NC School District/830 Scotland County/Elementary School

Wagram Elementary

Final

Campus Assessment Report

March 11, 2017

PARSONS

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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.

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Gross Area (SF):	73,960
Year Built:	1983
Last Renovation:	
Replacement Value:	$15,382,032
Repair Cost:	$4,185,494.00
Total FCI:	27.21 %
Total RSLI:	50.79 %
FCA Score:	72.79

Description:

GENERAL:
Wagram Elementary is located at 24081 Main St. in Wagram, North Carolina. The 1 story, 73,960 square foot building was originally constructed in 1983 There have been 1 addition. In addition to the main building, the campus contains a 2011 classroom and gymnasium addition.

This report contains condition and adequacy data collected during the 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
Floor construction is concrete. Roof construction is steel. 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 low slope standing seam metal . Roof opening include roof hatch door. Most building entrances appear to comply with ADA requirements.

C. INTERIORS
Interior partitions are typically CMU. Interior doors are generally solid core wood with hollow steel frames and mostly with glazing. Interior fittings include the following items: white boards, graphics and identifying devices, toilet accessories, storage shelving, handrails, fabricated toilet partitions. The interior wall finishes are typically painted CMU. Floor finishes in common areas are typically vinyl composition tile. Floor finishes in assignable spaces is typically vinyl composition tile. Ceiling finishes in common areas are typically suspended acoustical tile. Ceiling finishes in assignable areas are typically suspended acoustical tile.

CONVEYING:
The building does not include conveying equipment. Conveying equipment includes no hydraulic elevators, and no wheelchair lifts.

D. SERVICES
PLUMBING:
Plumbing fixtures are typically non-low-flow water fixtures with manual control valves. Domestic water distribution is combination of copper and galvanized steel with electric hot water heating. Sanitary waste system is cast iron and plastic. Rain water drainage system is external with gutters.

HVAC:
Heating is provided by 1 electric boilers. Cooling is supplied by 1 air cooled chillers. The heating/cooling distribution system is a ductwork system utilizing air handling units. Fresh air is supplied by air handling units. 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. This building does not have a locally controlled Building Automation System.

FIRE PROTECTION:
The building does not have a fire sprinkler system. The building does have additional fire suppression system in the kitchen. Standpipes are not included within fire stairs. 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, recessed and surface type, fluorescent and LED 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 not 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, vehicle equipment, fixed casework, window treatment, floor grilles and mats, and multiple seating furnishings.

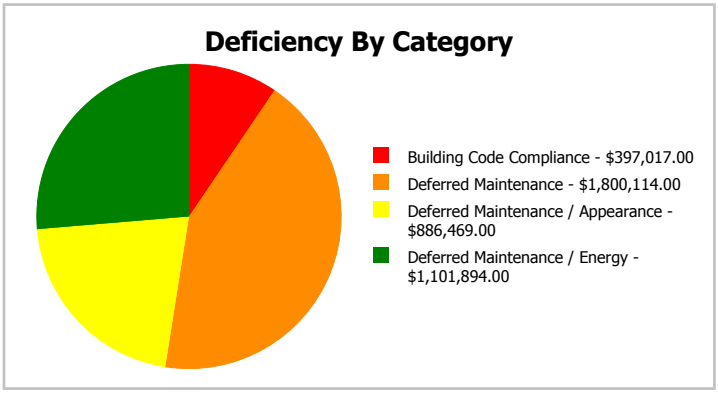
G.
SITE
Campus site features include paved driveways and parking lots, pedestrian pavement, flag pole, landscaping, play areas, and fencing. Site mechanical and electrical features include water, sewer, propane, natural gas, and site lighting.

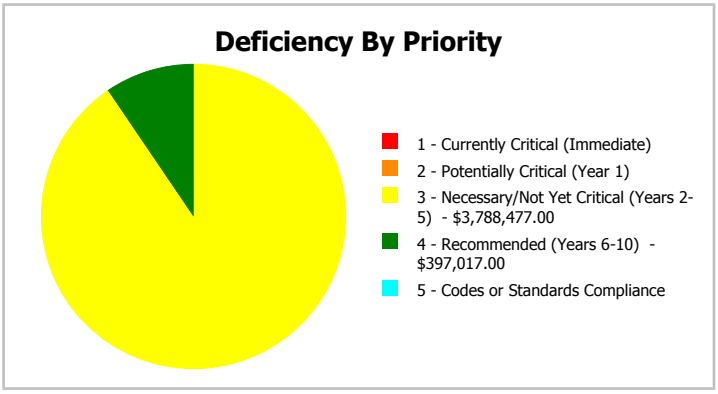
Attributes:

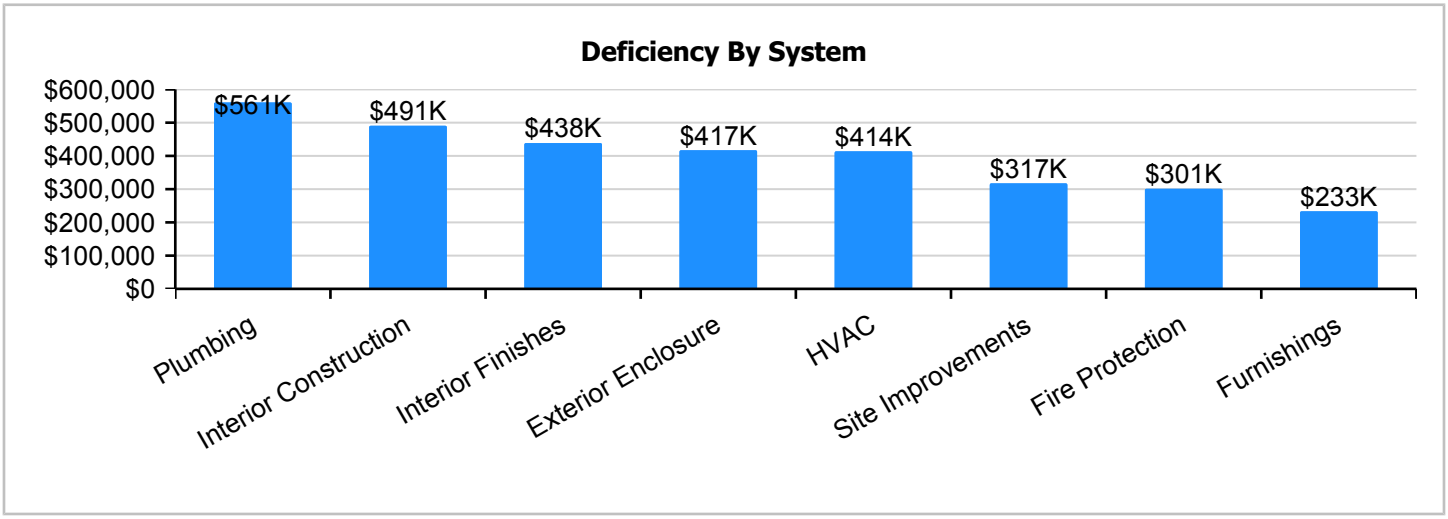
General Attributes:			
Condition Assessor:	Matt Mahaffey	Assessment Date:	
Suitability Assessor:			
School Inofrmation:			
HS Attendance Area:		LEA School No.:	
No. of Mobile Units:	0	No. of Bldgs.:	2
SF of Mobile Units:		Status:	
School Grades:	15	Site Acreage:	15

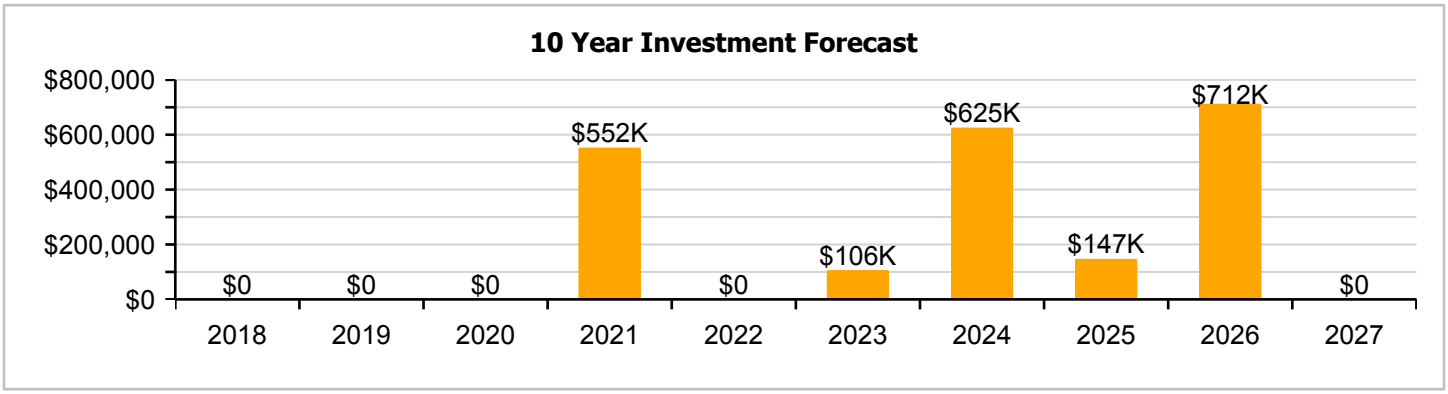
Campus Dashboard Summary

Gross Area:	73,960		
Year Built:	1983	Last Renovation:	
Repair Cost:	$4,185,494	Replacement Value:	$15,382,032
FCI:	27.21 %	RSLI%:	50.79 %









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.

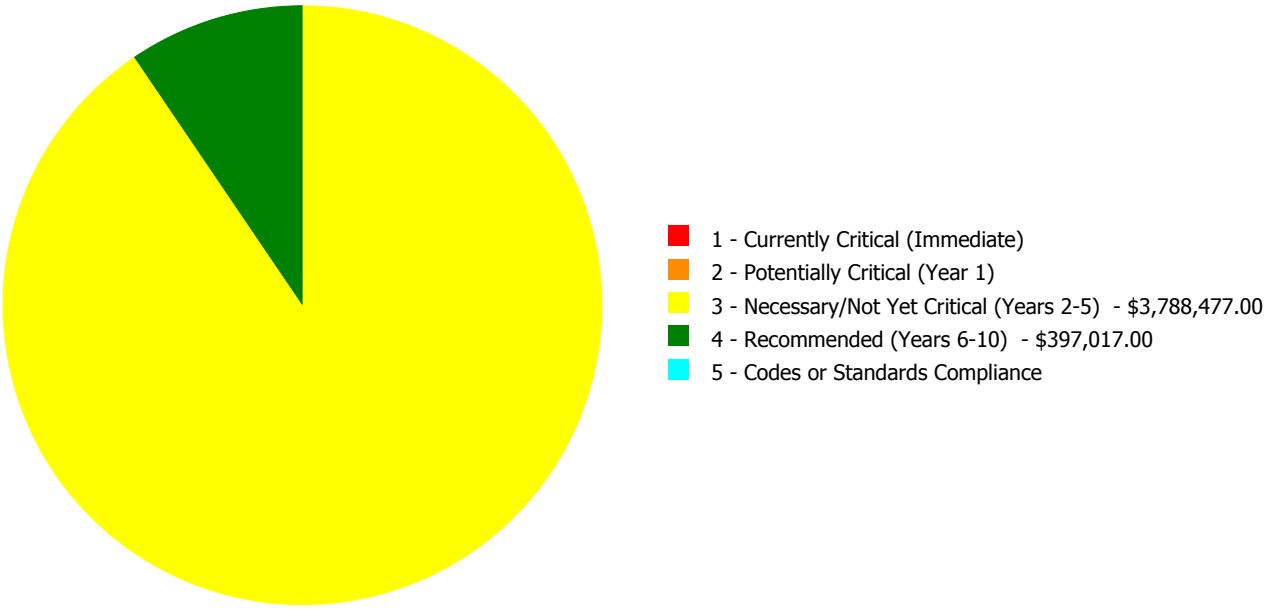
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	75.46 %	0.00 %	$0.00
B10 - Superstructure	75.46 %	0.00 %	$0.00
B20 - Exterior Enclosure	50.03 %	38.24 %	$550,408.00
B30 - Roofing	61.99 %	0.00 %	$0.00
C10 - Interior Construction	44.46 %	38.71 %	$647,349.00
C30 - Interior Finishes	42.85 %	31.77 %	$578,413.00
D20 - Plumbing	27.04 %	72.82 %	$739,982.00
D30 - HVAC	46.63 %	38.72 %	$546,100.00
D40 - Fire Protection	0.00 %	110.00 %	$397,017.00
D50 - Electrical	57.03 %	0.00 %	$0.00
E10 - Equipment	49.16 %	0.00 %	$0.00
E20 - Furnishings	23.66 %	72.82 %	$308,056.00
G20 - Site Improvements	47.23 %	37.37 %	$418,169.00
G30 - Site Mechanical Utilities	57.48 %	0.00 %	$0.00
G40 - Site Electrical Utilities	80.43 %	0.00 %	$0.00
Totals:	**50.79 %**	**27.21 %**	**$4,185,494.00**

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
1983 Main	48,960	41.44	$0.00	$0.00	$3,370,308.00	$262,817.00	$0.00
2011 Addition/Gym	25,000	2.96	$0.00	$0.00	$0.00	$134,200.00	$0.00
Site	73,960	20.11	$0.00	$0.00	$418,169.00	$0.00	$0.00
Total:		**27.21**	**$0.00**	**$0.00**	**$3,788,477.00**	**$397,017.00**	**$0.00**

Deficiencies By Priority



Budget Estimate Total: $4,185,494.00

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):	48,960
Year Built:	1983
Last Renovation:	
Replacement Value:	$8,766,778
Repair Cost:	$3,633,125.00
Total FCI:	41.44 %
Total RSLI:	36.00 %
FCA Score:	58.56

Description:

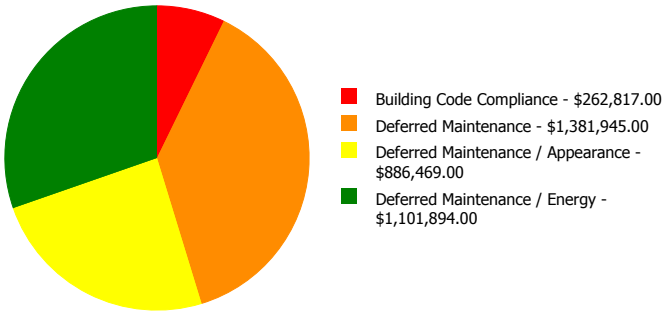
The narrative for this building is included in the Executive Summary Description at the front of this report.

Attributes: This asset has no attributes.

