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.

Penrose School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	2515 S. 78Th St. Philadelphia, Pa 19153	Enrollment	592
		Grade Range	'00-08'
Phone/Fax	215-492-6455 / 215-492-6985	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Penrose	Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = Cost of Assessed Deficiencies / 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	**13.29%**	**$8,286,194**	**$62,346,372**
Building	07.71 %	$1,881,739	$24,416,555
Grounds	23.23 %	$600,406	$2,584,878

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$1,517,940
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.30 %	$5,325	$1,804,235
Windows (Shows functionality of exterior windows)	00.00 %	$0	$880,365
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$70,879
Interior Doors (Classroom doors)	00.00 %	$0	$171,576
Interior Walls (Paint and Finishes)	00.00 %	$0	$821,706
Plumbing Fixtures	01.19 %	$7,886	$660,885
Boilers	00.00 %	$0	$912,627
Chillers/Cooling Towers	00.00 %	$0	$1,196,631
Radiators/Unit Ventilators/HVAC	02.57 %	$53,943	$2,101,437
Heating/Cooling Controls	00.00 %	$0	$659,907
Electrical Service and Distribution	25.74 %	$122,066	$474,155
Lighting	00.00 %	$0	$1,695,228
Communications and Security (Cameras, Pa System and Fire Alarm)	17.73 %	$112,560	$634,977

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.

Facility Condition Assessment Summary Report

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Penrose LSH School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	2515 S. 78Th St. Philadelphia, Pa 19153	Enrollment Grade Range	'00-08'
Phone/Fax	215-492-6455 / 215-492-6985	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Penrose	Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = Cost of Assessed Deficiencies / 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	**13.29%**	**$8,286,194**	**$62,346,372**
Building	02.73 %	$405,035	$14,824,649
Grounds	23.23 %	$600,406	$2,584,878

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	04.36 %	$43,990	$1,009,266
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.94 %	$7,349	$785,433
Windows (Shows functionality of exterior windows)	58.86 %	$201,846	$342,904
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$42,014
Interior Doors (Classroom doors)	00.00 %	$0	$94,594
Interior Walls (Paint and Finishes)	00.00 %	$0	$422,906
Plumbing Fixtures	01.89 %	$15,041	$794,490
Boilers	00.00 %	$0	$469,700
Chillers/Cooling Towers	00.00 %	$0	$615,868
Radiators/Unit Ventilators/HVAC	00.00 %	$0	$1,081,542
Heating/Cooling Controls	00.00 %	$0	$339,633
Electrical Service and Distribution	00.00 %	$0	$244,033
Lighting	00.00 %	$0	$872,479
Communications and Security (Cameras, Pa System and Fire Alarm)	34.44 %	$112,560	$326,802

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.

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.

T B Read at Penrose School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	2515 S. 78Th St. Philadelphia, Pa 19153	Enrollment Grade Range	'00-08'
Phone/Fax	215-492-6455 / 215-492-6985	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Penrose	Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = Cost of Assessed Deficiencies / 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	**13.29%**	**$8,286,194**	**$62,346,372**
Building	26.31 %	$5,399,013	$20,520,290
Grounds	23.23 %	$600,406	$2,584,878

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$410,467
Exterior Walls (Shows condition of the structural condition of the exterior facade)	161.23 %	$2,542,196	$1,576,758
Windows (Shows functionality of exterior windows)	00.00 %	$0	$769,369
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$61,943
Interior Doors (Classroom doors)	62.08 %	$93,087	$149,944
Interior Walls (Paint and Finishes)	10.26 %	$69,393	$676,669
Plumbing Fixtures	10.24 %	$59,133	$577,561
Boilers	61.58 %	$491,110	$797,564
Chillers/Cooling Towers	46.07 %	$481,782	$1,045,761
Radiators/Unit Ventilators/HVAC	05.65 %	$103,678	$1,836,490
Heating/Cooling Controls	00.17 %	$1,008	$576,707
Electrical Service and Distribution	00.00 %	$0	$414,374
Lighting	23.01 %	$340,886	$1,481,495
Communications and Security (Cameras, Pa System and Fire Alarm)	00.00 %	$0	$554,920

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

S144001;Penrose and Motivational HS

Final

Site Assessment Report

January 30, 2017

PARSONS

Table of Contents

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 a 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):	116,759
Year Built:	1910
Last Renovation:	2008
Replacement Value:	$62,346,372
Repair Cost:	$8,286,193.52
Total FCI:	13.29 %
Total RSLI:	61.57 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 2 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S144001		

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.

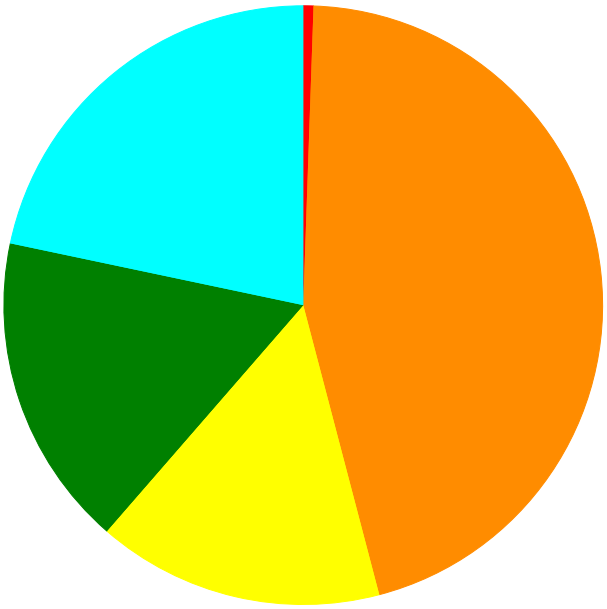
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	58.02 %	0.00 %	$0.00
A20 - Basement Construction	59.67 %	0.00 %	$0.00
B10 - Superstructure	56.88 %	0.00 %	$0.00
B20 - Exterior Enclosure	56.61 %	43.52 %	$2,756,715.36
B30 - Roofing	55.72 %	1.50 %	$43,989.57
C10 - Interior Construction	59.29 %	3.58 %	$100,909.62
C20 - Stairs	37.73 %	16.02 %	$25,842.44
C30 - Interior Finishes	73.72 %	9.01 %	$531,661.56
D10 - Conveying	86.21 %	207.93 %	$497,751.74
D20 - Plumbing	43.56 %	15.59 %	$451,071.38
D30 - HVAC	74.20 %	9.37 %	$1,131,520.10
D40 - Fire Protection	80.73 %	124.11 %	$1,197,636.94
D50 - Electrical	58.28 %	13.82 %	$948,688.59
E10 - Equipment	71.26 %	0.00 %	$0.00
E20 - Furnishings	63.02 %	0.00 %	$0.00
G20 - Site Improvements	36.56 %	4.20 %	$80,474.45
G40 - Site Electrical Utilities	46.67 %	77.82 %	$519,931.77
Totals:	**61.57 %**	**13.29 %**	**$8,286,193.52**

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)
B119001;T B Read at Penrose	42,719	26.31	$35,809.10	$3,059,063.06	$333,015.94	$878,228.23	$1,092,896.89
B144001;Penrose	48,882	7.71	$9,560.11	$596,367.16	$404,866.41	$166,502.86	$704,442.31
B144002;Penrose LSH	25,158	2.73	$0.00	$66,379.42	$24,249.82	$314,405.99	$0.00
G144001;Grounds	153,600	23.23	$0.00	$37,325.90	$519,931.77	$43,148.55	$0.00
Total:		**13.29**	**$45,369.21**	**$3,759,135.54**	**$1,282,063.94**	**$1,402,285.63**	**$1,797,339.20**

Deficiencies By Priority



1 - Response Time (< 2 yr) - $45,369.21
2 - Response Time (2-3 yrs) - $3,759,135.54
3 - Response Time (3-4 yrs) - $1,282,063.94
4 - Response Time (4-5 yrs) - $1,402,285.63
5 - Response Time (> 5 yrs) - $1,797,339.20

Budget Estimate Total: $8,286,193.52

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):	42,719
Year Built:	1910
Last Renovation:	2009
Replacement Value:	$20,520,290
Repair Cost:	$5,399,013.22
Total FCI:	26.31 %
Total RSLI:	58.24 %

Description:

prev. Bartram Motivation Center (1016) Includes gym addition (shared with Penrose). Provided by PlanCon.

Facility Assessment
August 21th, 2015

School District of Philadelphia
T.B. Read Elementary School
2555 S. 78th Street
Philadelphia, PA 19153

42,719 SF / 185 Students / LN 01

GENERAL

Mr. Dave Loftus FAC, provided input to the assessment team on current problems. Mr. James Pizzo Building Engineer accompanied us on our tour of the school and provided us with detailed information on the building systems and maintenance history. Early in the morning, we had a meeting with the Principal Douglas and we had a brief discussion of the school conditions. Building Engineer has been in this school for one year.

The 3 story, 42,719 square foot building was originally constructed in 1906 and is part of a complex that includes the Penrose School

and the Penrose Little School House. The building has a one level basement

ARCHITECTURAL/STRUCTURAL SYSTEMS

The building typically rests on concrete foundations and bearing walls that are not showing signs of settlement damage. The main structure typically consists of cast-in-place concrete columns, beams, and concrete, one way ribbed slab. The main roof structure consists of wood and steel truss supported by main structural frame. Main roofing is asphalt shingle application in good condition. The building envelope is typically masonry and concrete with face brick in fair condition with water intrusion in multiple areas throughout the building. Elevations are enhanced minimally with decorative stonework around entrances. The original windows were replaced in the early 1990s with extruded aluminum, double hung sliding windows, Lexan Plexiglas with insect/security screens. All windows are generally in fair condition with moderate hazing. Exterior doors are typically hollow metal in good condition. Public access doors have granite stoops and stairs. The building is accessible via access ramp at front entrance.

Partition walls are plastered ceramic hollow blocks and some CMU in good condition. Interior doors are generally wood frame and rail and stile wood doors with glazing and transoms in fair to poor condition and beyond service life. Doors leading to exit stairways are hollow metal frame and doors in good condition. Most interior doors do not have lever type handles. Fittings include: toilet accessories in very good condition; composite plastic and hollow metal toilet partitions in good condition; fixed metal lockers in fair condition, and handrails and ornamental metals, generally in fair condition. Some toilet partitions and accessories are ADA accessible. Interior identifying signage is typically plastic plaques with brail in very good condition. Stair construction is generally concrete in good condition metal stairs at roof access in very good condition. Stair railings are cast iron balusters and wood railing in fair condition.

The interior wall finishes include: painted plaster or CMU with glazed brick wainscot in toilets and basement areas good condition. Paint is generally in good condition with small damaged plaster areas throughout building due to water intrusion. Flooring includes patterned or bare concrete in stairways, corridors, storage, and basement service areas in good condition; hardwood in most classrooms in good condition; vinyl flooring in office areas, toilets and some classrooms in fair condition; tile in basement toilets in good condition; and carpet in IMC in very good condition. Ceiling finishes include: suspended acoustic tile system in classrooms, corridors, stairs, toilets and office areas in fair to poor condition with some new and some beyond service life and in need of replacement; and painted plaster or structural concrete in basement toilets and basement service areas in fair condition.

The building has one elevator serving all three floors and is accessible via the front entrance.

Commercial, Institutional, and Other equipment are included in the adjoining Penrose building.

Fixed furnishings include: fixed casework in classrooms, corridors and library, generally in fair to good condition.

MECHANICAL SYSTEMS

Toilet room plumbing fixtures include floor mounted water closets, wall hung lavatories and urinals. A few original fixtures remain, but most have been replaced at some time in the past century. Fixtures are generally in good condition and the district should budget to replace 1 water closet and 1 lavatory. Flush valves are exposed. Faucets are either single spout with ADA compliant lever handle valves or separate hot and cold spouts with momentary action knobs. Flush and lavatory valves are in good condition and will be expected to last at least 5 years. Classrooms have lavatories with momentary action faucets, and one faucet needs replacement.

The T. B. Read building does not have a cafeteria, because it is located in the new addition to Penrose.
The first and second floor science rooms have cold water faucets for laboratory sinks built into student tables. Sink drains are equipped with de-acidifiers. There are also gas supply pipes and the rooms are equipped with emergency shut off switches for the gas solenoid valves, however the gas supply has been shut off in the basement. Science room fixtures are estimated to have been installed in 2009 at the same time as the cafeteria and gym addition. All the equipment is in good condition and will last at least 5 more years.

The first floor nurse office has been converted into life skills room. The room is equipped with a clothes washer with hot and cold water connections with a single shutoff valve and an air gap drain line. The electric clothes dryer has a metal exhaust pipe discharging to outdoors through an upper window pane. There is an electric range without fume hood, and an ADA compliant lavatory. The life skills room facilities are all in good condition and probably date to the 2009 addition. They will not need repair or replacement for at least 5 years.

Service sinks are located in the hallways. They are cast iron with stainless steel rim, built in backsplash and trap. They have mixing supply valves with short neck faucets including vacuum breakers. These sinks are in excellent condition and can be expected to last 15 years or more.

Drinking fountains are located in the hallways on each floor. The second floor fountain is stainless steel, non-accessible, without coolers. The first floor fountain is accessible, but it is physically damaged, i.e. sheet metal panels are missing or dented. Fountains have exceeded their expected lifespan and should be replaced with accessible fountains including integral coolers.
Domestic water piping is soldered copper. Supply lines to fixtures are in good condition where visible and will not need repairs within 10 years. The domestic hot water circulation system has an inoperative pump and severe corrosion on associated pipe and valves. It should be completely replaced including the addition of a thermal expansion tank. The water heater is a gas burning, Bradford White, 50 gallon vertical tank, and was manufactured in 2007. The water heater shows rust on exterior sheet metal and should be replaced due to end of useful life. Water service enters from the Penrose side of the property.

Sanitary drain piping is mainly cast iron with hub and spigot connections, but includes galvanized steel vent stack pipes, copper sink drain connections, and hubless cast iron pipe with banded coupling for spot repairs. Due to age and appearance including external rust, the entire sanitary drain piping system should be inspected and repaired as needed. Toilet rooms do not have floor drains, and they should be added to prevent flooding due to fixtures overflowing.

Rain water drain pipes are external sheet metal from the roof down to the first floor level where they connect to cast iron hub and spigot pipe which continues down through the sidewalk. No problems were reported with roof drains, and since they are outside the building minor leaks are inconsequential. Rain water drain system will last at least 5 more years, and should be replaced along with gutters whenever the entire pitched roof is replaced. There is a groundwater sump in the basement boiler room with two vertical shaft pumps. The sump pump system can be expected to last 5 years minimum.

The building was originally and is still heated by forced air from a basement air handler to the classrooms and steam radiators in smaller spaces like closets. A major overhaul of the entire HVAC system was done in 2009 when the gym and cafeteria addition was built.

