

Facility Condition Assessment Summary Report

This report provides a summary of the Facility Condition Index (FCI) value of a school facility and select major building systems. The FCI calculation represents the cost of needed repairs divided by the replacement value. The FCI is a numerical value of condition and helps to identify the need for renewal or replacement of specific parts of the facility. The FCI is particularly useful when comparing similar facilities within the same portfolio.

Longstreth School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	5700 Willows Ave. Philadelphia, Pa 19143	Enrollment	484
Phone/Fax	215-727-2158 / 215-727-2260	Grade Range	'00-08'
Website	Www.Philasd.Org/Schools/Longstreth	Admissions Category	Neighborhood
		Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = $\frac{\text{Cost of Assessed Deficiencies}}{\text{Replacement Value}}$				
< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
Buildings				
Minimal Current Capital Funding Required	Refurbish Systems in building	Replace Systems in building.	Building should be considered for major renovation.	Building should be considered for closing/replacement.
Systems				
Perform routine maintenance on system	System requires minor repairs	System should be studied to determine repair vs. replacement.	System is nearing end of its life expectancy and should be considered for replacement	System should be replaced as part of the Capital Program

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	07.71%	\$3,451,331	\$44,747,398
Building	07.39 %	\$3,227,758	\$43,668,785
Grounds	20.73 %	\$223,573	\$1,078,613

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	\$0	\$1,356,289
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	\$0	\$3,150,269
Windows (Shows functionality of exterior windows)	00.00 %	\$0	\$1,537,154
Exterior Doors (Shows condition of exterior doors)	88.31 %	\$109,288	\$123,758
Interior Doors (Classroom doors)	00.00 %	\$0	\$299,579
Interior Walls (Paint and Finishes)	00.42 %	\$6,029	\$1,433,881
Plumbing Fixtures	00.33 %	\$3,811	\$1,153,932
Boilers	00.00 %	\$0	\$1,593,485
Chillers/Cooling Towers	00.36 %	\$7,446	\$2,089,368
Radiators/Unit Ventilators/HVAC	00.03 %	\$1,047	\$3,669,197
Heating/Cooling Controls	00.00 %	\$0	\$1,152,225
Electrical Service and Distribution	00.00 %	\$0	\$827,895
Lighting	08.99 %	\$266,007	\$2,959,938
Communications and Security (Cameras, Pa System and Fire Alarm)	10.66 %	\$118,216	\$1,108,697

Please note that some FCIs may be over 100% because there are times when replacing a building system requires that other building systems be upgraded to complete the installation. A FCI of 0.0% represents that there are no current deficiencies with the associated system.

School District of Philadelphia
S135001; Longstreth
Final
Site Assessment Report
January 30, 2017



Table of Contents

Site Executive Summary	4
Site Condition Summary	5
<u>B135001:Longstreth</u>	7
Executive Summary	7
Condition Summary	8
Condition Detail	9
System Listing	10
System Notes	12
Renewal Schedule	13
Forecasted Sustainment Requirement	16
Condition Index Forecast by Investment Scenario	17
Deficiency Summary By System	18
Deficiency Summary By Priority	19
Deficiency By Priority Investment	20
Deficiency Summary By Category	21
Deficiency Details By Priority	22
Equipment Inventory Detail	33
<u>G135001:Grounds</u>	34
Executive Summary	34
Condition Summary	35
Condition Detail	36
System Listing	37
System Notes	38
Renewal Schedule	39
Forecasted Sustainment Requirement	40
Condition Index Forecast by Investment Scenario	41
Deficiency Summary By System	42
Deficiency Summary By Priority	43
Deficiency By Priority Investment	44

Site Assessment Report

Deficiency Summary By Category	45
Deficiency Details By Priority	46
Equipment Inventory Detail	47
Glossary	48

Site Executive Summary

The organization of this report, as displayed in the Table of Contents, follows the structure of the associated eCOMET database. The overall node for each school campus begins with the letter "S", which indicates the "Site" label. Each Site is comprised of separate "Building" and "Grounds" nodes; their asset names begin with the letters "B" and "G" respectively. Information rolls up to the Site node from the Building and Grounds nodes. This Site report combines facility information with subsections for the Buildings And Grounds nodes.

The basis for the evaluation of condition is the functional systems and elements of a building and grounds 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 typically developed for similar building types and functions. Evaluation of systems and their elements takes into account 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 value. The Current Repair Amount, 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. Facility Condition Index (FCI) is an industry-standard measurement calculated as the ratio of the repair costs to correct a facility's deficiencies to the facility's Current Replacement Value. Condition Index (CI) for a system is calculated as the sum of the deficiencies divided by the sum of a system's Replacement Value (both values include soft-cost) expressed as a percentage ranging from 0% 100%.

Gross Area (SF):	85,350
Year Built:	1970
Last Renovation:	
Replacement Value:	\$44,747,398
Repair Cost:	\$3,451,331.08
Total FCI:	7.71 %
Total RSLI:	62.57 %



Description:

An error has occurred while processing HtmlTextBox 'htmlTextBox1': 'u1' is an undeclared prefix. Line 1, position 24448.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 3 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S135001		

Site Condition Summary

The Table below shows the CI and FCI for each major system shown at the UNIFORMAT classification Level II. 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	55.00 %	0.00 %	\$0.00
A20 - Basement Construction	55.00 %	0.00 %	\$0.00
B10 - Superstructure	55.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	57.16 %	2.27 %	\$109,287.85
B30 - Roofing	45.52 %	0.00 %	\$0.00
C10 - Interior Construction	49.60 %	0.72 %	\$15,144.20
C20 - Stairs	55.00 %	7.31 %	\$8,792.10
C30 - Interior Finishes	91.71 %	17.19 %	\$894,974.00
D10 - Conveying	105.71 %	29.77 %	\$38,873.58
D20 - Plumbing	31.02 %	0.92 %	\$15,980.34
D30 - HVAC	48.67 %	0.09 %	\$8,493.27
D40 - Fire Protection	92.47 %	176.76 %	\$1,215,964.37
D50 - Electrical	104.61 %	12.17 %	\$610,636.80
E10 - Equipment	51.61 %	21.61 %	\$293,594.70
E20 - Furnishings	40.00 %	8.81 %	\$16,016.41
G20 - Site Improvements	43.86 %	0.00 %	\$0.00
G40 - Site Electrical Utilities	48.64 %	88.46 %	\$223,573.46
Totals:	62.57 %	7.71 %	\$3,451,331.08

Condition Deficiency Priority

Facility Name	Gross Area (S.F.)	FCI %	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)
B135001;Longstreth	85,350	7.39	\$8,792.10	\$165,169.56	\$1,187,834.84	\$649,996.75	\$1,215,964.37
G135001;Grounds	58,100	20.73	\$0.00	\$0.00	\$223,573.46	\$0.00	\$0.00
Total:		7.71	\$8,792.10	\$165,169.56	\$1,411,408.30	\$649,996.75	\$1,215,964.37

Deficiencies By Priority



- 1 - Response Time (< 2 yr) - \$8,792.10
- 2 - Response Time (2-3 yrs) - \$165,169.56
- 3 - Response Time (3-4 yrs) - \$1,411,408.30
- 4 - Response Time (4-5 yrs) - \$649,996.75
- 5 - Response Time (> 5 yrs) - \$1,215,964.37

Budget Estimate Total: \$3,451,331.08

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 value. The Current Repair Amount, 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. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) 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).

Function:	Elementary School
Gross Area (SF):	85,350
Year Built:	1970
Last Renovation:	
Replacement Value:	\$43,668,785
Repair Cost:	\$3,227,757.62
Total FCI:	7.39 %
Total RSLI:	63.00 %



Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B135001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S135001		

Condition Summary

The Table below shows the CI 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	55.00 %	0.00 %	\$0.00
A20 - Basement Construction	55.00 %	0.00 %	\$0.00
B10 - Superstructure	55.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	57.16 %	2.27 %	\$109,287.85
B30 - Roofing	45.52 %	0.00 %	\$0.00
C10 - Interior Construction	49.60 %	0.72 %	\$15,144.20
C20 - Stairs	55.00 %	7.31 %	\$8,792.10
C30 - Interior Finishes	91.71 %	17.19 %	\$894,974.00
D10 - Conveying	105.71 %	29.77 %	\$38,873.58
D20 - Plumbing	31.02 %	0.92 %	\$15,980.34
D30 - HVAC	48.67 %	0.09 %	\$8,493.27
D40 - Fire Protection	92.47 %	176.76 %	\$1,215,964.37
D50 - Electrical	104.61 %	12.17 %	\$610,636.80
E10 - Equipment	51.61 %	21.61 %	\$293,594.70
E20 - Furnishings	40.00 %	8.81 %	\$16,016.41
Totals:	63.00 %	7.39 %	\$3,227,757.62

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 classification. The columns in the System Listing table below 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 for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for the system based on Building Owners and Managers Association (BOMA) recommendations.
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. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency \$: The financial investment to repair/replace 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.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLT%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$18.40	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$1,570,440
A1030	Slab on Grade	\$7.73	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$659,756
A2010	Basement Excavation	\$6.55	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$559,043
A2020	Basement Walls	\$12.70	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$1,083,945
B1010	Floor Construction	\$75.10	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$6,409,785
B1020	Roof Construction	\$13.88	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$1,184,658
B2010	Exterior Walls	\$36.91	S.F.	85,350	100	1970	2070		55.00 %	0.00 %	55			\$3,150,269
B2020	Exterior Windows	\$18.01	S.F.	85,350	40	1998	2038		57.50 %	0.00 %	23			\$1,537,154
B2030	Exterior Doors	\$1.45	S.F.	85,350	25	1989	2014	2042	108.00 %	88.31 %	27		\$109,287.85	\$123,758
B3010105	Built-Up	\$37.76	S.F.	34,765	20	2004	2024		45.00 %	0.00 %	9			\$1,312,726
B3010120	Single Ply Membrane	\$38.73	S.F.		20				0.00 %	0.00 %				\$0
B3010130	Preformed Metal Roofing	\$54.22	S.F.	709	30	2004	2034		63.33 %	0.00 %	19			\$38,442
B3010140	Shingle & Tile	\$38.73	S.F.		25				0.00 %	0.00 %				\$0
B3020	Roof Openings	\$0.06	S.F.	85,350	20	2004	2024		45.00 %	0.00 %	9			\$5,121
C1010	Partitions	\$17.91	S.F.	85,350	100	1970	2070		55.00 %	0.99 %	55		\$15,144.20	\$1,528,619
C1020	Interior Doors	\$3.51	S.F.	85,350	40	1989	2029		35.00 %	0.00 %	14			\$299,579
C1030	Fittings	\$3.12	S.F.	85,350	40	1989	2029		35.00 %	0.00 %	14			\$266,292
C2010	Stair Construction	\$1.41	S.F.	85,350	100	1970	2070		55.00 %	7.31 %	55		\$8,792.10	\$120,344