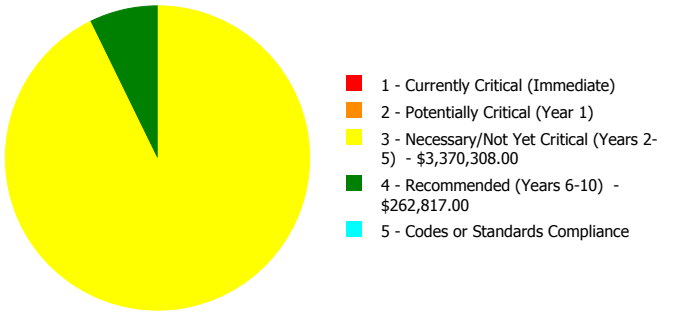
Dashboard Summary

Function:	ES -Elementary School	Gross Area:	48,960
Year Built:	1983	Last Renovation:	
Repair Cost:	$3,633,125	Replacement Value:	$8,766,778
FCI:	41.44 %	RSLI%:	36.00 %

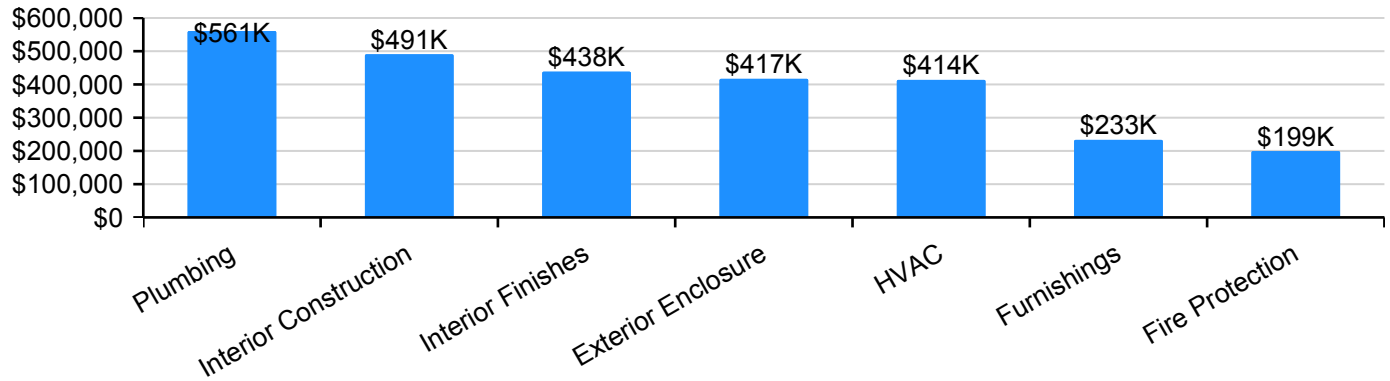
Deficiency By Category



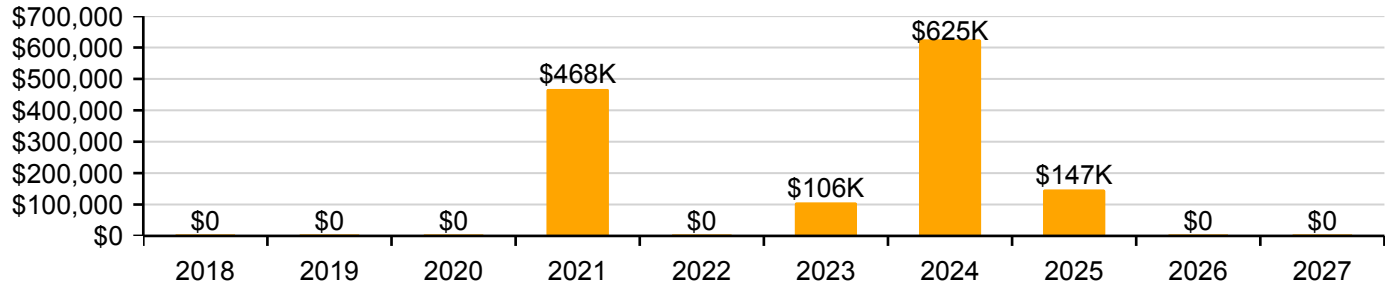
Deficiency By Priority



Deficiency By System



10 Year Investment Forecast



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
B10 - Superstructure	66.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	31.34 %	57.77 %	$550,408.00
B30 - Roofing	53.06 %	0.00 %	$0.00
C10 - Interior Construction	25.60 %	58.48 %	$647,349.00
C30 - Interior Finishes	29.34 %	47.99 %	$578,413.00
D20 - Plumbing	0.00 %	110.00 %	$739,982.00
D30 - HVAC	32.41 %	61.73 %	$546,100.00
D40 - Fire Protection	0.00 %	110.00 %	$262,817.00
D50 - Electrical	48.63 %	0.00 %	$0.00
E10 - Equipment	40.00 %	0.00 %	$0.00
E20 - Furnishings	0.00 %	110.00 %	$308,056.00
Totals:	**36.00 %**	**41.44 %**	**$3,633,125.00**

Photo Album

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

1). West Elevation - Jan 11, 2017

2). South Elevation - Jan 11, 2017

3). East Elevation - Jan 11, 2017

4). North Elevation - Jan 11, 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	$4.70	S.F.	48,960	100	1983	2083		66.00 %	0.00 %	66			$230,112
A1030	Slab on Grade	$8.26	S.F.	48,960	100	1983	2083		66.00 %	0.00 %	66			$404,410
B1010	Floor Construction	$1.61	S.F.	48,960	100	1983	2083		66.00 %	0.00 %	66			$78,826
B1020	Roof Construction	$15.44	S.F.	48,960	100	1983	2083		66.00 %	0.00 %	66			$755,942
B2010	Exterior Walls	$9.24	S.F.	48,960	100	1983	2083		66.00 %	0.00 %	66			$452,390
B2020	Exterior Windows	$9.20	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$495,475.00	$450,432
B2030	Exterior Doors	$1.02	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$54,933.00	$49,939
B3010130	Preformed Metal Roofing	$9.66	S.F.	48,960	30	2003	2033		53.33 %	0.00 %	16			$472,954
B3020	Roof Openings	$0.29	S.F.	48,960	25	2003	2028		44.00 %	0.00 %	11			$14,198
C1010	Partitions	$10.59	S.F.	48,960	75	1983	2058		54.67 %	0.00 %	41			$518,486
C1020	Interior Doors	$2.48	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$133,563.00	$121,421
C1030	Fittings	$9.54	S.F.	48,960	20	1983	2003		0.00 %	110.00 %	-14		$513,786.00	$467,078
C3010	Wall Finishes	$2.73	S.F.	48,960	10	2011	2021		40.00 %	0.00 %	4			$133,661
C3020	Floor Finishes	$11.15	S.F.	48,960	20	2008	2028		55.00 %	0.00 %	11			$545,904
C3030	Ceiling Finishes	$10.74	S.F.	48,960	25	1983	2008		0.00 %	110.00 %	-9		$578,413.00	$525,830
D2010	Plumbing Fixtures	$11.26	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$606,419.00	$551,290
D2020	Domestic Water Distribution	$0.96	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$51,702.00	$47,002
D2030	Sanitary Waste	$1.52	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$81,861.00	$74,419
D3020	Heat Generating Systems	$4.98	S.F.	48,960	30	1983	2013		0.00 %	110.00 %	-4		$268,203.00	$243,821
D3030	Cooling Generating Systems	$5.16	S.F.	48,960	25	1983	2008		0.00 %	110.00 %	-9		$277,897.00	$252,634
D3040	Distribution Systems	$6.02	S.F.	48,960	30	2010	2040		76.67 %	0.00 %	23			$294,739
D3060	Controls & Instrumentation	$1.91	S.F.	48,960	20	2010	2030		65.00 %	0.00 %	13			$93,514
D4010	Sprinklers	$4.22	S.F.	48,960	30			2016	0.00 %	110.00 %	-1		$227,272.00	$206,611
D4020	Standpipes	$0.66	S.F.	48,960	30			2016	0.00 %	110.00 %	-1		$35,545.00	$32,314
D5010	Electrical Service/Distribution	$1.65	S.F.	48,960	40	1983	2023		15.00 %	0.00 %	6			$80,784
D5020	Branch Wiring	$4.99	S.F.	48,960	30	1983	2013	2021	13.33 %	0.00 %	4			$244,310
D5020	Lighting	$11.64	S.F.	48,960	30	2008	2038		70.00 %	0.00 %	21			$569,894
D5030810	Security & Detection Systems	$1.83	S.F.	48,960	15	2009	2024		46.67 %	0.00 %	7			$89,597
D5030910	Fire Alarm Systems	$3.31	S.F.	48,960	15	2009	2024		46.67 %	0.00 %	7			$162,058
D5030920	Data Communication	$4.30	S.F.	48,960	15	2009	2024		46.67 %	0.00 %	7			$210,528
D5090	Other Electrical Systems	$0.12	S.F.	48,960	20	2009	2029		60.00 %	0.00 %	12			$5,875
E1020	Institutional Equipment	$0.30	S.F.	48,960	20	2005	2025		40.00 %	0.00 %	8			$14,688
E1090	Other Equipment	$1.86	S.F.	48,960	20	2005	2025		40.00 %	0.00 %	8			$91,066
E2010	Fixed Furnishings	$5.72	S.F.	48,960	20	1983	2003		0.00 %	110.00 %	-14		$308,056.00	$280,051
								Total	**36.00 %**	**41.44 %**			**$3,633,125.00**	**$8,766,778**

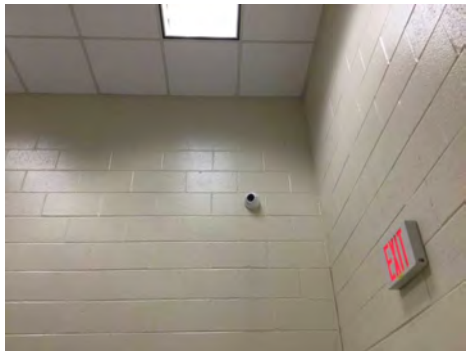
System Notes

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: B1020 - Roof Construction

Note:

System: B2010 - Exterior Walls



Note:

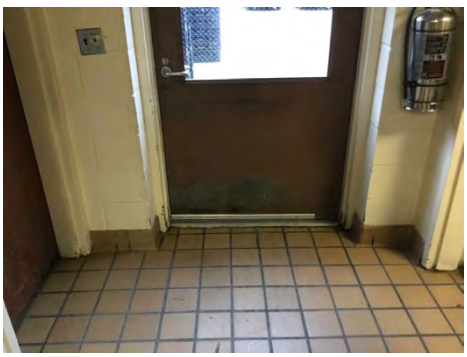
System: B2020 - Exterior Windows




Note:

System: B2030 - Exterior Doors



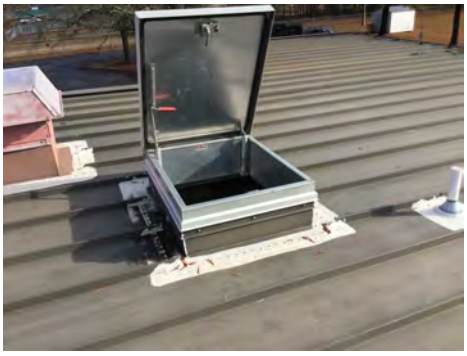
Note:

System: B3010130 - Preformed Metal Roofing



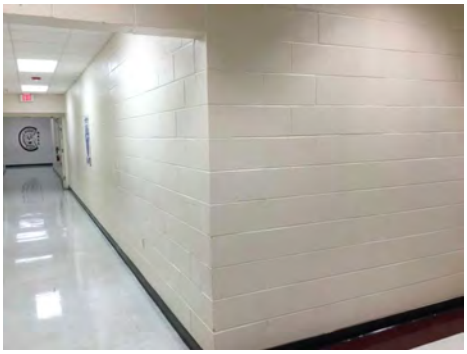
Note:

System: B3020 - Roof Openings



Note:

System: C1010 - Partitions

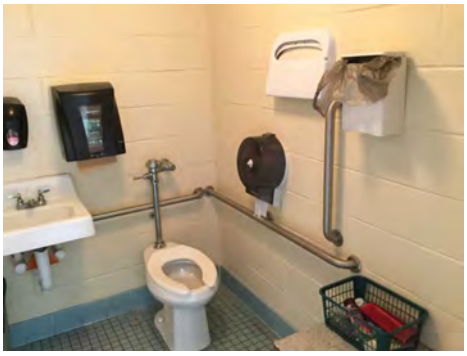



Note:

System: C1020 - Interior Doors

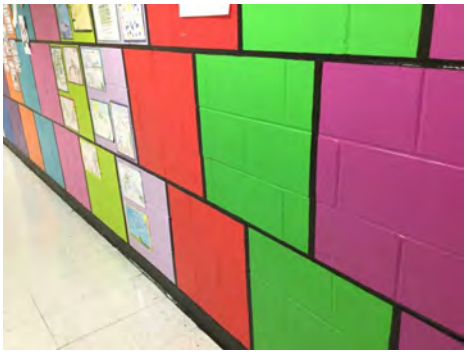
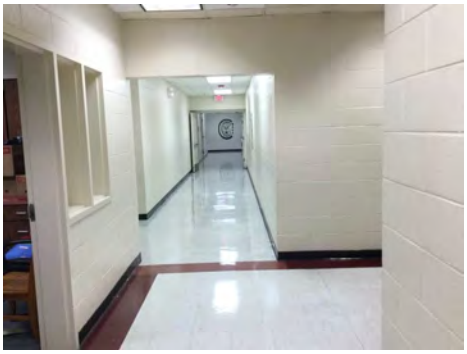

Note:

System: C1030 - Fittings



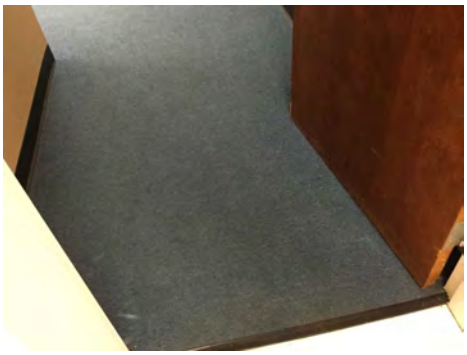
Note:

System: C3010 - Wall Finishes

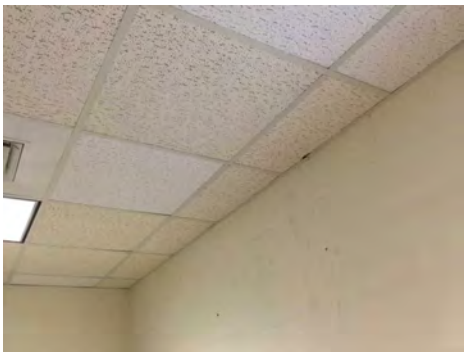
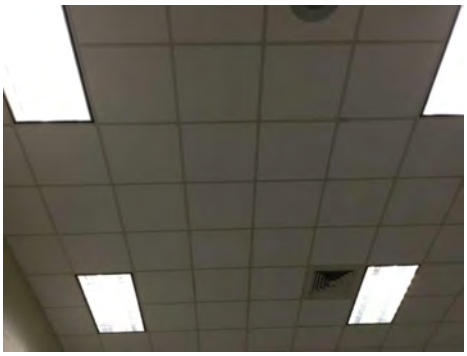
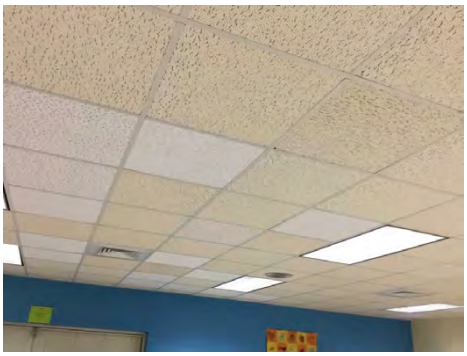

Note:

System: C3020 - Floor Finishes

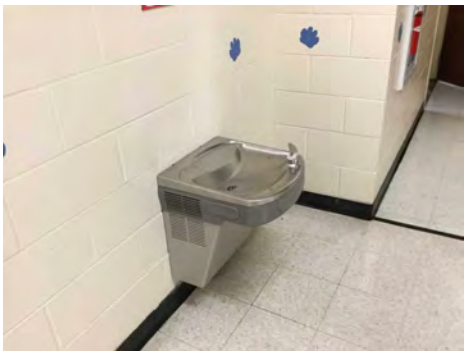
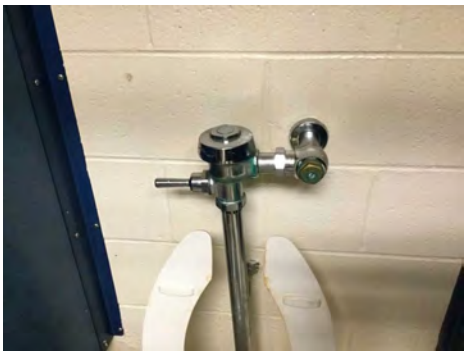
Note:

System: C3030 - Ceiling Finishes

Note:

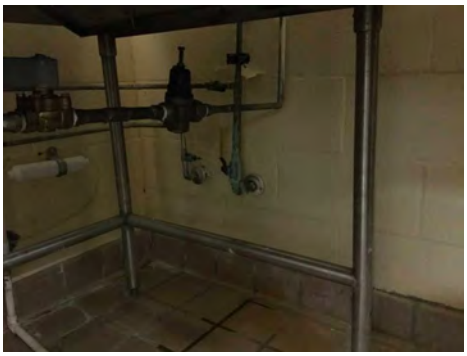
System: D2010 - Plumbing Fixtures

Note:

System: D2020 - Domestic Water Distribution





Note:

System: D2030 - Sanitary Waste



Note:

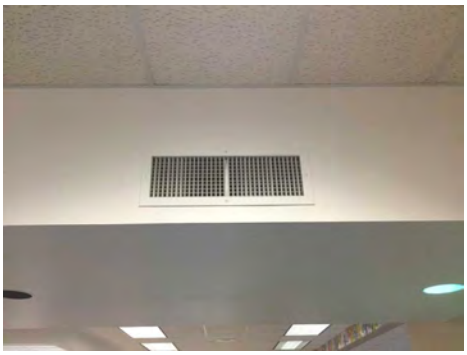
System: D3020 - Heat Generating Systems

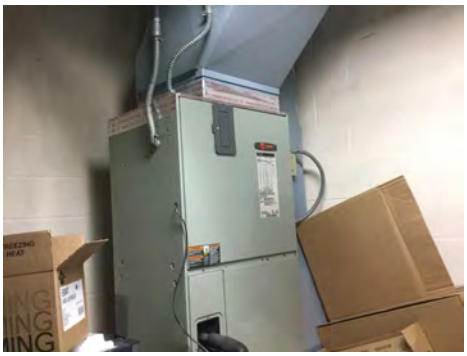
Note:

System: D3030 - Cooling Generating Systems

Note:

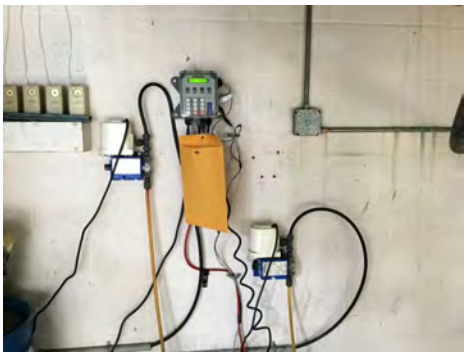
System: D3040 - Distribution Systems



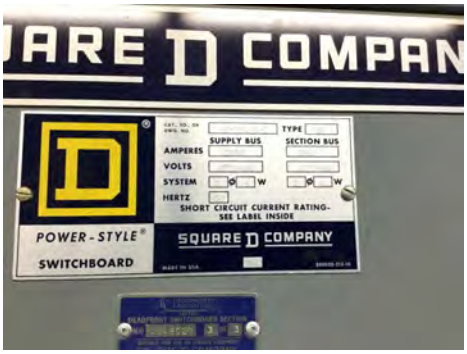
Note:

System: D3060 - Controls & Instrumentation

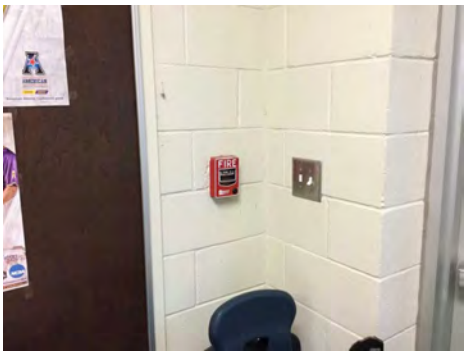
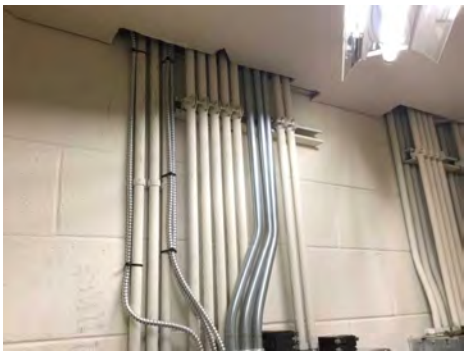

Note:

System: D5010 - Electrical Service/Distribution



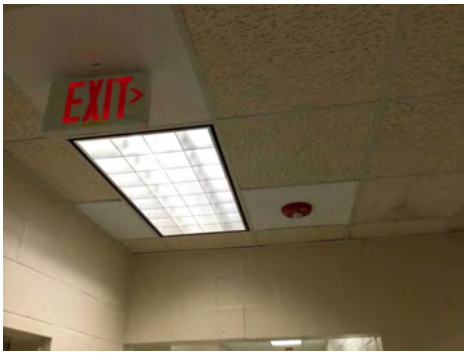

Note:

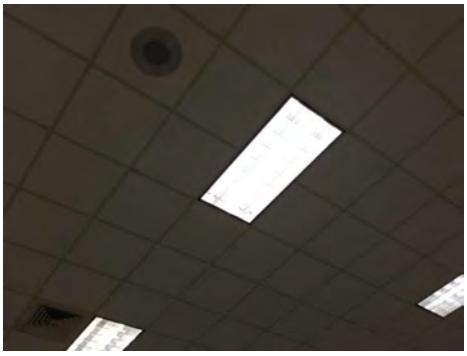
System: D5020 - Branch Wiring


Note:

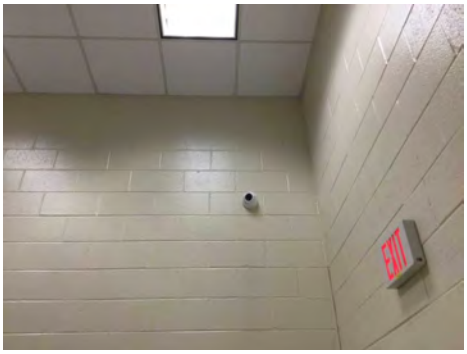
System: D5020 - Lighting





Note:

System: D5030810 - Security & Detection Systems

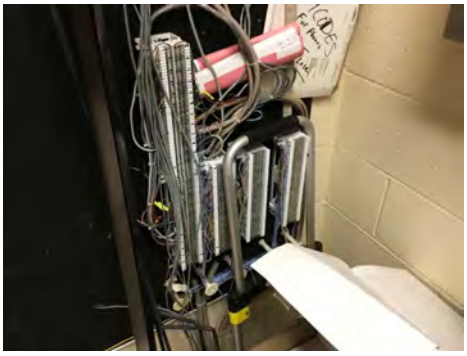
Note:

System: D5030910 - Fire Alarm Systems


Note:

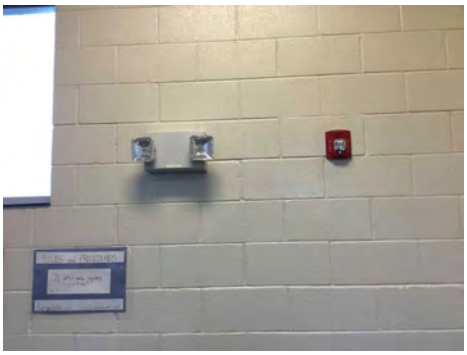
System: D5030920 - Data Communication






Note:

System: D5090 - Other Electrical Systems

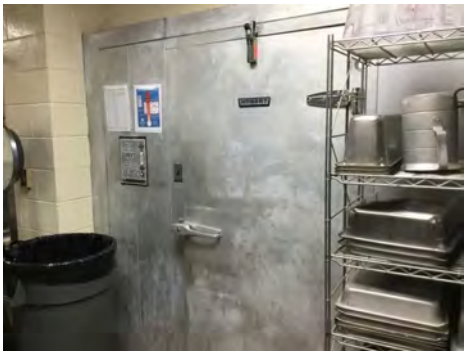



Note:

System: E1020 - Institutional Equipment


Note:

System: E1090 - Other Equipment



Note:

System: E2010 - Fixed Furnishings



Note:

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%

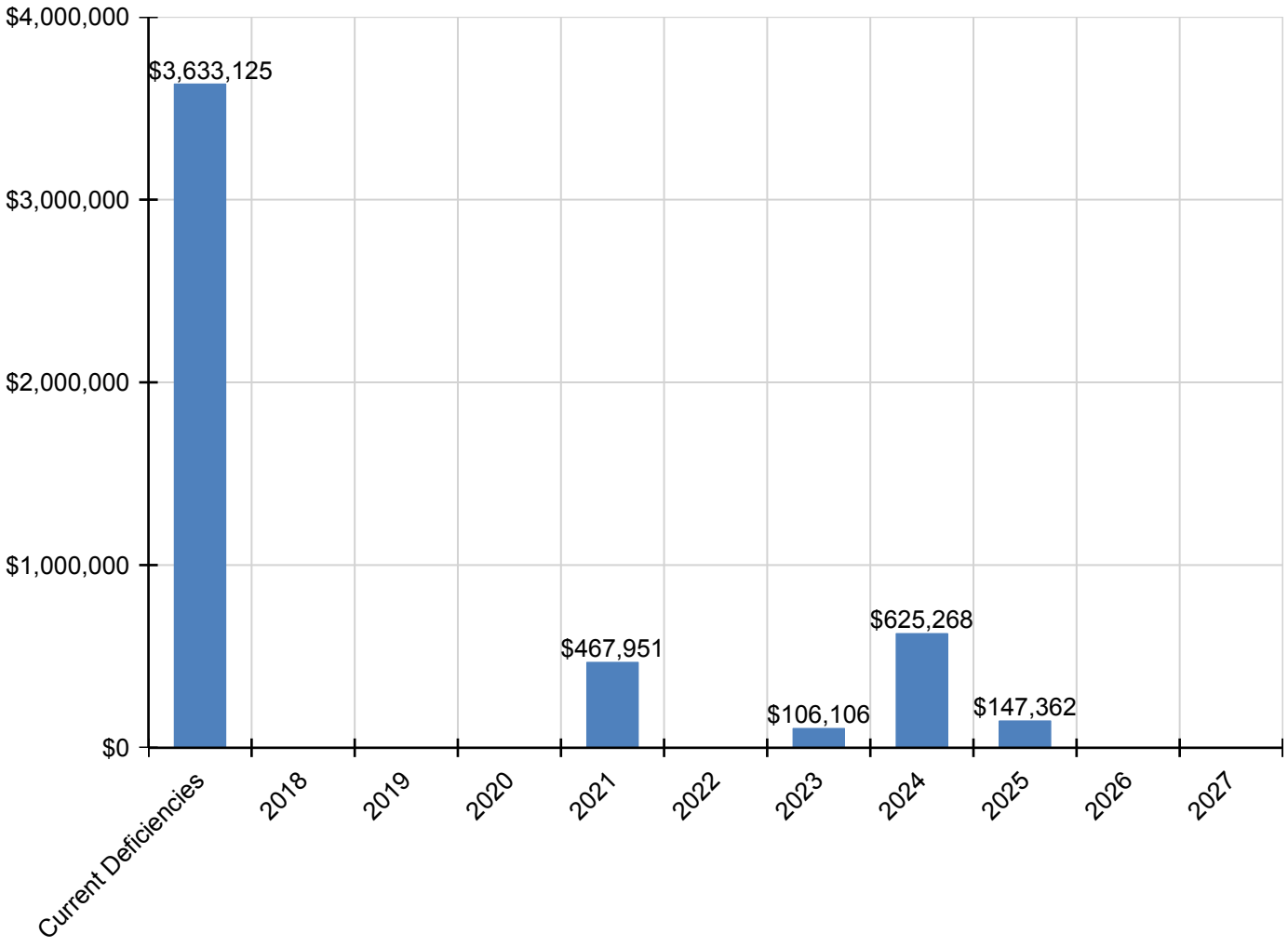
System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	**$3,633,125**	**$0**	**$0**	**$0**	**$467,951**	**$0**	**$106,106**	**$625,268**	**$147,362**	**$0**	**$0**	**$4,979,811**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** A10 - Foundations**	$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**
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	$495,475	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$495,475**
B2030 - Exterior Doors	$54,933	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$54,933**
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**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$133,563	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$133,563**
C1030 - Fittings	$513,786	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$513,786**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$165,480	$0	$0	$0	$0	$0	$0	**$165,480**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$578,413	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$578,413**

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	$606,419	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$606,419**
D2020 - Domestic Water Distribution	$51,702	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$51,702**
D2030 - Sanitary Waste	$81,861	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$81,861**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$268,203	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$268,203**
D3030 - Cooling Generating Systems	$277,897	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$277,897**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$227,272	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$227,272**
D4020 - Standpipes	$35,545	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$35,545**
D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$0	$0	$0	$0	$0	$0	$106,106	$0	$0	$0	$0	**$106,106**
D5020 - Branch Wiring	$0	$0	$0	$0	$302,470	$0	$0	$0	$0	$0	$0	**$302,470**
D5020 - Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$121,211	$0	$0	$0	**$121,211**
D5030910 - Fire Alarm Systems	$0	$0	$0	$0	$0	$0	$0	$219,241	$0	$0	$0	**$219,241**
D5030920 - Data Communication	$0	$0	$0	$0	$0	$0	$0	$284,815	$0	$0	$0	**$284,815**
D5090 - Other Electrical Systems	$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	$0	$0	$0	$0	$0	$20,467	$0	$0	**$20,467**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$126,895	$0	$0	**$126,895**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$308,056	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$308,056**