The building has 2 Weil McLain, cast iron, model 88 series 1, 15 section steam boilers installed in 1986. Each boiler has a maximum steam output of 2,966 MBH (89 HP). The boilers are in fair condition, but they will soon exceed their useful life expectancy and should be replaced. They are equipped with Power Flamer burners for gas or oil. The gas trains supplying each do not have vents required by current code, and should be upgraded when the boilers are replaced. Gas service enters the basement in the south-east corner of the building in a 6" line. There is a gas booster for the line passing through the Read building and supplying the Penrose gym addition heaters. The building has a 5,000 gallon oil tank with two oil pumps and both of them are functional. Boiler make-up water is supplied from the domestic water through a double backflow prevention valve and water softener system. There is chemical injection equipment for water treatment also.

There is no central cooling generating system for the school. There are 2 mini-split air-conditioning units for network equipment room and computer room with 2 ton capacity each. There are no window unit air-conditioners. The building should be converted to central air by installing a 100 ton capacity system.

Distribution system in the building consists of ducts and steam pipes. The original sheet metal ducts in the basement have been replaced with insulated ducts. These connect the air handlers to the built-in clay tile block ducts leading to the classrooms and then from the classrooms to the attic which serves as the exhaust plenum and discharges through gravity vents in the roof. Ducts were replaced and renovated in 2009 and are still in good condition and will not need maintenance for 20 years. The duct openings in the classrooms have wire mesh grills preventing entry into the ducts. The ducts are supplied from 2 air handlers: 1 for heating and 1 for ventilation only. They draw 100% outside air from a common inlet plenum. The heat unit has approximately 25,000 CFM capacity and the vent 15,000 CFM capacity. They both have 20 years useful life remaining. Steam and condensate pipe are threaded steel. Visible areas of the steam system show external rust. Multiple areas have damaged insulation which needs repair to prevent burns. There is a condensate sump with 2 pumps in a pit below the boiler room floor level which supplies a feed water tank with 2 pumps also. The engineer stated a lot of steam returned through the condensate system and there is no history of steam trap maintenance. The steam pipe and trap system should be surveyed in detail and repaired as needed. 3 out of 4 pressure gauges are damaged on the steam lines to AHU steam coils, and need replacement.

The building's original cast iron radiators have all been replaced with finned tube natural draft convection units installed in 2009. They are in good condition and have 15 years useful life remaining. They are equipped with manually adjustable thermostatic steam control valves.

The building HVAC controls were replaced in 2009 when the entire system was renovated. The AHUs have modern digital controls for fans and steam flow control. Ducts have manually operated dampers for air flow control, and steam terminal units have manually adjusted thermostatic control valves. The controls are in working order and can be expected to last 10 more years. Upgrades to the building should have their controls integrated with the existing system. Multiple manual gauges on the potable water and steam systems are damaged and need replacement.

The building does not have stand pipes or sprinklers. A fire sprinkler system should be installed, including if needed a fire pump.

ELECTRICAL SYSTEMS

An 800 Amperes 120/208V underground feeder from Penrose HS electrical service feed this school. The school electrical service is located in the basement in the fan room. The electrical service is manufactured by Eaton/Cutler-Hammer rated 800 Amperes 120/208V and was installed in 2009 and is expected to provide 30 more years of useful life.

The electrical distribution is obtained using, 120/208V panel-boards located at each corridor floor. Panel-boards are manufactured by Eaton/Cutler-Hammer, panel-boards were installed in 2009 and are expected to provide 30 more years of useful life. Raceways are concealed in ceiling or wall spaces.

The number of receptacles in classrooms varies, classrooms have been remodeled and provided with the proper amount of receptacles.

Most of the classrooms, offices and corridors are illuminated with recessed mounted fluorescent fixtures. Approximately 70% of the fixtures use fluorescent T-12 lamps. Provide new lighting fixtures with T-8 lamps

The Fire Alarm system is manufactured by General Electric EST. The main fire alarm control panel is located in Penrose HS. The school is provided with audio/visual devices at each classroom, pull station at exit doors and smoke detectors at the MDF room and unoccupied spaces. FA system was installed in 2007 and is expected to provide 10 more years of useful service life.
The present telephone system is adequate.

An independent and separate PA system does not exist. School uses the telephone systems for public announcement. This system is working adequately for most part.

The school is provided with a Sapling central clock system. System is working properly.

There is not television system.

The security system consists of CCTV cameras at each floor corridor and stairways. No additional cameras are required.

The school is not provided with an emergency power system. Future Penrose emergency power will serve this school.

There is adequate UPS in the IT room.

The emergency lighting is obtained with wall mounted battery backup emergency lights. Exit signs are located at each exit door and corridors and provided with battery unit.

The school is provided with a hydraulic type elevator manufactured by Schindler Elevator Corporation. It was installed in 2009 and is expected to provide 25 more years of useful service life.

GROUNDS SYSTEMS Included in the Penrose School.

Accessibility: the building has an accessible ramp at the front entrance and accessible routes. Some toilets are equipped with accessible fixtures, partitions and accessories, such as grab bars and accessible partitions. Most of the doors in the building do not have lever type door handles

The school perimeter is illuminated via wall and pole mounted lighting fixtures. No additional fixtures are required

CCTV cameras are installed around the building perimeter. No additional CCTV cameras are required.

There is a wall mounted loud speaker facing the playground area.

RECOMMENDATIONS

- Re-point exterior wall brickwork – allowing water intrusion
- Replace interior doors – beyond service life and failing
- Repair and paint interior plaster walls – damaged (10% of plaster area)
- Replace suspended acoustic tile ceiling system – beyond service life (75% of suspended ceiling)

- Replace 1 water closet due to age.Replace 1 lavatory due to age and 1 lavatory faucet due to leaks.
- Replace 3 drinking fountains with accessible ones including integral chillers throughout building.
- Replace domestic hot water circulation system due to failed pump and corrosion.
- Install thermal expansion tank for domestic hot water system.
- Inspect and repair sanitary drain piping due to age and noticeable clogged pipes and install floor drains in toilet rooms.
- Replace boilers including gas supply equipment due to age.
- Install 100 ton central air-conditioning system.
- Survey steam traps due to reported steam return in condensate system.
- Inspect and replace steam and condensate piping as needed due to age.
- Repair insulation on steam distribution and condensate pipes, approximately 50 feet.
- Replace damaged pressure and temperature gauges on steam and domestic water systems.
- Install fire sprinkler system with pump if needed.
- Provide to the 70% of the school with lighting fixtures with T-8 lamps. Approximate 400 fixtures

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B119001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S144001		

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	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	39.14 %	105.57 %	$2,542,196.48
B30 - Roofing	51.93 %	0.00 %	$0.00
C10 - Interior Construction	52.83 %	8.88 %	$93,086.78
C20 - Stairs	37.00 %	0.00 %	$0.00
C30 - Interior Finishes	80.66 %	20.54 %	$455,503.53
D10 - Conveying	34.29 %	0.00 %	$0.00
D20 - Plumbing	39.34 %	31.94 %	$278,647.93
D30 - HVAC	86.54 %	22.68 %	$1,077,577.46
D40 - Fire Protection	105.71 %	177.49 %	$611,115.07
D50 - Electrical	56.76 %	13.58 %	$340,885.97
E20 - Furnishings	42.50 %	0.00 %	$0.00
Totals:	**58.24 %**	**26.31 %**	**$5,399,013.22**

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 thesystem 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.

Site Assessment Report - B119001;T B Read at Penrose

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	$18.40	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$786,030
A1030	Slab on Grade	$7.73	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$330,218
A2010	Basement Excavation	$6.55	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$279,809
A2020	Basement Walls	$12.70	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$542,531
B1010	Floor Construction	$75.10	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$3,208,197
B1020	Roof Construction	$13.88	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$592,940
B2010	Exterior Walls	$36.91	S.F.	42,719	100	1906	2006	2052	37.00 %	161.23 %	37		$2,542,196.48	$1,576,758
B2020	Exterior Windows	$18.01	S.F.	42,719	40	1992	2032		42.50 %	0.00 %	17			$769,369
B2030	Exterior Doors	$1.45	S.F.	42,719	25	2003	2028		52.00 %	0.00 %	13			$61,943
B3010140	Shingle & Tile	$38.73	S.F.	10,532	25	2003	2028		52.00 %	0.00 %	13			$407,904
B3020	Roof Openings	$0.06	S.F.	42,719	20	2003	2023		40.00 %	0.00 %	8			$2,563
C1010	Partitions	$17.91	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$765,097
C1020	Interior Doors	$3.51	S.F.	42,719	40	1972	2012	2057	105.00 %	62.08 %	42		$93,086.78	$149,944
C1030	Fittings	$3.12	S.F.	42,719	40	2009	2049		85.00 %	0.00 %	34			$133,283
C2010	Stair Construction	$1.41	S.F.	42,719	100	1906	2006	2052	37.00 %	0.00 %	37			$60,234
C3010230	Paint & Covering	$15.05	S.F.	42,719	10	2011	2021		60.00 %	10.79 %	6		$69,393.32	$642,921
C3010232	Wall Tile	$0.79	S.F.	42,719	30	1972	2002	2025	33.33 %	0.00 %	10			$33,748
C3020411	Carpet	$7.30	S.F.	854	10	2011	2021		60.00 %	0.00 %	6			$6,234
C3020412	Terrazzo & Tile	$75.52	S.F.	1,282	50	1972	2022		14.00 %	0.00 %	7			$96,817
C3020413	Vinyl Flooring	$9.68	S.F.	10,680	20	2009	2029		70.00 %	0.00 %	14			$103,382
C3020414	Wood Flooring	$22.27	S.F.	19,224	25	2009	2034		76.00 %	0.00 %	19			$428,118
C3020415	Concrete Floor Finishes	$0.97	S.F.	10,680	50	2009	2059		88.00 %	0.00 %	44			$10,360
C3030	Ceiling Finishes	$20.97	S.F.	42,719	25	1972	1997	2042	108.00 %	43.10 %	27		$386,110.21	$895,817
D1010	Elevators and Lifts	$1.53	S.F.	42,719	35	1992	2027		34.29 %	0.00 %	12			$65,360
D2010	Plumbing Fixtures	$13.52	S.F.	42,719	35	1965	2000	2025	28.57 %	10.24 %	10		$59,132.58	$577,561
D2020	Domestic Water Distribution	$1.68	S.F.	42,719	25	2009	2034	2027	48.00 %	44.00 %	12		$31,575.62	$71,768
D2030	Sanitary Waste	$2.90	S.F.	42,719	25	1965	1990	2032	68.00 %	151.70 %	17		$187,939.73	$123,885
D2040	Rain Water Drainage	$2.32	S.F.	42,719	30	2003	2033		60.00 %	0.00 %	18			$99,108
D3020	Heat Generating Systems	$18.67	S.F.	42,719	30	1986	2016	2047	106.67 %	61.58 %	32		$491,110.11	$797,564
D3030	Cooling Generating Systems	$24.48	S.F.	42,719	30			2047	106.67 %	46.07 %	32		$481,781.82	$1,045,761
D3040	Distribution Systems	$42.99	S.F.	42,719	25	2009	2034		76.00 %	5.65 %	19		$103,677.62	$1,836,490
D3050	Terminal & Package Units	$11.60	S.F.	42,719	20	2009	2029		70.00 %	0.00 %	14			$495,540
D3060	Controls & Instrumentation	$13.50	S.F.	42,719	20	2009	2029		70.00 %	0.17 %	14		$1,007.91	$576,707
D4010	Sprinklers	$7.05	S.F.	42,719	35			2052	105.71 %	202.91 %	37		$611,115.07	$301,169
D4020	Standpipes	$1.01	S.F.	42,719	35			2052	105.71 %	0.00 %	37			$43,146
D5010	Electrical Service/Distribution	$9.70	S.F.	42,719	30	2009	2039		80.00 %	0.00 %	24			$414,374
D5020	Lighting and Branch Wiring	$34.68	S.F.	42,719	20	1910	1930	2025	50.00 %	23.01 %	10		$340,885.97	$1,481,495
D5030	Communications and Security	$12.99	S.F.	42,719	15	2009	2024		60.00 %	0.00 %	9			$554,920
D5090	Other Electrical Systems	$1.41	S.F.	42,719	30	1910	1940	2025	33.33 %	0.00 %	10			$60,234
E2010	Fixed Furnishings	$2.13	S.F.	42,719	40	1992	2032		42.50 %	0.00 %	17			$90,991
								Total	**58.24 %**	**26.31 %**			**$5,399,013.22**	**$20,520,290**

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:
95% - Paint & Covering
5% - Wall Tile

System: C3020 - Floor Finishes — This system contains no images

Note:
2% - Carpet
3% - Terrazzo & Tile
25% - Vinyl Flooring
45% - Wood Flooring
25% - Concrete Floor Finishes

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:	**$5,399,013**	**$0**	**$0**	**$0**	**$0**	**$0**	**$852,638**	**$130,979**	**$3,571**	**$796,449**	**$3,182,852**	**$10,365,503**
*** 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	$2,542,196	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,542,196**
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**
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	$3,571	$0	$0	**$3,571**
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	$93,087	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$93,087**
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**