Site Assessment Report - B135001;Longstreth

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 \$
C3010230	Paint & Covering	\$16.63	S.F.	85,350	10	2012			70.00 %	0.42 %	7		\$6,028.81	\$1,419,371
C3010231	Vinyl Wall Covering	\$0.00	S.F.	85,350	15				0.00 %	0.00 %				\$0
C3010232	Wall Tile	\$0.17	S.F.	85,350	30	1989	2019	2039	80.00 %	0.00 %	24			\$14,510
C3020411	Carpet	\$7.30	S.F.	2,561	10	2008	2018	2028	130.00 %	0.00 %	13			\$18,695
C3020412	Terrazzo & Tile	\$75.52	S.F.	17,070	50	1970	2020	2070	110.00 %	0.00 %	55			\$1,289,126
C3020413	Vinyl Flooring	\$9.68	S.F.	55,478	20	1998	2018	2028	65.00 %	0.00 %	13			\$537,027
C3020414	Wood Flooring	\$22.27	S.F.	5,975	25	1998	2023		32.00 %	0.00 %	8			\$133,063
C3020415	Concrete Floor Finishes	\$0.97	S.F.	4,268	50	1989	2039		48.00 %	0.00 %	24			\$4,140
C3030	Ceiling Finishes	\$20.97	S.F.	85,350	25	1971	1996	2042	108.00 %	49.67 %	27		\$888,945.19	\$1,789,790
D1010	Elevators and Lifts	\$1.53	S.F.	85,350	35	1970	2005	2052	105.71 %	29.77 %	37		\$38,873.58	\$130,586
D2010	Plumbing Fixtures	\$13.52	S.F.	85,350	35	1971	2006	2025	28.57 %	0.33 %	10		\$3,811.01	\$1,153,932
D2020	Domestic Water Distribution	\$1.68	S.F.	85,350	25	1971	1996	2023	32.00 %	8.49 %	8		\$12,169.33	\$143,388
D2030	Sanitary Waste	\$2.90	S.F.	85,350	25	1971	1996	2025	40.00 %	0.00 %	10			\$247,515
D2040	Rain Water Drainage	\$2.32	S.F.	85,350	30	1971	2001	2025	33.33 %	0.00 %	10			\$198,012
D3020	Heat Generating Systems	\$18.67	S.F.	85,350	35	2003	2038		65.71 %	0.00 %	23			\$1,593,485
D3030	Cooling Generating Systems	\$24.48	S.F.	85,350	30	2004	2034		63.33 %	0.36 %	19		\$7,445.82	\$2,089,368
D3040	Distribution Systems	\$42.99	S.F.	85,350	25	1971	1996	2025	40.00 %	0.03 %	10		\$1,047.45	\$3,669,197
D3050	Terminal & Package Units	\$11.60	S.F.	85,350	20	1971	1991	2025	50.00 %	0.00 %	10			\$990,060
D3060	Controls & Instrumentation	\$13.50	S.F.	85,350	20	1971	1991	2020	25.00 %	0.00 %	5			\$1,152,225
D4010	Sprinklers	\$7.05	S.F.	85,350	35			2052	105.71 %	202.08 %	37		\$1,215,964.37	\$601,718
D4020	Standpipes	\$1.01	S.F.	85,350	35				0.00 %	0.00 %				\$86,204
D5010	Electrical Service/Distribution	\$9.70	S.F.	85,350	30	2007	2037		73.33 %	0.00 %	22			\$827,895
D5020	Lighting and Branch Wiring	\$34.68	S.F.	85,350	20	1971	1991	2037	110.00 %	8.99 %	22		\$266,007.40	\$2,959,938
D5030	Communications and Security	\$12.99	S.F.	85,350	15	1971	1986	2032	113.33 %	10.66 %	17		\$118,216.45	\$1,108,697
D5090	Other Electrical Systems	\$1.41	S.F.	85,350	30	1971	2001	2047	106.67 %	188.14 %	32		\$226,412.95	\$120,344
E1020	Institutional Equipment	\$4.82	S.F.	85,350	35	1989	2024		25.71 %	71.37 %	9		\$293,594.70	\$411,387
E1090	Other Equipment	\$11.10	S.F.	85,350	35	2002	2037		62.86 %	0.00 %	22			\$947,385
E2010	Fixed Furnishings	\$2.13	S.F.	85,350	40	1971	2011	2031	40.00 %	8.81 %	16		\$16,016.41	\$181,796
Total									63.00 %	7.39 %			\$3,227,757.62	\$43,668,785

System Notes

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

System: C3010 - Wall Finishes This system contains no images

Note: 99% - Paint & Covering
1% - Wall Tile (ceramic)

System: C3020 - Floor Finishes This system contains no images

Note: 3% - Carpet
20% - Terrazzo & Tile
65% - Vinyl Flooring
7% - Wood Flooring
5% - Concrete Floor Finishes

System: D5010 - Electrical Service/Distribution



Note: Step-down transformer 30KVA 480V-120/208V

Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$3,227,758	\$0	\$0	\$0	\$0	\$1,469,320	\$0	\$1,920,212	\$385,221	\$2,481,885	\$9,252,309	\$18,736,704
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A1010 - Standard Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2010 - Exterior Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2020 - Exterior Windows	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2030 - Exterior Doors	\$109,288	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$109,288
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	\$0	\$0	\$0	\$0	\$0	\$1,884,091	\$0	\$1,884,091
B3010120 - Single Ply Membrane	\$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
B3010140 - Shingle & Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3020 - Roof Openings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,350	\$0	\$7,350
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	\$15,144	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,144

Site Assessment Report - B135001;Longstreth

C1020 - Interior Doors	\$0	\$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	\$0
C20 - Stairs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C2010 - Stair Construction	\$8,792	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,792
C30 - Interior Finishes	\$0	\$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	\$0
C3010230 - Paint & Covering	\$6,029	\$0	\$0	\$0	\$0	\$0	\$0	\$1,920,212	\$0	\$0	\$0	\$0	\$1,926,241
C3010231 - Vinyl Wall Covering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3010232 - Wall Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020 - Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020411 - Carpet	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020412 - Terrazzo & Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020413 - Vinyl Flooring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020414 - Wood Flooring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$185,417	\$0	\$0	\$0	\$185,417
C3020415 - Concrete Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3030 - Ceiling Finishes	\$888,945	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$888,945
D - Services	\$0	\$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	\$0
D1010 - Elevators and Lifts	\$38,874	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,874
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$3,811	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,705,867	\$0	\$1,709,678
D2020 - Domestic Water Distribution	\$12,169	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$199,804	\$0	\$0	\$0	\$211,973
D2030 - Sanitary Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$365,904	\$0	\$365,904
D2040 - Rain Water Drainage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$292,722	\$0	\$292,722
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3020 - Heat Generating Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3030 - Cooling Generating Systems	\$7,446	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,446
D3040 - Distribution Systems	\$1,047	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,424,202	\$0	\$5,425,250
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,463,614	\$0	\$1,463,614
D3060 - Controls & Instrumentation	\$0	\$0	\$0	\$0	\$0	\$1,469,320	\$0	\$0	\$0	\$0	\$0	\$0	\$1,469,320
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$1,215,964	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,215,964
D4020 - Standpipes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

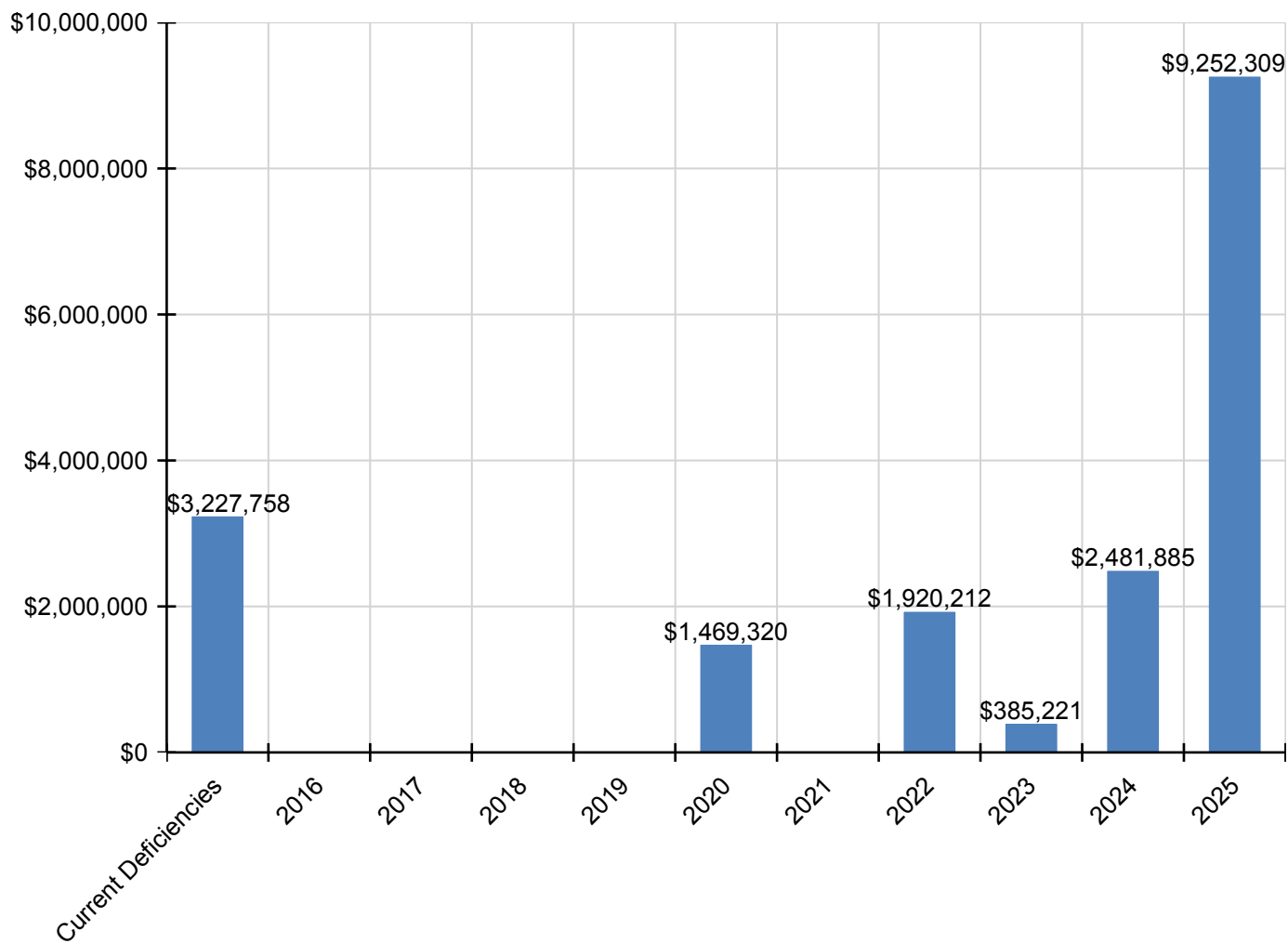
Site Assessment Report - B135001;Longstreth

D50 - Electrical	\$0	\$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	\$0
D5020 - Lighting and Branch Wiring	\$266,007	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$266,007
D5030 - Communications and Security	\$118,216	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$118,216
D5090 - Other Electrical Systems	\$226,413	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$226,413
E - Equipment & Furnishings	\$0	\$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	\$0
E1020 - Institutional Equipment	\$293,595	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$590,444	\$0	\$884,038
E1090 - Other Equipment	\$0	\$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	\$0
E2010 - Fixed Furnishings	\$16,016	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,016

