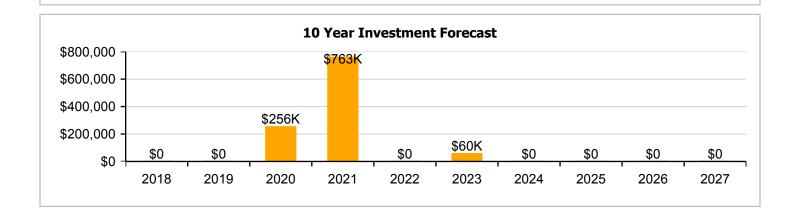
Year Built: 1958 Last Renovation:

 Repair Cost:
 \$0
 Replacement Value:
 \$1,240,118

 FCI:
 0.00 %
 RSLI%:
 19.90 %

No data found for this asset

No data found for this asset



## **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
G20 - Site Improvements	15.83 %	0.00 %	\$0.00
G30 - Site Mechanical Utilities	9.44 %	0.00 %	\$0.00
G40 - Site Electrical Utilities	45.43 %	0.00 %	\$0.00
Totals:	19.90 %	0.00 %	\$0.00

## **Photo Album**

The photo album consists of the various cardinal directions of the building..

1). Aeriall Image of North Laurinburg Elementary School - Feb 27, 2017



### **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
- 2. System Description: A brief description of a system present in the building.
- 3. Unit Price \$: The unit price of the system.
- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

# **System Listing**

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
G2010	Roadways	\$3.81	S.F.	46,992	25	1958	1983	2021	16.00 %	0.00 %	4			\$179,040
G2020	Parking Lots	\$1.33	S.F.	46,992	25	1958	1983	2021	16.00 %	0.00 %	4			\$62,499
G2030	Pedestrian Paving	\$1.91	S.F.	46,992	30	1958	1988	2021	13.33 %	0.00 %	4			\$89,755
G2040105	Fence & Guardrails	\$1.23	S.F.	46,992	30	2000	2030		43.33 %	0.00 %	13			\$57,800
G2040950	Covered Walkways	\$1.52	S.F.	46,992	25	1983	2008	2021	16.00 %	0.00 %	4			\$71,428
G2040950	Hard Surface Play Area	\$0.75	S.F.	46,992	20	1958	1978	2021	20.00 %	0.00 %	4			\$35,244
G2040950	Playing Field	\$4.54	S.F.	46,992	20	2000	2020		15.00 %	0.00 %	3			\$213,344
G2050	Landscaping	\$1.87	S.F.	46,992	15	1958	1973		0.00 %	0.00 %	-44			\$87,875
G3010	Water Supply	\$2.34	S.F.	46,992	50	1958	2008	2021	8.00 %	0.00 %	4			\$109,961
G3020	Sanitary Sewer	\$1.45	S.F.	46,992	50	1958	2008	2021	8.00 %	0.00 %	4			\$68,138
G3060	Fuel Distribution	\$0.98	S.F.	46,992	40	1983	2023		15.00 %	0.00 %	6			\$46,052
G4010	Electrical Distribution	\$2.35	S.F.	46,992	50	1983	2033		32.00 %	0.00 %	16			\$110,431
G4020	Site Lighting	\$1.47	S.F.	46,992	30	2000	2030		43.33 %	0.00 %	13			\$69,078
G4030	Site Communications & Security	\$0.84	S.F.	46,992	15	2015	2030		86.67 %	0.00 %	13			\$39,473
_	Total 1													\$1,240,118

## **System Notes**

The facility description in the executive summary contains an overview of each system. The photos of each system and any associated notes listed below provide additional information on select systems found within the facility:

**System:** G2010 - Roadways







### Note:

**System:** G2020 - Parking Lots







#### Note:

**System:** G2030 - Pedestrian Paving







## Campus Assessment Report - Site

**System:** G2040105 - Fence & Guardrails







Note:

**System:** G2040950 - Covered Walkways







Note:

**System:** G2040950 - Hard Surface Play Area



Note:

# Campus Assessment Report - Site

**System:** G2040950 - Playing Field







### Note:

**System:** G2050 - Landscaping





**System:** G3010 - Water Supply



Note:

**System:** G3020 - Sanitary Sewer



Note:

**System:** G3060 - Fuel Distribution





### Note:

**System:** G4010 - Electrical Distribution





## Campus Assessment Report - Site

**System:** G4020 - Site Lighting



Note:

**System:** G4030 - Site Communications & Security



## **Renewal Schedule**

eCOMET forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

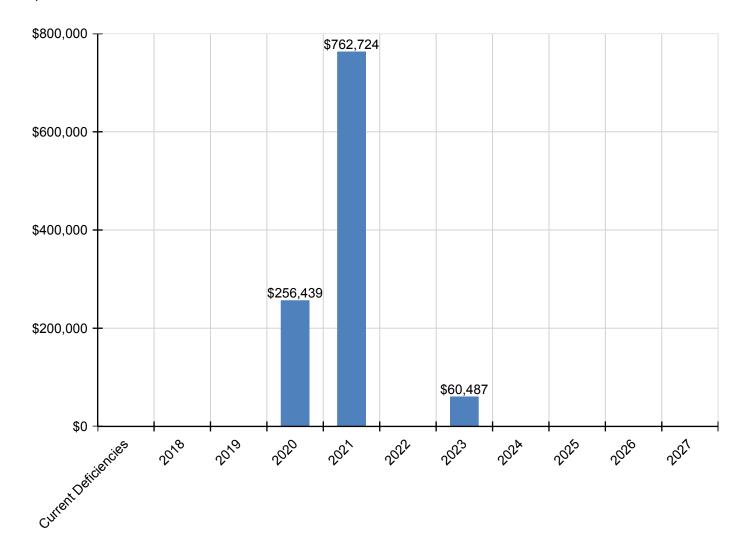
Inflation Rate: 3%

System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	\$0	\$0	\$0	\$256,439	\$762,724	\$0	\$60,487	\$0	\$0	\$0	\$0	\$1,079,650
G - Building Sitework	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G20 - Site Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2010 - Roadways	\$0	\$0	\$0	\$0	\$221,661	\$0	\$0	\$0	\$0	\$0	\$0	\$221,661
G2020 - Parking Lots	\$0	\$0	\$0	\$0	\$77,378	\$0	\$0	\$0	\$0	\$0	\$0	\$77,378
G2030 - Pedestrian Paving	\$0	\$0	\$0	\$0	\$111,121	\$0	\$0	\$0	\$0	\$0	\$0	\$111,121
G2040 - Site Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040105 - Fence & Guardrails	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040950 - Covered Walkways	\$0	\$0	\$0	\$0	\$88,432	\$0	\$0	\$0	\$0	\$0	\$0	\$88,432
G2040950 - Hard Surface Play Area	\$0	\$0	\$0	\$0	\$43,634	\$0	\$0	\$0	\$0	\$0	\$0	\$43,634
G2040950 - Playing Field	\$0	\$0	\$0	\$256,439	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$256,439
* G2050 - Landscaping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G30 - Site Mechanical Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G3010 - Water Supply	\$0	\$0	\$0	\$0	\$136,138	\$0	\$0	\$0	\$0	\$0	\$0	\$136,138
G3020 - Sanitary Sewer	\$0	\$0	\$0	\$0	\$84,359	\$0	\$0	\$0	\$0	\$0	\$0	\$84,359
G3060 - Fuel Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$60,487	\$0	\$0	\$0	\$0	\$60,487
G40 - Site Electrical Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4010 - Electrical Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4020 - Site Lighting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4030 - Site Communications & Security	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<sup>\*</sup> Indicates non-renewable system

## **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and forecasting capital renewal or sustainment requirements over the next ten years.



### **Deficiency Summary by System**

Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart lists all current deficiencies associated with this facility.

## **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:

## **Deficiency By Priority Investment Table**

The table below shows the current investment cost grouped by deficiency priority and building system.

## **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:

## **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.