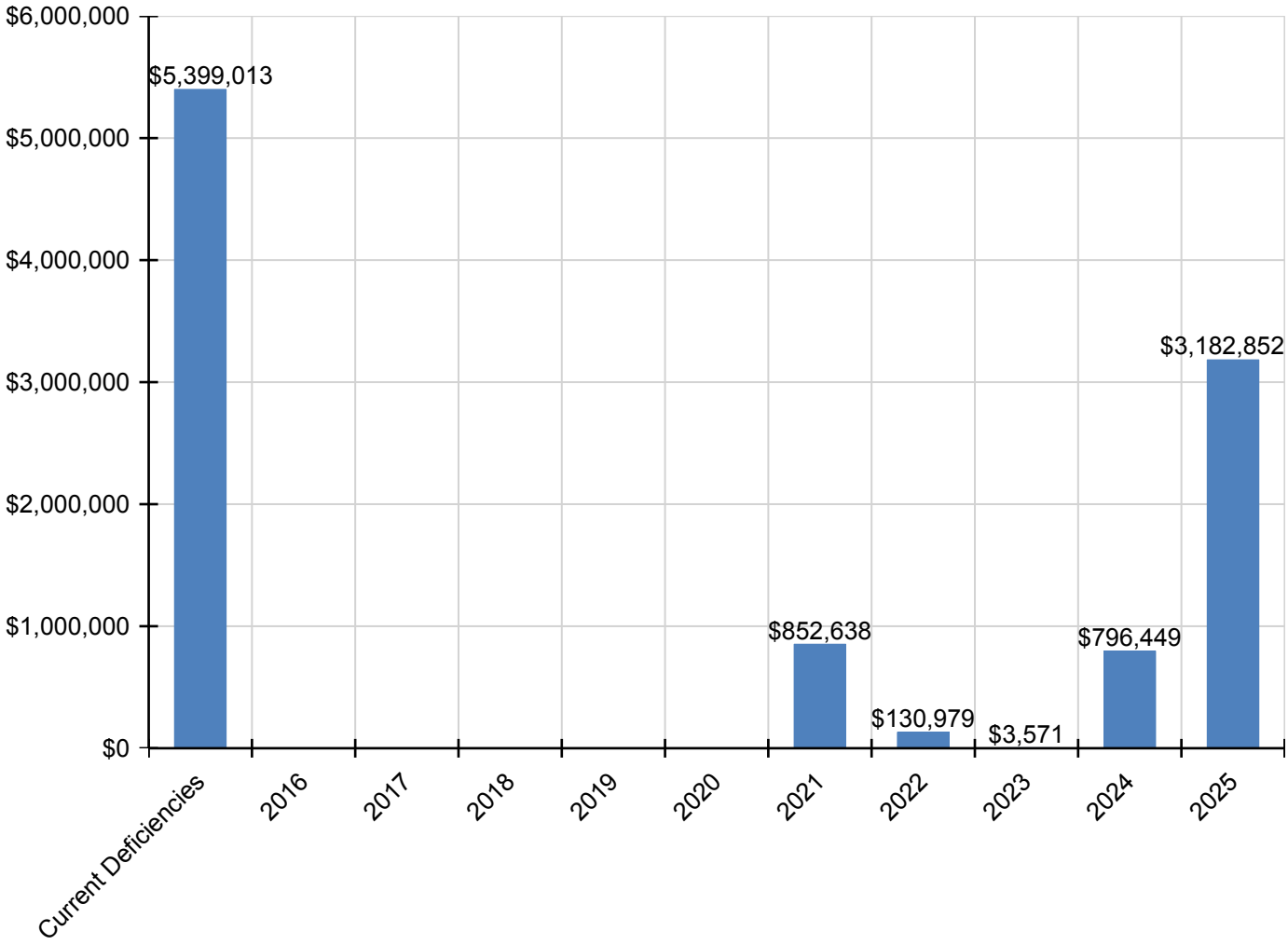
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$69,393	$0	$0	$0	$0	$0	$844,449	$0	$0	$0	$0	**$913,843**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$49,890	**$49,890**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$8,189	$0	$0	$0	$0	**$8,189**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$130,979	$0	$0	$0	**$130,979**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$386,110	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$386,110**
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	$59,133	$0	$0	$0	$0	$0	$0	$0	$0	$0	$853,813	**$912,946**
D2020 - Domestic Water Distribution	$31,576	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,576**
D2030 - Sanitary Waste	$187,940	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$187,940**
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**
D3020 - Heat Generating Systems	$491,110	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$491,110**
D3030 - Cooling Generating Systems	$481,782	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$481,782**
D3040 - Distribution Systems	$103,678	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$103,678**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,008	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,008**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$611,115	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$611,115**
D4020 - Standpipes	$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 - Lighting and Branch Wiring	$340,886	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,190,105	**$2,530,991**
D5030 - Communications and Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$796,449	$0	**$796,449**

D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$89,044	**$89,044**
E - Equipment & Furnishings	$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 Sustainment Requirement

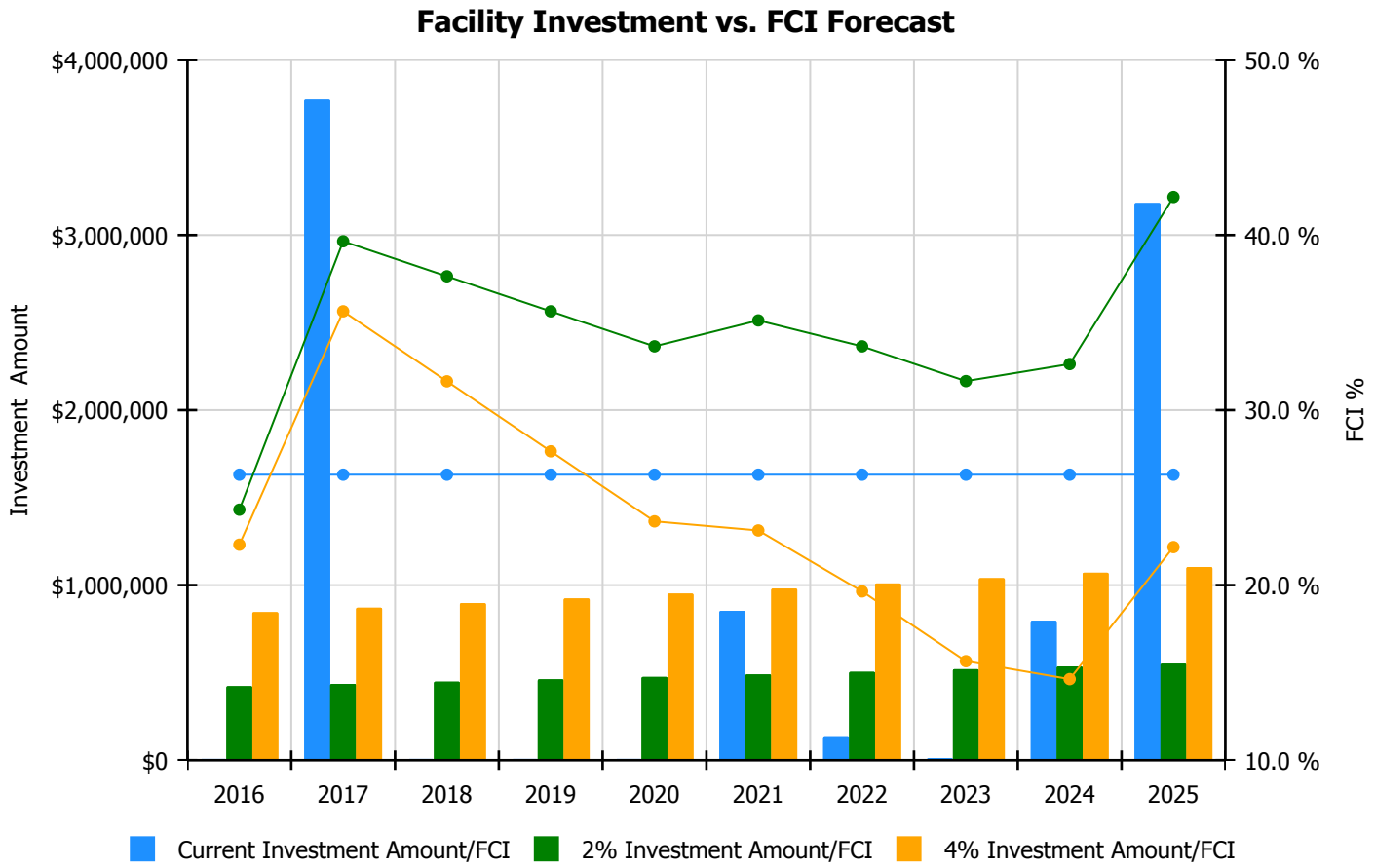
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

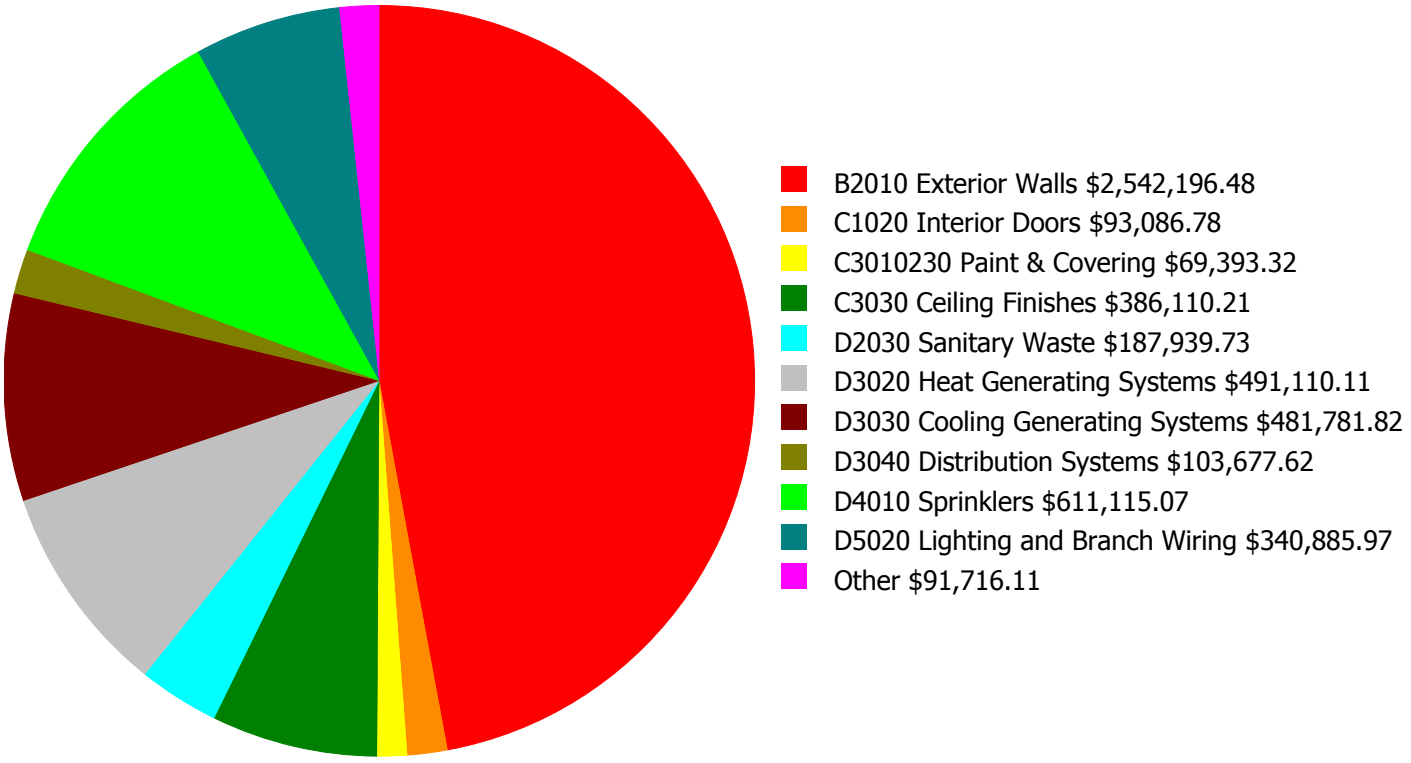
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 26.31%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$422,718.00	24.31 %	$845,436.00	22.31 %
2017	$3,773,347	$435,400.00	39.64 %	$870,799.00	35.64 %
2018	$0	$448,461.00	37.64 %	$896,923.00	31.64 %
2019	$0	$461,915.00	35.64 %	$923,831.00	27.64 %
2020	$0	$475,773.00	33.64 %	$951,546.00	23.64 %
2021	$852,638	$490,046.00	35.12 %	$980,092.00	23.12 %
2022	$130,979	$504,747.00	33.64 %	$1,009,495.00	19.64 %
2023	$3,571	$519,890.00	31.66 %	$1,039,780.00	15.66 %
2024	$796,449	$535,486.00	32.63 %	$1,070,973.00	14.63 %
2025	$3,182,852	$551,551.00	42.17 %	$1,103,102.00	22.17 %
Total:	**$8,739,836**	**$4,845,987.00**		**$9,691,977.00**	

Deficiency Summary by System

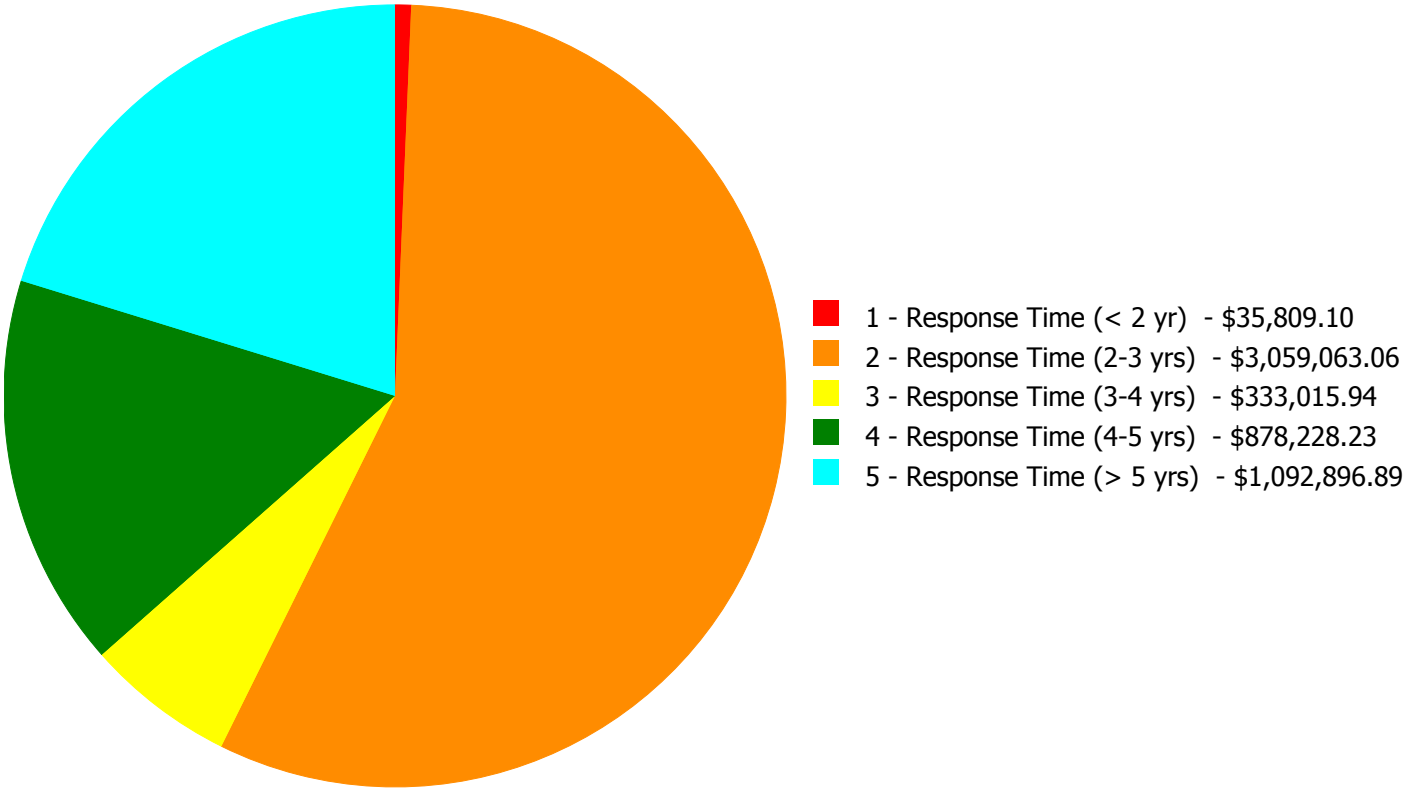
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $5,399,013.22