* Indicates non-renewable system

Forecasted Sustainment Requirement

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

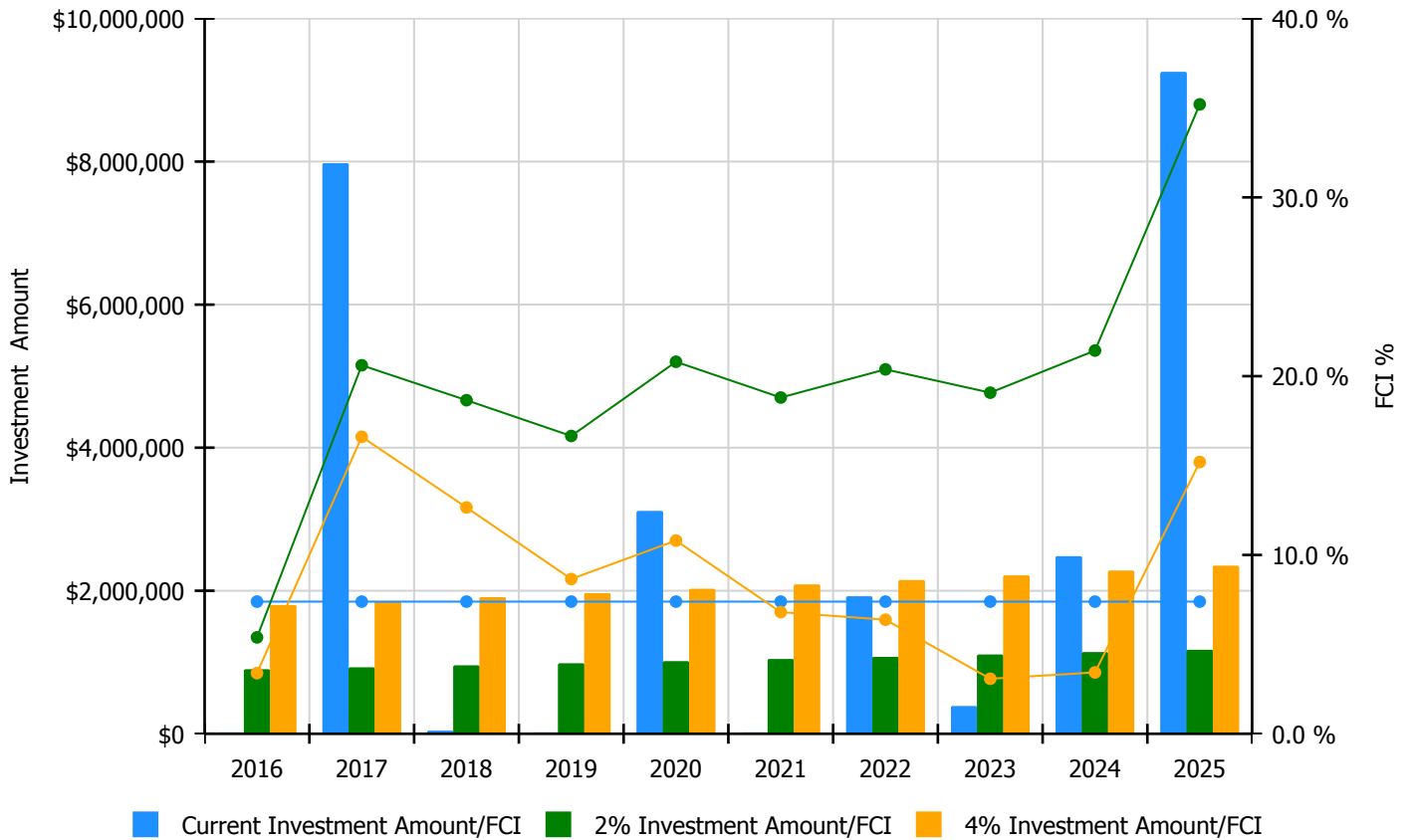


10 Year FCI Forecast by Investment Scenario

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

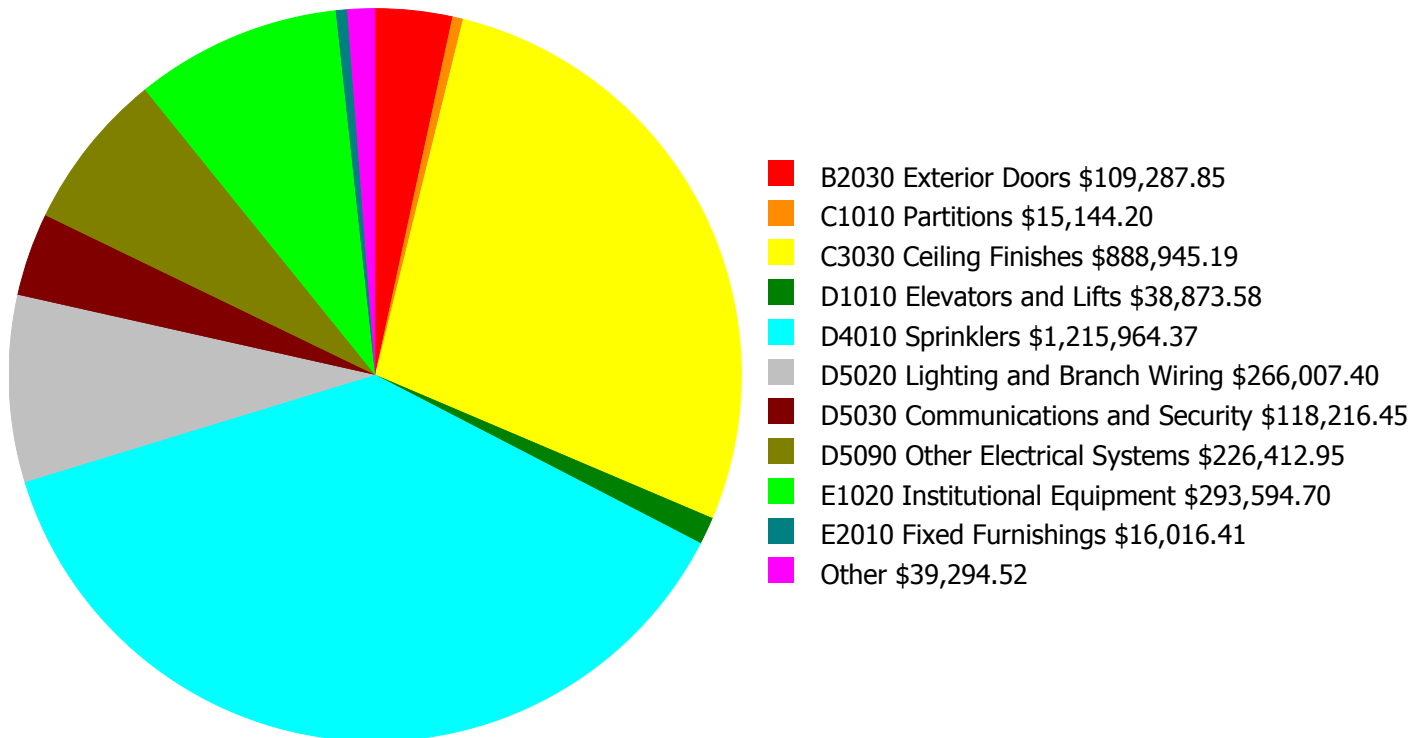
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 7.39%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$899,577.00	5.39 %	\$1,799,154.00	3.39 %
2017	\$7,976,175	\$926,564.00	20.61 %	\$1,853,129.00	16.61 %
2018	\$22,472	\$954,361.00	18.66 %	\$1,908,722.00	12.66 %
2019	\$0	\$982,992.00	16.66 %	\$1,965,984.00	8.66 %
2020	\$3,113,215	\$1,012,482.00	20.80 %	\$2,024,964.00	10.80 %
2021	\$0	\$1,042,856.00	18.80 %	\$2,085,713.00	6.80 %
2022	\$1,920,212	\$1,074,142.00	20.38 %	\$2,148,284.00	6.38 %
2023	\$385,221	\$1,106,366.00	19.08 %	\$2,212,732.00	3.08 %
2024	\$2,481,885	\$1,139,557.00	21.43 %	\$2,279,114.00	3.43 %
2025	\$9,252,309	\$1,173,744.00	35.20 %	\$2,347,488.00	15.20 %
Total:	\$25,151,489	\$10,312,641.00		\$20,625,284.00	

Deficiency Summary by System

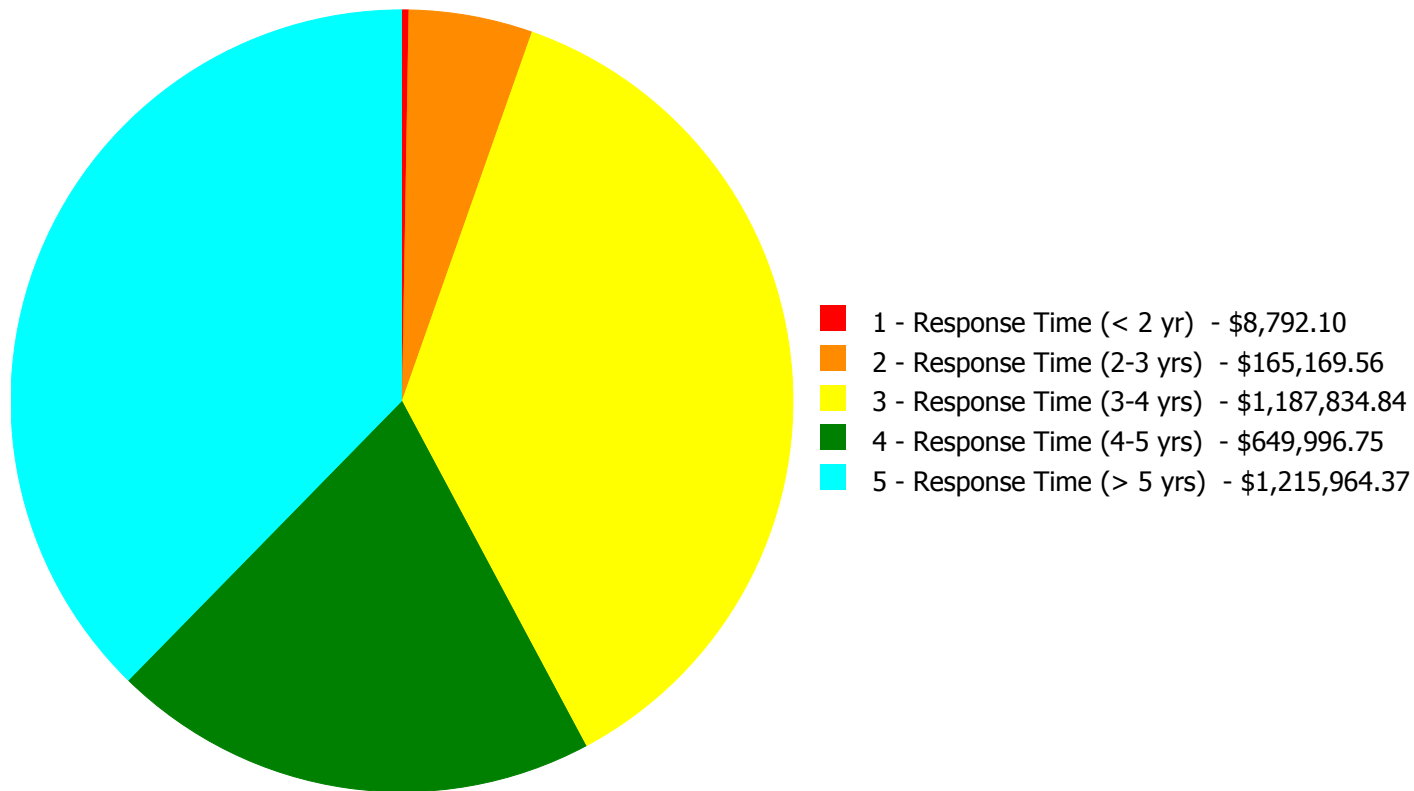
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: \$3,227,757.62

