Atlanta Public Schools/ Douglass Cluster

Boyd Elementary School

Revised

School Assessment Report

November 10, 2020

PARSONS

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School Executive Summary

The condition of a Campus is the accumulation of the condition evaluations of the component buildings and the site. Building condition is evaluated based on the functional systems and elements of a building and organized according to the **UNIFORMAT II Elemental Classification**. eCOMET uses parametric estimating methodology whereby historical costs for systems, components and equipment are collected by entities such as RSMeans and converted to unit costs, typically $/SF, and used to approximate future construction costs or replacement values. 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 **Current Replacement Value (CRV)** 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):	74,705
Year Built:	2019
Last Renovation:	
Replacement Value:	$14,791,577
Repair Cost:	$311,445.00
Total FCI:	2.11 %
Total RSLI:	70.74 %
FCA Score:	97.89

Description:

William E Boyd Elementary School is located at 1891 Johnson Rd. N.W.in Atlanta, Georgia. The main building consists of one story while the addition is a two-story building. This 74,705 square foot building was originally constructed in 1971. There have been one addition and one renovation effort in 2015.

This report contains condition and adequacy data collected during the 2019 Facility Condition Assessment (FCA) Update. 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 has a lower level of cast in-place construction.

B. SUPERSTRUCTURE
Floor construction is metal pan deck with lightweight fill. Roof construction is metal decking with steel supports. The exterior envelope

is composed of walls of brick veneer over CMU. Exterior windows are double pane aluminum frame with fixed and operable panes. Exterior doors are hollow metal steel mostly with glazing. Mechanical support doors are hollow metal steel with metal frames. The roofing system is a mix of built-up and single-ply applications. Roof openings include a roof hatch with fixed ladder access. Most building entrances appear to comply with ADA requirements.

C. INTERIORS
Interior partitions are typically CMU. Interior doors are generally solid core wood with metal 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. Stair construction includes steel risers and concrete treads with concrete finishes. The interior wall finishes are typically painted CMU. Floor finishes in common areas are a combination of vinyl composition tile in the main areas of the school. Carpet in the Media Center and Administrative areas and a small section of Epoxy specific restrooms. Ceiling finishes in common areas are typically suspended acoustical tile. Ceiling finishes in restrooms areas are typically drywall with an applied finish.

D. SERVICES
CONVEYING: The building does include conveying equipment. Conveying equipment includes one hydraulic elevator, and no wheelchair lifts.
PLUMBING: Plumbing fixtures are typically low-flow water fixtures with manual control valves. Domestic water distribution is copper with electric hot water heating. Sanitary waste system is cast iron. Rainwater drainage system is both internal with roof drains and external gutter systems.
HVAC: Heating is provided by gas fired boilers. Cooling is supplied by water source heat pump system with DX supporting systems. The heating/cooling distribution system is a ductwork system utilizing 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 has a remote Building Automation System.
FIRE PROTECTION: The building does have a fire sprinkler system. The building does have additional fire suppression systems, which include kitchen fire protection. Standpipes are 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 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 combined with the telephone system.
OTHER ELECTRICAL SYSTEMS: This building does have a separately derived emergency power system. There is a Generac Industrial Power natural gas emergency generator.

E. EQUIPMENT & FURNISHINGS
This building includes the following items and equipment: fixed food service, library equipment, athletic equipment, theater and stage, audio-visual, laboratory, 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, covered walkways, flagpole, landscaping, play areas, and fencing. Site mechanical and electrical features include water, sewer, natural gas and site lighting.

CODE REVIEW
ACCESSIBILITY: The building is generally in compliance with applicable ADA requirements with respect to path of travel, interior and exterior doors, interior signage, and toilet room dimensions, fixtures, and fittings. Most building entrances appear to comply with ADA requirements.
LIFE-SAFETY SYSTEMS: The building is covered with a sprinkler system. Fire extinguishers are located throughout the building. Power outlets in wet areas are GFIC protected. The fire alarm system includes detection devices, audio/visual alarms, and pull stations. Emergency/egress lighting is a combination of battery and special circuit systems. Illuminated exit signage is present in corridors and at exit doors. There is no fall protection at the roof.

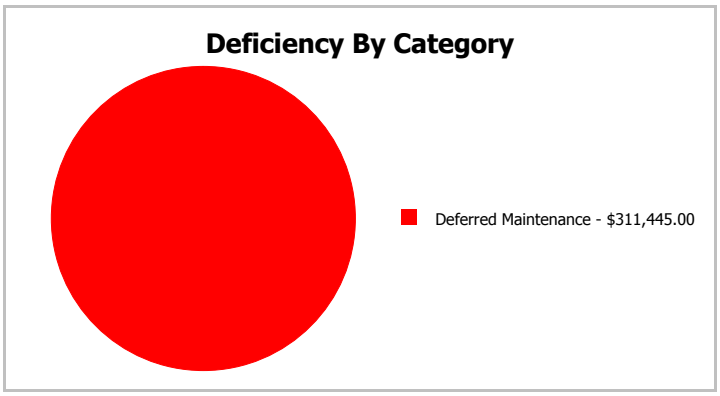
Attributes:

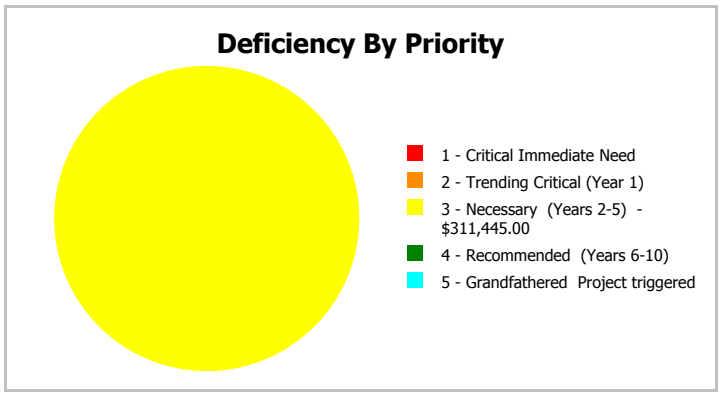
General Attributes:

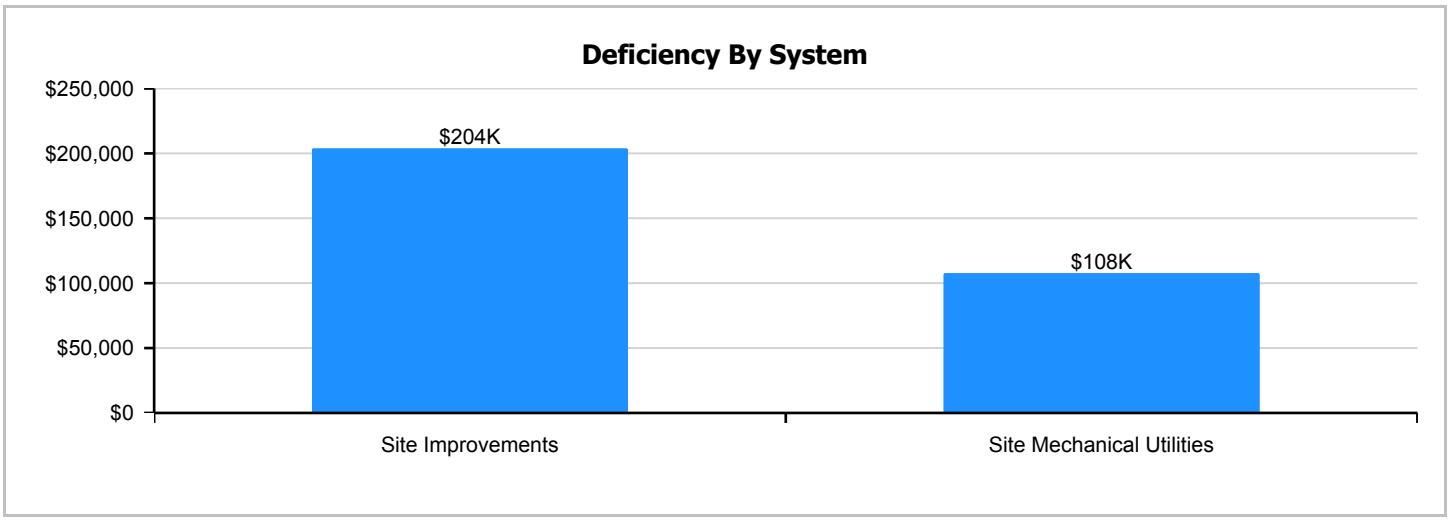
Arch Condition Assessor:	Hayden Collins	MEP Condition Assessor:	Hayden Collins
School Grades:	01, 02, 03, 04, 05, KK, PK	DOE Drawing Total GSF:	-
DOE Facility Number:	1053	Total # of Modular/Portables:	0
DOE Interior Site SF:	72405	Total GSF of Modular/Portables:	0
Approx. Acres:	19.7	Status:	Active

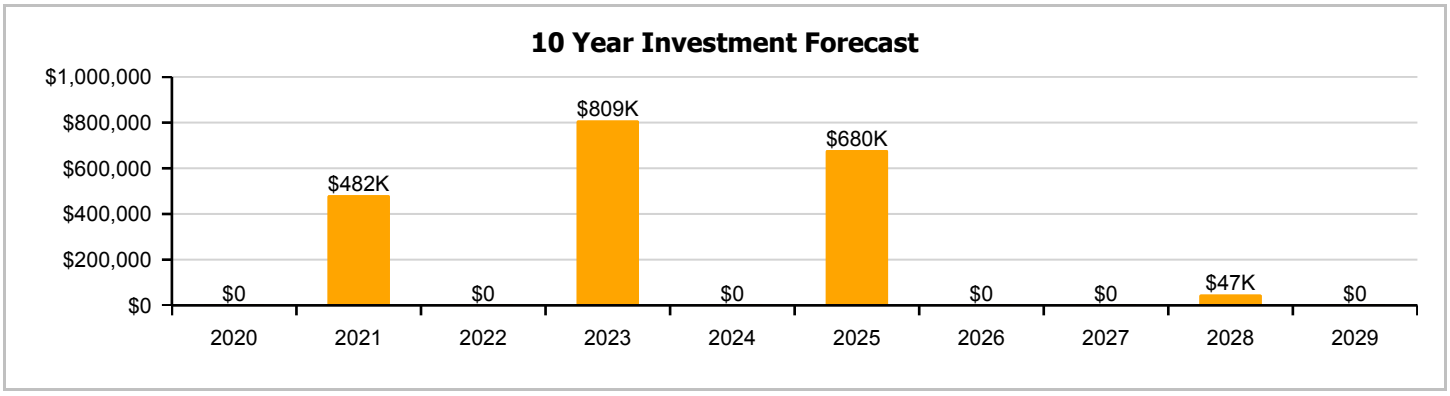
School Dashboard Summary

Gross Area:	74,705		
Year Built:	2019	Last Renovation:	
Repair Cost:	$311,445	Replacement Value:	$14,791,577
FCI:	2.11 %	RSLI%:	70.74 %