** Indicates non-renewable system*

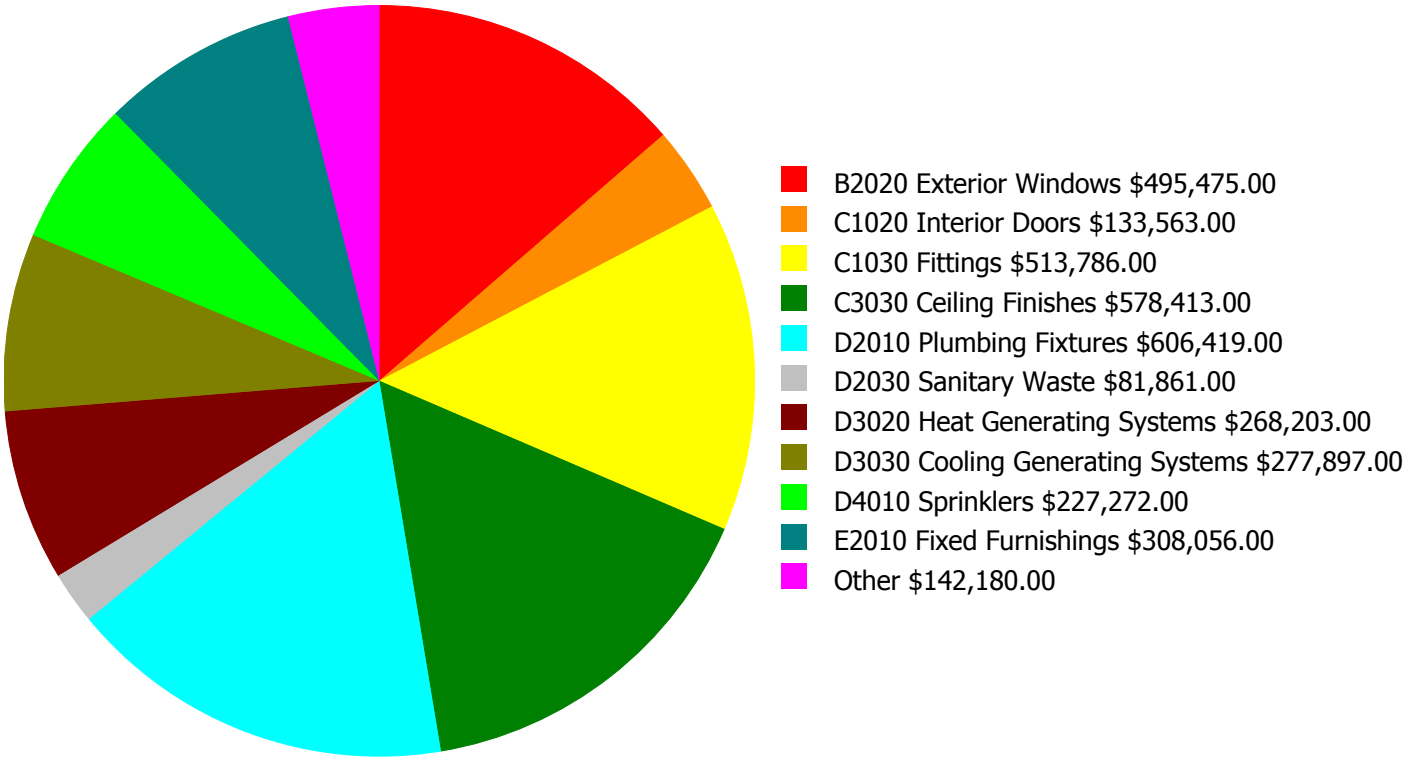
Forecasted Capital Renewal Requirement

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



Deficiency Summary by System

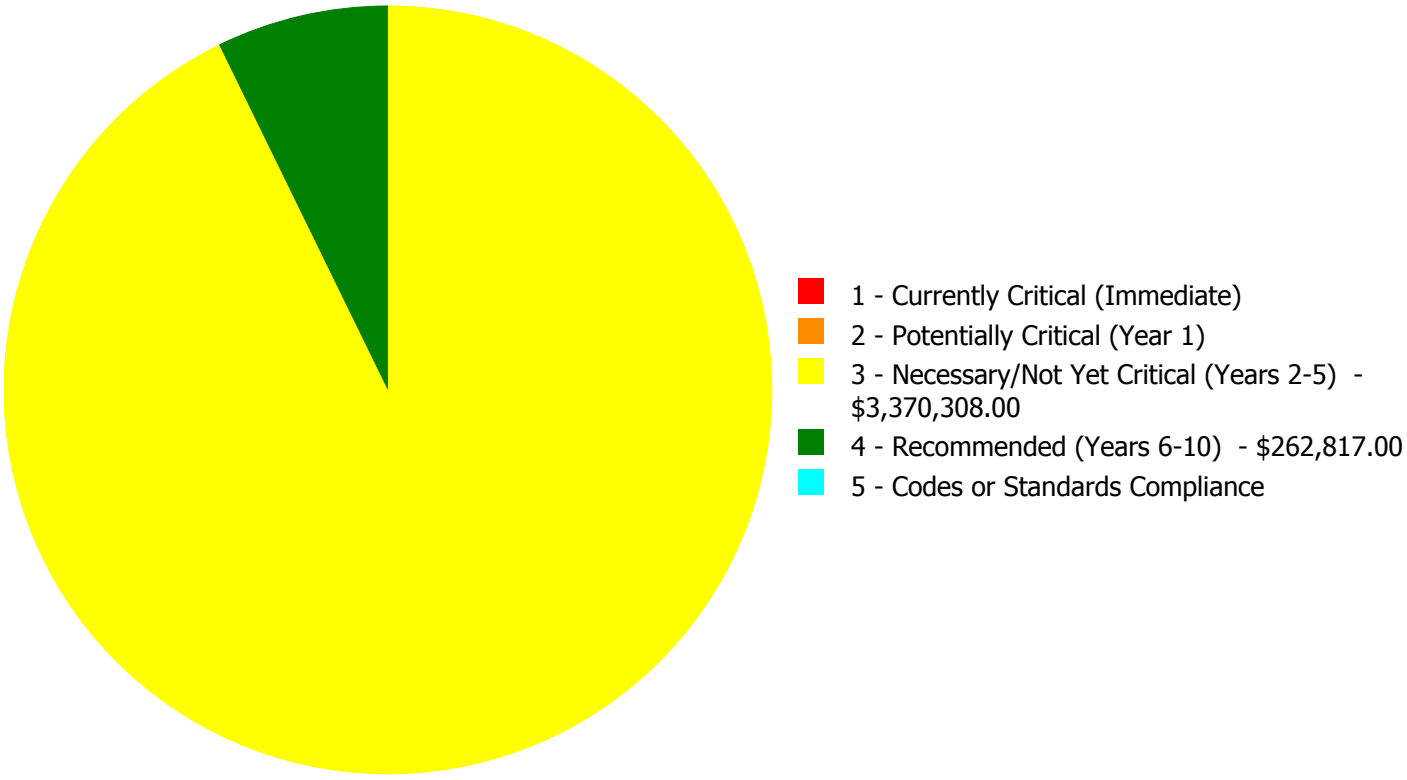
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $3,633,125.00

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: $3,633,125.00

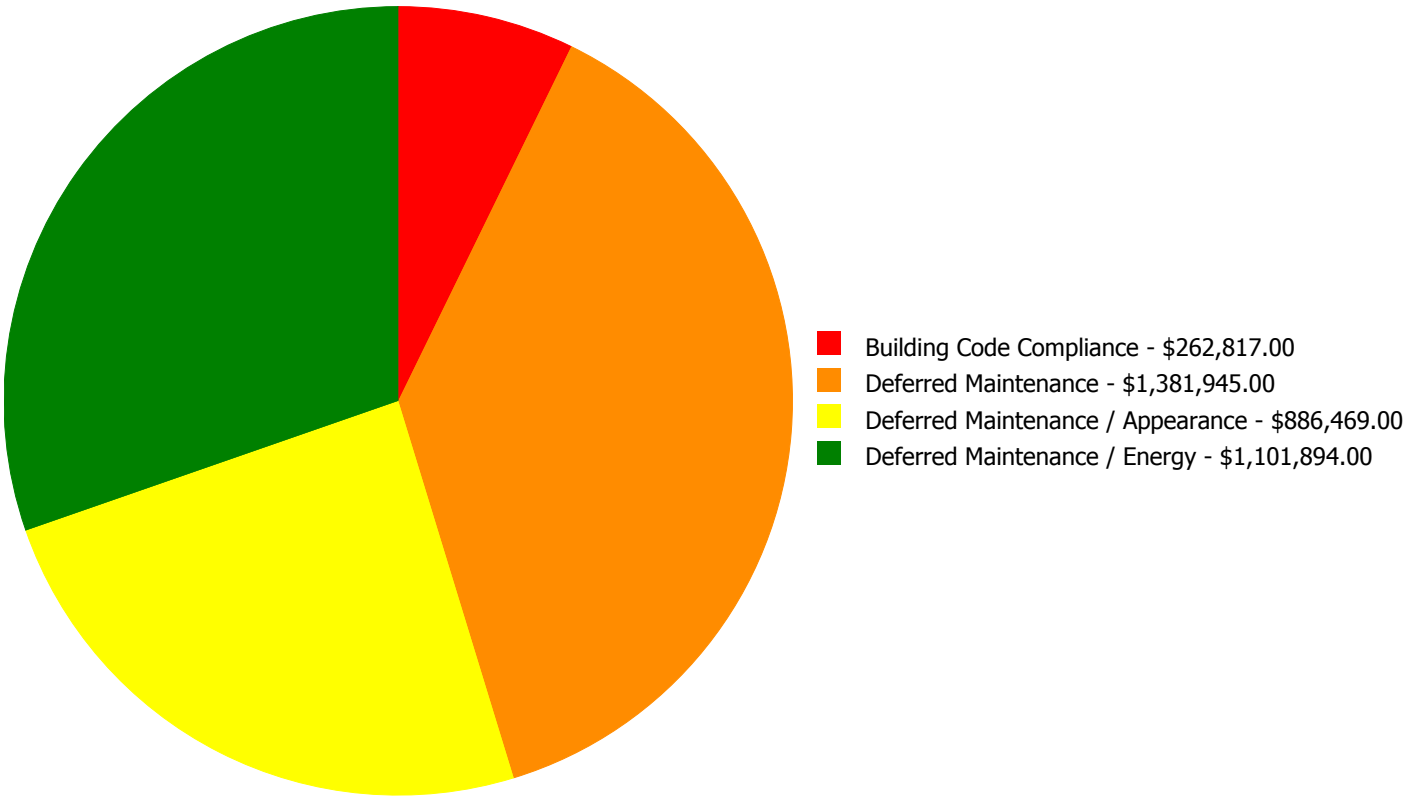
Deficiency By Priority Investment Table

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
B2020	Exterior Windows	$0.00	$0.00	$495,475.00	$0.00	$0.00	$495,475.00
B2030	Exterior Doors	$0.00	$0.00	$54,933.00	$0.00	$0.00	$54,933.00
C1020	Interior Doors	$0.00	$0.00	$133,563.00	$0.00	$0.00	$133,563.00
C1030	Fittings	$0.00	$0.00	$513,786.00	$0.00	$0.00	$513,786.00
C3030	Ceiling Finishes	$0.00	$0.00	$578,413.00	$0.00	$0.00	$578,413.00
D2010	Plumbing Fixtures	$0.00	$0.00	$606,419.00	$0.00	$0.00	$606,419.00
D2020	Domestic Water Distribution	$0.00	$0.00	$51,702.00	$0.00	$0.00	$51,702.00
D2030	Sanitary Waste	$0.00	$0.00	$81,861.00	$0.00	$0.00	$81,861.00
D3020	Heat Generating Systems	$0.00	$0.00	$268,203.00	$0.00	$0.00	$268,203.00
D3030	Cooling Generating Systems	$0.00	$0.00	$277,897.00	$0.00	$0.00	$277,897.00
D4010	Sprinklers	$0.00	$0.00	$0.00	$227,272.00	$0.00	$227,272.00
D4020	Standpipes	$0.00	$0.00	$0.00	$35,545.00	$0.00	$35,545.00
E2010	Fixed Furnishings	$0.00	$0.00	$308,056.00	$0.00	$0.00	$308,056.00
	Total:	$0.00	$0.00	$3,370,308.00	$262,817.00	$0.00	$3,633,125.00

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: $3,633,125.00

Deficiency Details by Priority

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

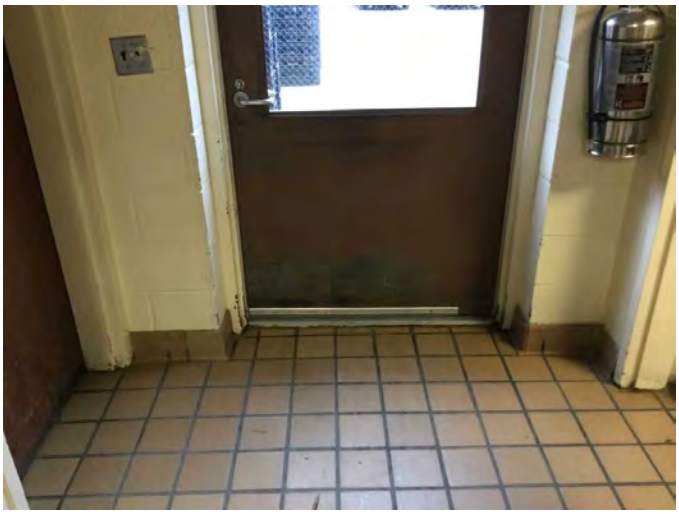
Priority 3 - Necessary/Not Yet Critical (Years 2-5):

System: B2020 - Exterior Windows

Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance / Energy
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $495,475.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The aluminum frame, operable, single pane windows are aged, not energy efficient, and should be replaced.

System: B2030 - Exterior Doors



Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $54,933.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The original exterior doors are aged, rusted, and should be replaced.

System: C1020 - Interior Doors

Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $133,563.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

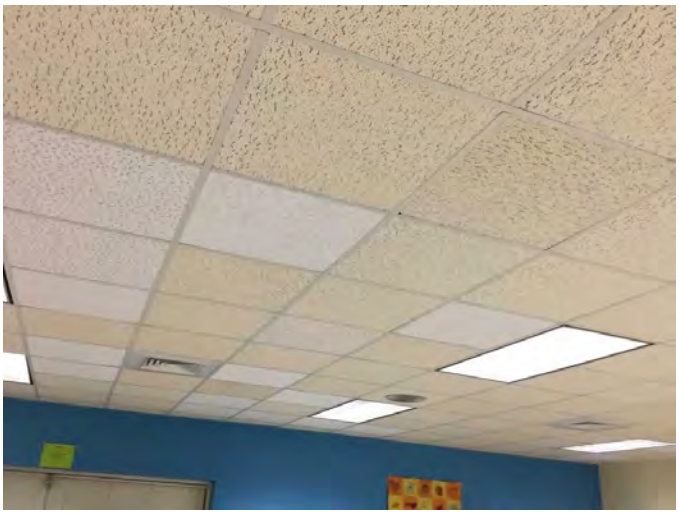
Notes: The interior doors are aged and should be replaced

System: C1030 - Fittings

Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $513,786.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The original fittings are aged, rusted and should be replaced.

System: C3030 - Ceiling Finishes



Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance / Appearance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $578,413.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

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: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance / Energy
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $606,419.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: Plumbing fixtures are in operational conditions. However, they are aged and should be replaced with a low-flow water fixtures.

System: D2020 - Domestic Water Distribution

Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $51,702.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The domestic water distribution system is aged and should be replaced.

System: D2030 - Sanitary Waste

Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $81,861.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The sanitary waste system is aged, has reported periodic failures, and should be replaced.

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: 48,960.00
Unit of Measure: S.F.
Estimate: $268,203.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The electric boiler is operating properly and are in fair condition but; is aging, inefficient, becoming logistically unsupportable, and should be replaced with energy efficient model.

System: D3030 - Cooling Generating Systems

Location: Chiller yard
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $277,897.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: Chiller is aging and logistically unsupportable, and should be replaced with an energy efficient model.

System: E2010 - Fixed Furnishings

Location: Throughout
Distress: Beyond Service Life
Category: Deferred Maintenance / Appearance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $308,056.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The fixed furnishings are aged, in marginal condition, and should be replaced.

Priority 4 - Recommended (Years 6-10):

System: D4010 - Sprinklers

This deficiency has no image.

Location: Throughout
Distress: Missing
Category: Building Code Compliance
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $227,272.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: A Sprinkler system is missing and is recommended to be provided to comply with current codes.

System: D4020 - Standpipes

This deficiency has no image.

Location: Throughout
Distress: Missing
Category: Building Code Compliance
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 48,960.00
Unit of Measure: S.F.
Estimate: $35,545.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: A Sprinkler system is missing and is recommended to be provided to comply with current codes.

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):	25,000
Year Built:	2011
Last Renovation:	
Replacement Value:	$4,535,500
Repair Cost:	$134,200.00
Total FCI:	2.96 %
Total RSLI:	77.09 %
FCA Score:	97.04

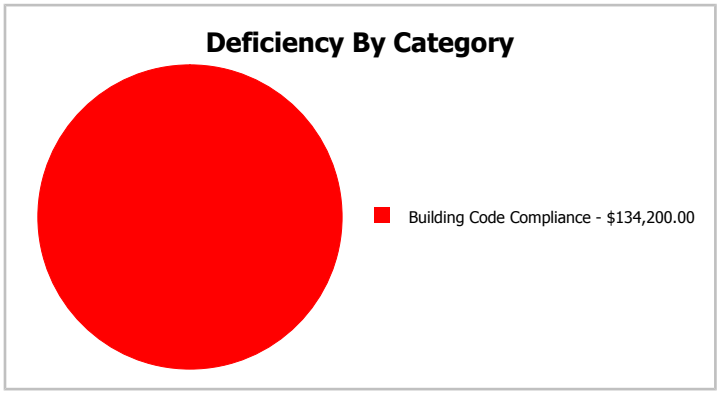
Description:

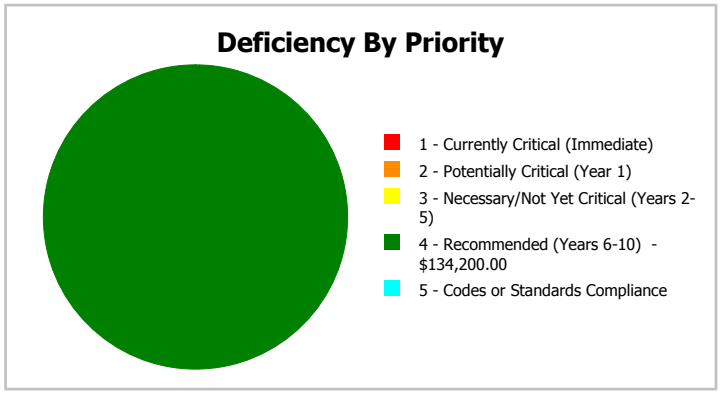
The narrative for this building is included in the Executive Summary Description at the front of this report.