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: $5,399,013.22

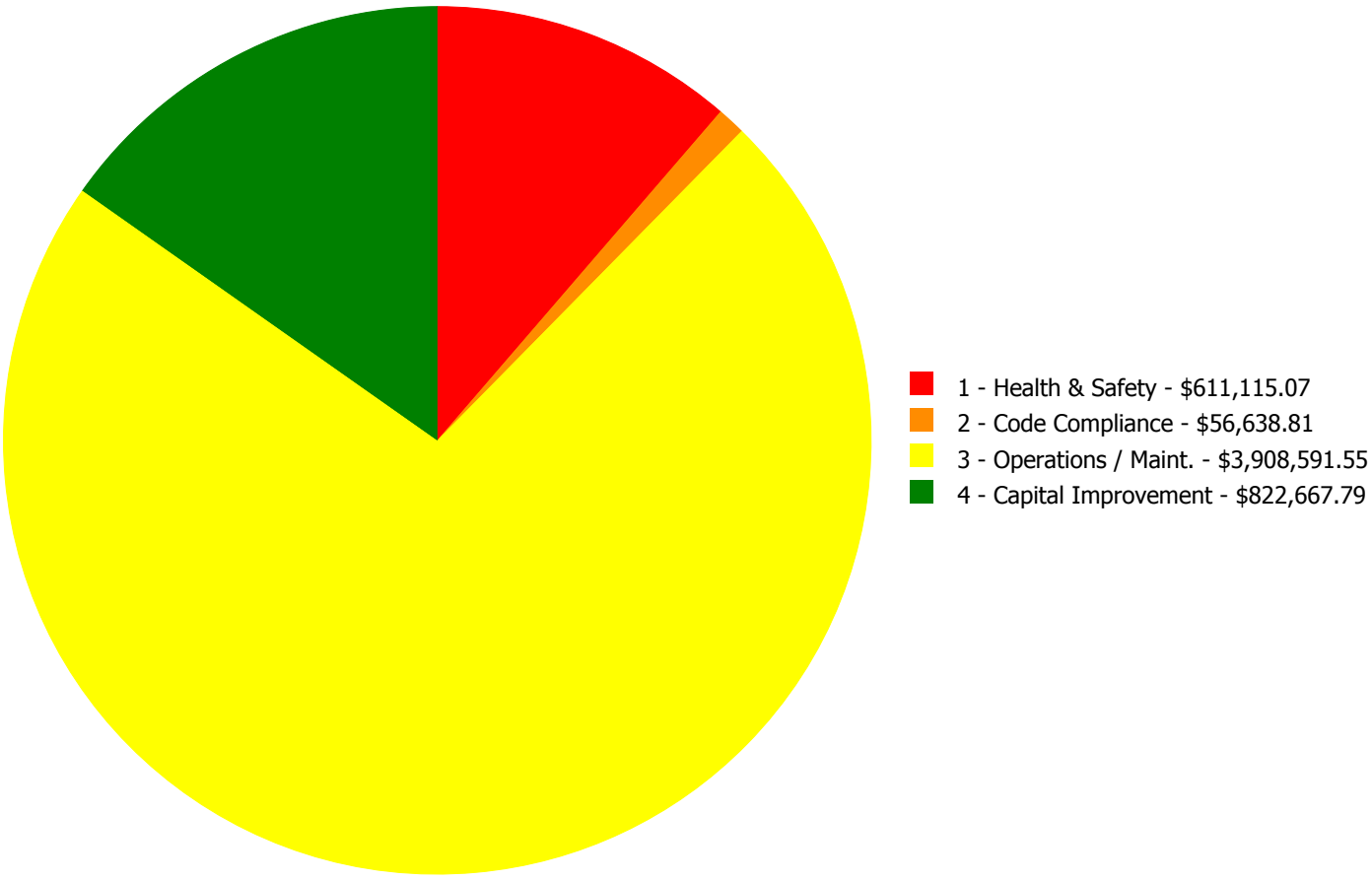
Deficiency By Priority Investment Table

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
B2010	Exterior Walls	$0.00	$2,542,196.48	$0.00	$0.00	$0.00	$2,542,196.48
C1020	Interior Doors	$0.00	$93,086.78	$0.00	$0.00	$0.00	$93,086.78
C3010230	Paint & Covering	$0.00	$0.00	$69,393.32	$0.00	$0.00	$69,393.32
C3030	Ceiling Finishes	$0.00	$0.00	$0.00	$386,110.21	$0.00	$386,110.21
D2010	Plumbing Fixtures	$0.00	$59,132.58	$0.00	$0.00	$0.00	$59,132.58
D2020	Domestic Water Distribution	$9,560.11	$22,015.51	$0.00	$0.00	$0.00	$31,575.62
D2030	Sanitary Waste	$0.00	$0.00	$187,939.73	$0.00	$0.00	$187,939.73
D3020	Heat Generating Systems	$0.00	$0.00	$0.00	$491,110.11	$0.00	$491,110.11
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$481,781.82	$481,781.82
D3040	Distribution Systems	$26,248.99	$1,745.74	$75,682.89	$0.00	$0.00	$103,677.62
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$1,007.91	$0.00	$1,007.91
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$611,115.07	$611,115.07
D5020	Lighting and Branch Wiring	$0.00	$340,885.97	$0.00	$0.00	$0.00	$340,885.97
	Total:	$35,809.10	$3,059,063.06	$333,015.94	$878,228.23	$1,092,896.89	$5,399,013.22

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: $5,399,013.22

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: D2020 - Domestic Water Distribution

Location: Boiler room.
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 1 - Response Time (< 2 yr)
Correction: Provide expansion tank for water heater.
Qty: 1.00
Unit of Measure: Ea.
Estimate: $9,560.11
Assessor Name: System
Date Created: 11/13/2015

Notes: Install thermal expansion tank for domestic hot water system.

System: D3040 - Distribution Systems

This deficiency has no image.

Location: Hallways and closets
Distress: Failing
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Conduct a steam trap survey and replace failed units.
Qty: 8,000.00
Unit of Measure: S.F.
Estimate: $26,248.99
Assessor Name: System
Date Created: 11/13/2015

Notes: Survey steam traps due to reported steam return in condensate system.

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

System: B2010 - Exterior Walls

Location: Entire building

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

Qty: 85,500.00

Unit of Measure: S.F.

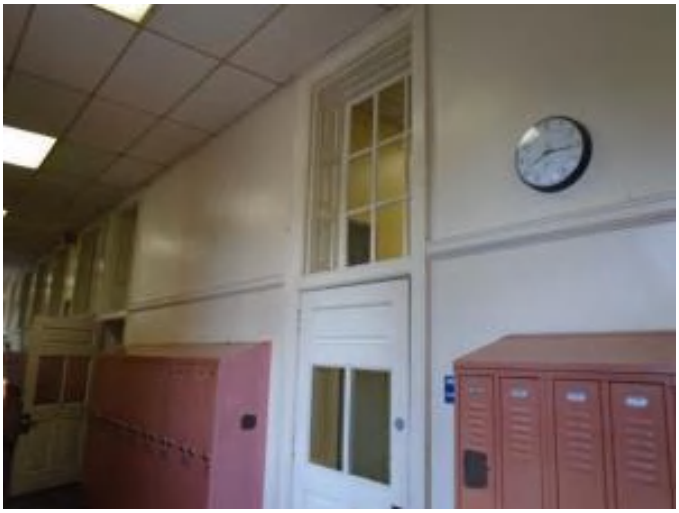
Estimate: $2,542,196.48

Assessor Name: System

Date Created: 09/24/2015

Notes: Re-point exterior wall brickwork – allowing water intrusion

System: C1020 - Interior Doors



Location: 1st 2nd floor

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace interior doors - wood doors with wood frame - per leaf

Qty: 20.00

Unit of Measure: Ea.

Estimate: $93,086.78

Assessor Name: System

Date Created: 09/24/2015

Notes: Replace interior doors – beyond service life and failing

System: D2010 - Plumbing Fixtures

Location: Hallways

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Remove and replace water fountains to meet ADA - includes high and low fountains and new recessed alcove

Qty: 3.00

Unit of Measure: Ea.

Estimate: $47,078.70

Assessor Name: System

Date Created: 11/13/2015

Notes: Replace 3 drinking fountains with accessible ones including integral chillers throughout building.

System: D2010 - Plumbing Fixtures

Location: Basement

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace water closet - quantify additional units

Qty: 1.00

Unit of Measure: Ea.

Estimate: $7,462.15

Assessor Name: System

Date Created: 11/13/2015

Notes: Replace 1 water closet due to age

System: D2010 - Plumbing Fixtures

Location: Classrooms

Distress: Beyond Service Life

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: $4,591.73

Assessor Name: System

Date Created: 11/13/2015

Notes: Replace 1 lavatory due to age and 1 lavatory faucet due to leaks.

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $22,015.51

Assessor Name: System

Date Created: 11/13/2015

Notes: Replace domestic hot water circulation system due to failed pump and corrosion.

System: D3040 - Distribution Systems

Location: Hallways

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace hydronic distribution piping insulation - 100 LF of piping

Qty: 50.00

Unit of Measure: L.F.

Estimate: $1,745.74

Assessor Name: System

Date Created: 11/13/2015

Notes: Repair insulation on steam distribution and condensate pipes, approximately 50 feet.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building

Distress: Energy Efficiency

Category: 4 - Capital Improvement

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

Correction: Replace lighting fixtures

Qty: 400.00

Unit of Measure: Ea.

Estimate: $340,885.97

Assessor Name: System

Date Created: 10/22/2015

Notes:
Provide to the 70% of the school with lighting fixtures with T-8 lamps. Approximate 400 fixtures

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

System: C3010230 - Paint & Covering

Location: Various throughout

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 8,100.00

Unit of Measure: S.F.

Estimate: $69,393.32

Assessor Name: System

Date Created: 09/24/2015

Notes: Repair and paint interior plaster walls – damaged (10% of plaster area)

System: D2030 - Sanitary Waste

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Inspect sanitary waste piping and replace damaged sections. (+100KSF)

Qty: 42,719.00

Unit of Measure: S.F.

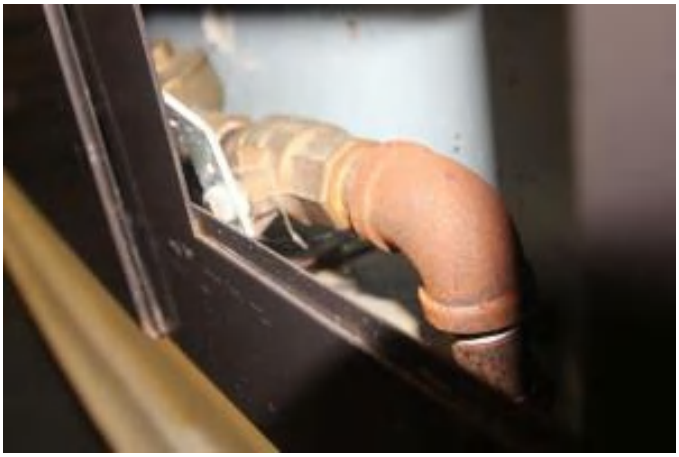
Estimate: $187,939.73

Assessor Name: System

Date Created: 11/13/2015

Notes: Inspect and repair sanitary drain piping due to age and noticeable clogged pipes and install floor drains in toilet rooms.

System: D3040 - Distribution Systems



Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Perform testing to identify and replace damaged steam and condensate piping.

Qty: 8,000.00

Unit of Measure: S.F.

Estimate: $75,682.89

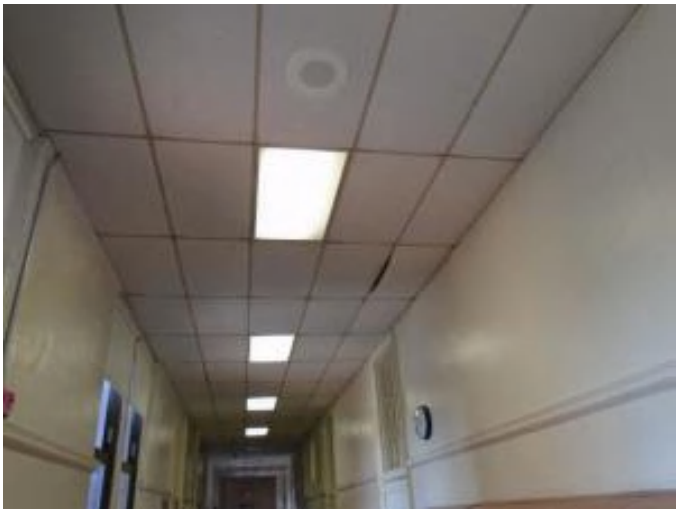
Assessor Name: System

Date Created: 11/13/2015

Notes: Inspect and replace steam and condensate piping as needed due to age.

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

System: C3030 - Ceiling Finishes



Location: Throughout

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 25,600.00

Unit of Measure: S.F.

Estimate: $386,110.21

Assessor Name: System

Date Created: 09/24/2015

Notes: Replace suspended acoustic tile ceiling system – beyond service life (75% of suspended ceiling)

System: D3020 - Heat Generating Systems

Location: Boiler room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace boiler, cast iron sectional (50 HP)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $491,110.11

Assessor Name: System

Date Created: 11/13/2015

Notes: Replace boilers including gas supply equipment due to age.

System: D3060 - Controls & Instrumentation

Location: Basement

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace temperature, pressure gauges (enter estimate)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,007.91

Assessor Name: System

Date Created: 11/13/2015

Notes: Replace damaged pressure and temperature gauges on steam and domestic water systems.

Priority 5 - Response Time (> 5 yrs):

System: D3030 - Cooling Generating Systems

Location: Entire building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install chilled water system with distribution piping and pumps. (+75KSF)

Qty: 30,000.00

Unit of Measure: S.F.

Estimate: $481,781.82

Assessor Name: System

Date Created: 11/13/2015

Notes: Install 100 ton central air-conditioning system.

System: D4010 - Sprinklers

This deficiency has no image.

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: 42,719.00

Unit of Measure: S.F.