School 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	52.00 %	0.00 %	$0.00
B10 - Superstructure	52.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	92.20 %	0.00 %	$0.00
B30 - Roofing	26.20 %	0.00 %	$0.00
C10 - Interior Construction	90.61 %	0.00 %	$0.00
C20 - Stairs	96.00 %	0.00 %	$0.00
C30 - Interior Finishes	74.54 %	0.00 %	$0.00
D10 - Conveying	80.00 %	0.00 %	$0.00
D20 - Plumbing	80.82 %	0.00 %	$0.00
D30 - HVAC	61.27 %	0.00 %	$0.00
D40 - Fire Protection	85.01 %	0.00 %	$0.00
D50 - Electrical	80.28 %	0.00 %	$0.00
E10 - Equipment	80.00 %	0.00 %	$0.00
E20 - Furnishings	80.00 %	0.00 %	$0.00
G20 - Site Improvements	63.46 %	12.68 %	$203,795.00
G30 - Site Mechanical Utilities	24.89 %	30.21 %	$107,650.00
G40 - Site Electrical Utilities	86.67 %	0.00 %	$0.00
Totals:	**70.74 %**	**2.11 %**	**$311,445.00**

Condition Deficiency Priority

Facility Name	Gross Area (S.F.)	FCI %	1 - Critical Immediate Need	2 - Trending Critical (Year 1)	3 - Necessary (Years 2-5)	4 - Recommended (Years 6-10)	5 - Grandfathered Project triggered
1971 Bldg 2010	74,705	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Site	74,705	12.77	$0.00	$0.00	$311,445.00	$0.00	$0.00
Total:		**2.11**	**$0.00**	**$0.00**	**$311,445.00**	**$0.00**	**$0.00**

Deficiencies By Priority

Budget Estimate Total: $311,445.00

Executive Summary

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Function:	Elementary
Gross Area (SF):	74,705
Year Built:	1971
Last Renovation:	2015
Replacement Value:	$12,353,206
Repair Cost:	$0.00
Total FCI:	0.00 %
Total RSLI:	72.40 %
FCA Score:	100.00

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.

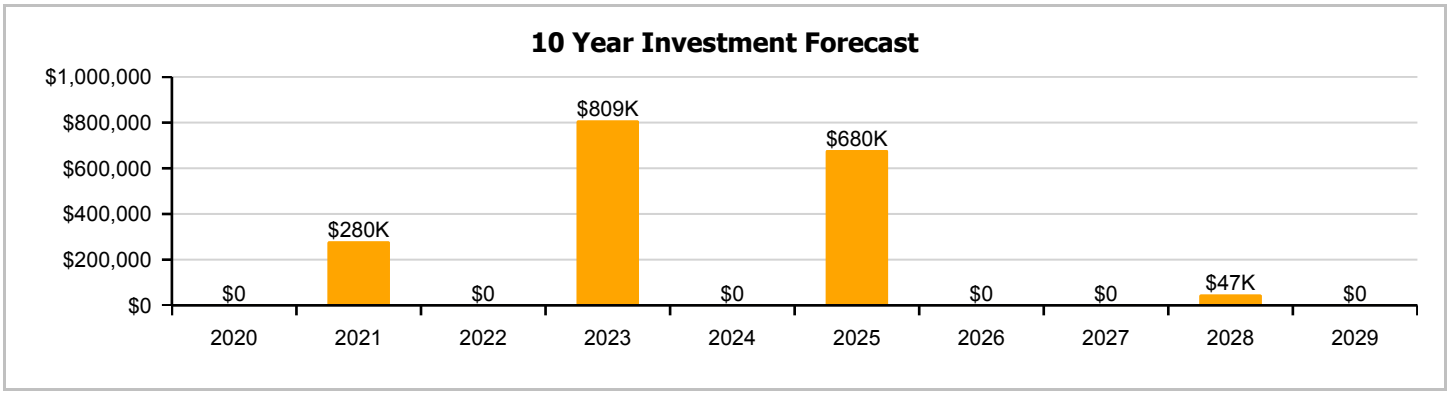
Dashboard Summary

Function:	Elementary	Gross Area:	74,705
Year Built:	1971	Last Renovation:	2015
Repair Cost:	$0	Replacement Value:	$12,353,206
FCI:	0.00 %	RSLI%:	72.40 %

No data found for this asset

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 II classification Level 2. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	52.00 %	0.00 %	$0.00
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E10 - Equipment	80.00 %	0.00 %	$0.00
E20 - Furnishings	80.00 %	0.00 %	$0.00
Totals:	**72.40 %**	**0.00 %**	**$0.00**

Photo Album

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

1). Southern Exterior Elevation - Oct 18, 2019

2). Eastern Exterior Elevation - Nov 25, 2019

3). Eastern Exterior Elevation - Nov 25, 2019

4). Northern Exterior Elevation - Nov 25, 2019

5). Western Exterior Elevation - Nov 25, 2019

6). Courtyard - Nov 25, 2019

7). Courtyard - Nov 25, 2019

8). Courtyard - Nov 25, 2019

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 as new construction.

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	$6.78	S.F.	74,705	100	1971	2071		52.00 %	0.00 %	52			$506,500
A1030	Slab on Grade	$5.72	S.F.	74,705	100	1971	2071		52.00 %	0.00 %	52			$427,313
B1020	Roof Construction	$10.80	S.F.	74,705	100	1971	2071		52.00 %	0.00 %	52			$806,814
B2010	Exterior Walls	$11.50	S.F.	74,705	100	2015	2115		96.00 %	0.00 %	96			$859,108
B2020	Exterior Windows	$7.17	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$535,635
B2030	Exterior Doors	$0.71	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$53,041
B3010105	Built-Up	$7.15	S.F.	60,000	25	1998	2023		16.00 %	0.00 %	4			$429,000
B3010120	Single Ply Membrane	$5.37	S.F.	14,705	20	2015	2035		80.00 %	0.00 %	16			$78,966
B3020	Roof Openings	$0.44	S.F.	74,705	30	1998	2028		30.00 %	0.00 %	9			$32,870
C1010	Partitions	$4.89	S.F.	74,705	100	2015	2115		96.00 %	0.00 %	96			$365,307
C1020	Interior Doors	$3.16	S.F.	74,705	40	2015	2055		90.00 %	0.00 %	36			$236,068
C1030	Fittings	$2.30	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$171,822
C2010	Stair Construction	$2.47	S.F.	74,705	100	2015	2115		96.00 %	0.00 %	96			$184,521
C3010220	Tile	$9.25	S.F.	1,705	30	2015	2045		86.67 %	0.00 %	26			$15,771
C3010230	Paint & Covering	$1.47	S.F.	73,000	10	2015	2025		60.00 %	0.00 %	6			$107,310
C3020405	Epoxy	$17.30	S.F.	6,000	15	2015	2030		73.33 %	0.00 %	11			$103,800
C3020901	Carpet	$7.50	S.F.	5,500	8	2015	2023		50.00 %	0.00 %	4			$41,250
C3020903	VCT	$3.48	S.F.	63,205	15	2015	2030		73.33 %	0.00 %	11			$219,953
C3030	Ceiling Finishes	$7.80	S.F.	65,000	20	2015	2035		80.00 %	0.00 %	16			$507,000
D1010	Elevators and Lifts	$1.27	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$94,875
D2010	Plumbing Fixtures	$14.35	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$1,072,017
D2020	Domestic Water Distribution	$0.66	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$49,305
D2030	Sanitary Waste	$1.54	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$115,046
D2040	Rain Water Drainage	$1.29	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$96,369
D3010	Energy Supply	$0.61	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$45,570
D3020	Heat Generating Systems	$3.21	S.F.	74,705	20	2001	2021		10.00 %	0.00 %	2			$239,803
D3030	Cooling Generating Systems	$5.49	S.F.	74,705	20	2005	2025		30.00 %	0.00 %	6			$410,130
D3040	Distribution Systems	$9.60	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$717,168
D3050	Terminal & Package Units	$9.70	S.F.	74,705	15	2015	2030		73.33 %	0.00 %	11			$724,639
D3060	Controls & Instrumentation	$1.98	S.F.	74,705	15	2015	2030		73.33 %	0.00 %	11			$147,916
D4010	Sprinklers	$3.70	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$276,409
D4020	Standpipes	$0.26	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$19,423

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 $
D4090	Other Fire Protection Systems	$0.56	S.F.	74,705	15	2015	2030		73.33 %	0.00 %	11			$41,835
D5010	Electrical Service/Distribution	$5.38	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$401,913
D5020	Branch Wiring	$5.41	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$404,154
D5020	Lighting	$7.56	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$564,770
D5030810	Security & Detection Systems	$1.51	Ea.	74,705	20	2015	2035		80.00 %	0.00 %	16			$112,805
D5030910	Fire Alarm Systems	$2.74	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$204,692
D5030920	Data Communication	$3.56	S.F.	74,705	25	2015	2040		84.00 %	0.00 %	21			$265,950
D5090	Other Electrical Systems	$1.01	S.F.	74,705	15	2015	2030		73.33 %	0.00 %	11			$75,452
E1020	Institutional Equipment	$1.28	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$95,622
E1090	Other Equipment	$3.20	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$239,056
E2010	Fixed Furnishings	$3.43	S.F.	74,705	20	2015	2035		80.00 %	0.00 %	16			$256,238
								Total	**72.40 %**					**$12,353,206**

System Notes

The facility description in the executive summary contains an overview of each system. The system 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



Note:

System: B3010105 - Built-Up



Note:

System: B3010120 - Single Ply Membrane



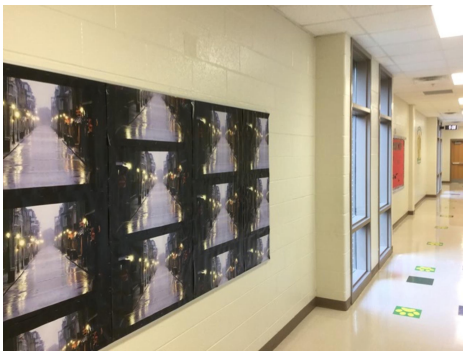
Note:

System: B3020 - Roof Openings



Note:

System: C1010 - Partitions



Note:

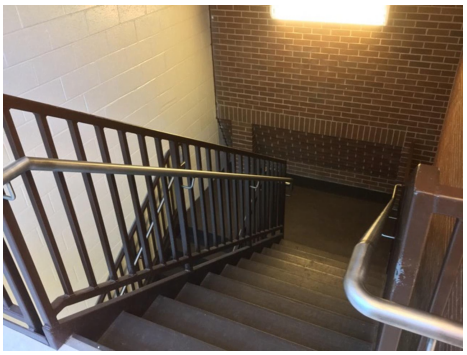
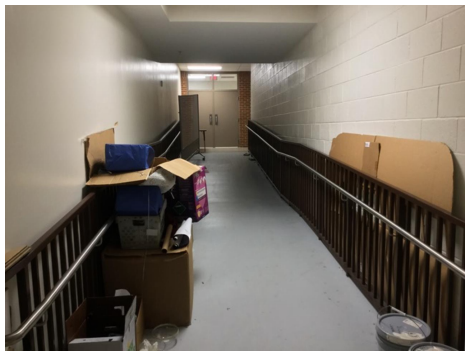
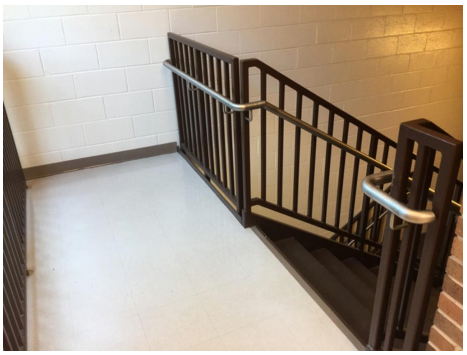
System: C1020 - Interior Doors