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: \$3,227,757.62

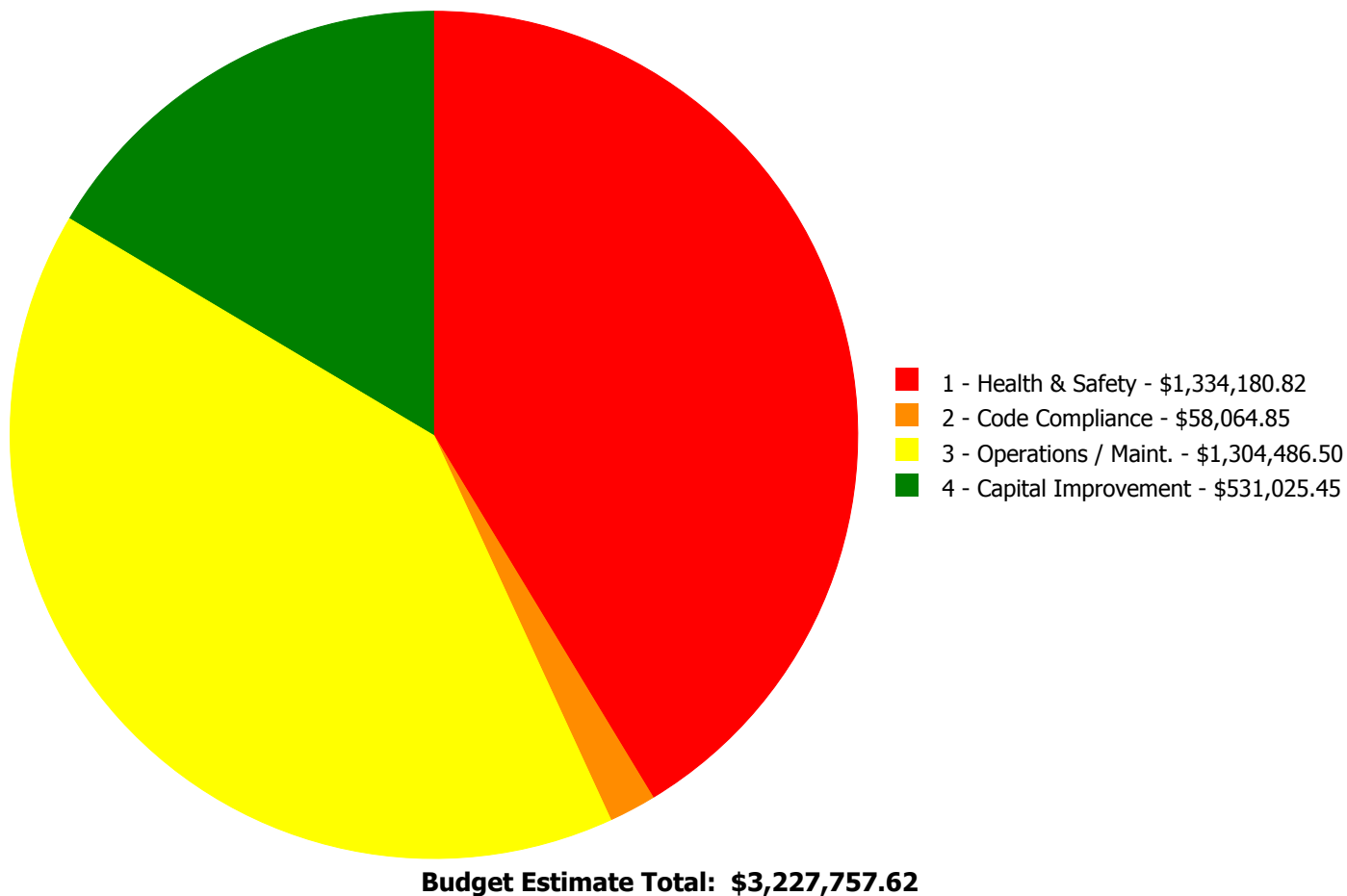
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
B2030	Exterior Doors	\$0.00	\$109,287.85	\$0.00	\$0.00	\$0.00	\$109,287.85
C1010	Partitions	\$0.00	\$15,144.20	\$0.00	\$0.00	\$0.00	\$15,144.20
C2010	Stair Construction	\$8,792.10	\$0.00	\$0.00	\$0.00	\$0.00	\$8,792.10
C3010230	Paint & Covering	\$0.00	\$6,028.81	\$0.00	\$0.00	\$0.00	\$6,028.81
C3030	Ceiling Finishes	\$0.00	\$0.00	\$888,945.19	\$0.00	\$0.00	\$888,945.19
D1010	Elevators and Lifts	\$0.00	\$12,853.60	\$26,019.98	\$0.00	\$0.00	\$38,873.58
D2010	Plumbing Fixtures	\$0.00	\$3,811.01	\$0.00	\$0.00	\$0.00	\$3,811.01
D2020	Domestic Water Distribution	\$0.00	\$12,169.33	\$0.00	\$0.00	\$0.00	\$12,169.33
D3030	Cooling Generating Systems	\$0.00	\$0.00	\$0.00	\$7,445.82	\$0.00	\$7,445.82
D3040	Distribution Systems	\$0.00	\$1,047.45	\$0.00	\$0.00	\$0.00	\$1,047.45
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$0.00	\$1,215,964.37	\$1,215,964.37
D5020	Lighting and Branch Wiring	\$0.00	\$0.00	\$35,267.62	\$230,739.78	\$0.00	\$266,007.40
D5030	Communications and Security	\$0.00	\$0.00	\$0.00	\$118,216.45	\$0.00	\$118,216.45
D5090	Other Electrical Systems	\$0.00	\$0.00	\$226,412.95	\$0.00	\$0.00	\$226,412.95
E1020	Institutional Equipment	\$0.00	\$0.00	\$0.00	\$293,594.70	\$0.00	\$293,594.70
E2010	Fixed Furnishings	\$0.00	\$4,827.31	\$11,189.10	\$0.00	\$0.00	\$16,016.41
	Total:	\$8,792.10	\$165,169.56	\$1,187,834.84	\$649,996.75	\$1,215,964.37	\$3,227,757.62

Deficiency Summary by Category

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

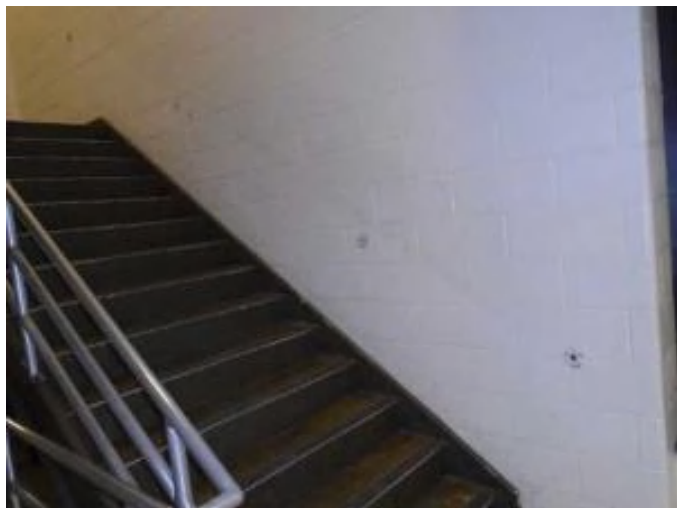


Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: C2010 - Stair Construction



Location: Stairs

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Replace inadequate or install proper stair railing
- select appropriate material

Qty: 60.00

Unit of Measure: L.F.

Estimate: \$8,792.10

Assessor Name: James Sullivan

Date Created: 11/10/2015

Notes: Replace stair railing to comply with building codes

Priority 2 - Response Time (2-3 yrs):

System: B2030 - Exterior Doors



Location: Various entrances

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 2 - Response Time (2-3 yrs)

Correction: Remove and replace exterior doors - per leaf

Qty: 12.00

Unit of Measure: Ea.

Estimate: \$109,287.85

Assessor Name: James Sullivan

Date Created: 11/10/2015

Notes: Replace exterior doors – beyond service life, rusted and failing

System: C1010 - Partitions



Location: Shower rooms

Distress: Maintenance Required

Category: 3 - Operations / Maint.

Priority: 2 - Response Time (2-3 yrs)

Correction: Remodel and refurbish shower room - based on approximately 8 showers

Qty: 2.00

Unit of Measure: Ea.

Estimate: \$15,144.20

Assessor Name: James Sullivan

Date Created: 12/29/2015

Notes: Renovate gym shower rooms to elevate fixtures to height useful for 8th graders

System: C3010230 - Paint & Covering



Location: Various

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 2 - Response Time (2-3 yrs)

Correction: Repair substrate and repaint interior concrete or CMU walls - SF of wall surface

Qty: 150.00

Unit of Measure: S.F.

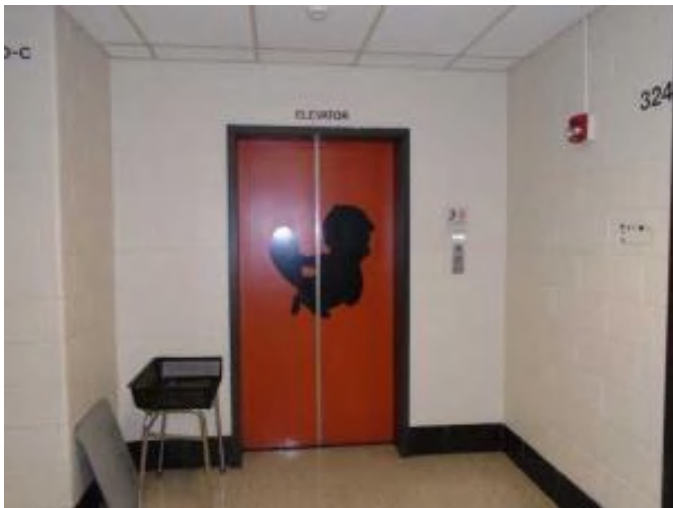
Estimate: \$6,028.81

Assessor Name: James Sullivan

Date Created: 11/10/2015

Notes: Repair CMU partition walls – structural cracks developing

System: D1010 - Elevators and Lifts



Location: Elevator

Distress: Accessibility

Category: 2 - Code Compliance

Priority: 2 - Response Time (2-3 yrs)

Correction: Modernize or upgrade the elevator cab or to comply with ADA - exact scope of work estimate not available - total cost is sufficient

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$12,853.60

Assessor Name: James Sullivan

Date Created: 11/10/2015

Notes: Updated elevator – call buttons and cabin panel not code compliant

System: D2010 - Plumbing Fixtures



Location: Toilet room

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 2 - Response Time (2-3 yrs)

Correction: Remove and replace or replace lavatory - quantify accessible if required

Qty: 1.00

Unit of Measure: Ea.