Estimate: $611,115.07

Assessor Name: System

Date Created: 11/13/2015

Notes: Install fire sprinkler system with 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:

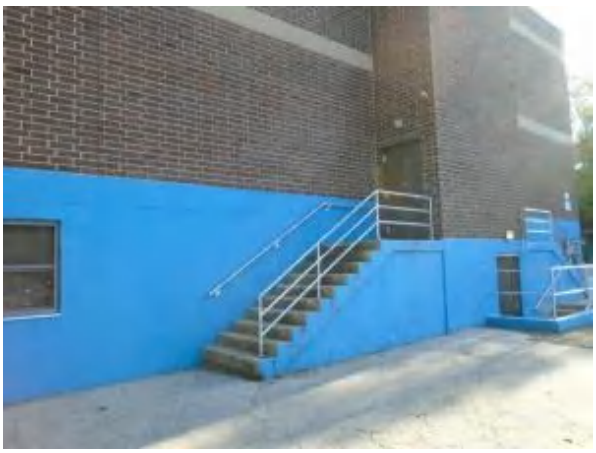
Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D1010 Elevators and Lifts	Hydraulic passenger elevators, base unit, standard finish, 1500 lb, 100 fpm, 2 stop	1.00	Ea.	Frist Floor	Schindler Elevator Corporation				35	1992	2027	$61,999.00	$68,198.90
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler room					30	1986	2047	$75,956.00	$167,103.20
D3040 Distribution Systems	Air-handling unit, built-up, horizontal/vertical, constant volume, single zone, 16,500 CFM, with cooling/heating coil section, filters, mixing box	1.00	Ea.	Fan room	Johnson Controls	XTI-054X066-EAJ017A	CEVM XT0070		25	2009	2034	$44,193.60	$48,612.96
D3040 Distribution Systems	Air-handling unit, built-up, horizontal/vertical, constant volume, single zone, 27,000 CFM, with cooling/heating coil section, filters, mixing box	1.00	Ea.	Fan room	York	XTI-060X102-EALA017A	CEVM XT0069		25	2009	2034	$70,587.00	$77,645.70
D5010 Electrical Service/Distribution	Switchboards, no main disconnect, 4 wire, 120/208 V, 1000 amp, incl CT compartment, excl CT's or PT's	1.00	Ea.	Basement	Eaton/Cutler-Hammer	Pow-R-Line C			30	2009	2039	$8,973.45	$9,870.80
												Total:	**$371,431.56**

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):	48,882
Year Built:	1971
Last Renovation:	2008
Replacement Value:	$24,416,555
Repair Cost:	$1,881,738.85
Total FCI:	7.71 %
Total RSLI:	66.17 %



Description:

Facility Assessment

October 8th, 2015

School District of Philadelphia
Penrose Elementary School
2515 S 78th Street
Philadelphia, PA 19153

48,882 SF / 716 Students / LN 01

GENERAL

Mr. Dave Loftus, Facility Area Coordinator provided input to the Parsons Assessment team on current problems mainly in the mechanical systems, and Mr. James Pizzo Building Engineer accompanied us on our tour of the school and provided us with detailed information on the building systems and maintenance history.

The 3 story, 48,882 square foot building was originally constructed in 1971 with an addition of gym, cafeteria, and offices built in 2008. The building has a partial basement level and is part of a complex that also includes the Penrose LSH and Motivation HS (TB Read).

STRUCTURAL / EXTERIOR CLOSURE

The building typically rests on concrete foundations and bearing walls that are showing slight signs of settlement damage. The main structure typically consists of cast-in-place concrete columns, beams, and one way ribbed slab. The main roof structure consists of concrete one-way slab supported by main structural frame with gym roof structure of steel truss. Main roofing is built up application in good condition. The building envelope is typically masonry and concrete with face brick in good condition with some interior cracks in masonry that appear to be caused by settling. The Penrose windows were replaced with the addition and are extruded aluminum, single-hung dual pane tilt out windows with insect/security screens. All windows are in good condition. Exterior doors are hollow metal in good condition. The building is accessible per ADA requirements from the front entrance to both the first floor and basement area.

Partition walls are painted CMU block in good condition with glazed curtain wall in new cafeteria. CMU walls have cracks developing on both ends of building prior to the stairway that appear to be settlement related. Interior doors are generally hollow metal frame with solid core wood doors with lites in good condition. Doors leading to exit stairways are hollow metal frame and doors in good condition. Most interior doors have lever type handles. Fittings include: toilet accessories in good condition; composite plastic toilet partitions in good condition; fixed metal lockers in fair condition; and handrails and ornamental metals, generally in good condition. Toilet partitions and accessories in the original building are not ADA accessible. Interior identifying signage is plastic panels with brail in good condition. Stair construction is generally concrete in steel with cast iron nosing in poor condition with spalling and detachment of nosing causing a trip hazard. Stair railings are floor and wall mounted metal railing in fair condition.

The interior wall finishes include: painted CMU throughout in good condition. Paint is in good condition. Flooring finishes includes bare concrete in basement service areas in good condition; carpet in IMC in poor condition and beyond service life; tile in toilets and showers in poor to good condition with tile flooring in original building boy's toilets damaged and not sloping toward floor drain; and vinyl in all other areas in fair to good condition. Ceiling finishes include suspended acoustic tile system in corridors in poor condition, beyond service life and failing and in addition cafeteria and offices in very good condition. All other areas are painted structural concrete ceilings in good condition with painted steel structure ceiling in gym in very good condition.

The building has no elevator.

Commercial and Institutional equipment includes: gym equipment in very good condition. Other equipment includes: food service equipment in very good condition.

Fixed furnishings include: fixed casework in classrooms, corridors and library, generally in fair to good condition; and foldable gym bleacher seating for 440 in very good condition.

MECHANICAL SYSTEMS

Toilet room plumbing fixtures in the main building include porcelain wall-mounted water closets and urinals and cast iron lavatories. Flush valves are installed in pipe chases. Faucets are separate hot and cold with momentary action valves. The original kitchen only has one lavatory. The new kitchen has all stainless steel commercial fixtures including a triple basin wash sink with grease trap, a single basin prewash sink with disposal, a single basin cook sink, and a lavatory. The cook sink faucet is missing the spout and the faucet should be replaced. There are two life skills rooms in the original part with residential kitchen sinks installed recently when the rooms were converted to life skills. Service sinks are installed in cleaning closets. They are enameled cast iron and stainless steel rim with mixing hot and cold faucets with vacuum breakers. The life skills rooms have plumbing connections for clothes washers with combination shut-off valves for the hot and cold water supply. The new gym has shower rooms for the boys and girls and a single shower for the gym teacher. Showers are unused presently and some of the faucets drip which should be remedied by routine maintenance. Drinking fountains are located in hallways and in the gym. They are accessible type with integral coolers. One of them is damaged and needs replacement. Otherwise, plumbing fixtures are in good condition and can be expected to last 10 more years.

Water supply enters the building in the original construction and also separately in the gym addition. The original entry is in the basement through a 4 inch line with compound meter with 2 inch bypass, Y-strainer, reduced pressure backflow preventer without bypass, and pressure reducing valve. Domestic water distribution pipe is soldered copper, likely original in both parts. Fixtures flow well and visible areas of pipe showed no cause for concern. Water entry and distribution piping should be serviceable for 10 more years. There is an electric water heater with inoperative circulation pump due to a bad coupler. The pump should be repaired or replaced. A thermal expansion tank should be added as well. The gym addition also has a 4 inch water supply with compound meter with bypass and reduced pressure backflow preventer with strainer and 2 inch bypass also with backflow preventer. There are 3 Paloma tankless, natural gas, direct vent, water heaters for the gym building. They were installed in 2009 when the gym was built and have an expansion tank. The heaters are in excellent visual condition and should last 10 more years.

Sanitary drain pipes in the original building are hub and spigot cast iron. The only problem reported with them is that the toilet room floors do not slope toward the floor drains. The pipes are original to the building and based on their age they should be inspected for internal problems and repaired as needed. The gym addition has underground sanitary drain pipes that were not visible during the inspection, but are 7 years old and should have over 20 years of service life remaining.

Rain water drain pipes are hub and spigot cast iron pipe with cast iron roof drains and strainers. There are no overflow drains. Drain pipes run inside the building and connect to the sanitary drain pipes before leaving the building. Outdoor stairwell drains are not clogged. Gym roof drains lead from gutters to ground level through sheet metal downspouts and then underground. The only problem with rain water drainage is that surface flows near the interior corner of the building head straight toward the door and enter the building. This is best remedied by modifying the landscaping to include an earthen berm in the path of the water to direct it toward an existing outdoor drain and away from the doorway.

The building does not have boilers. There is no fuel oil supply. There are 2 natural gas services for the building. There is a 4 inch supply in the basement with a gas booster that serves the four roof top units for the original construction. In the gym there is a 4 inch gas service without booster for the two roof top units, the kitchen, and the water heaters.

The building does not have chillers or cooling towers. The roof top combination units provide cooling for the entire building.

There are three rooftop exhaust fans: Penn Barry power ventilators with ½ HP motors. They were manufactured in 2012 and are in excellent condition and expected to last 16 more years. Toilet exhausts for the first and second floor boys' rooms are inadequate due to floor drainage problems, so larger fans should be installed. The original kitchen which is no longer used still has the electric convection and there is no exhaust hood nor was one needed. The new kitchen includes a gas burning range and convection oven located under an exhaust hood with fire suppression system, all installed in 2009. The equipment is in good condition and will not need replacement sooner than 5 years. Ventilation throughout the building is accomplished by ducts to each classroom with supply grilles on the walls and returns in drop ceilings forming plenum spaces.

Heating, cooling, and ventilating is provided by 6 rooftop combination units: 4 for the original building and 2 for the gym. The original building has Carrier model 48MA Combination Multizone Heating/Cooling Units manufactured in 1997 with 12 zone modules, air cooled condensers, dual compressors, 486 MBH heat, and 30 or 37 ton cooling capacity. Total cooling capacity is 134 tons. Total heat capacity is 1,944 MBH. Heating and cooling capacities are well matched to the building floor area. Some units have had compressors replaced (based on paint color mismatch). One unit had ice buildup on a compressor. This is typically caused by dirt buildup on the evaporator coils and indicated the units should be cleaned thoroughly. With routine maintenance these units will not need replacement for 5 - 10 years. The gym rooftop units are annexAir brand, but models and capacities were not obtained due to lack of roof access during the inspection. One was observed from the roof of the main building and it is in very good having been installed in 2009. These units have 10 year life expectancy remaining. Additional terminal units include a minisplit air conditioner for a network equipment room and a window unit air conditioner for the small basement gym now serving as a weight room. There are electric heat units for stairwells, but these are not used because they make the spaces too hot.

Controls are low voltage electric. Each classroom has its own thermostat. Most are replacement pieces of unknown age but a few original thermostats remain. The controls are working well and with routine maintenance will continue to do so for 10-15 years.

The original building does not have stand pipes or sprinklers. The gym addition has a fire sprinkler system with 6 inch water supply. It does not have a fire pump. A sprinkler system should be installed in the original construction to increase occupant safety, including a fire pump if needed.

ELECTRICAL SYSTEMS

This school is composed of the 1971 Building and the 2009 addition, each building is provided with a separate electrical service.A 1000KVA, 480/277V unit substation serves the 1971 Building. The unit substation is manufactured by United Electric Products and is original installation and is expected to provide 10 more years of useful service life. The unit substation and the utility metering PECO 01 017457200 are located in the basement. An Eaton/Cutler-Hammer 2000A, 120/208V service entrance switchboard serves the 2009 addition. The service entrance switchboard was installed in 2009 and is expected to provide 30 more years of useful service life. Service entrance switchboard is located in the first floor electrical room.

There are 120/208V panel-boards in each floor for lighting and receptacles. There are approximately 6 panelboards that are part of the original installation that need to be replaced. Newer panelboards were installed in 2009 and are expected to provide 30 more years of useful service life. The raceway is mainly conduits run above the ceiling.

The number of receptacles in the classrooms are adequate. The teacher's whiteboard wall has been provided with double

compartment surface raceways with receptacles spaced 36” on center.

The 1971 Building is mainly classrooms which are illuminated with surface mounted fluorescent fixtures with T-8 lamps.

The addition is composed of cafeteria and gymnasium. The gymnasium is illuminated with HID pendant mounted lighting fixtures and the cafeteria is illuminated with 2’x4’, recessed fluorescent fixtures with T-8 lamps.

The 1971 building and the addition are provided General Electric EST Quick Start fire alarm system. The fire alarm system was installed in 2009 and is expected to provide 10 more years of useful service life. Fire alarm system is tested every day in the morning.

The present telephone system is adequate. During the assessment, randomly we verified that the wall mounted handsets are provided with dial tone.

An independent and separate PA system does not exist. School uses the telephone systems for public announcement. This system is working adequately for most part.

There is not clock system in this school. Each classrooms is provided with stand-alone battery operated clock. Provide a wireless, synchronized clock system battery operated.

There is not television system.

The security system consists of indoor surveillance CCTV cameras. Security system was installed in 2009 and is expected to provide 10 more years of useful service life.

The school is not provided with emergency power system. A 100KW outdoor diesel generator is required to cover the emergency power requirements of the 1971 building and the addition.

There is adequate UPS in the IT room.

The emergency lighting is obtained with wall mounted emergency fixtures with battery backup. Emergency lighting fixtures are located in each corridor, stairways, gymnasium and cafeteria

The 1971 building is not provided with lightning protection system. A study needs to be conducted to determine if lightning protection system is required in this building. The addition is provided with lightning protection system.

This school is not provided with an auditorium.

GROUNDS SYSTEMS

The site is inclusive of the Penrose school building and addition, Penrose LSH, and the Motivation H.S. (TB Read) buildings and all surrounding parking and yard areas. Roadway to parking area is asphalt paving in good condition and accessible via S. 77th St. Play yard areas and parking areas on site are all asphalt paving in good condition. Pedestrian walkways are all concrete paving in fair condition with some various spots of spalling and cracked concrete. Chain link and metal fencing and gates surrounding site is generally in good condition with exception of fence on west side of site that is in poor condition and not adequate for safety and security. Fixed wood and metal benches in entry yard area are in good condition. Landscaping throughout site includes new and mature trees and bushes and grass areas generally in good condition. A small landscaped area near the northwest door of the transition hallway between Penrose and the gym addition has poor water retention and causes water and mud intrusion during rain events.

Accessibility: the building does have an accessible entrance and accessible routes on the ground level and basement level. Toilets in the addition are equipped with accessible fixtures, partitions and accessories, such as grab bars and accessible partitions. Most of the doors in the building have lever type door handles.

The exterior of the school is illuminated with wall mounted HID fixtures, the parking lot is illuminated with pole mounted lighting fixtures. Trees surrounding the parking lot block the lighting fixtures creating dark areas. Provide pole mounted floodlights for a safer environment.

The outdoor security system is accomplished with outdoor surveillance CCTV cameras around the building perimeter. The parking lot is

not provided with outdoor surveillance cameras. Provide pole mounted surveillance CCTV cameras at the parking lot.

Outdoor loud speakers are provided facing the playground area.