Note:

System: C1030 - Fittings

Note:

System: C2010 - Stair Construction

Note:

System: C3010220 - Tile



Note:

System: C3010230 - Paint & Covering



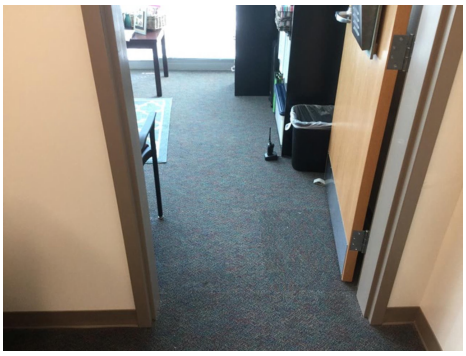
Note:

System: C3020405 - Epoxy



Note:

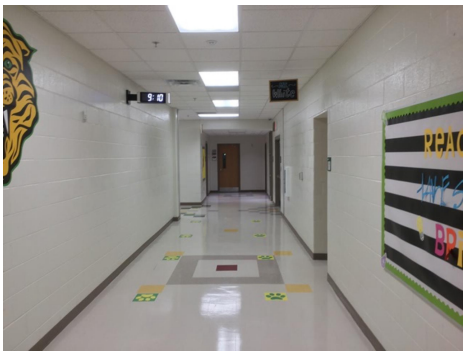
System: C3020901 - Carpet


Note:

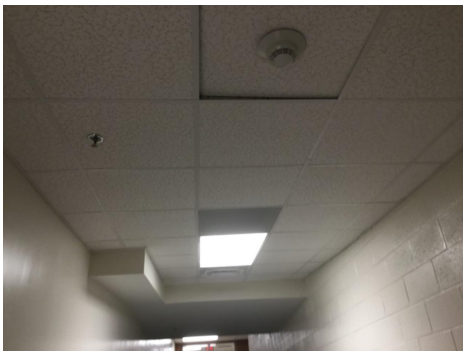
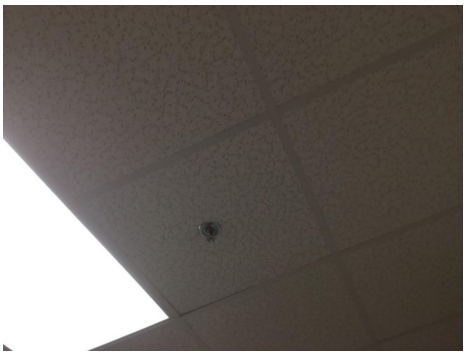
System: C3020903 - VCT





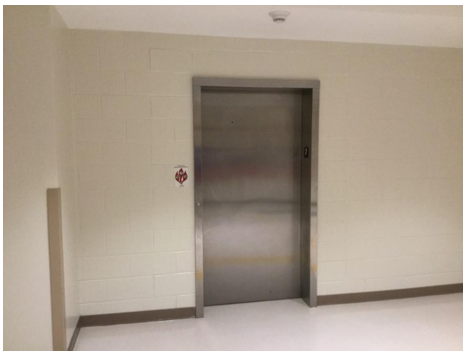
Note:

System: C3030 - Ceiling Finishes


Note:

System: D1010 - Elevators and Lifts

Note:

System: D2010 - Plumbing Fixtures

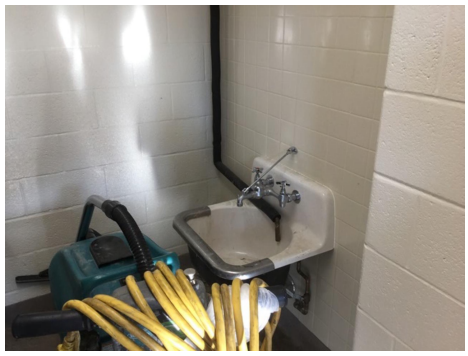
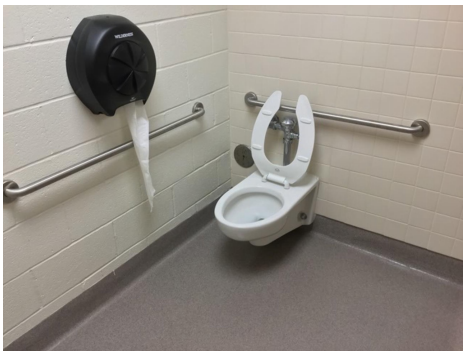


Note:

System: D2020 - Domestic Water Distribution


Note:

System: D2030 - Sanitary Waste

Note:

System: D2040 - Rain Water Drainage



Note:

System: D3010 - Energy Supply



Note:

System: D3020 - Heat Generating Systems

Note:

System: D3030 - Cooling Generating Systems


Note:

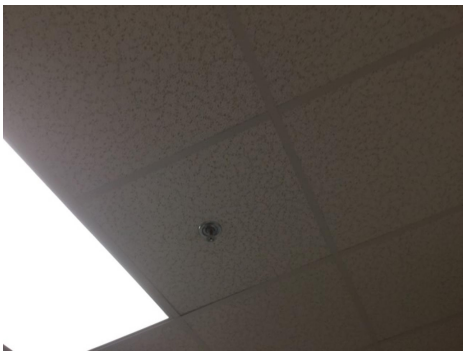
System: D3040 - Distribution Systems

Note:

System: D3050 - Terminal & Package Units

Note:

System: D4010 - Sprinklers

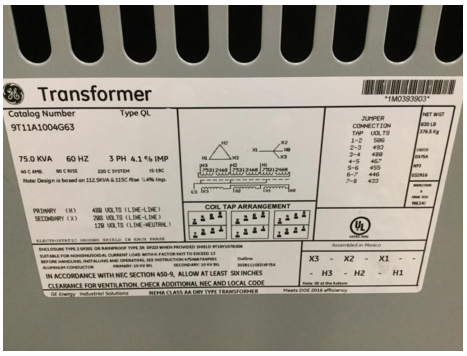


Note:

System: D4090 - Other Fire Protection Systems

Note:

System: D5010 - Electrical Service/Distribution

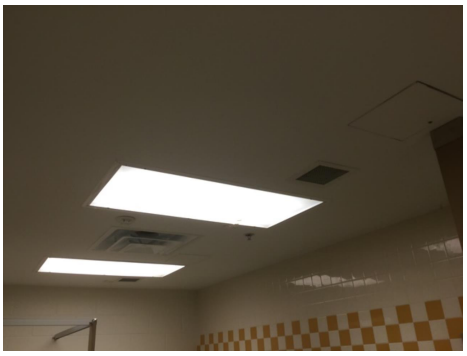


Note:

System: D5020 - Branch Wiring

Note:

System: D5020 - Lighting



Note:

System: D5030810 - Security & Detection Systems



Note:

System: D5030910 - Fire Alarm Systems



Note:

System: 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 table. 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	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total:		**$0**	**$279,847**	**$0**	**$809,134**	**$0**	**$679,635**	**$0**	**$0**	**$47,177**	**$0**	**$1,815,793**
*** 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**
*** 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**
B3010105 - Built-Up	$0	$0	$0	$0	$758,064	$0	$0	$0	$0	$0	$0	**$758,064**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$47,177	$0	**$47,177**
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**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** C2010 - Stair Construction**	$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	$0	$0	$0	$0	$0	$0	$0	**$0**

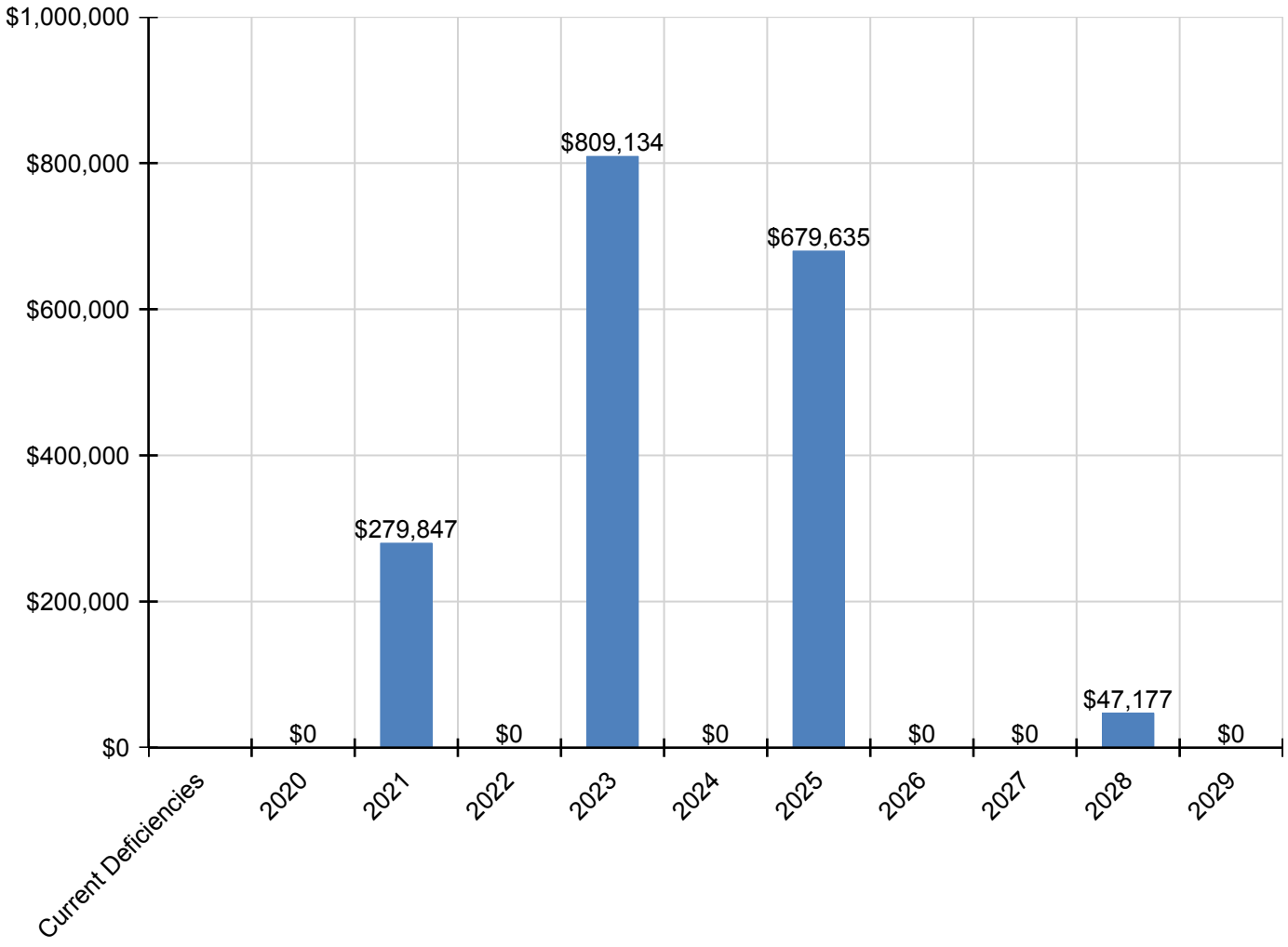
System	Current Deficiencies	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
C3010220 - Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$140,947	$0	$0	$0	$0	**$140,947**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020405 - Epoxy	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020901 - Carpet	$0	$0	$0	$0	$51,070	$0	$0	$0	$0	$0	$0	**$51,070**
C3020903 - VCT	$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**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$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**
D2040 - Rain Water Drainage	$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**
D3010 - Energy Supply	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$279,847	$0	$0	$0	$0	$0	$0	$0	$0	**$279,847**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$538,688	$0	$0	$0	$0	**$538,688**
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	$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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4090 - Other Fire Protection Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	**$0**