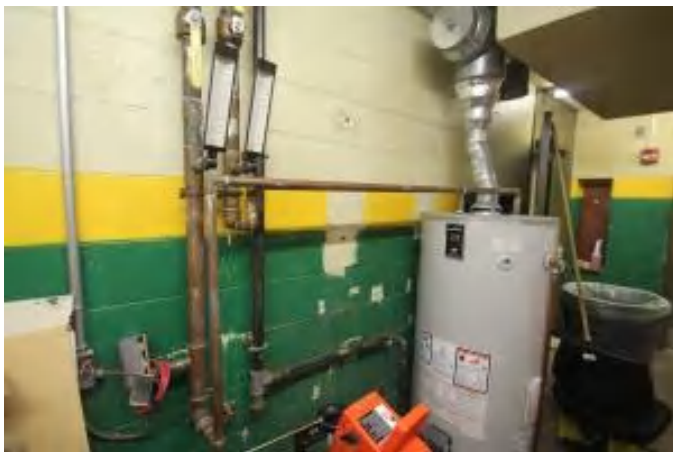
Estimate: \$3,811.01

Assessor Name: James Sullivan

Date Created: 12/29/2015

Notes: Replace broken lavatory in engineer's toilet room

System: D2020 - Domestic Water Distribution



Location: Mechanical room

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 2 - Response Time (2-3 yrs)

Correction: Replace domestic water circulation pump (to 1 HP)

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$12,169.33

Assessor Name: James Sullivan

Date Created: 12/29/2015

Notes: Install expansion tank and circulation pump for domestic hot water

System: D3040 - Distribution Systems



Location: Boiler room
Distress: Maintenance Required
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace hydronic distribution piping insulation - 100 LF of piping
Qty: 30.00
Unit of Measure: L.F.
Estimate: \$1,047.45
Assessor Name: James Sullivan
Date Created: 12/29/2015

Notes: Repair boiler room chilled water piping insulation, approx. 15 linear ft., to prevent condensation and rust

System: E2010 - Fixed Furnishings



Location: Auditorium
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace auditorium seating - add tablet arms if required. Veneer seating is an option.
Qty: 5.00
Unit of Measure: Ea.
Estimate: \$4,827.31
Assessor Name: James Sullivan
Date Created: 11/10/2015

Notes: Repair or replace auditorium seats – 2% damaged or missing

Priority 3 - Response Time (3-4 yrs):

System: C3030 - Ceiling Finishes



Location: Throughout

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Remove and replace suspended acoustic ceilings - lighting not included

Qty: 66,200.00

Unit of Measure: S.F.

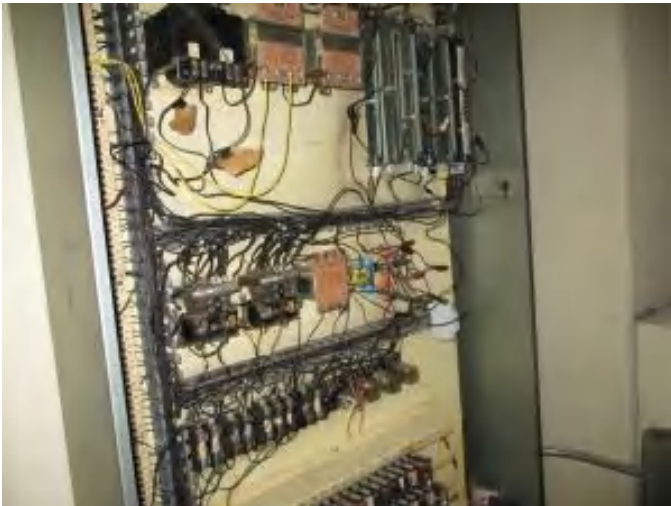
Estimate: \$888,945.19

Assessor Name: James Sullivan

Date Created: 11/10/2015

Notes: Replace suspended acoustic tile ceiling system – beyond service life (90% of suspended ceiling)

System: D1010 - Elevators and Lifts



Location: Basement Elevator Machine Room

Distress: Obsolete

Category: 3 - Operations / Maint.

Priority: 3 - Response Time (3-4 yrs)

Correction: Replace elevator motor and controller

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$26,019.98

Assessor Name: James Sullivan

Date Created: 12/21/2015

Notes: Provide a new elevator controller

System: D5020 - Lighting and Branch Wiring



Location: Entire Building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add wiring device
Qty: 96.00
Unit of Measure: Ea.
Estimate: \$35,267.62
Assessor Name: James Sullivan
Date Created: 12/21/2015

Notes: Provide (2)25FT of surface raceways with 24" receptacles on center and two-duplex wall mount receptacles. Approximate 96

System: D5090 - Other Electrical Systems



Location: Outdoor
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$202,163.13
Assessor Name: James Sullivan
Date Created: 12/21/2015

Notes: Provide 90KW, outdoor, diesel powered generator.

System: D5090 - Other Electrical Systems



Location: Roof
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 3 - Response Time (3-4 yrs)
Correction: Repair Lightning Protection System
Qty: 1.00
Unit of Measure: Job
Estimate: \$24,249.82
Assessor Name: James Sullivan
Date Created: 12/21/2015

Notes: Prepare a study to determine if the school building requires lightning protection system.

System: E2010 - Fixed Furnishings



Location: Stage
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Remove and replace stage curtain - insert the LF of track and SF of curtain
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$11,189.10
Assessor Name: James Sullivan
Date Created: 11/10/2015

Notes: Replace stage curtains – torn/damaged

Priority 4 - Response Time (4-5 yrs):

System: D3030 - Cooling Generating Systems



Location: Boiler room

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Replace base mounted, end suction CHW pump (3" size, 5 HP, to 225 GPM)

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$7,445.82

Assessor Name: James Sullivan

Date Created: 12/29/2015

Notes: Replace 5 HP chilled water pump motor due to excessive rust on motor case

System: D5020 - Lighting and Branch Wiring



Location: Entire Building

Distress: Obsolete

Category: 3 - Operations / Maint.

Priority: 4 - Response Time (4-5 yrs)

Correction: Add Lighting Fixtures

Qty: 340.00

Unit of Measure: Ea.

Estimate: \$230,739.78

Assessor Name: James Sullivan

Date Created: 12/21/2015

Notes: Replace 30% of the existing lighting fixtures with fluorescent fixtures with T8 lamps. Approximate 340 fixtures

System: D5030 - Communications and Security



Location: Entire Building
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Video Surveillance System
Qty: 30.00
Unit of Measure: Ea.
Estimate: \$118,216.45
Assessor Name: James Sullivan
Date Created: 12/21/2015

Notes: Provide surveillance CCTV cameras to provide a complete coverage of the school building interior. Approximate 30 surveillance CCTV cameras

System: E1020 - Institutional Equipment

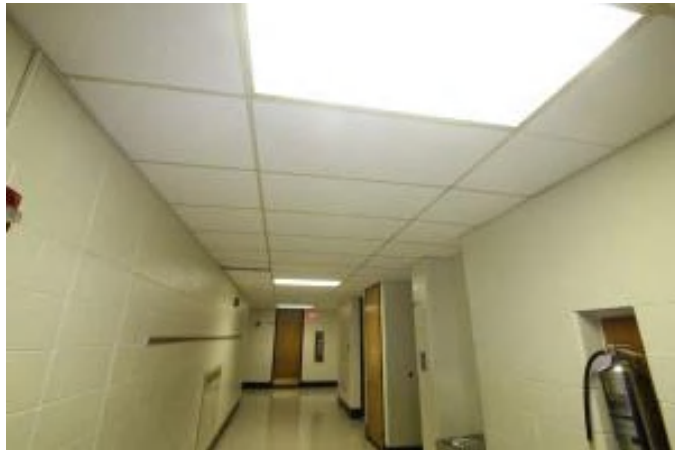


Location: Auditorium
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Stage Theatrical Lighting System
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$293,594.70
Assessor Name: James Sullivan
Date Created: 12/21/2015

Notes: Provide theatrical lighting and dimming system.

Priority 5 - Response Time (> 5 yrs):

System: D4010 - Sprinklers



Location: Entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 85,000.00

Unit of Measure: S.F.

Estimate: \$1,215,964.37

Assessor Name: James Sullivan

Date Created: 12/29/2015

Notes: Install fire protection sprinkler system including fire pump if needed.

Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D1010 Elevators and Lifts	Hydraulic, passenger elevator, 1500 lb, 2 floors, 100 FPM	1.00	Ea.	First Floor					30	1970	2047	\$68,985.00	\$75,883.50
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 2628 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler room	DeDetrich	GT413A	507261/5		35	2003	2038	\$69,812.50	\$153,587.50
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 2628 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler room	DeDetrich	GT413A	507261/3		35	2003	2038	\$69,812.50	\$153,587.50
D3030 Cooling Generating Systems	Chiller, centrifugal, water cooled, packaged hermetic, standard controls, 200 ton	1.00	Ea.	Boiler room	Carrier	30HXC206RZE660KA	0704Q03530		30	2004	2034	\$152,640.80	\$167,904.88
D3030 Cooling Generating Systems	Cooling tower, packaged unit, stainless steel, induced draft, crossflow, horizontal, gear drive, 297 ton, includes standard controls, excludes pumps and piping	1.00	Ea.	Roof					30	2004	2034	\$71,098.50	\$78,208.35
D3040 Distribution Systems	Pump, circulating, cast iron, base mounted, coupling guard, bronze impeller, flanged joints, 15 H.P., to 1000 GPM, 5" size	2.00	Ea.	Boiler room	Armstrong	4280			25	2004	2029	\$21,432.00	\$47,150.40
D3040 Distribution Systems	Pump, circulating, cast iron, base mounted, coupling guard, bronze impeller, flanged joints, 15 H.P., to 1000 GPM, 5" size	2.00	Ea.	Boiler room	Armstrong	4280	483151		25	2004	2029	\$21,432.00	\$47,150.40
D5010 Electrical Service/Distribution	Motor control center, starters, class 1, type B, combination MCP, FVNR, with control XFMR, size 2, 25 HP, 18" high, incl starters & structures	1.00	Ea.	First Floor Electrical Room					30	2007	2037	\$3,073.95	\$3,381.35
D5010 Electrical Service/Distribution	Switchboards, distribution section, aluminum bus bars, 4 W, 120/208 or 277/480 V, 1600 amp, excl breakers	1.00	Ea.	First Floor Electrical Room					30	2007	2037	\$7,358.85	\$8,094.74
Total:												\$734,948.62	

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 value. The Current Repair Amount, 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. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) 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).

Function:	
Gross Area (SF):	58,100
Year Built:	1970
Last Renovation:	
Replacement Value:	\$1,078,613
Repair Cost:	\$223,573.46
Total FCI:	20.73 %
Total RSLI:	44.98 %



Description:

Attributes:

General Attributes:

Bldg ID:	S135001	Site ID:	S135001
----------	---------	----------	---------

Condition Summary

The Table below shows the CI 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	43.86 %	0.00 %	\$0.00
G40 - Site Electrical Utilities	48.64 %	88.46 %	\$223,573.46
Totals:	44.98 %	20.73 %	\$223,573.46

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 classification. The columns in the System Listing table below 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 for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for the system based on Building Owners and Managers Association (BOMA) recommendations.
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. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency \$: The financial investment to repair/replace 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.