RECOMMENDATIONS

- Repair CMU exterior and partition walls – structural cracks developing
- Replace toilet partitions for accessibility
- Repair stair tread and nosing – damaged and hazard to safety
- Replace carpet – beyond service life
- Repair and retile toilet floors – not sloped to drain
- Replace suspended acoustic tile ceiling system – beyond service life (corridors)
- Add elevator for accessibility
- Replace concrete paving – damaged (10% of site concrete paving area)
- Replace fence on west side of site
- Install retention wall for storm water diversion
- Replace broken faucet in kitchen
- Replace damaged water fountain
- Repair or replace domestic hot water circulation pump
- Install domestic hot water thermal expansion tank
- Inspect sanitary drain pipes due to age
- Upgrade boys' toilet exhaust fans
- Install fire protection sprinkler system in original construction, 41,000 s.f.
- Replace (6) 120/208V panelboards
- Provide wireless, synchronized, battery operated clock system. Approximate 50
- Provide an outdoor diesel powered generator. Approximate 100KW
- Prepare a study to determine if lightning protection system is required in the 1971 building.
- Provide pole mounted floodlights for a safer environment. Approximate 6
- Provide pole mounted outdoor surveillance CCTV cameras at the parking lot. Approximate 6

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B144001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S144001		

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	56.00 %	0.00 %	$0.00
A20 - Basement Construction	56.00 %	0.00 %	$0.00
B10 - Superstructure	56.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	63.95 %	0.19 %	$5,324.60
B30 - Roofing	70.00 %	0.00 %	$0.00
C10 - Interior Construction	57.08 %	0.65 %	$7,822.84
C20 - Stairs	56.00 %	37.49 %	$25,842.44
C30 - Interior Finishes	78.38 %	3.10 %	$76,158.03
D10 - Conveying	105.71 %	286.03 %	$497,751.74
D20 - Plumbing	36.41 %	15.77 %	$157,382.11
D30 - HVAC	81.34 %	1.19 %	$53,942.64
D40 - Fire Protection	72.47 %	148.87 %	$586,521.87
D50 - Electrical	61.98 %	16.39 %	$470,992.58
E10 - Equipment	80.00 %	0.00 %	$0.00
E20 - Furnishings	82.50 %	0.00 %	$0.00
Totals:	**66.17 %**	**7.71 %**	**$1,881,738.85**

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 thesystem 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 $
A1010	Standard Foundations	$18.40	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$899,429
A1030	Slab on Grade	$7.73	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$377,858
A2010	Basement Excavation	$6.55	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$320,177
A2020	Basement Walls	$12.70	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$620,801
B1010	Floor Construction	$75.10	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$3,671,038
B1020	Roof Construction	$13.88	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$678,482
B2010	Exterior Walls	$36.91	S.F.	48,882	100	1971	2071		56.00 %	0.30 %	56		$5,324.60	$1,804,235
B2020	Exterior Windows	$18.01	S.F.	48,882	40	2008	2048		82.50 %	0.00 %	33			$880,365
B2030	Exterior Doors	$1.45	S.F.	48,882	25	1999	2024		36.00 %	0.00 %	9			$70,879
B3010105	Built-Up	$37.76	S.F.	40,122	20	2009	2029		70.00 %	0.00 %	14			$1,515,007
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		25				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	48,882	20	2009	2029		70.00 %	0.00 %	14			$2,933
C1010	Partitions	$17.91	S.F.	48,882	100	1971	2071		56.00 %	0.00 %	56			$875,477
C1020	Interior Doors	$3.51	S.F.	48,882	40	1999	2039		60.00 %	0.00 %	24			$171,576
C1030	Fittings	$3.12	S.F.	48,882	40	1999	2039		60.00 %	5.13 %	24		$7,822.84	$152,512
C2010	Stair Construction	$1.41	S.F.	48,882	100	1971	2071		56.00 %	37.49 %	56		$25,842.44	$68,924

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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	$16.81	S.F.	48,882	10	2011	2021		60.00 %	0.00 %	6			$821,706
C3010231	Vinyl Wall Covering	$0.00	S.F.	48,882	15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$0.00	S.F.	48,882	30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.	978	10	1999	2009	2027	120.00 %	153.31 %	12		$10,944.59	$7,139
C3020412	Terrazzo & Tile	$75.52	S.F.	1,955	50	1971	2021		12.00 %	23.74 %	6		$35,048.58	$147,642
C3020413	Vinyl Flooring	$9.68	S.F.	41,550	20	2008	2028		65.00 %	0.00 %	13			$402,204
C3020414	Wood Flooring	$22.27	S.F.	2,444	25	2008	2033		72.00 %	0.00 %	18			$54,428
C3020415	Concrete Floor Finishes	$0.97	S.F.	1,955	50	1999	2049		68.00 %	0.00 %	34			$1,896
C3030	Ceiling Finishes	$20.97	S.F.	48,882	25	1971	1996	2042	108.00 %	2.94 %	27		$30,164.86	$1,025,056
D1010	Elevators and Lifts	$3.56	S.F.	48,882	35			2052	105.71 %	286.03 %	37		$497,751.74	$174,020
D2010	Plumbing Fixtures	$13.52	S.F.	48,882	35	1971	2006	2025	28.57 %	1.19 %	10		$7,886.05	$660,885
D2020	Domestic Water Distribution	$1.68	S.F.	48,882	25	1971	1996	2025	40.00 %	38.45 %	10		$31,575.62	$82,122
D2030	Sanitary Waste	$2.90	S.F.	48,882	25	1971	1996	2030	60.00 %	83.18 %	15		$117,920.44	$141,758
D2040	Rain Water Drainage	$2.32	S.F.	48,882	30	1971	2001	2030	50.00 %	0.00 %	15			$113,406
D3020	Heat Generating Systems	$18.67	S.F.		0				0.00 %	0.00 %				$0
D3030	Cooling Generating Systems	$24.48	S.F.		0				0.00 %	0.00 %				$0
D3040	Distribution Systems	$67.47	S.F.	48,882	25	2012	2037		88.00 %	1.64 %	22		$53,942.64	$3,298,069
D3050	Terminal & Package Units	$11.60	S.F.	48,882	20	1997	2017	2025	50.00 %	0.00 %	10			$567,031
D3060	Controls & Instrumentation	$13.50	S.F.	48,882	20	1971	1991	2030	75.00 %	0.00 %	15			$659,907
D4010	Sprinklers	$7.05	S.F.	48,882	35	2009	2044		82.86 %	170.19 %	29		$586,521.87	$344,618
D4020	Standpipes	$1.01	S.F.	48,882	35				0.00 %	0.00 %				$49,371
D5010	Electrical Service/Distribution	$9.70	S.F.	48,882	30	1971	2001	2025	33.33 %	25.74 %	10		$122,065.73	$474,155
D5020	Lighting and Branch Wiring	$34.68	S.F.	48,882	20	2009	2029		70.00 %	0.00 %	14			$1,695,228
D5030	Communications and Security	$12.99	S.F.	48,882	15	2009	2024		60.00 %	17.73 %	9		$112,560.22	$634,977
D5090	Other Electrical Systems	$1.41	S.F.	48,882	30	2009	2039		80.00 %	342.94 %	24		$236,366.63	$68,924
E1020	Institutional Equipment	$4.82	S.F.	48,882	35	2008	2043		80.00 %	0.00 %	28			$235,611
E1090	Other Equipment	$11.10	S.F.	48,882	35	2008	2043		80.00 %	0.00 %	28			$542,590
E2010	Fixed Furnishings	$2.13	S.F.	48,882	40	2008	2048		82.50 %	0.00 %	33			$104,119
								Total	**66.17 %**	**7.71 %**			**$1,881,738.85**	**$24,416,555**

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: 100% - Paint & Covering

System: C3020 - Floor Finishes — This system contains no images

Note: 2% - Carpet
4% - Terrazzo & Tile (ceramic)
85% - Vinyl Flooring
5% - Wood Flooring
4% - Concrete Floor Finishes

System: D5010 - Electrical Service/Distribution



Note: Cutler-Hammer step down transformer 75KVA and 45KVA, 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:	**$1,881,739**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,273,198**	**$0**	**$0**	**$1,013,081**	**$2,637,586**	**$6,805,604**
*** 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	$5,325	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,325**
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	$101,729	$0	**$101,729**
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	$0	$0	**$0**
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	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

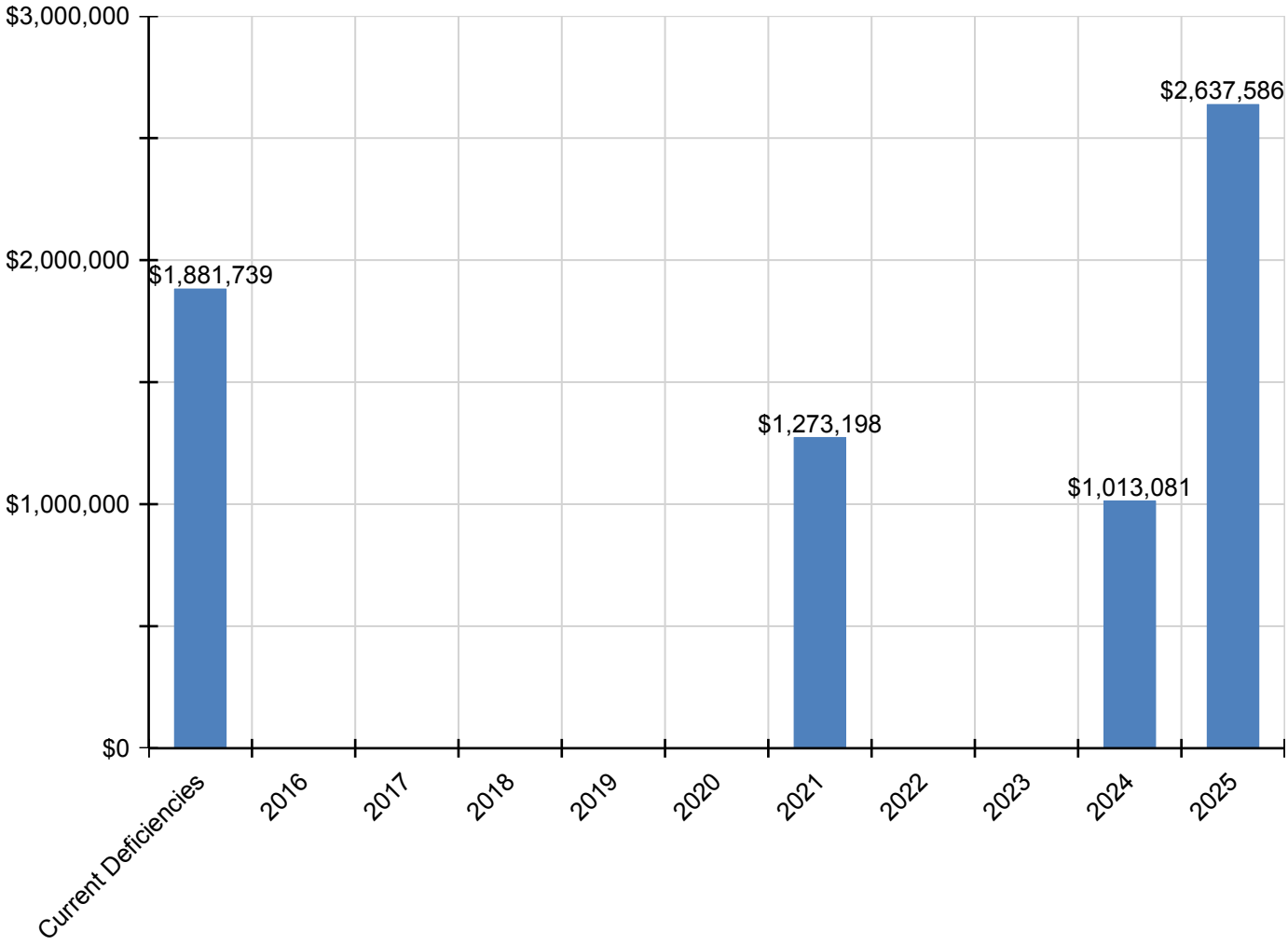
C1020 - Interior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1030 - Fittings	$7,823	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$7,823**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$25,842	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$25,842**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$1,079,276	$0	$0	$0	$0	**$1,079,276**
C3010231 - Vinyl Wall Covering	$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**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$10,945	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$10,945**
C3020412 - Terrazzo & Tile	$35,049	$0	$0	$0	$0	$0	$193,921	$0	$0	$0	$0	**$228,970**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$30,165	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$30,165**
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	$497,752	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$497,752**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$7,886	$0	$0	$0	$0	$0	$0	$0	$0	$0	$976,991	**$984,877**
D2020 - Domestic Water Distribution	$31,576	$0	$0	$0	$0	$0	$0	$0	$0	$0	$121,401	**$152,977**
D2030 - Sanitary Waste	$117,920	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$117,920**
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**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$53,943	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$53,943**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$838,246	**$838,246**
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	$586,522	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$586,522**
D4020 - Standpipes	$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	$122,066	$0	$0	$0	$0	$0	$0	$0	$0	$0	$700,948	**$823,014**
D5020 - Lighting and Branch Wiring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5030 - Communications and Security	$112,560	$0	$0	$0	$0	$0	$0	$0	$0	$911,351	$0	**$1,023,912**
D5090 - Other Electrical Systems	$236,367	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$236,367**
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 Sustainment Requirement

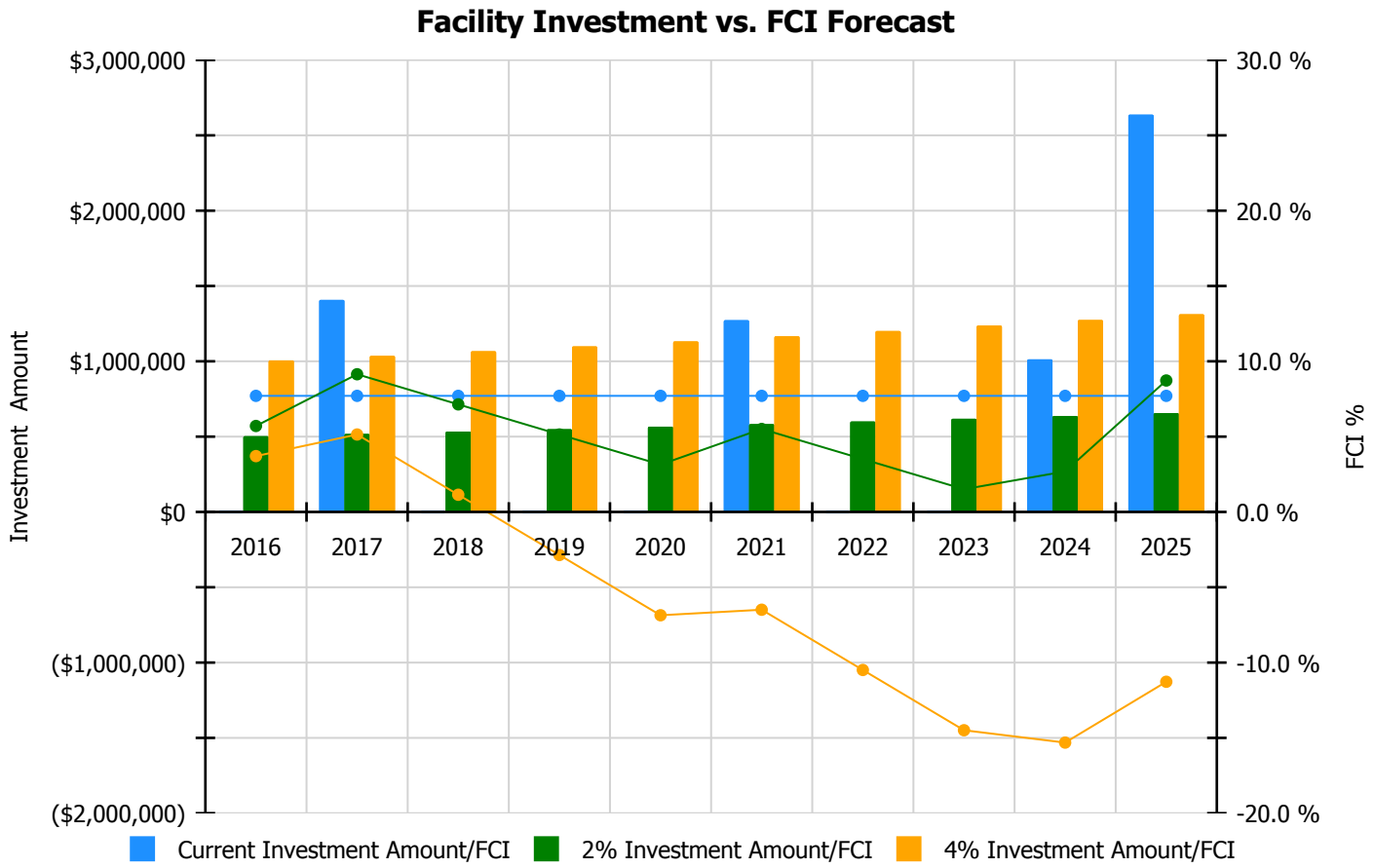
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