System	Current Deficiencies	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
D5030910 - Fire Alarm Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5030920 - Data Communication	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$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

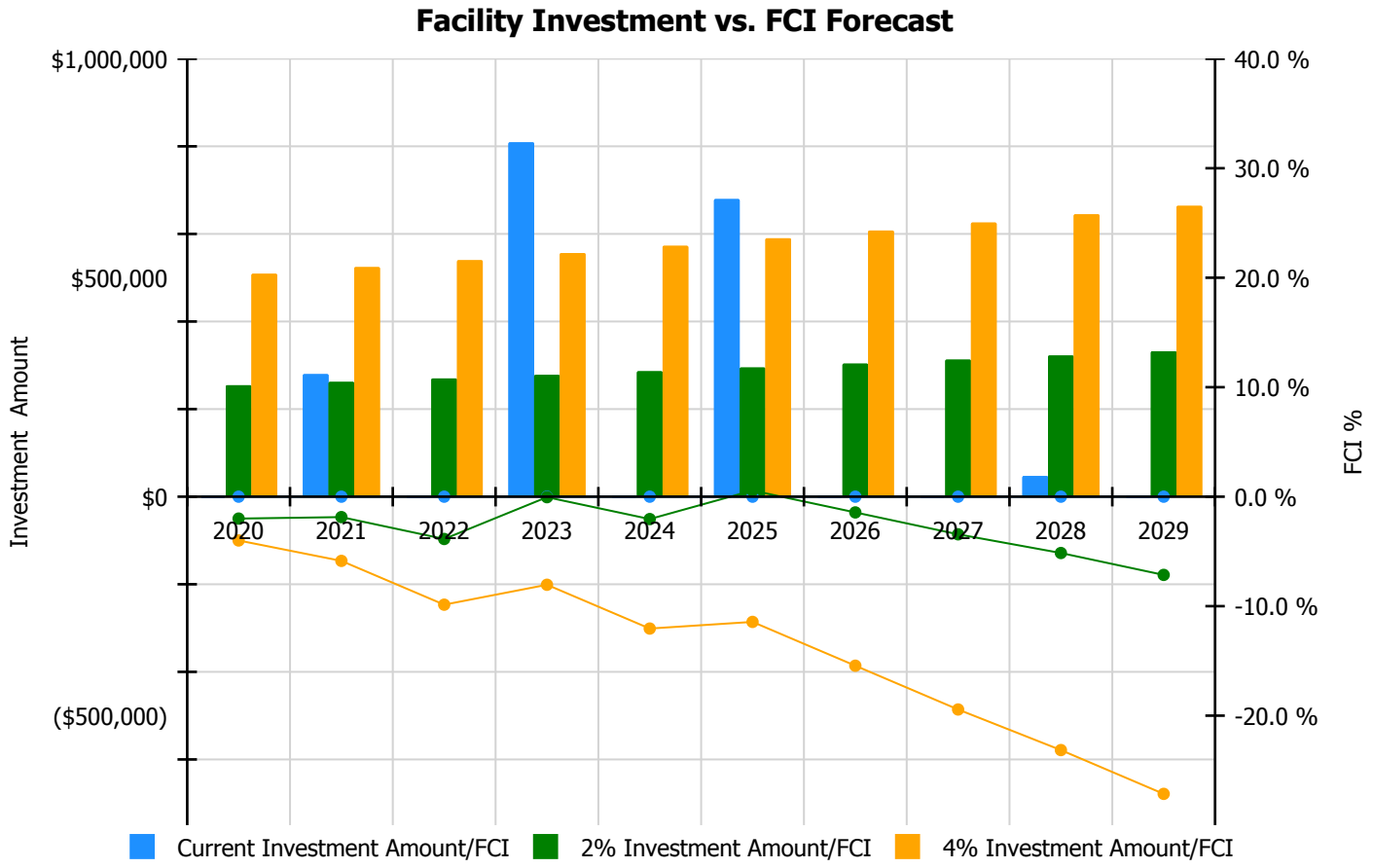
The following chart shows the current building deficiencies and forecasted capital renewal (sustainment) requirements over the next ten years.



Condition Index Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation



Year	Investment Amount Current FCI - 0%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2020	$0	$254,476.00	-2.00 %	$508,952.00	-4.00 %
2021	$279,847	$262,110.00	-1.86 %	$524,221.00	-5.86 %
2022	$0	$269,974.00	-3.86 %	$539,947.00	-9.86 %
2023	$809,134	$278,073.00	-0.05 %	$556,146.00	-8.05 %
2024	$0	$286,415.00	-2.05 %	$572,830.00	-12.05 %
2025	$679,635	$295,007.00	0.56 %	$590,015.00	-11.44 %
2026	$0	$303,858.00	-1.44 %	$607,715.00	-15.44 %
2027	$0	$312,973.00	-3.44 %	$625,947.00	-19.44 %
2028	$47,177	$322,363.00	-5.14 %	$644,725.00	-23.14 %
2029	$0	$332,034.00	-7.14 %	$664,067.00	-27.14 %
Total:	**$1,815,793**	**$2,917,283.00**		**$5,834,565.00**	

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.

No data found for this asset

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:

No data found for this asset

Deficiency By Priority Investment Table

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

No data found for this asset

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:

No data found for this asset

Deficiency Details by Priority

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

No data found for this asset

Executive Summary

The condition of a Campus is the accumulation of the condition evaluations of the component buildings and the site. Building condition is evaluated based on the functional systems and elements of a building and organized according to the **UNIFORMAT II Elemental Classification**. eCOMET uses parametric estimating methodology whereby historical costs for systems, components and equipment are collected by entities such as RSMeans and converted to unit costs, typically $/SF, and used to approximate future construction costs or replacement values. 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 **Current Replacement Value (CRV)** 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:	
Gross Area (SF):	74,705
Year Built:	1971
Last Renovation:	
Replacement Value:	$2,438,371
Repair Cost:	$311,445.00
Total FCI:	12.77 %
Total RSLI:	62.34 %
FCA Score:	87.23

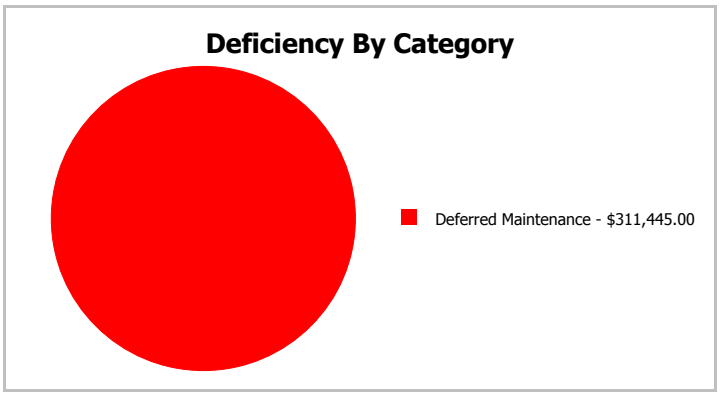
Description:

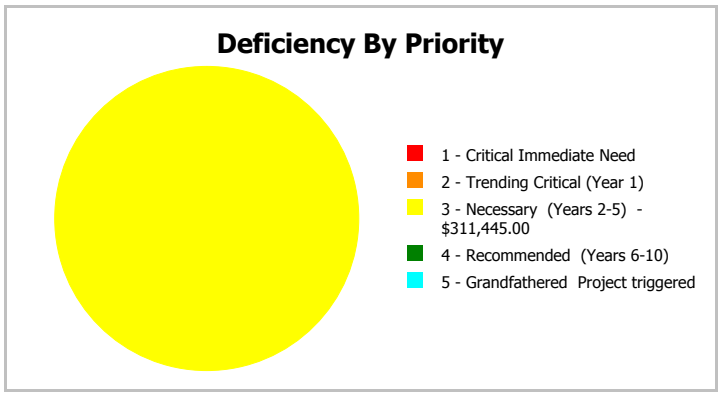
The narrative for this site is included in the Executive Summary Description at the front of this report.

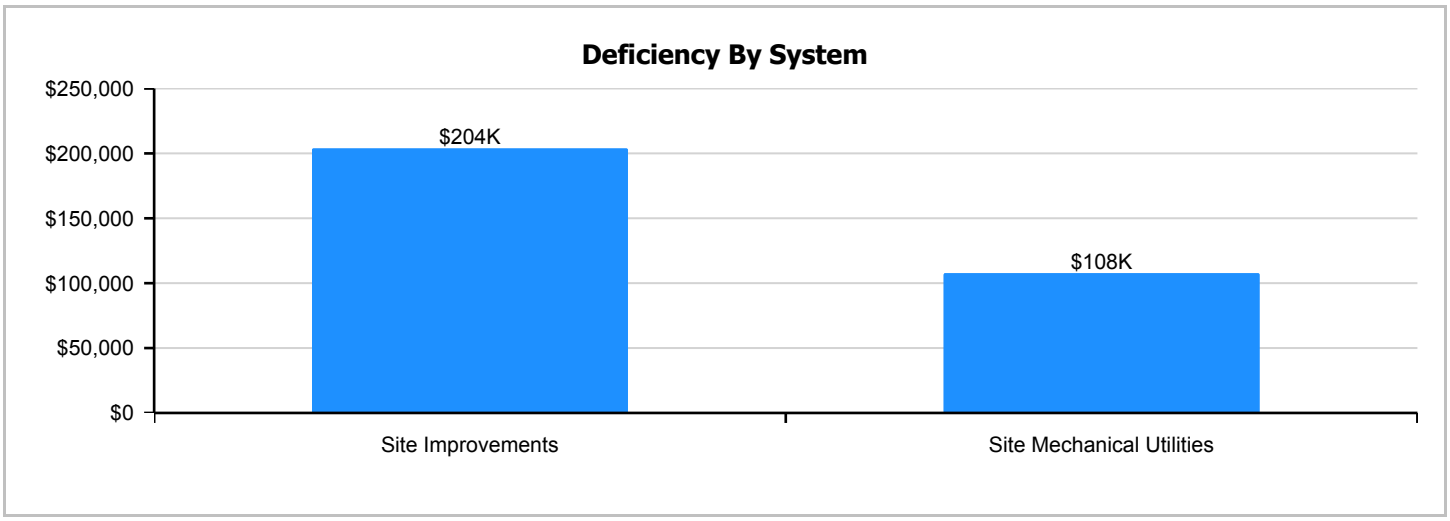
Attributes: This asset has no attributes.