Additionally, a condition rating (eCR) based on the following guidelines is provided as observed at the time of the assessment.

- Excellent (E) - No noticeable distress or damage. The entire system is free from observable defect.
- Very Good (VG) - Overall no serviceability reduction for the entire system. No degradation of critical components and minor distress and defect noticeable for some but not non critical components within the system.
- Good (G) - Slight or no serviceability reduction for the entire system. There may be noticeable defects for some non critical components and slight noticeable degradation of the critical components.
- Fair (F) - Overall serviceability is degraded but adequate. There may be moderate deterioration for very few of the critical components and few of the non critical components may have severe degradation.
- Marginal (MA) - Overall serviceability and reliability loss. Most if not all of the non critical components suffer from severe degradation and a few of the critical component may have severe degradation.
- Moderate (MO) - Overall a significant serviceability loss. Most if not all the components have severe degradation with the reminder of the component showing visible distress.
- Very Poor (VP) - Overall the system is barely functional. All of the components are severely degraded.
- Non-Functional (NF) - Overall the system does not function with all the components having no serviceability and suffer from severe degradation.

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	\$11.52	S.F.		30				0.00 %	0.00 %				\$0
G2020	Parking Lots	\$7.65	S.F.	10,400	30	1998	2028		43.33 %	0.00 %	13			\$79,560
G2030	Pedestrian Paving	\$11.52	S.F.	40,400	40	1989	2029		35.00 %	0.00 %	14			\$465,408
G2040	Site Development	\$4.36	S.F.	58,100	25	1998	2023	2028	52.00 %	0.00 %	13			\$253,316
G2050	Landscaping & Irrigation	\$3.78	S.F.	7,300	15	1998	2013	2033	120.00 %	0.00 %	18			\$27,594
G4020	Site Lighting	\$3.58	S.F.	58,100	30	1971	2001	2028	43.33 %	0.00 %	13			\$207,998
G4030	Site Communications & Security	\$0.77	S.F.	58,100	30	1971	2001	2037	73.33 %	499.75 %	22		\$223,573.46	\$44,737
Total									44.98 %	20.73 %			\$223,573.46	\$1,078,613

System Notes

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

No data found for this asset

Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

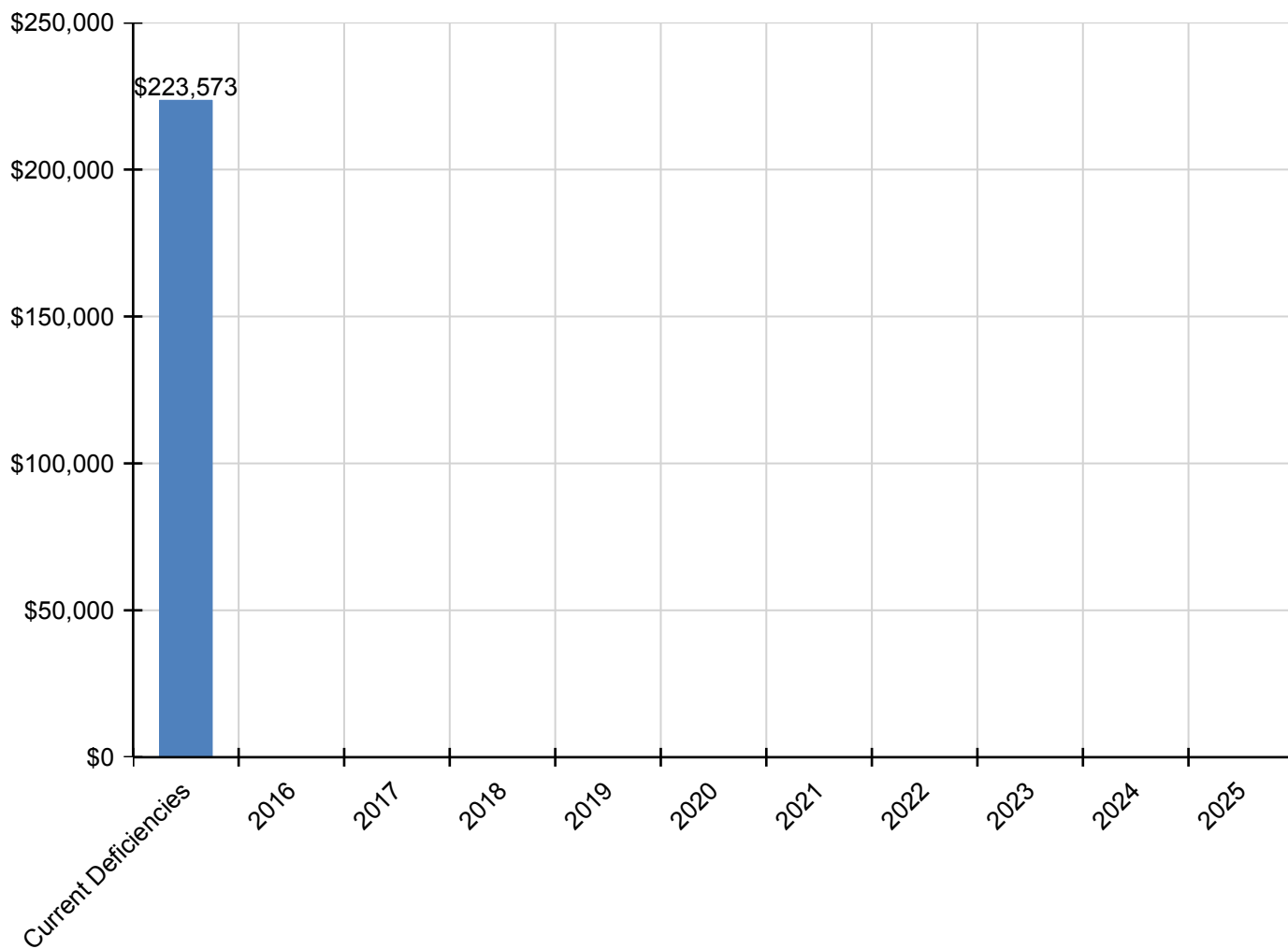
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$223,573	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,573
G - Building Sitework	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G20 - Site Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2010 - Roadways	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
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
G2050 - Landscaping & Irrigation	\$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
G4020 - Site Lighting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4030 - Site Communications & Security	\$223,573	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,573