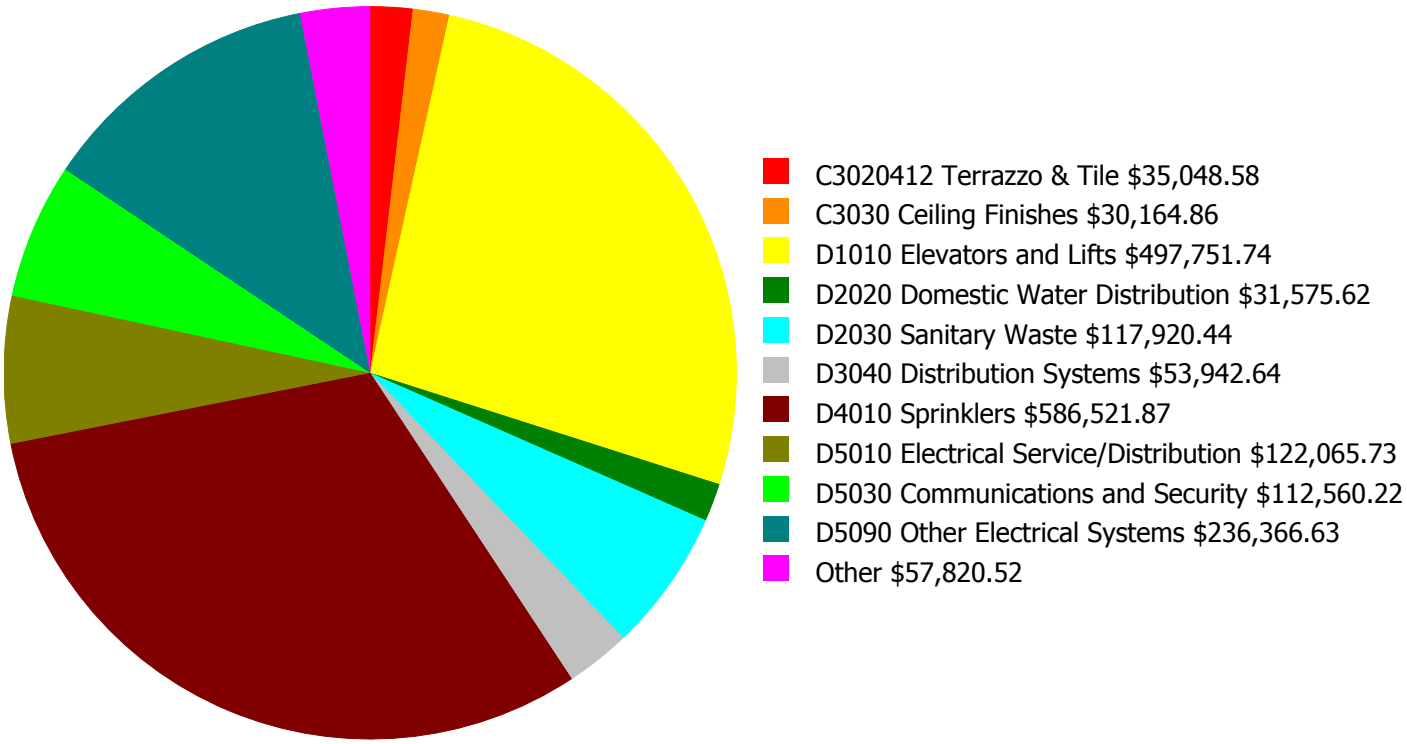
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 7.71%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$502,981.00	5.71 %	$1,005,962.00	3.71 %
2017	$1,407,640	$518,070.00	9.14 %	$1,036,141.00	5.14 %
2018	$0	$533,613.00	7.14 %	$1,067,225.00	1.14 %
2019	$0	$549,621.00	5.14 %	$1,099,242.00	-2.86 %
2020	$0	$566,110.00	3.14 %	$1,132,219.00	-6.86 %
2021	$1,273,198	$583,093.00	5.51 %	$1,166,186.00	-6.49 %
2022	$0	$600,586.00	3.51 %	$1,201,171.00	-10.49 %
2023	$0	$618,603.00	1.51 %	$1,237,206.00	-14.49 %
2024	$1,013,081	$637,161.00	2.69 %	$1,274,323.00	-15.31 %
2025	$2,637,586	$656,276.00	8.73 %	$1,312,552.00	-11.27 %
Total:	**$6,331,505**	**$5,766,114.00**		**$11,532,227.00**	

Deficiency Summary by System

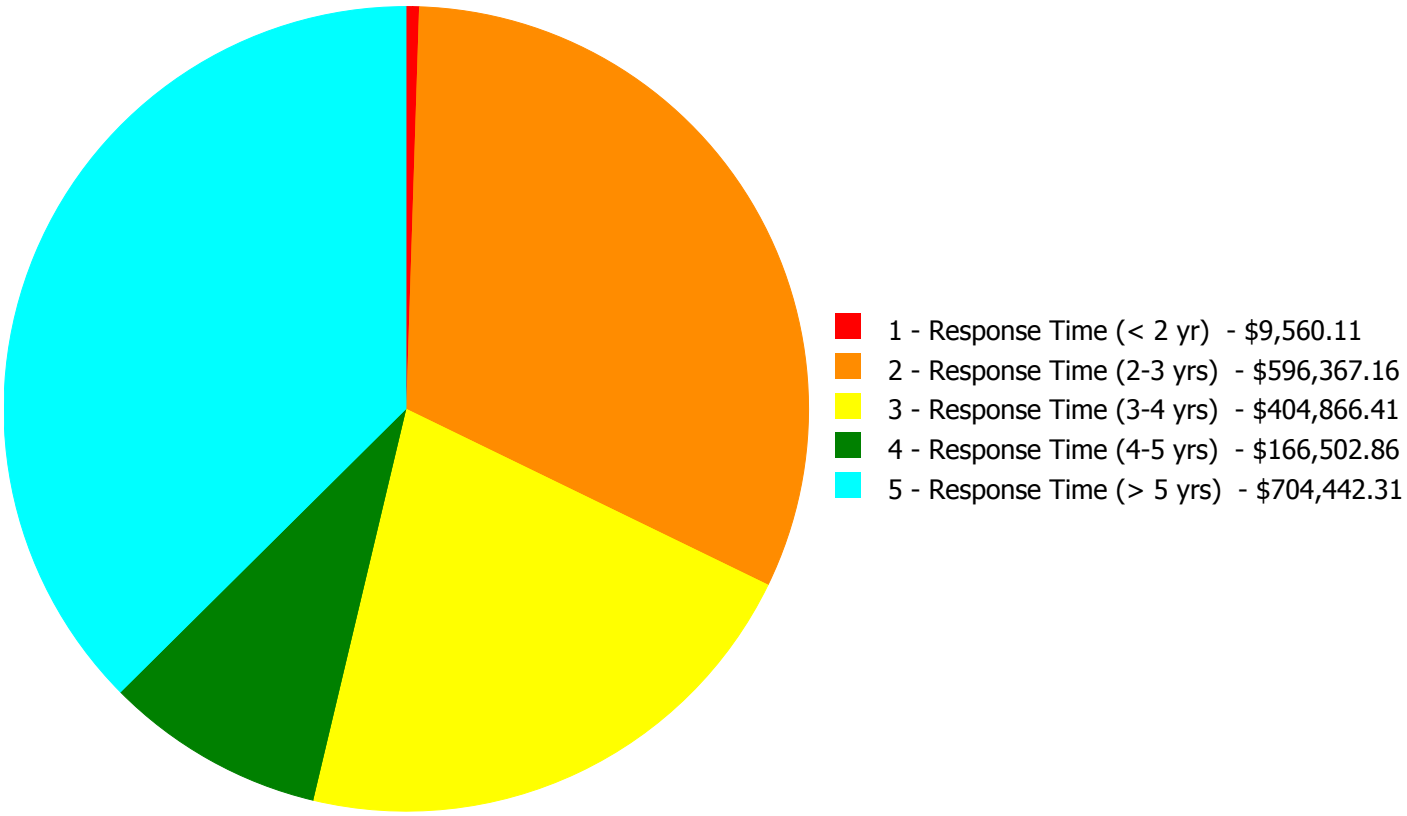
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $1,881,738.85

Deficiency Summary by Priority

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



Budget Estimate Total: $1,881,738.85

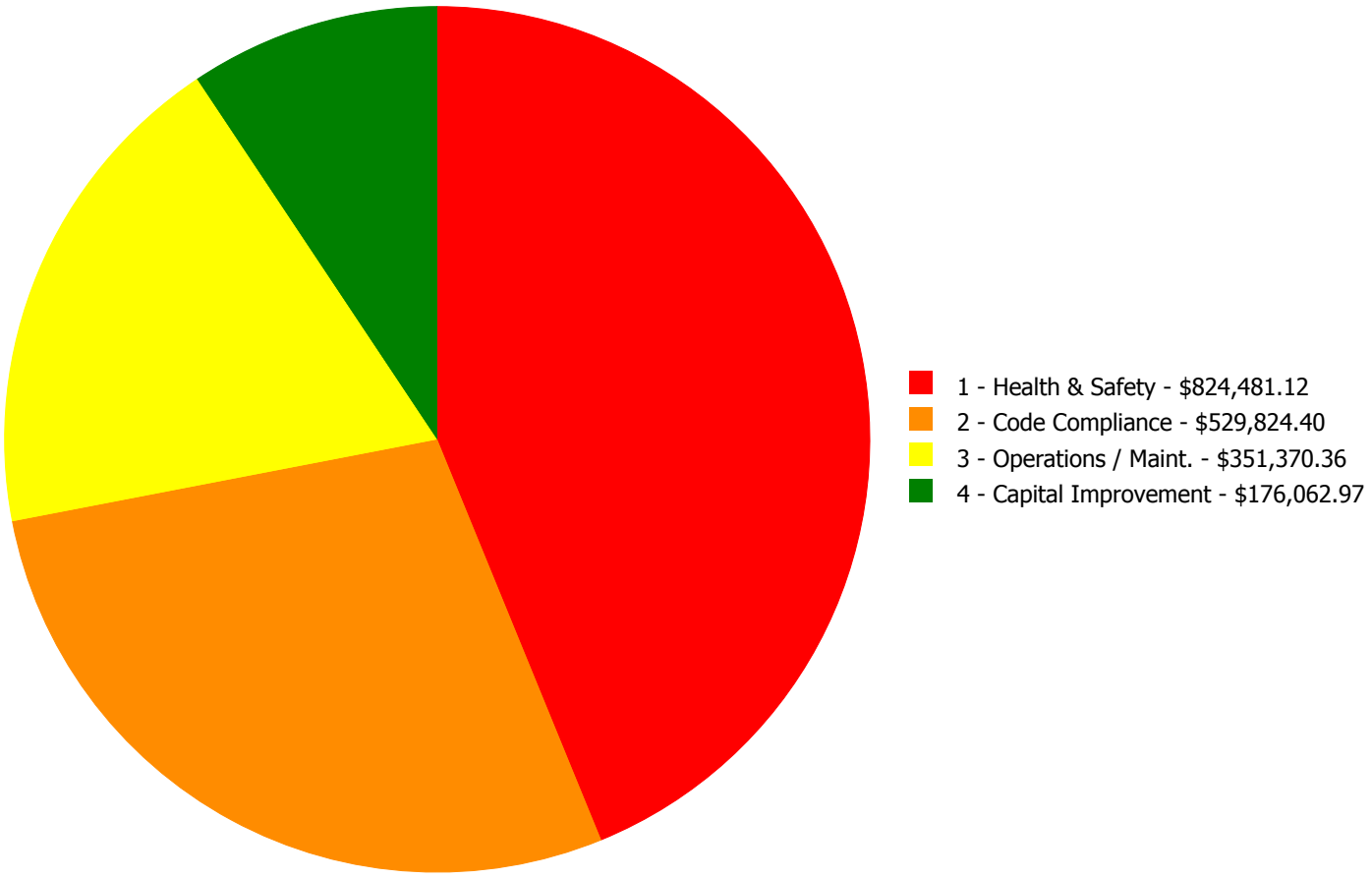
Deficiency By Priority Investment Table

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
B2010	Exterior Walls	$0.00	$0.00	$5,324.60	$0.00	$0.00	$5,324.60
C1030	Fittings	$0.00	$7,822.84	$0.00	$0.00	$0.00	$7,822.84
C2010	Stair Construction	$0.00	$25,842.44	$0.00	$0.00	$0.00	$25,842.44
C3020411	Carpet	$0.00	$0.00	$10,944.59	$0.00	$0.00	$10,944.59
C3020412	Terrazzo & Tile	$0.00	$35,048.58	$0.00	$0.00	$0.00	$35,048.58
C3030	Ceiling Finishes	$0.00	$0.00	$30,164.86	$0.00	$0.00	$30,164.86
D1010	Elevators and Lifts	$0.00	$497,751.74	$0.00	$0.00	$0.00	$497,751.74
D2010	Plumbing Fixtures	$0.00	$7,886.05	$0.00	$0.00	$0.00	$7,886.05
D2020	Domestic Water Distribution	$9,560.11	$22,015.51	$0.00	$0.00	$0.00	$31,575.62
D2030	Sanitary Waste	$0.00	$0.00	$0.00	$0.00	$117,920.44	$117,920.44
D3040	Distribution Systems	$0.00	$0.00	$0.00	$53,942.64	$0.00	$53,942.64
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$586,521.87	$586,521.87
D5010	Electrical Service/Distribution	$0.00	$0.00	$122,065.73	$0.00	$0.00	$122,065.73
D5030	Communications and Security	$0.00	$0.00	$0.00	$112,560.22	$0.00	$112,560.22
D5090	Other Electrical Systems	$0.00	$0.00	$236,366.63	$0.00	$0.00	$236,366.63
	Total:	$9,560.11	$596,367.16	$404,866.41	$166,502.86	$704,442.31	$1,881,738.85

Deficiency Summary by Category

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



Budget Estimate Total: $1,881,738.85

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: D2020 - Domestic Water Distribution

Location: Basement

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 1 - Response Time (< 2 yr)

Correction: Provide expansion tank for water heater.