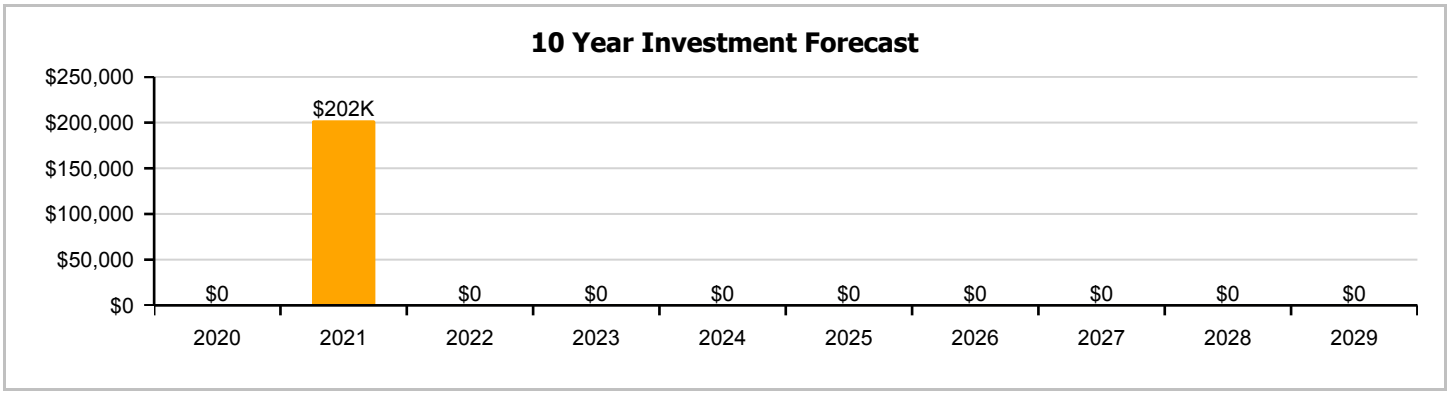
Dashboard Summary

Function:		Gross Area:	74,705
Year Built:	1971	Last Renovation:	
Repair Cost:	$311,445	Replacement Value:	$2,438,371
FCI:	12.77 %	RSLI%:	62.34 %









Condition Summary

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

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
G20 - Site Improvements	63.46 %	12.68 %	$203,795.00
G30 - Site Mechanical Utilities	24.89 %	30.21 %	$107,650.00
G40 - Site Electrical Utilities	86.67 %	0.00 %	$0.00
Totals:	**62.34 %**	**12.77 %**	**$311,445.00**

Photo Album

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

1). Boyd ES Site - Oct 18, 2019

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 as new construction.

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	$2.48	S.F.	74,705	35	1971	2006		0.00 %	110.00 %	-13		$203,795.00	$185,268
G2020	Parking Lots	$8.44	S.F.	74,705	35	2010	2045		74.29 %	0.00 %	26			$630,510
G2030	Pedestrian Paving	$2.45	S.F.	74,705	35	2015	2050		88.57 %	0.00 %	31			$183,027
G2040105	Fence & Guardrails	$1.15	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$85,911
G2040950	Covered Walkways	$1.44	S.F.	74,705	20	2010	2030		55.00 %	0.00 %	11			$107,575
G2040950	Playing Field	$4.28	S.F.	74,705	20	2010	2030		55.00 %	0.00 %	11			$319,737
G2050	Landscaping	$1.27	S.F.	74,705	25	2015	2040		84.00 %	0.00 %	21			$94,875
G3010	Water Supply	$1.14	S.F.	74,705	50	2017	2067		96.00 %	0.00 %	48			$85,164
G3020	Sanitary Sewer	$2.32	S.F.	74,705	50	1971	2021		4.00 %	0.00 %	2			$173,316
G3030	Storm Sewer	$1.31	S.F.	74,705	50	1971	2021	2019	0.00 %	110.00 %	0		$107,650.00	$97,864
G4010	Electrical Distribution	$1.85	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$138,204
G4020	Site Lighting	$3.14	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$234,574
G4030	Site Communication and Security	$1.37	S.F.	74,705	30	2015	2045		86.67 %	0.00 %	26			$102,346
								Total	**62.34 %**	**12.77 %**			**$311,445.00**	**$2,438,371**

System Notes

The facility description in the executive summary contains an overview of each system. The system 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 - Covered Walkways



Note:

System: G2040950 - Playing Field



Note:

System: G2050 - Landscaping



Note:

System: G3030 - Storm Sewer



Note:

System: G4010 - Electrical Distribution

Note:

System: G4020 - Site Lighting



Note:

System: G4030 - Site Communication and 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 table. 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.

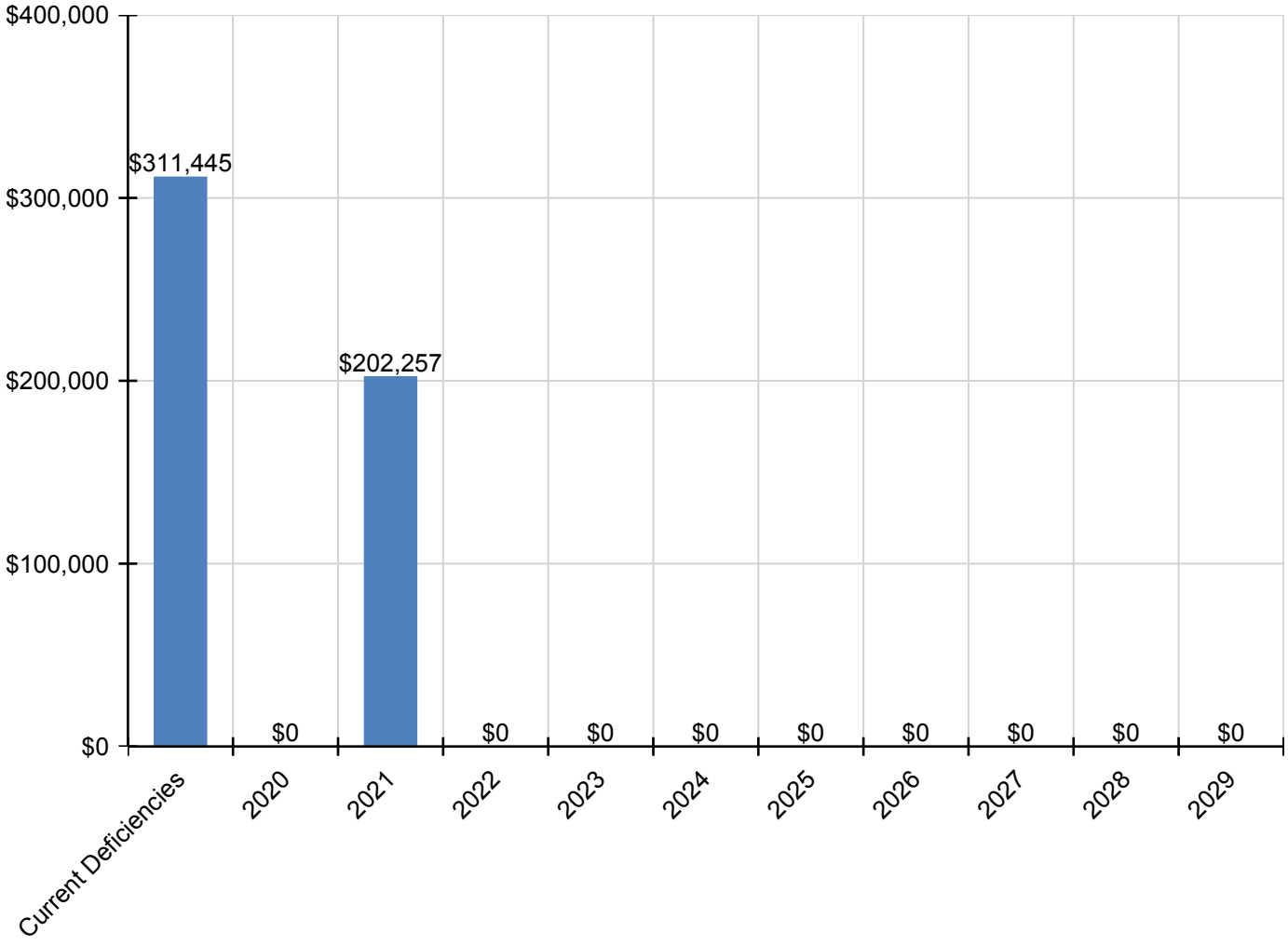
Inflation Rate: 3%

System	Current Deficiencies	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total:	**$311,445**	**$0**	**$202,257**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$513,702**
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	$203,795	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$203,795**
G2020 - Parking Lots	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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 - Covered Walkways	$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	$202,257	$0	$0	$0	$0	$0	$0	$0	$0	**$202,257**
G3030 - Storm Sewer	$107,650	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$107,650**
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 Communication and Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Capital Renewal Requirement

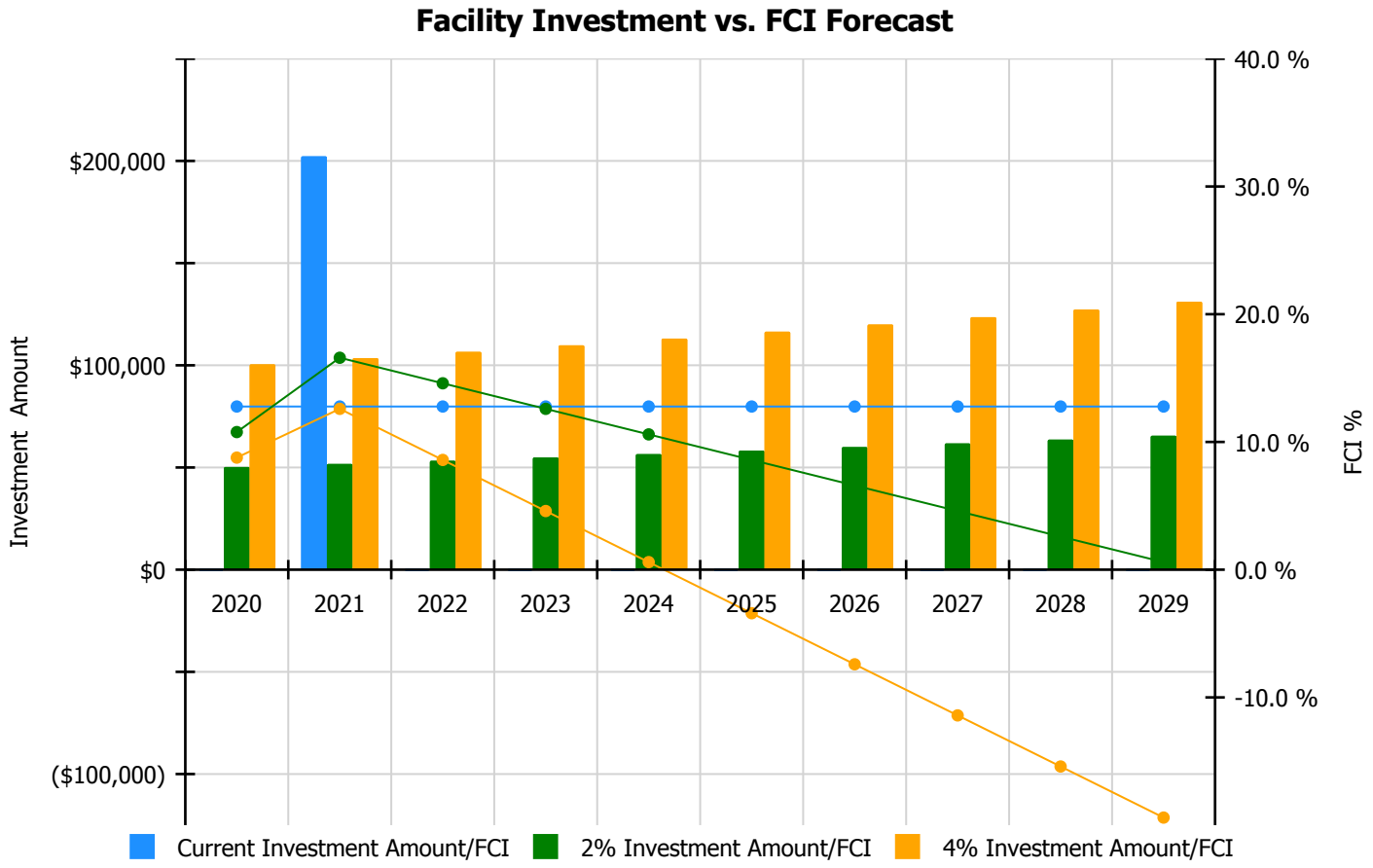
The following chart shows the current building deficiencies and forecasted capital renewal (sustainment) requirements over the next ten years.