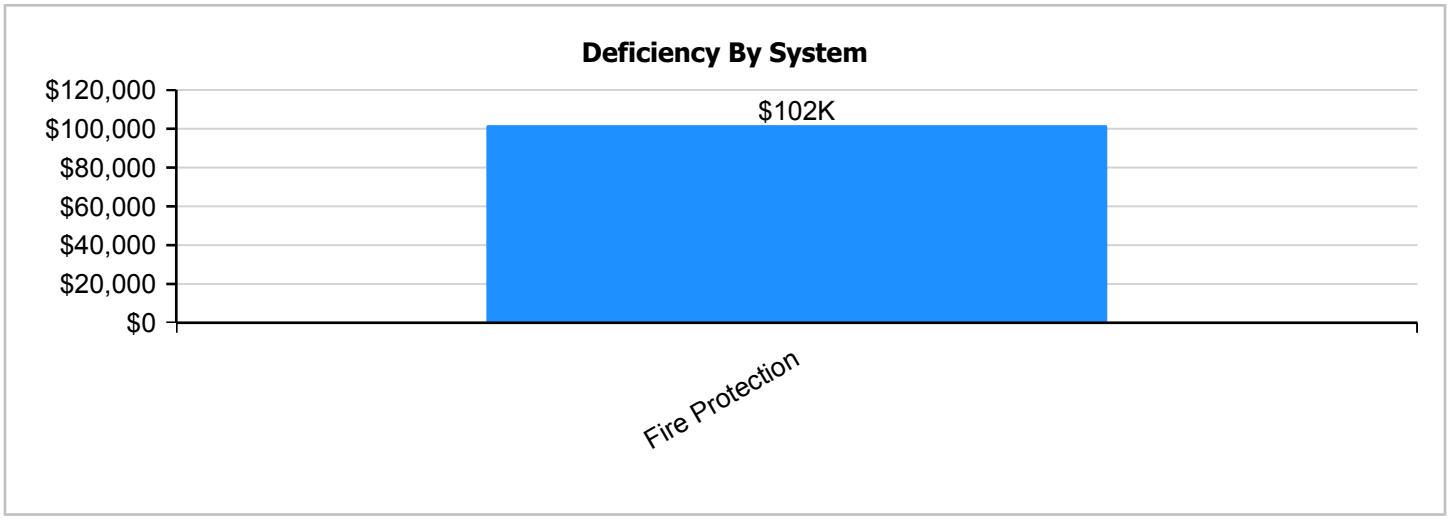
Attributes: This asset has no attributes.

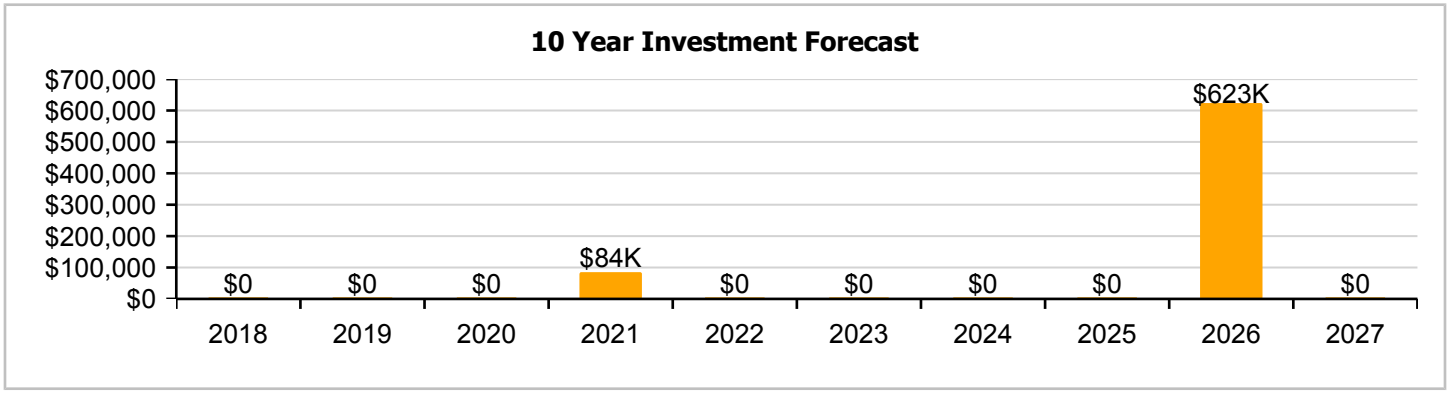
Dashboard Summary

Function:	ES -Elementary School	Gross Area:	25,000
Year Built:	2011	Last Renovation:	
Repair Cost:	$134,200	Replacement Value:	$4,535,500
FCI:	2.96 %	RSLI%:	77.09 %









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	94.00 %	0.00 %	$0.00
B10 - Superstructure	94.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	86.65 %	0.00 %	$0.00
B30 - Roofing	80.00 %	0.00 %	$0.00
C10 - Interior Construction	81.40 %	0.00 %	$0.00
C30 - Interior Finishes	69.29 %	0.00 %	$0.00
D20 - Plumbing	80.00 %	0.00 %	$0.00
D30 - HVAC	70.56 %	0.00 %	$0.00
D40 - Fire Protection	0.00 %	110.00 %	$134,200.00
D50 - Electrical	73.47 %	0.00 %	$0.00
E10 - Equipment	70.00 %	0.00 %	$0.00
E20 - Furnishings	70.00 %	0.00 %	$0.00
Totals:	**77.09 %**	**2.96 %**	**$134,200.00**

Photo Album

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

1). West Elevation - Jan 11, 2017

2). North Elevation - Jan 11, 2017

3). South Elevation - Jan 11, 2017

4). East Elevation - Jan 11, 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

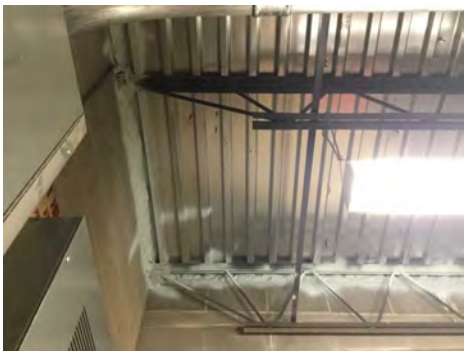
The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to 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	$4.70	S.F.	25,000	100	2011	2111		94.00 %	0.00 %	94			$117,500
A1030	Slab on Grade	$8.26	S.F.	25,000	100	2011	2111		94.00 %	0.00 %	94			$206,500
B1010	Floor Construction	$1.61	S.F.	25,000	100	2011	2111		94.00 %	0.00 %	94			$40,250
B1020	Roof Construction	$15.44	S.F.	25,000	100	2011	2111		94.00 %	0.00 %	94			$386,000
B2010	Exterior Walls	$9.24	S.F.	25,000	100	2011	2111		94.00 %	0.00 %	94			$231,000
B2020	Exterior Windows	$9.20	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$230,000
B2030	Exterior Doors	$1.02	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$25,500
B3010130	Preformed Metal Roofing	$9.66	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$241,500
C1010	Partitions	$10.59	S.F.	25,000	75	2011	2086		92.00 %	0.00 %	69			$264,750
C1020	Interior Doors	$2.48	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$62,000
C1030	Fittings	$9.54	S.F.	25,000	20	2011	2031		70.00 %	0.00 %	14			$238,500
C3010	Wall Finishes	$2.73	S.F.	25,000	10	2011	2021		40.00 %	0.00 %	4			$68,250
C3020	Floor Finishes	$11.15	S.F.	25,000	20	2011	2031		70.00 %	0.00 %	14			$278,750
C3030	Ceiling Finishes	$10.74	S.F.	25,000	25	2011	2036		76.00 %	0.00 %	19			$268,500
D2010	Plumbing Fixtures	$11.26	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$281,500
D2020	Domestic Water Distribution	$0.96	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$24,000
D2030	Sanitary Waste	$1.52	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$38,000
D3030	Cooling Generating Systems	$5.16	S.F.	25,000	25	2011	2036		76.00 %	0.00 %	19			$129,000
D3040	Distribution Systems	$6.02	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$150,500
D3050	Terminal & Package Units	$7.93	S.F.	25,000	15	2011	2026		60.00 %	0.00 %	9			$198,250
D3060	Controls & Instrumentation	$1.91	S.F.	25,000	20	2011	2031		70.00 %	0.00 %	14			$47,750
D4010	Sprinklers	$4.22	S.F.	25,000	30			2016	0.00 %	110.00 %	-1		$116,050.00	$105,500
D4020	Standpipes	$0.66	S.F.	25,000	30			2016	0.00 %	110.00 %	-1		$18,150.00	$16,500
D5010	Electrical Service/Distribution	$1.65	S.F.	25,000	40	2011	2051		85.00 %	0.00 %	34			$41,250
D5020	Branch Wiring	$4.99	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$124,750
D5020	Lighting	$11.64	S.F.	25,000	30	2011	2041		80.00 %	0.00 %	24			$291,000
D5030810	Security & Detection Systems	$1.83	S.F.	25,000	15	2011	2026		60.00 %	0.00 %	9			$45,750
D5030910	Fire Alarm Systems	$3.31	S.F.	25,000	15	2011	2026		60.00 %	0.00 %	9			$82,750
D5030920	Data Communication	$4.30	S.F.	25,000	15	2011	2026		60.00 %	0.00 %	9			$107,500
D5090	Other Electrical Systems	$0.12	S.F.	25,000	20	2011	2031		70.00 %	0.00 %	14			$3,000
E1090	Other Equipment	$1.86	S.F.	25,000	20	2011	2031		70.00 %	0.00 %	14			$46,500
E2010	Fixed Furnishings	$5.72	S.F.	25,000	20	2011	2031		70.00 %	0.00 %	14			$143,000
								Total	**77.09 %**	**2.96 %**			**$134,200.00**	**$4,535,500**

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: B1020 - Roof Construction

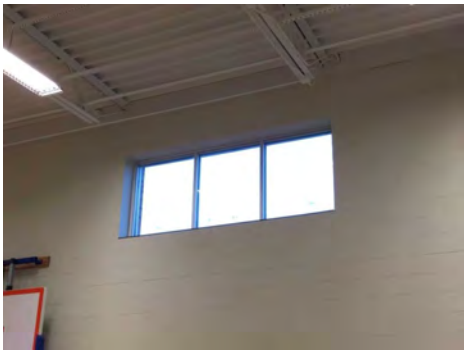


Note:

System: B2010 - Exterior Walls

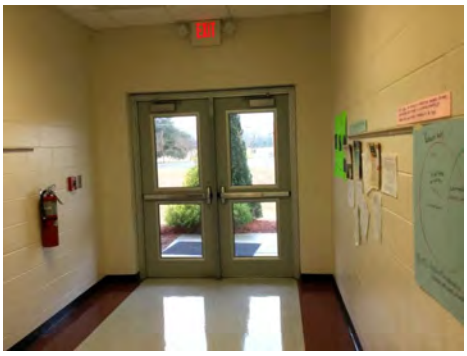
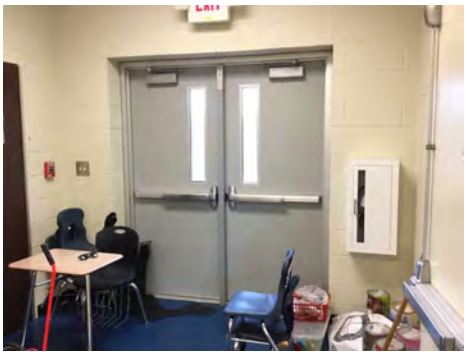

Note:

System: B2020 - Exterior Windows


Note:

System: B2030 - Exterior Doors

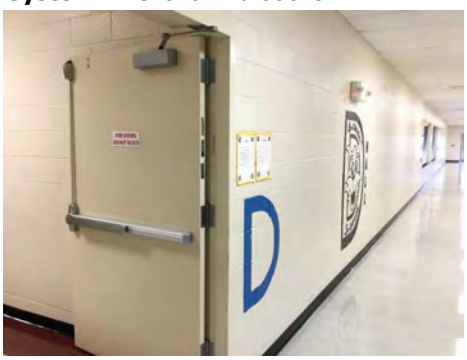
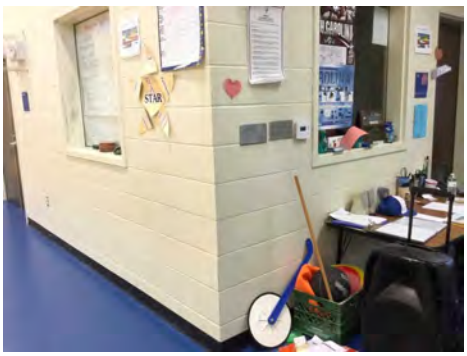




Note:

System: B3010130 - Preformed Metal Roofing

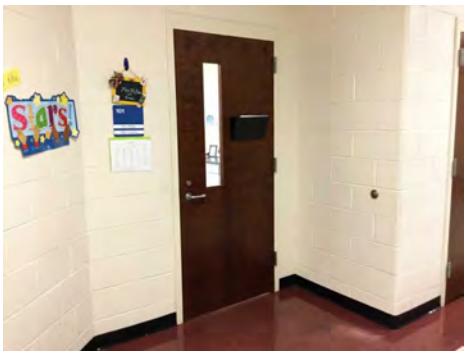
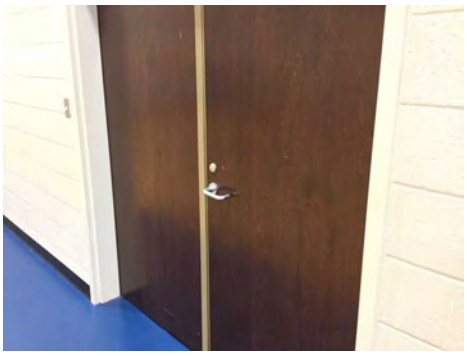

Note:

System: C1010 - Partitions

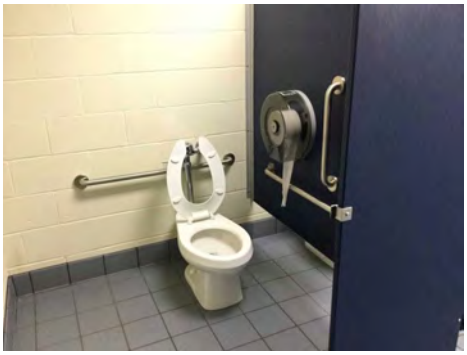
Note:

System: C1020 - Interior Doors

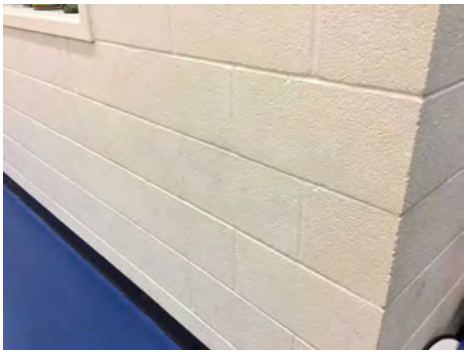
Note:

System: C1030 - Fittings

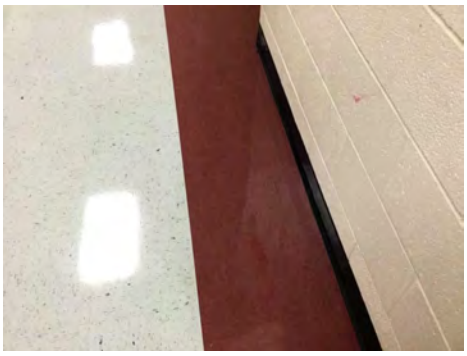

Note:

System: C3010 - Wall Finishes



Note:

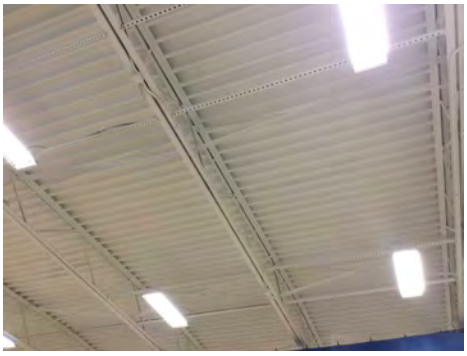
System: C3020 - Floor Finishes



Note:

System: C3030 - Ceiling Finishes





Note:

System: D2010 - Plumbing Fixtures



Note:

System: D2020 - Domestic Water Distribution

Note:

System: D2030 - Sanitary Waste

Note:

System: D3030 - Cooling Generating Systems

Note:

System: D3040 - Distribution Systems



Note:

System: D3050 - Terminal & Package Units

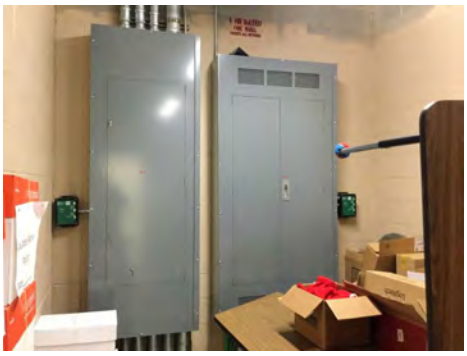


Note:

System: D3060 - Controls & Instrumentation


Note:

System: D5010 - Electrical Service/Distribution

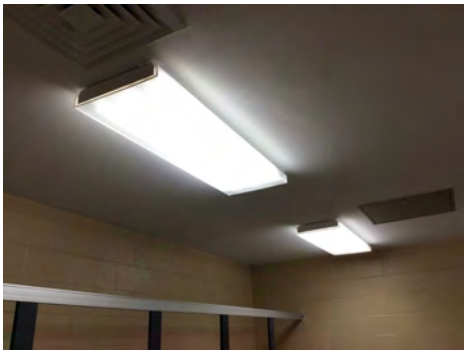


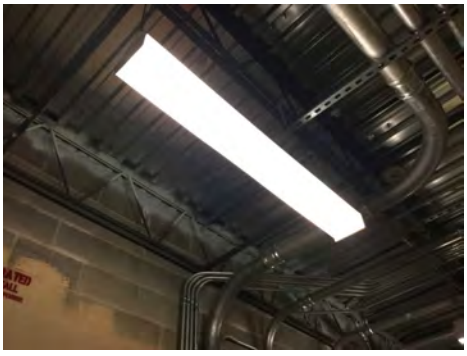
Note:

System: D5020 - Branch Wiring

Note:

System: D5020 - Lighting





Note:

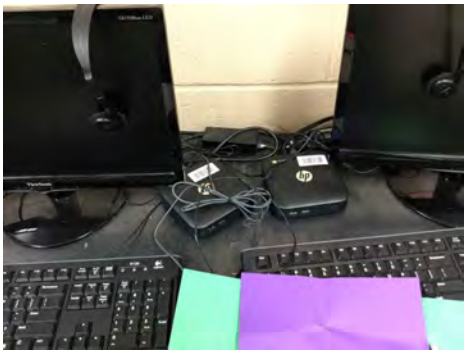
System: D5030810 - Security & Detection Systems

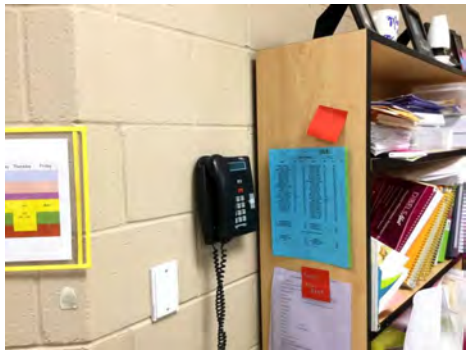
Note:

System: D5030910 - Fire Alarm Systems

Note:

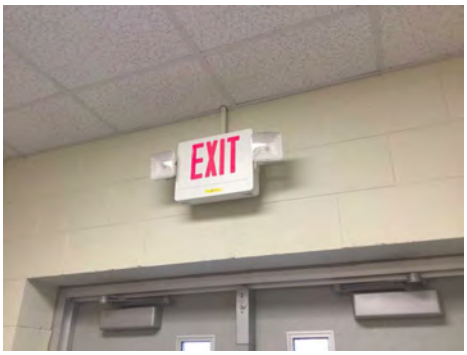
System: D5030920 - Data Communication





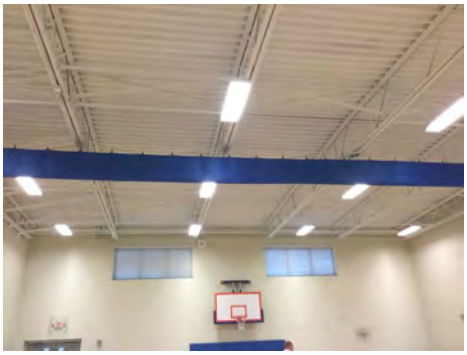
Note:

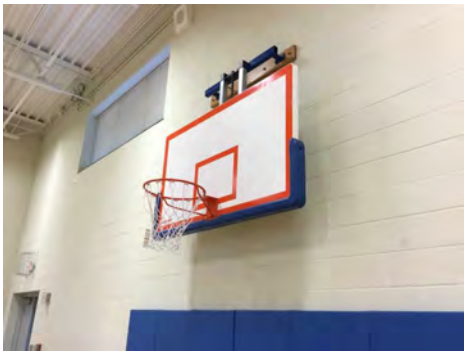
System: D5090 - Other Electrical Systems



Note:

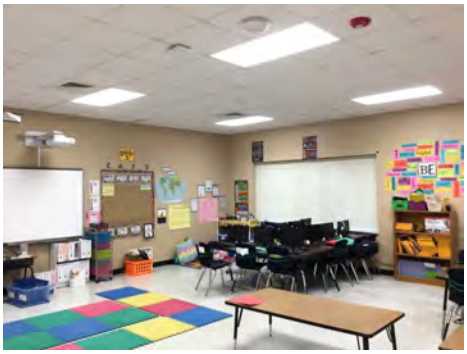
System: E1090 - Other Equipment





Note:

System: E2010 - Fixed Furnishings



Note:

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%

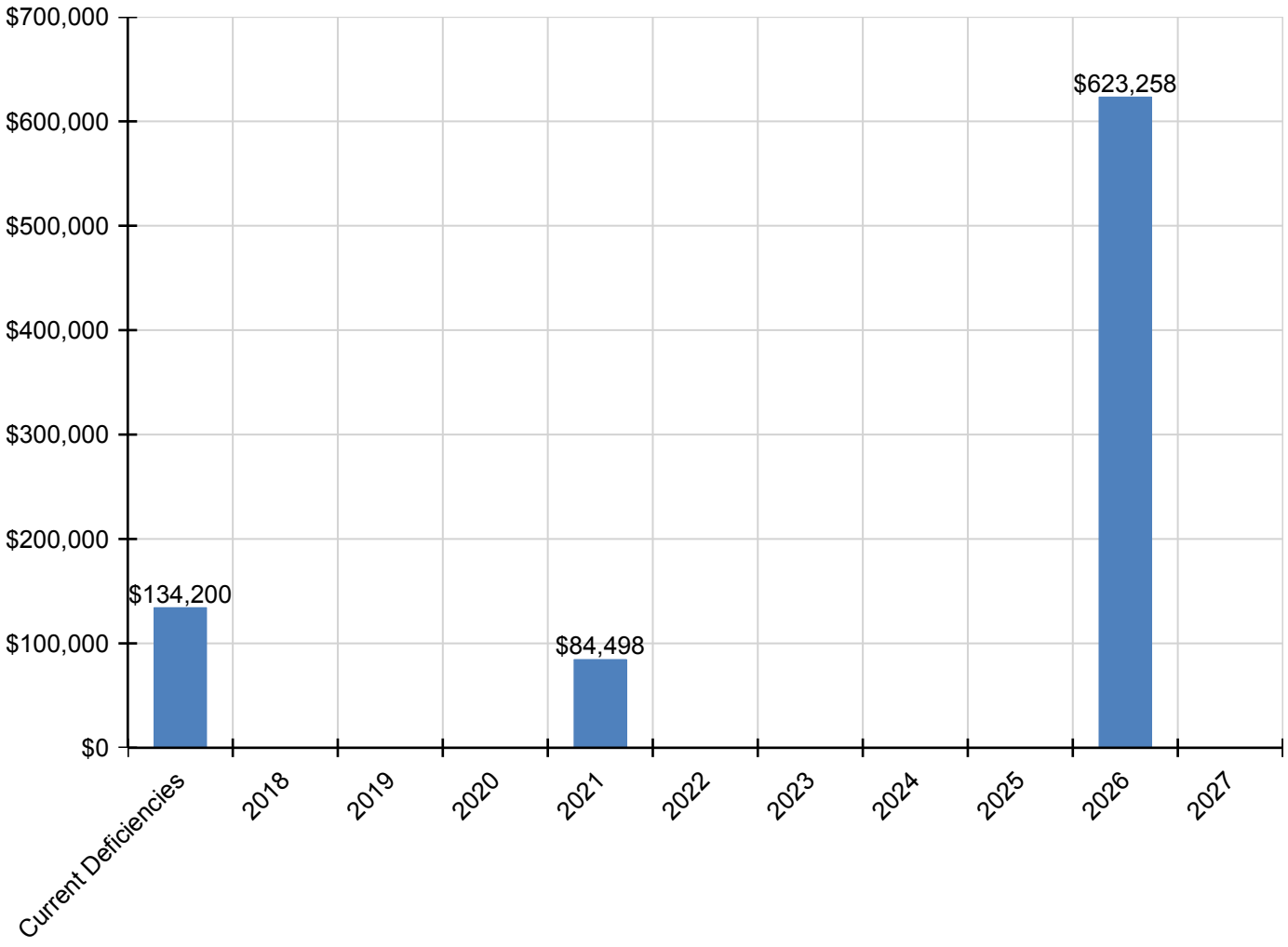
System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	**$134,200**	**$0**	**$0**	**$0**	**$84,498**	**$0**	**$0**	**$0**	**$0**	**$623,258**	**$0**	**$841,955**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** A10 - Foundations**	$0	$0	$0	$0	$0	$0	$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**
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	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	**$0**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$84,498	$0	$0	$0	$0	$0	$0	**$84,498**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2030 - Sanitary Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$284,538	$0	**$284,538**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$116,050	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$116,050**
D4020 - Standpipes	$18,150	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$18,150**
D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5020 - Branch Wiring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5020 - Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$65,663	$0	**$65,663**
D5030910 - Fire Alarm Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$118,767	$0	**$118,767**
D5030920 - Data Communication	$0	$0	$0	$0	$0	$0	$0	$0	$0	$154,289	$0	**$154,289**
D5090 - Other Electrical Systems	$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**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

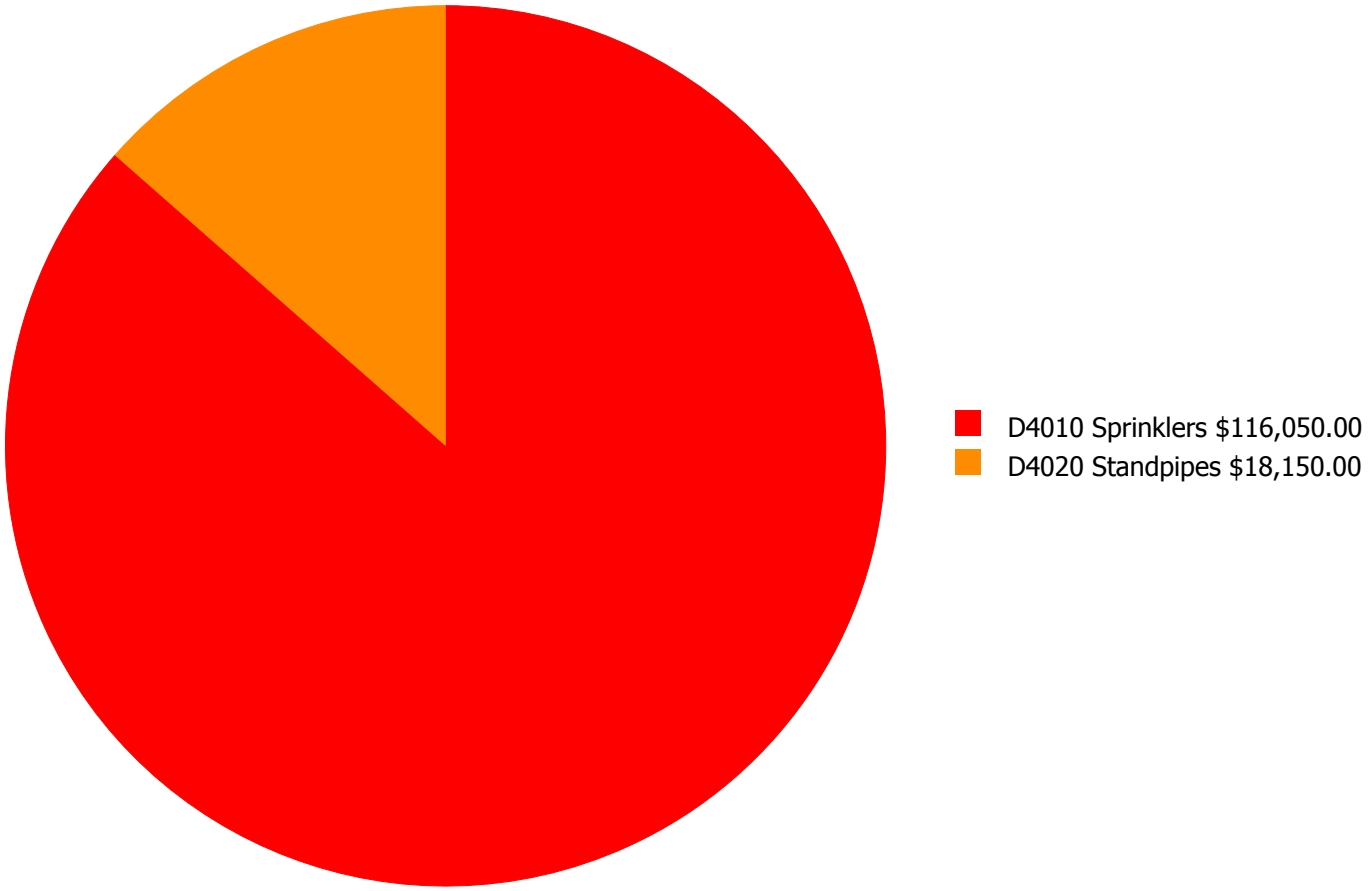
Forecasted Capital Renewal Requirement

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



Deficiency Summary by System

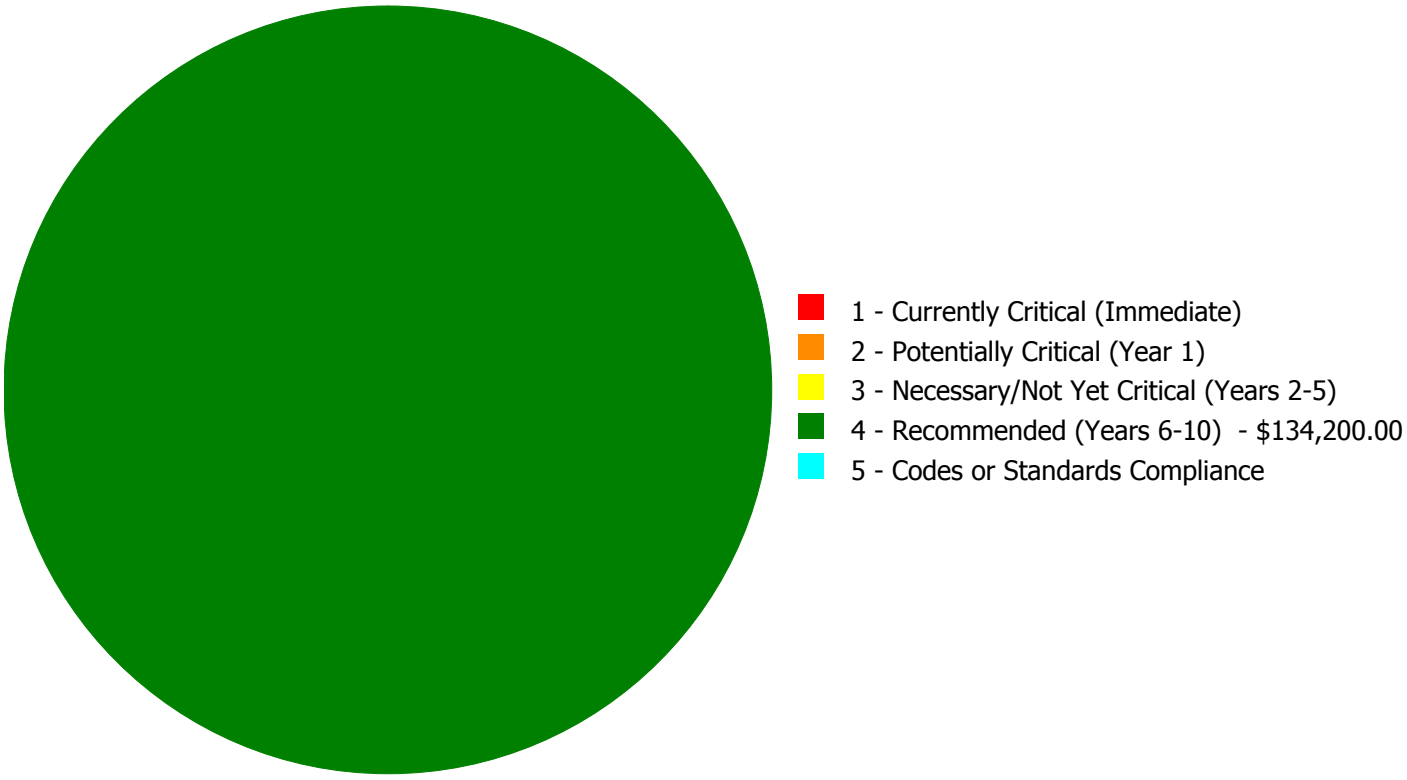
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $134,200.00