* Indicates non-renewable system

Forecasted Sustainment Requirement

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

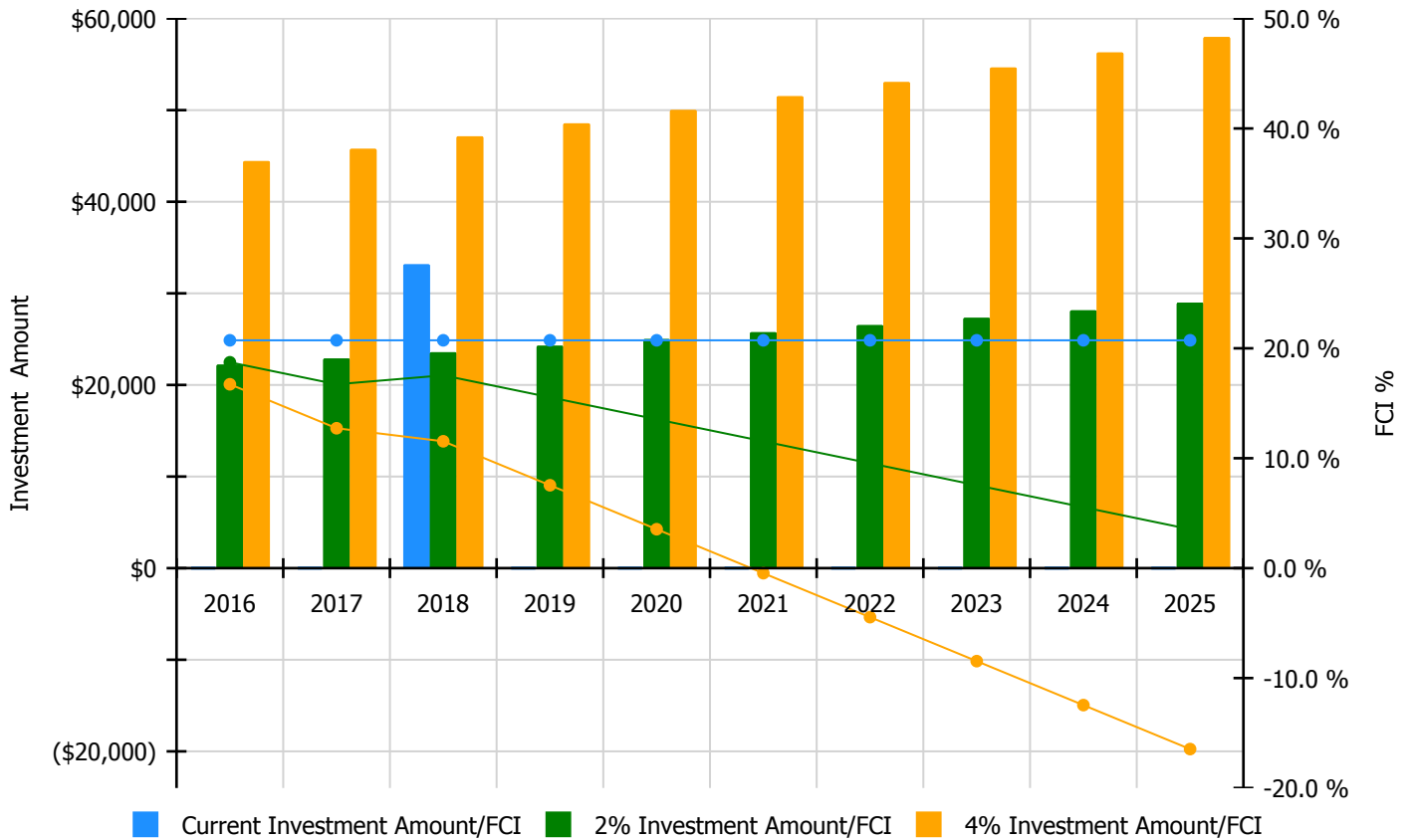


10 Year FCI Forecast by Investment Scenario

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

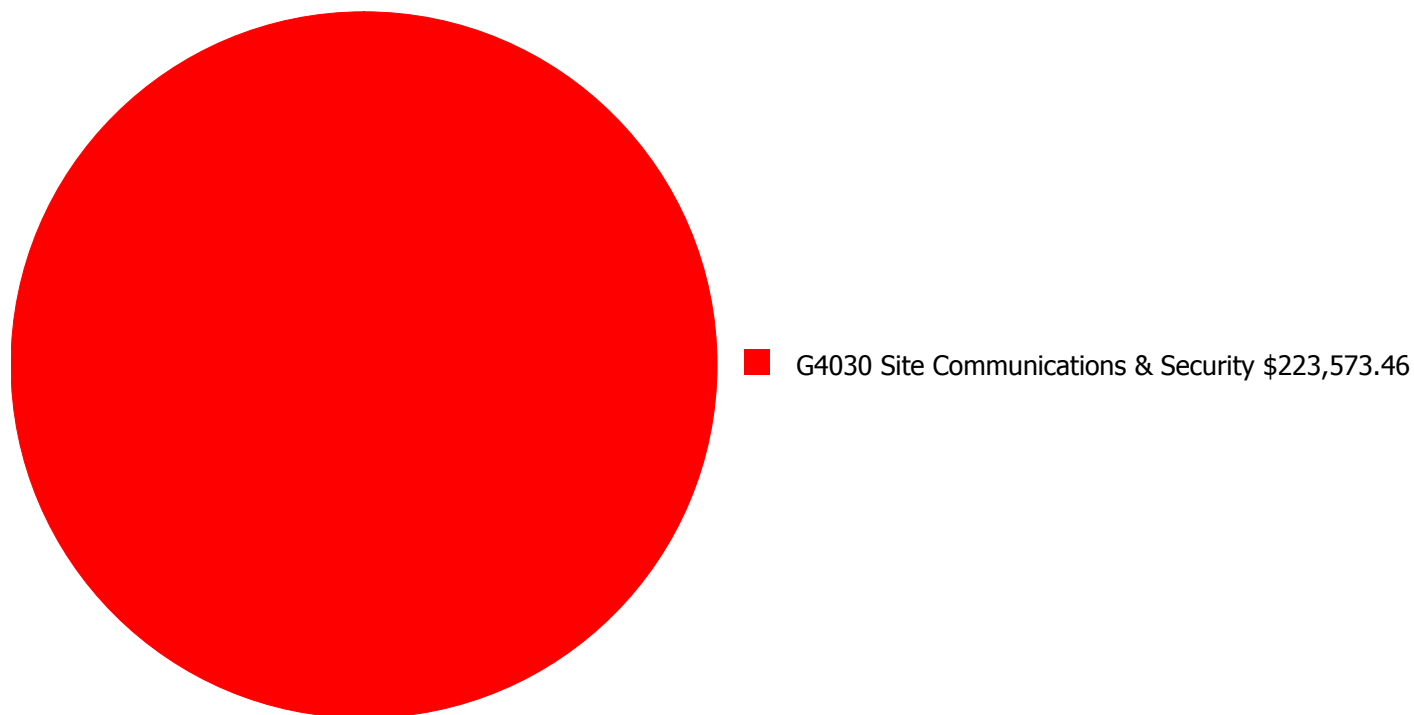
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 20.73%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$22,219.00	18.73 %	\$44,439.00	16.73 %
2017	\$0	\$22,886.00	16.73 %	\$45,772.00	12.73 %
2018	\$33,168	\$23,573.00	17.54 %	\$47,145.00	11.54 %
2019	\$0	\$24,280.00	15.54 %	\$48,560.00	7.54 %
2020	\$0	\$25,008.00	13.54 %	\$50,016.00	3.54 %
2021	\$0	\$25,758.00	11.54 %	\$51,517.00	-0.46 %
2022	\$0	\$26,531.00	9.54 %	\$53,062.00	-4.46 %
2023	\$0	\$27,327.00	7.54 %	\$54,654.00	-8.46 %
2024	\$0	\$28,147.00	5.54 %	\$56,294.00	-12.46 %
2025	\$0	\$28,991.00	3.54 %	\$57,983.00	-16.46 %
Total:	\$33,168	\$254,720.00		\$509,442.00	

Deficiency Summary by System

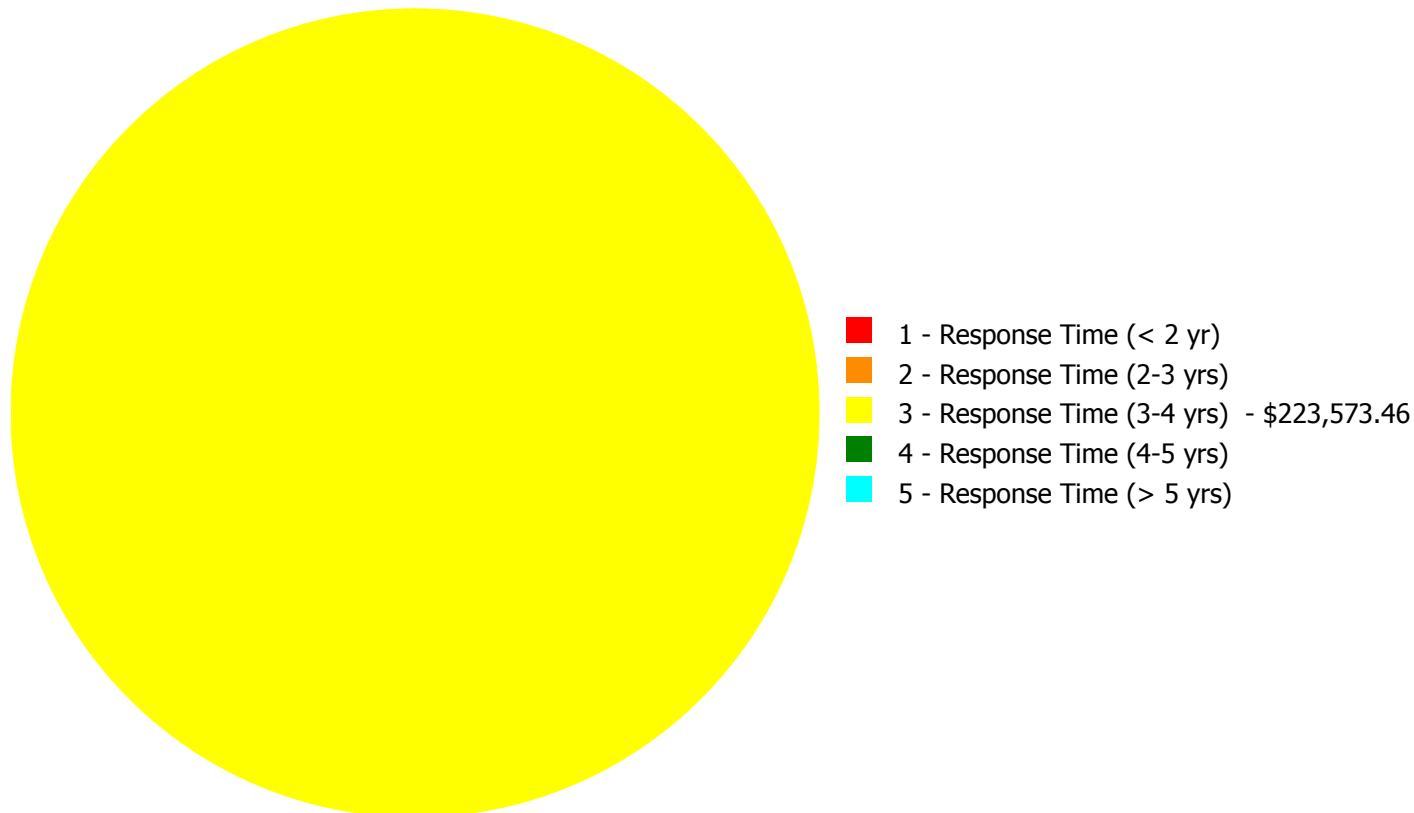
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: \$223,573.46

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: \$223,573.46

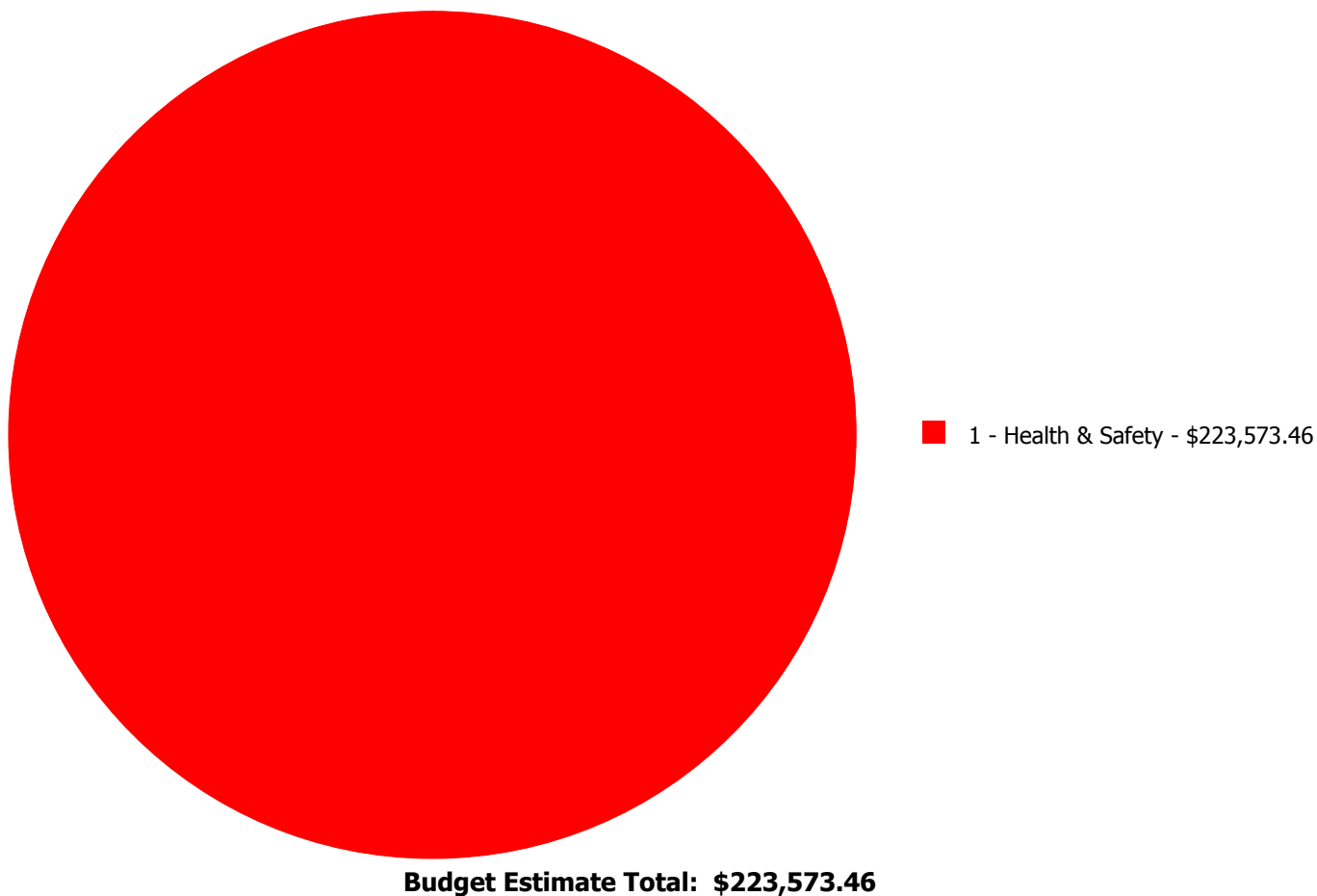
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G4030	Site Communications & Security	\$0.00	\$0.00	\$223,573.46	\$0.00	\$0.00	\$223,573.46
	Total:	\$0.00	\$0.00	\$223,573.46	\$0.00	\$0.00	\$223,573.46

Deficiency Summary by Category

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



Deficiency Details by Priority

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

Priority 3 - Response Time (3-4 yrs):

System: G4030 - Site Communications & Security



Location: Building Perimeter

Distress: Security Issue

Category: 1 - Health & Safety

Priority: 3 - Response Time (3-4 yrs)

Correction: Add Video Surveillance System

Qty: 12.00

Unit of Measure: Ea.