Condition Index Forecast by Investment Scenario

The chart below illustrates the effect of various investment levels on the building FCI for the next 10 years. The levels of investment shown below include:

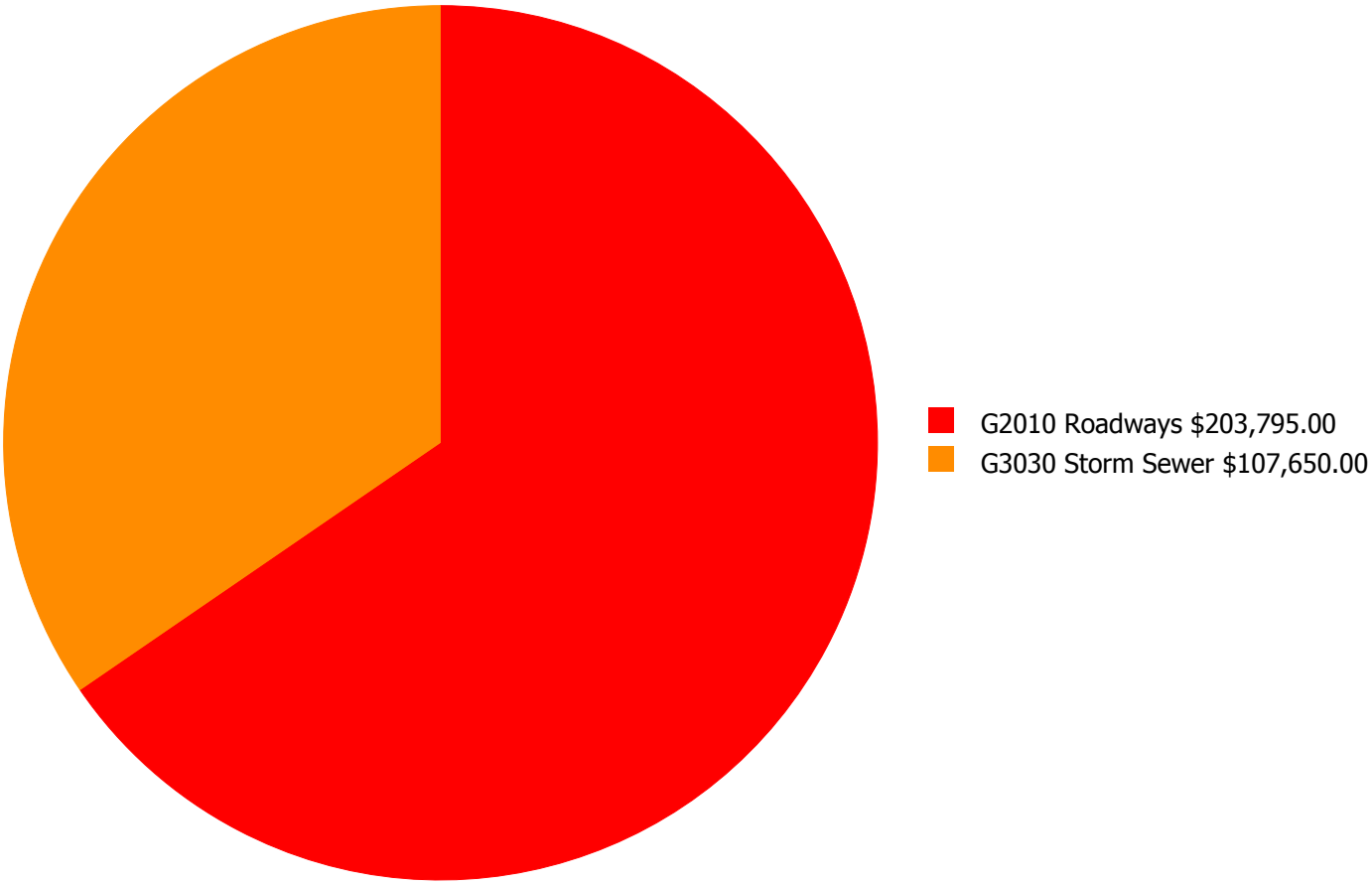
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value of the building, escalated for inflation



Year	Investment Amount Current FCI - 12.77%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2020	$0	$50,230.00	10.77 %	$100,461.00	8.77 %
2021	$202,257	$51,737.00	16.59 %	$103,475.00	12.59 %
2022	$0	$53,289.00	14.59 %	$106,579.00	8.59 %
2023	$0	$54,888.00	12.59 %	$109,776.00	4.59 %
2024	$0	$56,535.00	10.59 %	$113,070.00	0.59 %
2025	$0	$58,231.00	8.59 %	$116,462.00	-3.41 %
2026	$0	$59,978.00	6.59 %	$119,956.00	-7.41 %
2027	$0	$61,777.00	4.59 %	$123,554.00	-11.41 %
2028	$0	$63,630.00	2.59 %	$127,261.00	-15.41 %
2029	$0	$65,539.00	0.59 %	$131,079.00	-19.41 %
Total:	**$202,257**	**$575,834.00**		**$1,151,673.00**	

Deficiency Summary by System

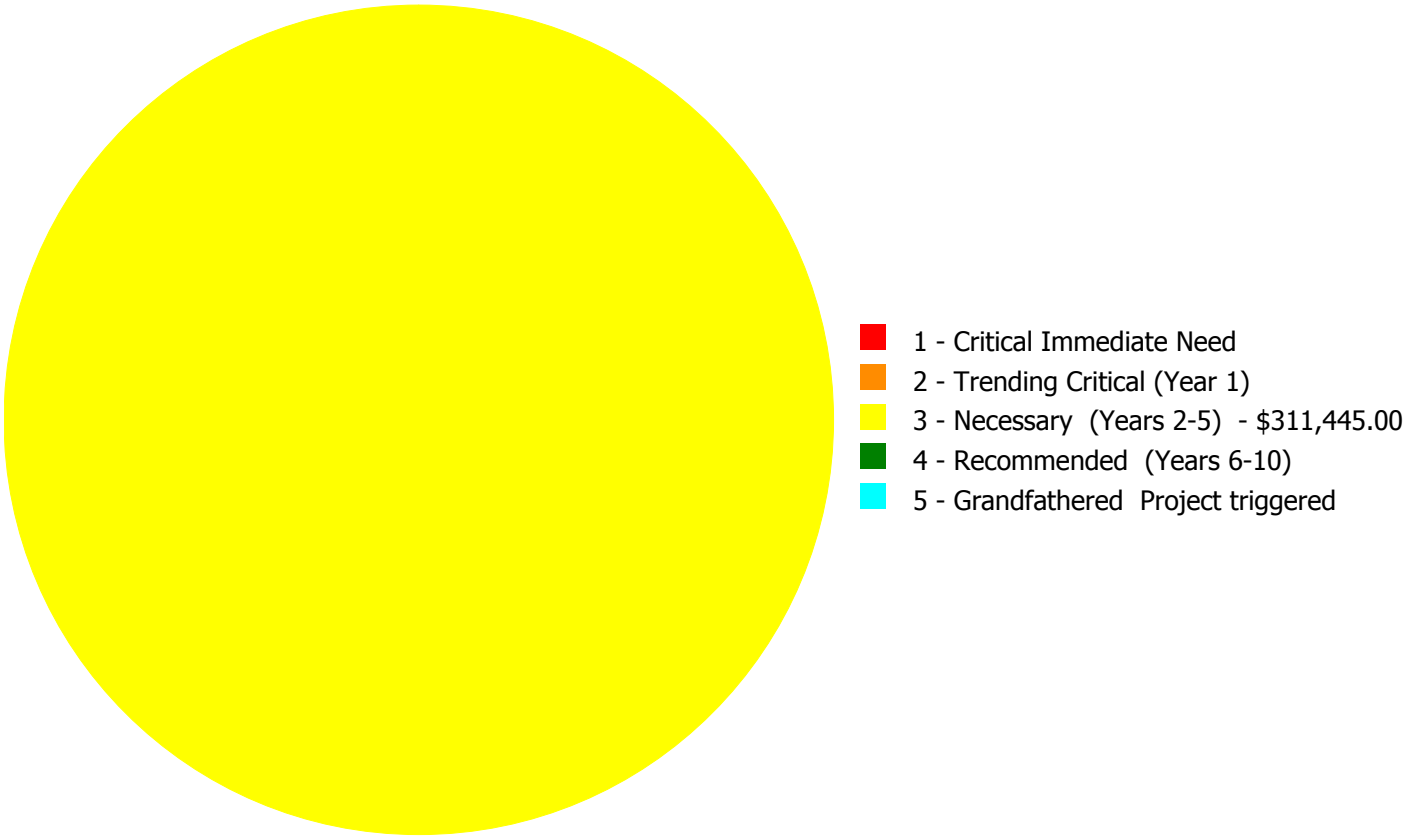
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $311,445.00