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: $134,200.00

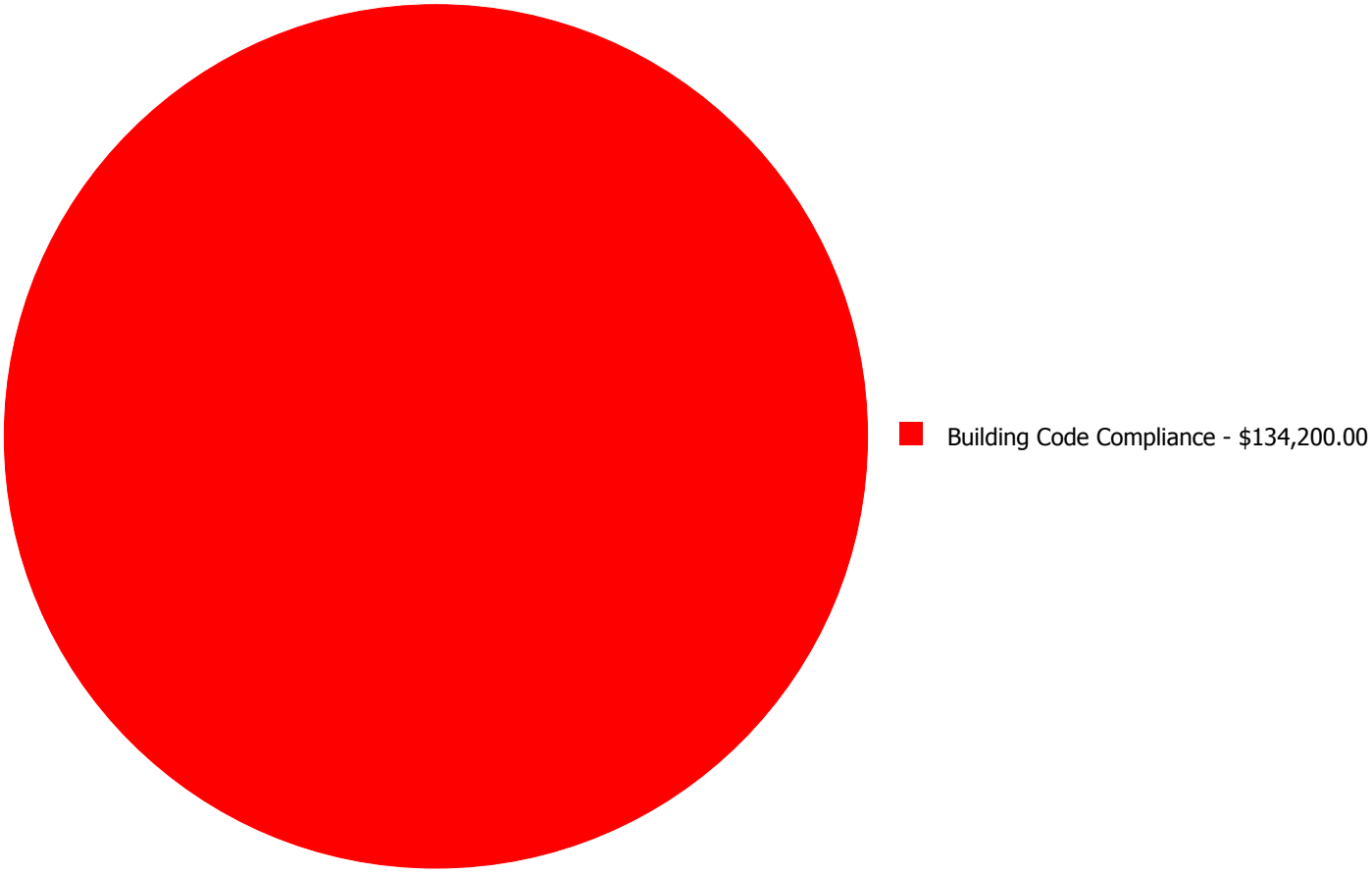
Deficiency By Priority Investment Table

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
D4010	Sprinklers	$0.00	$0.00	$0.00	$116,050.00	$0.00	$116,050.00
D4020	Standpipes	$0.00	$0.00	$0.00	$18,150.00	$0.00	$18,150.00
	Total:	$0.00	$0.00	$0.00	$134,200.00	$0.00	$134,200.00

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: $134,200.00

Deficiency Details by Priority

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

Priority 4 - Recommended (Years 6-10):

System: D4010 - Sprinklers

This deficiency has no image.

Location: Throughout
Distress: Missing
Category: Building Code Compliance
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 25,000.00
Unit of Measure: S.F.
Estimate: $116,050.00
Assessor Name: Terence Davis
Date Created: 12/21/2016

Notes: A Sprinkler system is missing and is recommended to be provided to comply with current codes.

System: D4020 - Standpipes

This deficiency has no image.

Location: Throughout
Distress: Missing
Category: Building Code Compliance
Priority: 4 - Recommended (Years 6-10)
Correction: Renew System
Qty: 25,000.00
Unit of Measure: S.F.
Estimate: $18,150.00
Assessor Name: Terence Davis
Date Created: 12/21/2016

Notes: A Sprinkler system is missing and is recommended to be provided to comply with current codes.

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):	73,960
Year Built:	1983
Last Renovation:	2009
Replacement Value:	$2,079,754
Repair Cost:	$418,169.00
Total FCI:	20.11 %
Total RSLI:	55.77 %
FCA Score:	79.89

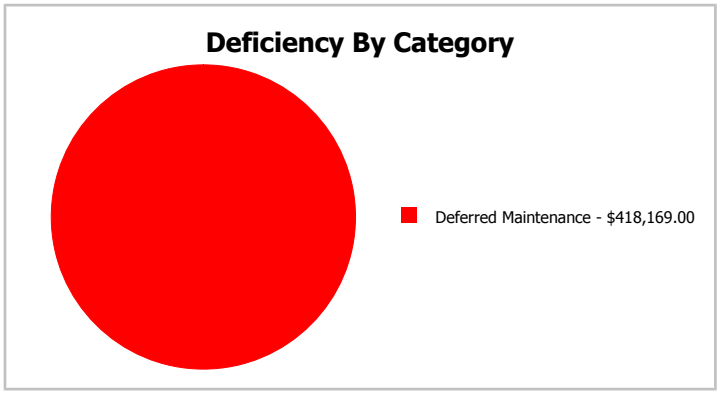
Description:

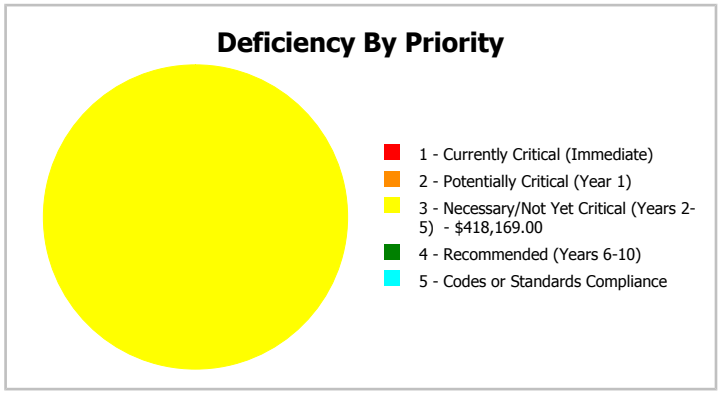
The narrative for this site is included in the Executive Summary Description at the front of this report.

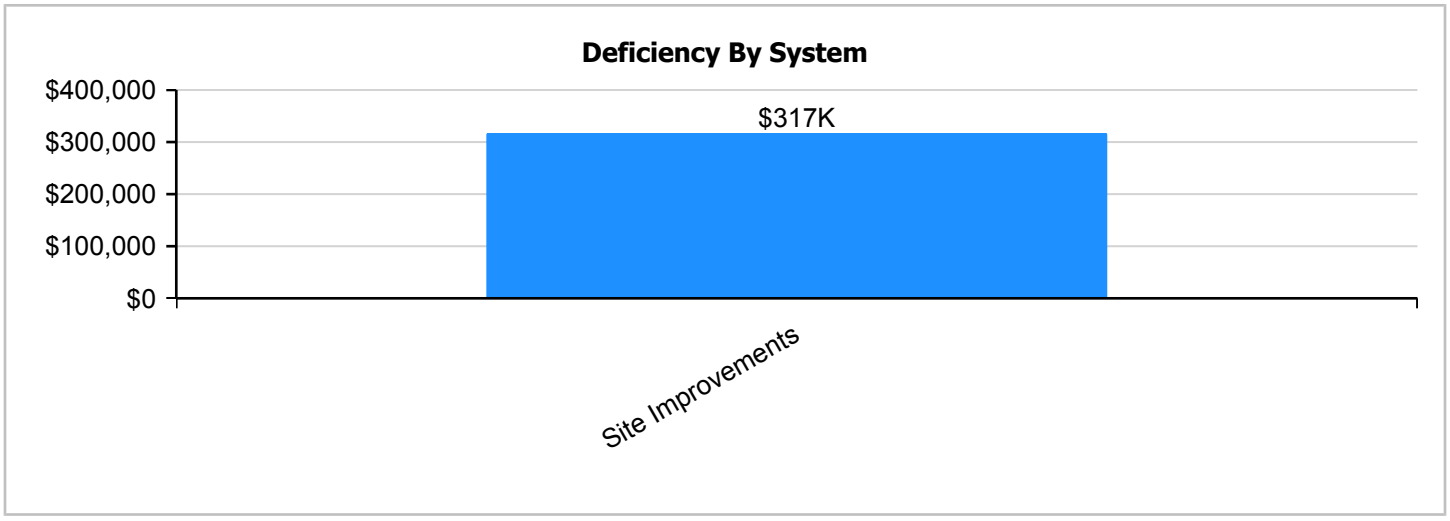
Attributes: This asset has no attributes.

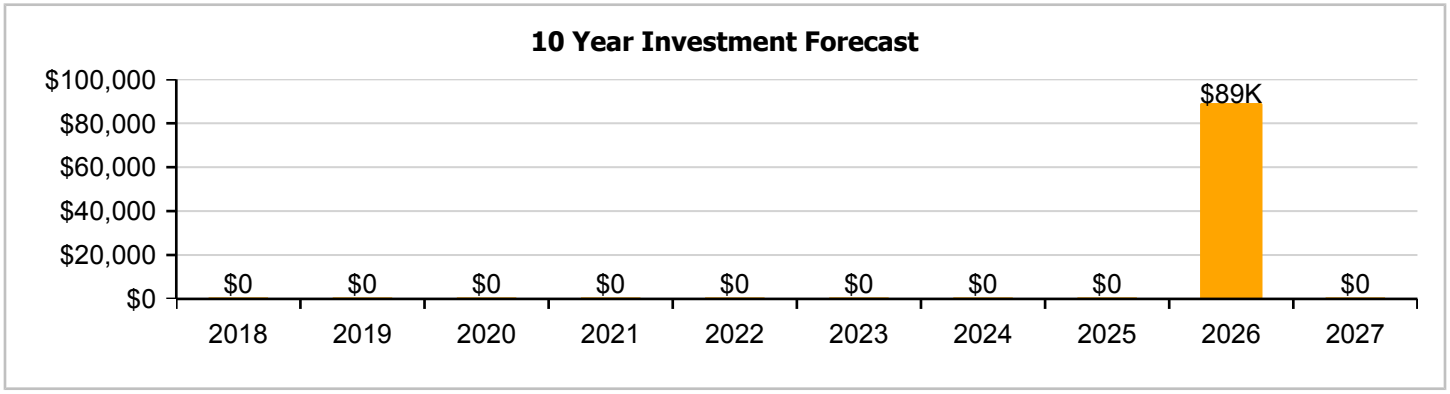
Dashboard Summary

Function:	ES -Elementary School	Gross Area:	73,960
Year Built:	1983	Last Renovation:	2009
Repair Cost:	$418,169	Replacement Value:	$2,079,754
FCI:	20.11 %	RSLI%:	55.77 %









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	47.23 %	37.37 %	$418,169.00
G30 - Site Mechanical Utilities	57.48 %	0.00 %	$0.00
G40 - Site Electrical Utilities	80.43 %	0.00 %	$0.00
Totals:	**55.77 %**	**20.11 %**	**$418,169.00**

Photo Album

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

1). Aerial Image of Wagram Elementary School - Feb 24, 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.	73,960	25	1983	2008		0.00 %	110.00 %	-9		$309,966.00	$281,788
G2020	Parking Lots	$1.33	S.F.	73,960	25	1983	2008		0.00 %	110.00 %	-9		$108,203.00	$98,367
G2030	Pedestrian Paving	$1.91	S.F.	73,960	30	2011	2041		80.00 %	0.00 %	24			$141,264
G2040105	Fence & Guardrails	$1.23	S.F.	73,960	30	2011	2041		80.00 %	0.00 %	24			$90,971
G2040950	Canopies	$0.44	S.F.	73,960	25	2011	2036		76.00 %	0.00 %	19			$32,542
G2040950	Playing Field	$4.54	S.F.	73,960	20	2011	2031		70.00 %	0.00 %	14			$335,778
G2050	Landscaping	$1.87	S.F.	73,960	15	2011	2026		60.00 %	0.00 %	9			$138,305
G3010	Water Supply	$2.34	S.F.	73,960	50	2011	2061		88.00 %	0.00 %	44			$173,066
G3020	Sanitary Sewer	$1.45	S.F.	73,960	50	2011	2061		88.00 %	0.00 %	44			$107,242
G3030	Storm Sewer	$4.54	S.F.	73,960	50	1983	2033		32.00 %	0.00 %	16			$335,778
G4010	Electrical Distribution	$2.35	S.F.	73,960	50	2011	2061		88.00 %	0.00 %	44			$173,806
G4020	Site Lighting	$1.47	S.F.	73,960	30	2011	2041		80.00 %	0.00 %	24			$108,721
G4030	Site Communications & Security	$0.84	S.F.	73,960	15	2011	2026		60.00 %	0.00 %	9			$62,126
								Total	**55.77 %**	**20.11 %**			**$418,169.00**	**$2,079,754**

System Notes

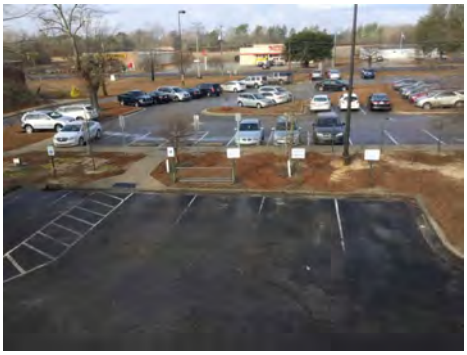
The facility description in the executive summary contains an overview of each system. The photos of each system and any associated notes listed below provide additional information on select systems found within the facility:

System: G2010 - Roadways



Note:

System: G2020 - Parking Lots



Note:

System: G2030 - Pedestrian Paving



Note:

System: G2040105 - Fence & Guardrails

Note:

System: G2040950 - Canopies

Note:

System: G2040950 - Playing Field

Note:

System: G2050 - Landscaping



Note:

System: G3010 - Water Supply


Note:

System: G3020 - Sanitary Sewer



Note:

System: G3030 - Storm Sewer



Note:

System: G4010 - Electrical Distribution


Note:

System: G4020 - Site Lighting



Note:

System: G4030 - Site Communications & Security



Note:

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.