Estimate: \$223,573.46

Assessor Name: Craig Anding

Date Created: 12/21/2015

Notes: Provide additional outdoor surveillance CCTV cameras for a complete coverage of the school building perimeter. Approximate 12

Equipment Inventory

The following table represents the inventory details of the inventory found in the building, which fall under the following subsystems:

No data found for this asset

Glossary

ABMA	American Boiler Manufacturers Association http://www.abma.com/
ACEEE	American Council for an Energy-Efficient Economy
ACGIH	American Council of Governmental and Industrial Hygienists
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFTC	After Tax Cash Flow
AGA	American Gas Association
AHU	Air Handling Unit
Amp	Ampere
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASD	Adjustable Speed Drive
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers Inc.
ASME	American Society of Mechanical Engineers
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.
ATS	After Tax Savings
AW	Annual worth
BACNET	Building Automation Control Network
BAS	Building Automation System
BCR	Benefit Cost Ratio
BEP	Business Energy Professional (AEE)
BF	Ballast Factor
BHP	Boiler Horsepower (boilers)
BHP	Brake Horsepower (motors)
BLCC	Building Life Cycle Cost analysis program (FEMP)
BOCA	Building Officials and Code Administrators
BTCF	Before Tax Cash Flow

Site Assessment Report - S135001;Longstreth

BTS	Before Tax Savings
Btu	British thermal unit
Building Addition	An area space or component of a building added to a building after the original building's year built date.
CAA	Clean Air Act
CAAA-90	Clean Air Act Amendments of 1990
CABO	Council of American Building Officials
CAC	Conventional Air Conditioning
CADDET	Center for the Analysis and Dissemination of Demonstrated Energy Technologies
Calculated Next Renewal	The year a system or 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 is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection.
CDD	Cooling Degree Days
CDGP	Certified Distributed Generation Professional
CEC	California Energy Commission
CEM	Certified Energy Manager
CEP	Certified Energy Procurement Professional
CFC	Chlorofluorocarbon
CFD	Cash Flow Diagram
CFL	Compact Fluorescent Light
CFM cfm	Cubic Feet per Minute
CHP	Combined Heat and Power (a.k.a. cogeneration)
CHW	Chilled Water
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
COP	Coefficient of Performance
Cp	Heat Capacity of Material
CPUC	California Public Utility Commission
CRI	Color Rendering Index
CRT	Cathode Ray Tube VDT HMI

Site Assessment Report - S135001;Longstreth

CTC	Competitive Transition Charge
Cu	Coefficient of Utilization
Current Replacement Value (CRV)	CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.
Cv	Value Coefficient
CWS	Chilled Water System
D d	Distance (usually feet)
DB	Dry Bulb
DCV	Demand Control Ventilation
DD	Degree Day
DDB	Double Declining Balance
DDC	Direct Digital Controls
Deferred maintenance	Deferred maintenance is condition work (excluding suitability and energy audit needs) 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.
Delta	Difference
Delta P	Pressure Difference
Delta T	Temperature Difference
DG	Distributed Generation
DOE	Department of Energy
DP	Dew Point
DR	Demand Response
DX	Direct Expansion Air Conditioner
EA	Energy Audit
EBITDA	Earnings before Interest Taxes Depreciation and Amortization
ECI	Energy Cost Index
ECM	Energy Conservation Measure
ECO	Energy Conservation Opportunity
ECPA	Energy Conservation and Production Act
ECR	Energy Conservation Recommendation
ECS	Energy Control System

Site Assessment Report - S135001;Longstreth

EER	Energy Efficiency Ratio
EERE	Energy Efficiency and Renewable Energy division of US DOE
EIA	Energy Information Agency
EIS	Energy Information System
EMCS	Energy Management Computer System
EMO	Energy Management Opportunity
EMP	Energy Management Project
EMR	Energy Management Recommendation
EMS	Energy Management System
Energy Utilization Index (EUI)	EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot.
EO	Executive Order
EPA	Environmental Protection Agency
EPACT	Energy Policy Act of 1992
EPCA	Energy Production and Conservation Act of 1975
EPRI	Electric Power Research Institute
EREN	Efficiency and Renewable Energy (Division of USDOE)
ERV	Energy Recovery Ventilator
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
EUI	Energy Use Index
EWG	Exempt Wholesale Generators
Extended Facility Condition Index (EFCI)	EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value.
f	Frequency
F	Fahrenheit
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Condition Assessment (FCA)	FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process.
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.

Site Assessment Report - S135001;Longstreth

FC	Footcandle
FCA	Fuel Cost Adjustment
FEMIA	Federal Energy Management Improvement Act of 1988
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FESR	Fuel Energy Savings Ratio
FLA	Full Load Amps
FLF	Facility Load Factor (usually monthly)
FLRPM	Full Load Revolutions per Minute
FMS	Facility Management System
FPM fpm	Feet per Minute (velocity)
FSEC	Florida Solar Energy Center
Ft	Foot
GPM gpm	Gallons per Minute
GRI	Gas Research Institute
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.
GUI	Graphical User Interface
H h	Enthalpy Btu/lb
HCFC	Hydrochlorofluorocarbons
HDD	Heating Degree days
HFC	Hydrofluorocarbons
HHV	Higher Heating Value
HID	High Intensity Discharge (lamp)
HMI	Human Machine Interface
HMMI	Human Man Machine Interface
HO	High Output (lamp)
HP Hp hp	Horsepower
HPS	High Pressure Sodium (lamp)
HR	Humidity Ratio
Hr hr	Hour

Site Assessment Report - S135001;Longstreth

HRU	Heat Recovery Unit
HVAC	Heating Ventilation and Air-Conditioning
Hz	Hertz
I	Intensity (lumen output of lamp)
I i	Interest rate or Discount rate
IAQ	Indoor Air Quality
ICA	International Cogeneration Alliance
ICBO	International Conference of Buildings Officials
ICC	International Code Council
ICP	Institutional Conservation Program
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
Install year	The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system's Current Replacement Value (CRV) was replaced).
IRP	Integrated Resource Planning
IRR	Internal Rate of Return
ISO	Independent System Operator
ITA	Independent Tariff Administrator
k	Kilo multiple of thousands in SI system
K	Kelvins (color temperature of lamp)
K k	Thermal Conductivity of Material
KVA	Kilovolt Ampere
KVAR	Kilovolt Ampere Reactive
kW	kiloWatt
kWh	kiloWatt hour
L	Length (usually feet)
LCC	Life Cycle Costing
LDC	Local Distribution Company
LEED	Leadership in Energy and Environmental Design
LEED EB	LEED for Existing Buildings

Site Assessment Report - S135001;Longstreth

LEED NC	LEED for new construction
LF	Load Factor
LHV	Lower Heating Value
Life cycle	The period of time that a building or site system or element can be expected to adequately serve its intended function.
LPS	Low Pressure Sodium (lamp)
Lu	Lumen Output of a Lamp or Fixture
M	Mega multiple of millions in SI system
M&V	Measurement and Verification
MACRS	Modified Accelerated Cost Recovery System
MARR	Minimum Attractive Rate of Return
Mbtu	Thousand Btu
MCF	Thousand Cubic Feet (usually of gas)
MEC	Model Energy Code
Mm	Multiple of Thousands in I/P System
MMBtu	Million Btu
MMCS	Maintenance Management Computer System
MMI	Man Machine Interface
MMS	Maintenance Management System
MSE 2000	Management System for Energy 2000 (ANSI Georgia Tech Univ)
MW	MegaWatt
MWH MWh	MegaWatt hour
NAAQS	National Ambient Air Quality Standards
NAESCO	National Association of Energy Service Companies
NAIMA	North American Insulation Manufacturers Association
NEA	National Energy Act of 1978
NECPA	National Energy Conservation Policy Act
NEMA	National Electrical Manufacturer's Association
NERC	North American Electric Reliability Council
Next Renewal	The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor's visual inspection.

Site Assessment Report - S135001;Longstreth

NFPA	National Fire Protection Association
NGPA	National Gas Policy Act of 1978
NLRPM	No Load Revolutions per Minute (speed)
Nn	Equipment or Project lifetime in economic analysis
NOPR	Notice of Proposed Rule Making from FERC
NOx	Nitrogen Oxide Compounds
NPV	Net present value in economic analysis
NREL	National Renewable Energy Laboratory
NUG	Non-Utility Generator
O&M	Operation and Maintenance
OA	Outside Air
ODP	Ozone Depletion Potential
OPAC	Off-Peak Air Conditioning
P	Present value in economic analysis
PBR	Performance Based Rates
PEA	Preliminary Energy Audit
PF	Power Factor
PID	Proportional plus integral plus derivative (control system)
PM	Portfolio Manager in Energy Star rating system
PM	Preventive Maintenance
PoolCo	Power Pool Company or Organization
POU	Point of Use
PQ	Power Quality
PSC	Public Service Commission
PSIA psia	Pounds per square inch absolute (pressure)
PSIG psig	Pounds per square inch gauge (pressure)
PUC	Public Utility Commission
PUHCA	Public Utilities Holding Company Act of 1935
PURPA	Public Utilities Regulatory Policies of 1978
PV	Photovoltaic system

Site Assessment Report - S135001;Longstreth

PV	Present Value
PW	Present Worth
PX	Power Exchange
q	Rate of heat flow in Btu per hour
Q	Heat load due to conduction using degree days
QF	Qualifying Facility
R	Electrical resistance
R	Thermal Resistance
RC	Remote controller
RCR	Room Cavity Ratio
RCRA	Resource Conservation and Recovery Act
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)	RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100
REMR	Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition
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.
RH	Relative Humidity
RLA	Running Load Amps
RMS	Root Mean Square
RO	Reverse Osmosis
ROI	Return on Investment
RPM	Revolutions Per Minute
RTG	Regional Transmission Group
RTO	Regional Transmission Organization
RTP	Real Time Pricing
SBCCI	Southern Building Code Congress International
SC	Scheduling Coordinator
SC	Shading Coefficient
SCADA	Supervisory Control and Data Acquisition Systems

Site Assessment Report - S135001;Longstreth

SEER	Seasonal Energy Efficiency Ratio
SHR	Sensible Heat Ratio
Site	The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility.
Soft Cost	An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses.
SOx	Sulfur Oxide Compounds
SP	Static Pressure
SP SPB	Simple Payback
SPP	Simple Payback Period
SPP	Small Power Producers
STR	Stack Temperature Rise
SV	Specific Volume
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.
T	Temperature
T	Tubular (lamps)
TAA	Technical Assistance Audit
TCP/IP	Transmission Control Protocol/Internet Protocol
TES	Thermal Energy Storage
THD	Total Harmonic Distortion
TOD	Time of Day
TOU	Time of Use
TQM	Total Quality Management
TransCo	Transmission Company
U	Thermal Conductance
UDC	Utility Distribution Company
UL	Underwriters Laboratories
UNIFORMAT II	The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings.
USGBC	US Green Building Council
v	Specific Volume

Site Assessment Report - S135001;Longstreth

V	Volts Voltage
V	Volume
VAV	Variable Air Volume
VDT	Video Display Terminal
VFD	Variable Frequency Drive
VHO	Very High Output
VSD	Variable Speed Drive
W	Watts
W	Width
WB	Wet bulb
WH Wh	Watt Hours
Year built	The year that a building or addition was originally built based on substantial completion or occupancy.
Z	Electrical Impedance