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: $311,445.00

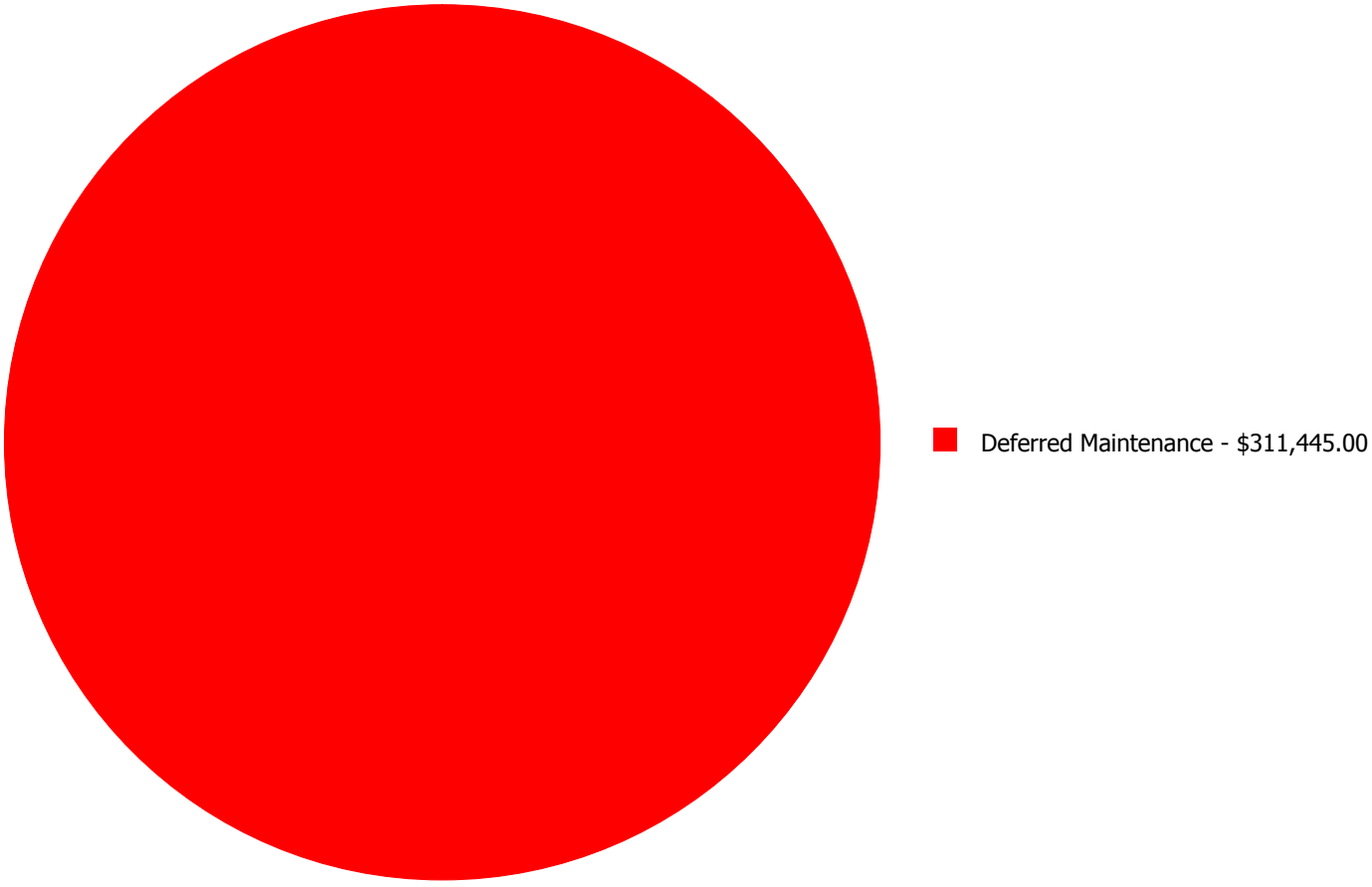
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Critical Immediate Need	2 - Trending Critical (Year 1)	3 - Necessary (Years 2-5)	4 - Recommended (Years 6-10)	5 - Grandfathered Project triggered	Total
G2010	Roadways	$0.00	$0.00	$203,795.00	$0.00	$0.00	$203,795.00
G3030	Storm Sewer	$0.00	$0.00	$107,650.00	$0.00	$0.00	$107,650.00
	Total:	$0.00	$0.00	$311,445.00	$0.00	$0.00	$311,445.00

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: $311,445.00

Deficiency Details by Priority

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

Priority 3 - Necessary (Years 2-5):

System: G2010 - Roadways

Location: Site
Distress: Beyond Expected Life
Category: Deferred Maintenance
Priority: 3 - Necessary (Years 2-5)
Correction: Renew System
Qty: 74,705.00
Unit of Measure: S.F.
Estimate: $203,795.00
Assessor Name: Hayden Collins
Date Created: 07/19/2013

Notes: Rear parking and roadways need repair and/or replacement.

System: G3030 - Storm Sewer

Location: Site
Distress: Beyond Expected Life
Category: Deferred Maintenance
Priority: 3 - Necessary (Years 2-5)
Correction: Renew System
Qty: 74,705.00
Unit of Measure: S.F.
Estimate: $107,650.00
Assessor Name: Hayden Collins
Date Created: 07/19/2013

Notes: The site storm drains that support the water runoff are functional however, have exceeded the expected life cycle. This project provides a budgetary consideration for a new rainwater drainage system.

Glossary

Abandoned	A facility owned by the city that is not occupied and not maintained. See Vacant.
Additional Cost	Total project cost is composed of hard and soft costs. Additional costs or soft expenses are costs that are necessary to accomplish the corrective work but are not directly attributable to the deficient systems direct construction cost, which are often referred to as hard cost. The components included in the soft costs vary by owner but usually include architect and contractor fees, contingencies and other owner-incurred costs necessary to fully develop and build a facility. These soft cost factors can be adjusted anytime within the eCOMET database at the owner's discretion.
Assessment	Visual survey of a facility to determine its condition. It involves looking at the age of systems, reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality.
ASTM	ASTM International (ASTM): Originally known as the American Society for Testing and Materials, ASTM is an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services.
BOMA	Building Owners Managers of America (BOMA): National organization of public and private facility owners focused on building management tools and maintenance techniques. eCOMET® reference: Building and component system effective economic life expectancies.
Building	A fully enclosed and roofed structure that can be traversed internally without exiting to the exterior.
Building Addition	An area, space or component of a building added to a building after the original building's year built date. NOTE: As a convention in the database, "Main" was used to designate the original building. Additions built prior to 1987 (30 years) were included in the main building area calculations to reflect their predicted system depreciation characteristics and remaining service life.
Building Systems	eCOMET® uses UNIFORMAT II to organize building data. UNIFORMAT II was originally developed by the federal General Services Administration to delineate building costs by systems rather than by material. UNIFORMAT II was formalized by an NIST standard, NISTIR 6389 in 1999. It has been further quantified and updated by ASTM standard 2005, E1557-05. The Construction Specifications Institute, CSI, has taken over the standard as part of their MasterFormat / MasterSpec system.
Calculated Next Renewal	The year a system or building element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system.
Capital Renewal	Capital renewal refers to the cyclical replacement of building systems or elements as they become obsolete or beyond their useful life. It is not normally included in an annual operating/maintenance budget. See calculated next renewal and next renewal.
City Cost Index (CCI)	RS Means provides building system, equipment, and construction costs at a national level. The City Cost Index (also provided by RS Means) localizes those costs to a geographic region of the United States. In eCOMET®, each building or site is assigned a City Cost Index, which adjusts all of the associated costs for systems, deficiencies and inventory to the local value.
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
Condition Budget	The Condition Budget, also known as Condition Needs, 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 the work.

Condition Index (CI) %	The Condition Index (CI) also known as the Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) Value 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 100.00% (new) to 0.00% (expired - no remaining life).
Correction	Correction refers to an assessor's recommended deficiency repair or replacement action. For any system or element deficiency, there can be multiple and alternative solutions for its repair or replacement. A Correction is user defined and tied to a UNIFORMAT II element, or system it is intended to address. It excludes other peripheral costs that may also be included in the packaging of repair, replacement or renewal improvements that may also be triggered by the deficiency correction.
Cost Model	A cost model is a list of facility systems which could represent the installed systems a given facility. Included in the cost model are standard unit cost estimates, gross areas, life cycles and installed dates. Also represented is the repair cost for deficient systems, replacement values. See eCOMET® cost models.
Criteria	Criteria refer to the set of requirements, guidelines or standards that are assessed and rated to develop a score.
Current Period	The Current Period is the current year plus a user defined number of forward years.
Current Replacement Value (CRV)	The Current Replacement Value (CRV) of a facility, building or system represents the hypothetical cost of rebuilding or replacing an existing facility under today's codes and construction standards, using its current configuration. It is calculated by multiplying the gross area of the facility by a square foot cost developed in that facility's cost model. Replacement cost includes construction costs and owner's additional or soft costs for fees, permits and other expenses to reflect a total project cost.
Deferred Maintenance	Deferred maintenance is condition work deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.
Deficiency	A deficiency is a repair item that is damaged, missing, inadequate or insufficient for an intended purpose.
Deficiency Category	Category refers to the type or class of a user defined deficiency grouping with shared or similar characteristics. Category descriptions include, but are not limited to: Accessibility Code Compliance, Appearance, Building Code Compliance, Deferred Maintenance, Energy, Environmental, Life Safety Code Compliance, and Safety.
Deficiency Priority	Priority refers to a deficiency's urgency for repair as determined by the assessment team. Five typical industry priority settings were used for the assessment: Priority 1 – Currently Critical; Priority 2 – Potentially Critical; Priority 3 – Necessary/Not Yet Critical; Priority 4 – Recommended.
Distress	Distress refers to a user-defined root cause of a deficiency. Distress descriptions are: Beyond Service Life, Damaged, Inadequate, Needs Remediation, and Missing.
eCOMET®	Energy and Condition Management Estimation Technology (eCOMET®) is Parsons proprietary facility asset management software developed to provide facility managers with a state of the art, web-based tool to develop and maintain a comprehensive database of FCA data and information used for facility asset management, maintenance and repair, and capital renewal planning. eCOMET® is used by Parsons and its clients as the primary tool for collecting FCA data, preparing cost estimates, generating individual facility reports and cost estimates, and developing the overall capital renewal program.
eCOMET® Cost Models	eCOMET cost models are derived from RS Means Square Foot Cost Data cost models and these models are used to develop the current replacement value (CRV) and assign life cycle costs to the various systems within a building. Cost models are assigned current costs-per-square-foot to establish replacement values. The Cost models are designed to represent a client specific facility that meets local standards cost trends.

Element	Elements are the major components that comprise building systems as defined by UNIFORMAT II.
Expected Life	Also referred to as Useful Life. See Useful Life definition.
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Attributes	Customizable eCOMET fields to identify attributes specific to a facility. These fields are part of the eCOMET database set-up with the owner.
Facility Condition Assessment (FCA)	A facility condition assessment (FCA) is a visual inspection of buildings and grounds at a facility to identify and estimate current and future needed repairs or replacements of major systems for planning and budgeting purposes. It is typically performed for organizations that are tasked with the day to day maintenance, operation, and capital renewal (replacement) of building systems and components of a large inventory of facilities. The primary goal of an FCA is to objectively and quantifiably identify, inspect, and prioritize the repair and replacement needs of the building and ground systems (e.g., roofs, windows, doors, floor finishes, plumbing fixtures, parking lot, and sidewalks) within facilities that have either failed or have surpassed their service life, and to identify and forecast future capital replacement needs for systems that have not yet failed, but planned replacement of those systems is needed to ensure that the facilities will continue to meet the mission of the organization.
Facility Condition Index (FCI%)	FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.
Forecast Period	The Forecast Period refers to a user defined number of years forward of the Current Period.
Gen (Generate)	The Cost Model has a Gen box for each system line item. By checking the box, eCOMET will generate life cycle deficiencies based on the Year Installed and the Life for that system. Systems that typically do not re-generate (foundations, floor construction, roof construction, basement walls, etc.) would not have the Gen box checked as those systems would not re-generate at the end of a life cycle. In those instances, it would be more practical and cost effective to demolish the entire facility than re-new those systems.
Gross Square Feet (GSF)	The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall.
Life Cycle	Life cycle refers to the period of time that a building or site system or element can be expected to adequately serve its intended function. Parsons assigns expected life cycles to all building systems based on Building Operators and Managers of America (BOMA) recommended life cycles, manufacturers suggested life, and RS Means cost data, and client-provided historical data. BOMA standards are a nationally recognized source of life cycle data for various components and/or systems associated with facilities. RS Means is a national company specializing in construction estimating and costs.
Next Renewal	Next Renewal refers to a manually-adjusted expected useful life of a system or element based on on-site inspection either by reducing or extending the Calculated Next Renewal to more accurately reflect current conditions.
Order of Magnitude	Order of Magnitude refers to a rough approximation made with a degree of knowledge and confidence that the budgeted, projected or estimated cost falls within a reasonable range of cost values.
Remaining Service Life (RSL)	RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date.