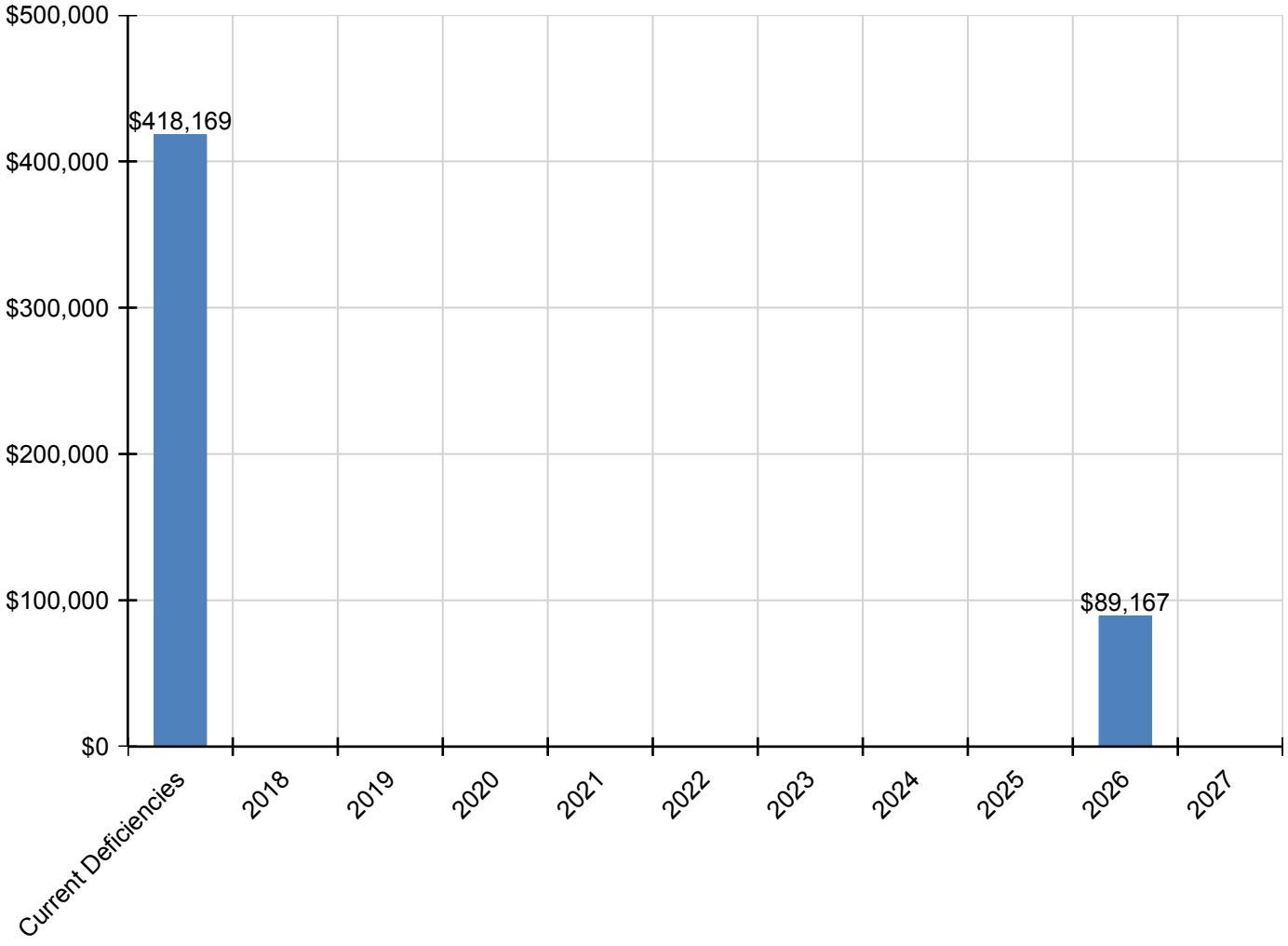
Inflation Rate: 3%

System	Current Deficiencies	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total:	**$418,169**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$89,167**	**$0**	**$507,336**
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	$309,966	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$309,966**
G2020 - Parking Lots	$108,203	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$108,203**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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 - Canopies	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040950 - Playing Field	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** 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	$0	$0	$0	$0	$0	$0	$0	**$0**
G3020 - Sanitary Sewer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G3030 - Storm Sewer	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$89,167	$0	**$89,167**

** Indicates non-renewable system*

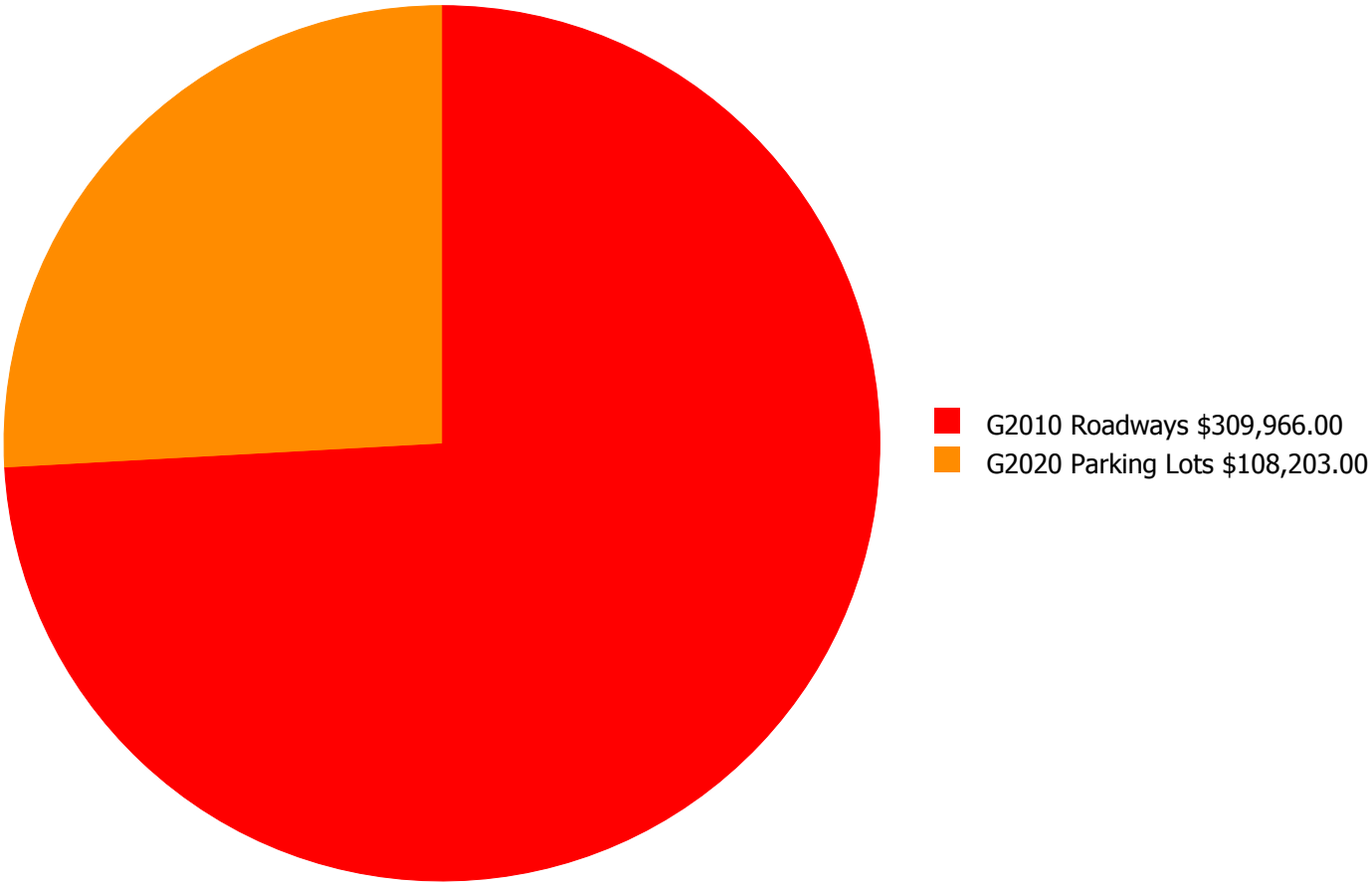
Forecasted Capital Renewal Requirement

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



Deficiency Summary by System

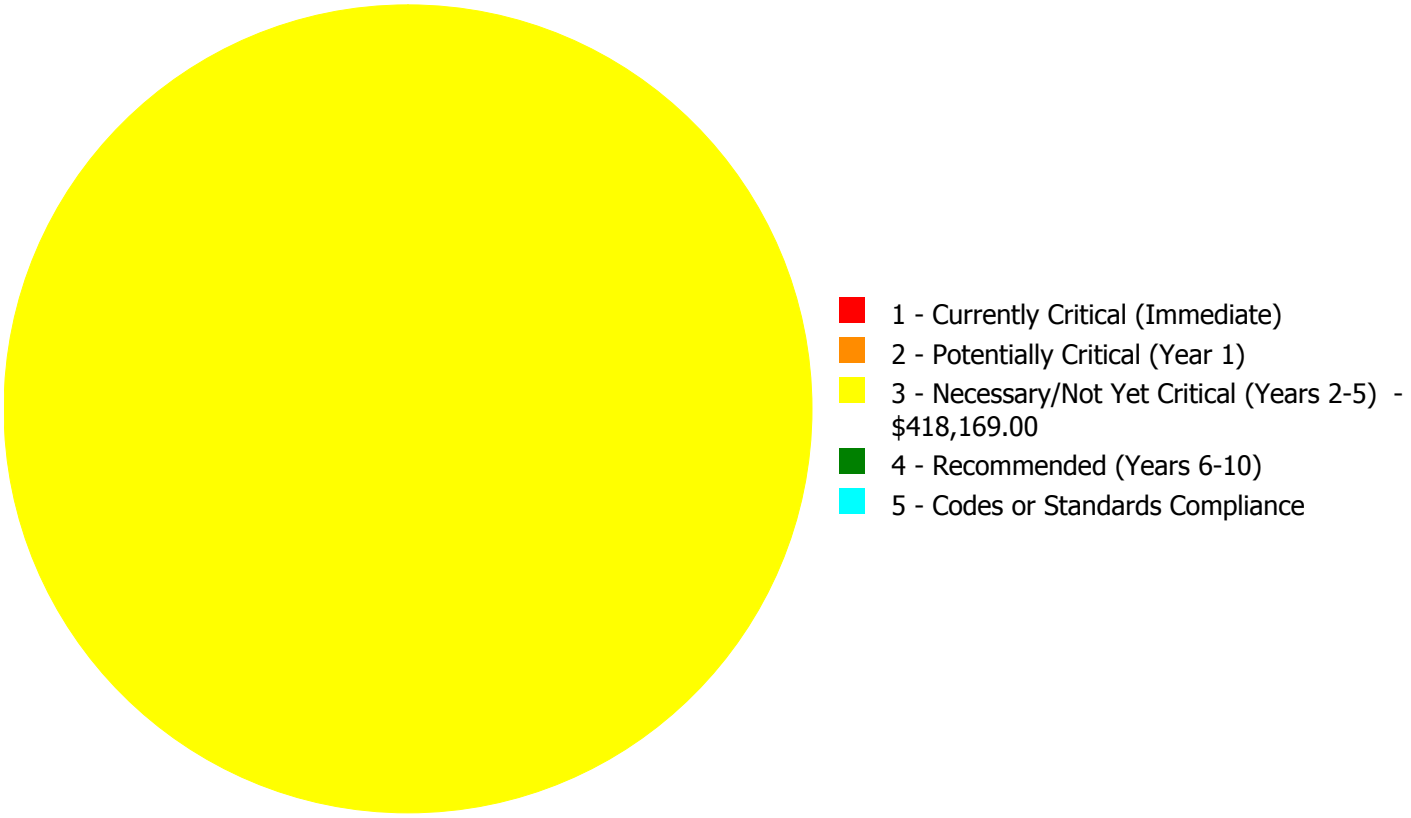
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $418,169.00

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: $418,169.00

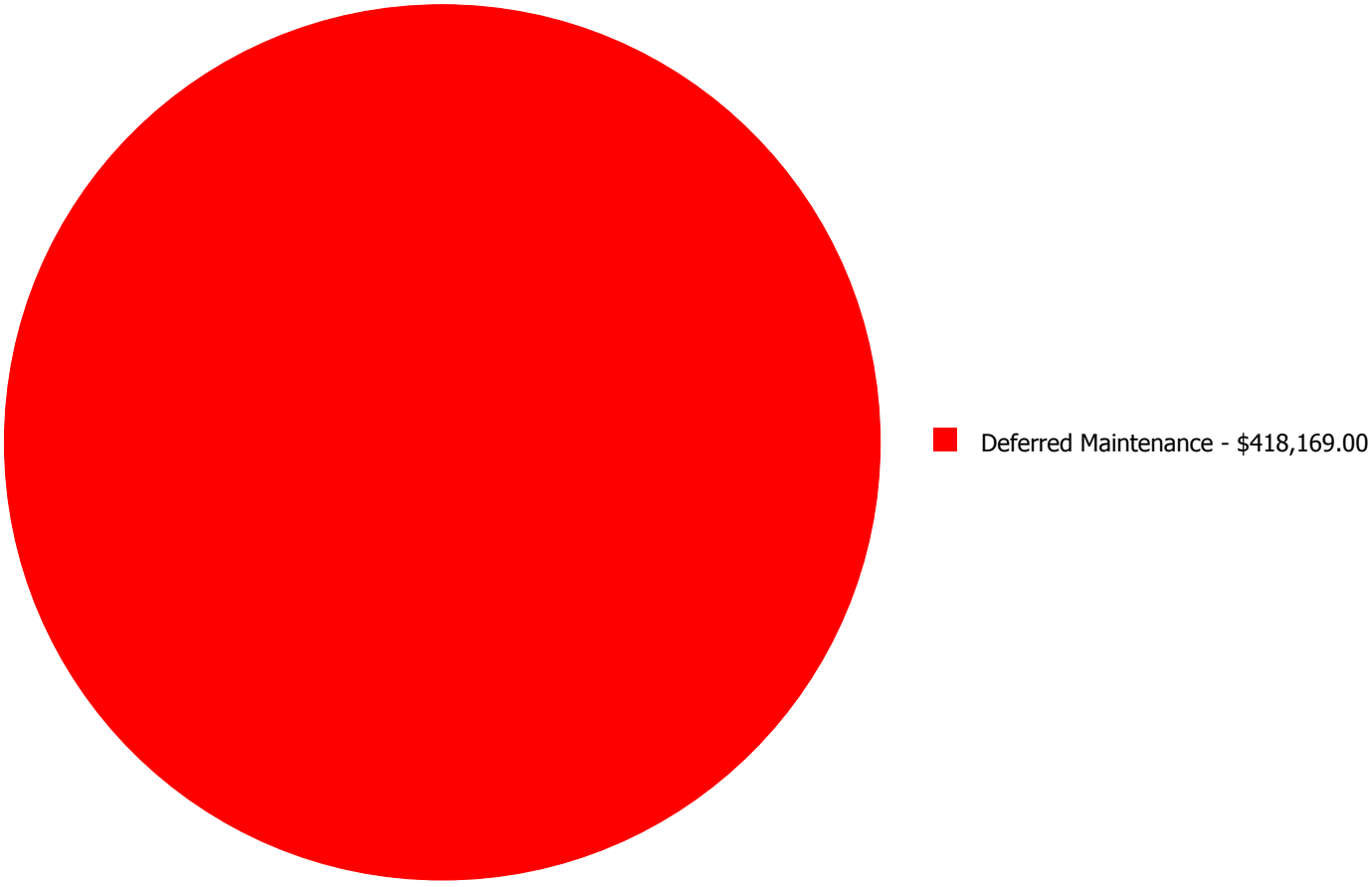
Deficiency By Priority Investment Table

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
G2010	Roadways	$0.00	$0.00	$309,966.00	$0.00	$0.00	$309,966.00
G2020	Parking Lots	$0.00	$0.00	$108,203.00	$0.00	$0.00	$108,203.00
	Total:	$0.00	$0.00	$418,169.00	$0.00	$0.00	$418,169.00

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: $418,169.00

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: G2010 - Roadways

Location: Entire site
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 73,960.00
Unit of Measure: S.F.
Estimate: $309,966.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The asphaltic roadway is aged, has many road cuts and repairs, and should be re-surfaced.

System: G2020 - Parking Lots

Location: North and East sides
Distress: Beyond Service Life
Category: Deferred Maintenance
Priority: 3 - Necessary/Not Yet Critical (Years 2-5)
Correction: Renew System
Qty: 73,960.00
Unit of Measure: S.F.
Estimate: $108,203.00
Assessor Name: Terence Davis
Date Created: 01/11/2017

Notes: The majority of the parking lot is aged, has many repairs and potholes, and should be re-surfaced.