Remaining Service Life Index (RSLI)	The Remaining Service Life Index (RSLI), also known as the Condition Index (CI), is calculated as the sum of a renewable system's or component's Remaining Service Life (RSL) Value divided by the sum of a system's or component's Replacement Value (both values exclude softcost to simplify calculation updates) expressed as a percentage ranging from 100.00% (new) to 0.00% (expired - no remaining service life).
Remaining Service Life Value	Remaining Service Life Value, also known as the RSL Weight, is a calculated value used to determine the RSLI and is equal to the system Value (Unit Cost * Qty) * RSL (not displayed).
Renewal Factors	Renewal factors represent the difference in cost of renovating or replacing an existing system, rather than new construction of a building system. For example, installing a new built-up roof on an existing building would include removing and disposing of the old roof, a cost not associated with new construction. Using a renewal premium to account for demolition and other difficulty costs, Parsons typically assigns a renewal factor of 110%.
Renewal Schedule	A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal.
Repair Cost	Repair cost is the sum of all the deficiencies associated with a building or multiple buildings/facilities. It will include any applied soft costs or City Cost Indexes.
Replacement Value	See Current Replacement Value.
Site	A facility's grounds and its utilities, roadways, landscaping, fencing and other typical land improvements needed to support a facility.
Soft Costs	Soft Costs are a construction industry term that refers to expense items that are not considered direct construction costs. Soft costs are user-defined and include architectural, engineering, management, testing, and mitigation fees, and other owner pre- and post-construction expenses.
Sustainability	Sustainability refers to the collection of policies and strategies that meet society’s present needs without compromising the ability of future generations to meet their own needs.
System	System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II.
System Generated Deficiency	eCOMET automatically generates system deficiencies based on system life cycles using the systems installation dates as the base year. By adjusting the Next Renewal date ahead or behind the predicted or stated life cycle date, a system cost will come due earlier or later than the originally installed life cycle date. This utility accounts for good maintenance conditions and a longer life, or early expiration of a system life due to any number of adverse factors such as poor installation, acts of god, material defects, poor design applications and other factors that may shorten the life of a material or system. It is important to mention that the condition of the systems is not necessarily a reflection of maintenance practices, but a combination of system usage and age.
UNIFORMAT	ASTM UNIFORMAT II, Classification for Building Elements (E1557-97), a publication of the Construction Specification Institute (CSI), is a format used to classify major facility components common to most buildings. The format is based on functional elements or parts of a facility characterized by their functions without regard to the materials and methods used to accomplish them. These elements are often referred to as systems or assemblies.
Unit Price	The Unit Price (Raw) x the Additional Cost Template percentage.
Unit Price (Raw)	The actual $/sq. ft. cost being used for the building and systems. It will include adjustments for the City Cost Index applied to the facility.

Useful Life	Also known as Expected Life, Useful Life refers to the intrinsic period of time a system or element is expected to perform as intended. Useful life is generally provided by manufacturers of materials, systems and elements through their literature, testing and experience. Useful Lives in the database are derived from the Building Owners and Managers (BOMA) organization's guidelines, RSMeans cost data, and from client- defined historical experience.
Vacant	Vacant refers to a facility that is not occupied but is a maintained facility. See Abandoned.
Year Built	The year that a building or addition was originally built based on substantial completion or occupancy.
Year Installed	The year a system or element was built or the most recent major renovation date where a minimum of 70% of the system's Current Replacement Value (CRV) was replaced.

BASYS
Building Assessment System

Suitability Report - Full

Project #:	12382	County:	Atlanta Public Schools	Site #:	1053
Project:	APS Assessments 2019	Region:	761	Site:	Boyd ES
Grade Config:	PK-5	Site Type:	Elementary	Site Size:	20.00

Suitability	Rating	Score	Possible Score	Percent Score
Suitability - ES				
Learning Environment				
Learning Style Variety	Excel	5.00	5.00	100.00
Interior Environment	Fair	1.30	2.00	65.00
Exterior Environment	Excel	1.50	1.50	100.00
General Classrooms				
Environment	Fair	3.02	4.65	65.00
Size	Excel	11.63	11.63	100.00
Location	Excel	3.49	3.49	100.00
Storage/Fixed Equip	Excel	3.49	3.49	100.00
Kindergarten				
Environment	Good	0.33	0.42	80.00
Size	Excel	1.04	1.04	100.00
Location	Excel	0.31	0.31	100.00
Storage/Fixed Equip	Excel	0.31	0.31	100.00
ECE				
Environment	Good	0.40	0.50	80.00
Size	Excel	1.25	1.25	100.00
Location	Excel	0.37	0.37	100.00
Storage/Fixed Equip	Fair	0.24	0.37	65.00
Self-Contained Special Ed				
Environment	Fair	0.31	0.48	65.00
Size	Excel	1.20	1.20	100.00
Location	Excel	0.36	0.36	100.00
Storage/Fixed Equip	Excel	0.36	0.36	100.00
Instructional Resource Rooms				
Environment	Fair	0.47	0.72	65.00
Size	Excel	1.80	1.80	100.00
Location	Excel	0.54	0.54	100.00
Storage/Fixed Equip	Good	0.43	0.54	80.00
Science				
Environment	Good	0.32	0.40	80.00
Size	Excel	1.00	1.00	100.00
Location	Excel	0.30	0.30	100.00
Storage/Fixed Equip	Excel	0.30	0.30	100.00
Music				
Environment	Fair	0.48	0.74	65.00

Project #:	12382	County:	Atlanta Public Schools	Site #:	1053
Project:	APS Assessments 2019	Region:	761	Site:	Boyd ES
Grade Config:	PK-5	Site Type:	Elementary	Site Size:	20.00

Suitability	Rating	Score	Possible Score	Percent Score
Size	Excel	1.85	1.85	100.00
Location	Excel	0.56	0.56	100.00
Storage/Fixed Equip	Excel	0.56	0.56	100.00
Art				
Environment	Excel	0.47	0.47	100.00
Size	Excel	1.17	1.17	100.00
Location	Excel	0.35	0.35	100.00
Storage/Fixed Equip	Excel	0.35	0.35	100.00
Maker Space				
Environment	(N/A)	0.00	0.00	0.00
Size	(N/A)	0.00	0.00	0.00
Location	(N/A)	0.00	0.00	0.00
Storage/Fixed Equip	(N/A)	0.00	0.00	0.00
Computer Labs				
Environment	Excel	0.34	0.34	100.00
Size	Fair	0.55	0.85	65.00
Location	Excel	0.26	0.26	100.00
Storage/Fixed Equip	Good	0.20	0.26	80.00
P.E.				
Environment	Excel	1.92	1.92	100.00
Size	Good	3.84	4.80	80.00
Location	Excel	1.44	1.44	100.00
Storage/Fixed Equip	Fair	0.94	1.44	65.00
Performing Arts				
Environment	Excel	0.60	0.60	100.00
Size	Excel	1.51	1.51	100.00
Location	Excel	0.45	0.45	100.00
Storage/Fixed Equip	Fair	0.29	0.45	65.00
Media Center				
Environment	Excel	0.97	0.97	100.00
Size	Good	1.95	2.44	80.00
Location	Excel	0.73	0.73	100.00
Storage/Fixed Equip	Good	0.58	0.73	80.00
Restrooms (Student)	Excel	0.89	0.89	100.00
Administration	Excel	2.56	2.56	100.00
Counseling	Excel	0.29	0.29	100.00
Clinic	Good	0.47	0.58	80.00
Staff WkRm/Toilets	Excel	1.27	1.27	100.00
Cafeteria	Excel	5.00	5.00	100.00
Food Service and Prep	Excel	6.20	6.20	100.00
Custodial and Maintenance	Excel	0.50	0.50	100.00
Outside				
Vehicular Traffic	Excel	2.00	2.00	100.00
Pedestrian Traffic	Excel	0.97	0.97	100.00
Parking	Poor	0.41	0.81	50.00
Play Areas	Excel	2.34	2.34	100.00

Project #:	12382	County:	Atlanta Public Schools	Site #:	1053
Project:	APS Assessments 2019	Region:	761	Site:	Boyd ES
Grade Config:	PK-5	Site Type:	Elementary	Site Size:	20.00

Suitability	Rating	Score	Possible Score	Percent Score
Safety and Security				
Fencing	Excel	0.75	0.75	100.00
Signage & Way Finding	Good	0.80	1.00	80.00
Ease of Supervision	Poor	1.50	3.00	50.00
Controlled Entrances	Poor	0.25	0.50	50.00
Total For Site:		**89.66**	**98.25**	**91.26**

Comments

Suitability - ES

Boyd Elementary School serves students in grades PreK-5. This school has a STEM focus with a STEM lab for all students. Boyd is also the regional location for students with physical handicapping conditions. The building and grounds have ADA compliant ramps and a centrally located elevator to accommodate this program. Originally built in 1971, Boyd had a renovation and addition to the structure in 2016. The large property sits next to a public running trail.

Suitability - ES->Learning Environment-->Interior Environment

There are some sightlines blocked in classrooms and hallways. HVAC varies throughout the building , temperature is not easy to maintain.

Suitability - ES->General Classrooms-->Environment

There are some sightlines blocked in classrooms and hallways. HVAC varies throughout the building , temperature is not easy to maintain.

Suitability - ES->ECE-->Storage/Fixed Equip

There are two PreK classrooms in this school. Only one has a bathroom in the classroom. Only one has adequate storage and natural light.

Suitability - ES->Self-Contained Special Ed-->Environment

The room for self-contained students is dim with no natural light.

Suitability - ES->Instructional Resource Rooms-->Environment

The entryway to this classroom has a hallway that blocks sightlines. The space is dim with little natural light.

Suitability - ES->Music-->Environment

This room is colder than other rooms in the building. There were leaks in the ceiling after the building renovation, causing organic growth that has not been totally remediated.

Suitability - ES->Computer Labs-->Size

The room designed to be a computer lab does not meet the standard. This school also uses the band room as a computer lab.

Suitability - ES->P.E.-->Storage/Fixed Equip

There is no padding on any walls for basketball, and no permanent basketball hoops. Storage overflows into the gym space. This is also the auditorium. Storage is shared.

Suitability - ES->Performing Arts-->Storage/Fixed Equip

Auditorium storage is shared with the gym. Supplies spill into the gym from the stage area.

Suitability - ES->Counseling

The counselors office is across from the main office and is shared with the parent center.

Suitability - ES->Outside-->Parking

There are not enough parking spaces for the number of staff. Staff park one another in spots and park along the drive area. Visitor parking is not marked.

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Project:	APS Assessments 2019	Region:	761	Site:	Boyd ES
Grade Config:	PK-5	Site Type:	Elementary	Site Size:	20.00

Suitability	Rating	Score	Possible Score	Percent Score

Suitability - ES->Safety and Security-->Ease of Supervision

There are a number of alcoves throughout the building that inhibit sight lines. The exit doors are all easily accessed by students, and often used without ability to supervise. Exit doors do not have sound control. They are bars with direct access to outside and the running path.

Suitability - ES->Safety and Security-->Controlled Entrances

The security vestibule opens to the rest of the building without need to go through the front office.