Qty: 1.00

Unit of Measure: Ea.

Estimate: $9,560.11

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Install domestic hot water thermal expansion tank

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

System: C1030 - Fittings

Location: Toilets

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Remove and replace damaged toilet paritions - handicap units

Qty: 8.00

Unit of Measure: Ea.

Estimate: $7,822.84

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Replace toilet partitions for accessibility

System: C2010 - Stair Construction

Location: Stairs

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Regrout joints between stone treads and risers - LF of grout

Qty: 120.00

Unit of Measure: L.F.

Estimate: $25,842.44

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Repair stair tread and nosing – damaged and hazard to safety

System: C3020412 - Terrazzo & Tile

Location: Toilets

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace and re-grout floor tile

Qty: 977.00

Unit of Measure: S.F.

Estimate: $35,048.58

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Repair and retile toilet floors – not sloped to drain

System: D1010 - Elevators and Lifts

Location: TBD

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Add interior hydraulic elevator - 3 floors - adjust the electrical run lengths to hook up the elevator

Qty: 1.00

Unit of Measure: Ea.

Estimate: $497,751.74

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Add elevator for accessibility

System: D2010 - Plumbing Fixtures

Location: Corridor

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and Replace Water Fountains - without ADA new recessed alcove

Qty: 1.00

Unit of Measure: Ea.

Estimate: $7,579.19

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Replace damaged water fountain

System: D2010 - Plumbing Fixtures

Location: Kitchen

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace lavatory faucet

Qty: 1.00

Unit of Measure: Ea.

Estimate: $306.86

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Replace broken faucet in kitchen

System: D2020 - Domestic Water Distribution

Location: Basement

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $22,015.51

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Repair or replace domestic hot water circulation pump

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

System: B2010 - Exterior Walls

Location: East and south ends

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

Qty: 80.00

Unit of Measure: S.F.

Estimate: $5,324.60

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Repair CMU exterior and partition walls – structural cracks developing

System: C3020411 - Carpet

Location: Stairs

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace carpet

Qty: 978.00

Unit of Measure: S.F.

Estimate: $10,944.59

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Replace carpet – beyond service life

System: C3030 - Ceiling Finishes

Location: Corridors

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: 2,000.00

Unit of Measure: S.F.

Estimate: $30,164.86

Assessor Name: Craig Anding

Date Created: 11/17/2015

Notes: Replace suspended acoustic tile ceiling system – beyond service life (corridors)

System: D5010 - Electrical Service/Distribution

Location: Entire Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Electrical Distribution System (U)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $122,065.73

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Replace (6) 120/208V panelboards

System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: Outdoor
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $212,116.81
Assessor Name: Craig Anding
Date Created: 12/30/2015

Notes: Provide an outdoor diesel powered generator. Approximate 100KW

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: Craig Anding
Date Created: 12/30/2015

Notes: Prepare a study to determine if lightning protection system is required in the 1971 building.

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

System: D3040 - Distribution Systems

Location: Boys' toilets

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Provide inline centrifugal fan and wall outlet louver for restroom exhaust (8 plbg fixtures)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $53,942.64

Assessor Name: Craig Anding

Date Created: 01/15/2016

Notes: Upgrade boys' toilet exhaust fans

System: D5030 - Communications and Security

Location: Entire Building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add/Replace Clock System or Components

Qty: 50.00

Unit of Measure: Ea.

Estimate: $112,560.22

Assessor Name: Craig Anding

Date Created: 12/30/2015

Notes: Provide wireless, synchronized, battery operated clock system. Approximate 50

Priority 5 - Response Time (> 5 yrs):

System: D2030 - Sanitary Waste

Location: Original building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Inspect sanitary waste piping and replace damaged sections. (+50KSF)

Qty: 41,000.00

Unit of Measure: S.F.

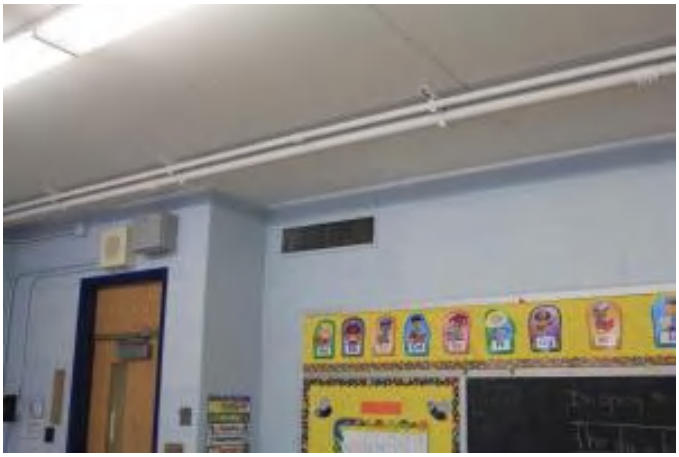
Estimate: $117,920.44

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Inspect sanitary drain pipes due to age

System: D4010 - Sprinklers



Location: Original building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 41,000.00

Unit of Measure: S.F.

Estimate: $586,521.87

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Install fire protection sprinkler system in original construction

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
D3050 Terminal & Package Units	Rooftop air conditioner, multizone, electric cool, gas heat SEER 14, 30 ton cooling, 450 MBH heating, includes, standard controls, curb and economizer	2.00	Ea.	Rooftop	Carrier	48MA-034	3297F85880		20	1997	2025	$167,772.00	$369,098.40
D3050 Terminal & Package Units	Rooftop air conditioner, multizone, electric cool, gas heat SEER 14, 30 ton cooling, 450 MBH heating, includes, standard controls, curb and economizer	2.00	Ea.	Rooftop	Carrier	48MA-034	3297F85881		20	1997	2025	$167,772.00	$369,098.40
D3050 Terminal & Package Units	Rooftop air conditioner, multizone, electric cool, gas heat, 40 ton cooling, 540 MBH heating, includes, standard controls, curb and economizer	2.00	Ea.	Rooftop	Carrier	48MA-040	0597F50496		20	1997	2025	$147,823.50	$325,211.70
D3050 Terminal & Package Units	Rooftop air conditioner, multizone, electric cool, gas heat, 40 ton cooling, 540 MBH heating, includes, standard controls, curb and economizer	2.00	Ea.	Rooftop	Carrier	48MA-040	0597F50497		20	1997	2025	$147,823.50	$325,211.70
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 300 kVA & below, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	1.00	Ea.	Basement electrical room					30	1971	2025	$42,600.60	$46,860.66
D5010 Electrical Service/Distribution	Switchboards, distribution section, aluminum bus bars, 4 W, 120/208 or 277/480 V, 1200 amp, excl breakers	1.00	Ea.	Basement electrical room					30	1971	2025	$6,551.55	$7,206.71
D5010 Electrical Service/Distribution	Switchboards, no main disconnect, 4 wire, 120/208 V, 3000 amp, incl CT compartment, excl CT's or PT's	1.00	Ea.	First floor electrical room					30	2009	2039	$12,792.60	$14,071.86
D5010 Electrical Service/Distribution	Transformer, liquid-filled, 5 kV or 15 kV primary, 277/480 V secondary, 3 phase, 1000 kVA, pad mounted	1.00	Ea.	Basement Electrical room					30	1971	2025	$50,425.20	$55,467.72
												Total:	**$1,512,227.15**

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:	Little School House
Gross Area (SF):	25,158
Year Built:	2000
Last Renovation:	
Replacement Value:	$14,824,649
Repair Cost:	$405,035.23
Total FCI:	2.73 %
Total RSLI:	62.49 %

Description:

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Attributes:

General Attributes:

Active:	Open	Bldg ID:	B144002
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S144001		

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	84.00 %	0.00 %	$0.00
A20 - Basement Construction	84.00 %	0.00 %	$0.00
B10 - Superstructure	84.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	75.25 %	17.87 %	$209,194.28
B30 - Roofing	35.79 %	4.36 %	$43,989.57
C10 - Interior Construction	75.71 %	0.00 %	$0.00
C20 - Stairs	0.00 %	0.00 %	$0.00
C30 - Interior Finishes	51.73 %	0.00 %	$0.00
D20 - Plumbing	54.12 %	1.47 %	$15,041.34
D30 - HVAC	41.69 %	0.00 %	$0.00
D40 - Fire Protection	57.14 %	0.00 %	$0.00
D50 - Electrical	53.68 %	9.25 %	$136,810.04
E10 - Equipment	54.29 %	0.00 %	$0.00
E20 - Furnishings	60.00 %	0.00 %	$0.00
Totals:	**62.49 %**	**2.73 %**	**$405,035.23**

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 thesystem 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 $
A1010	Standard Foundations	$24.32	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$611,843
A1030	Slab on Grade	$15.51	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$390,201
A2010	Basement Excavation	$13.07	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$328,815
A2020	Basement Walls	$23.02	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$579,137
B1010	Floor Construction	$92.20	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$2,319,568
B1020	Roof Construction	$24.11	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$606,559
B2010	Exterior Walls	$31.22	S.F.	25,158	100	1999	2099		84.00 %	0.94 %	84		$7,348.51	$785,433
B2020	Exterior Windows	$13.63	S.F.	25,158	40	1999	2039		60.00 %	58.86 %	24		$201,845.77	$342,904
B2030	Exterior Doors	$1.67	S.F.	25,158	25	1999	2024		36.00 %	0.00 %	9			$42,014
B3010105	Built-Up	$37.76	S.F.		20				0.00 %	0.00 %				$0
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.	1,256	30	1999	2029		46.67 %	0.00 %	14			$68,100
B3010140	Shingle & Tile	$38.73	S.F.	23,859	20	1999	2019	2022	35.00 %	4.76 %	7		$43,989.57	$924,059
B3020	Roof Openings	$0.68	S.F.	25,158	20	1999	2019	2022	35.00 %	0.00 %	7			$17,107
C1010	Partitions	$14.93	S.F.	25,158	100	1999	2099		84.00 %	0.00 %	84			$375,609
C1020	Interior Doors	$3.76	S.F.	25,158	40	1999	2039		60.00 %	0.00 %	24			$94,594
C1030	Fittings	$4.12	S.F.	25,158	40	1999	2039		60.00 %	0.00 %	24			$103,651
C2010	Stair Construction	$1.28	S.F.	25,158	100				0.00 %	0.00 %				$32,202

Site Assessment Report - B144002;Penrose LSH

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	$16.81	S.F.	25,158	10	2011	2021		60.00 %	0.00 %	6			$422,906
C3010231	Vinyl Wall Covering	$0.00	S.F.	25,158	15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$0.00	S.F.	25,158	30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.	503	10	1999	2009	2020	50.00 %	0.00 %	5			$3,672
C3020412	Terrazzo & Tile	$75.52	S.F.	503	50	1999	2049		68.00 %	0.00 %	34			$37,987
C3020413	Vinyl Flooring	$9.68	S.F.	23,649	20	1999	2019	2029	70.00 %	0.00 %	14			$228,922
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	503	50	1999	2049		68.00 %	0.00 %	34			$488
C3030	Ceiling Finishes	$20.97	S.F.	25,158	25	1999	2024		36.00 %	0.00 %	9			$527,563
D2010	Plumbing Fixtures	$31.58	S.F.	25,158	35	2000	2035		57.14 %	1.89 %	20		$15,041.34	$794,490
D2020	Domestic Water Distribution	$2.90	S.F.	25,158	25	2000	2025		40.00 %	0.00 %	10			$72,958
D2030	Sanitary Waste	$2.90	S.F.	25,158	25	2000	2025		40.00 %	0.00 %	10			$72,958
D2040	Rain Water Drainage	$3.29	S.F.	25,158	30	2000	2030		50.00 %	0.00 %	15			$82,770
D3020	Heat Generating Systems	$18.67	S.F.	25,158	35	2000	2035		57.14 %	0.00 %	20			$469,700
D3030	Cooling Generating Systems	$24.48	S.F.	25,158	30	2000	2030		50.00 %	0.00 %	15			$615,868
D3040	Distribution Systems	$42.99	S.F.	25,158	25	2000	2025		40.00 %	0.00 %	10			$1,081,542
D3050	Terminal & Package Units	$11.60	S.F.	25,158	20	2000	2020		25.00 %	0.00 %	5			$291,833
D3060	Controls & Instrumentation	$13.50	S.F.	25,158	20	2000	2020		25.00 %	0.00 %	5			$339,633
D4010	Sprinklers	$8.02	S.F.	25,158	35	2000	2035		57.14 %	0.00 %	20			$201,767
D4020	Standpipes	$0.99	S.F.	25,158	35	2000	2035		57.14 %	0.00 %	20			$24,906
D5010	Electrical Service/Distribution	$9.70	S.F.	25,158	30	2000	2030		50.00 %	0.00 %	15			$244,033
D5020	Lighting and Branch Wiring	$34.68	S.F.	25,158	20	2000	2020	2025	50.00 %	0.00 %	10			$872,479
D5030	Communications and Security	$12.99	S.F.	25,158	15	2000	2015	2025	66.67 %	34.44 %	10		$112,560.22	$326,802
D5090	Other Electrical Systems	$1.41	S.F.	25,158	30	2000	2030		50.00 %	68.36 %	15		$24,249.82	$35,473
E1020	Institutional Equipment	$4.82	S.F.	25,158	35	1999	2034		54.29 %	0.00 %	19			$121,262
E1090	Other Equipment	$11.10	S.F.	25,158	35	1999	2034		54.29 %	0.00 %	19			$279,254
E2010	Fixed Furnishings	$2.13	S.F.	25,158	40	1999	2039		60.00 %	0.00 %	24			$53,587
								Total	**62.49 %**	**2.73 %**			**$405,035.23**	**$14,824,649**

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: 100% - Paint & Covering

System: C3020 - Floor Finishes — This system contains no images

Note: 2% - Carpet
2% - Terrazzo & Tile (ceramic)
94% - Vinyl Flooring
2% - Concrete Floor Finishes

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:	**$405,035**	**$0**	**$0**	**$0**	**$0**	**$809,928**	**$555,470**	**$1,273,268**	**$0**	**$817,486**	**$3,587,471**	**$7,448,657**
*** 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	$7,349	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$7,349**
B2020 - Exterior Windows	$201,846	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$201,846**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$60,300	$0	**$60,300**
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	$0	$0	**$0**
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	$43,990	$0	$0	$0	$0	$0	$0	$1,250,124	$0	$0	$0	**$1,294,113**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$23,144	$0	$0	$0	**$23,144**
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**

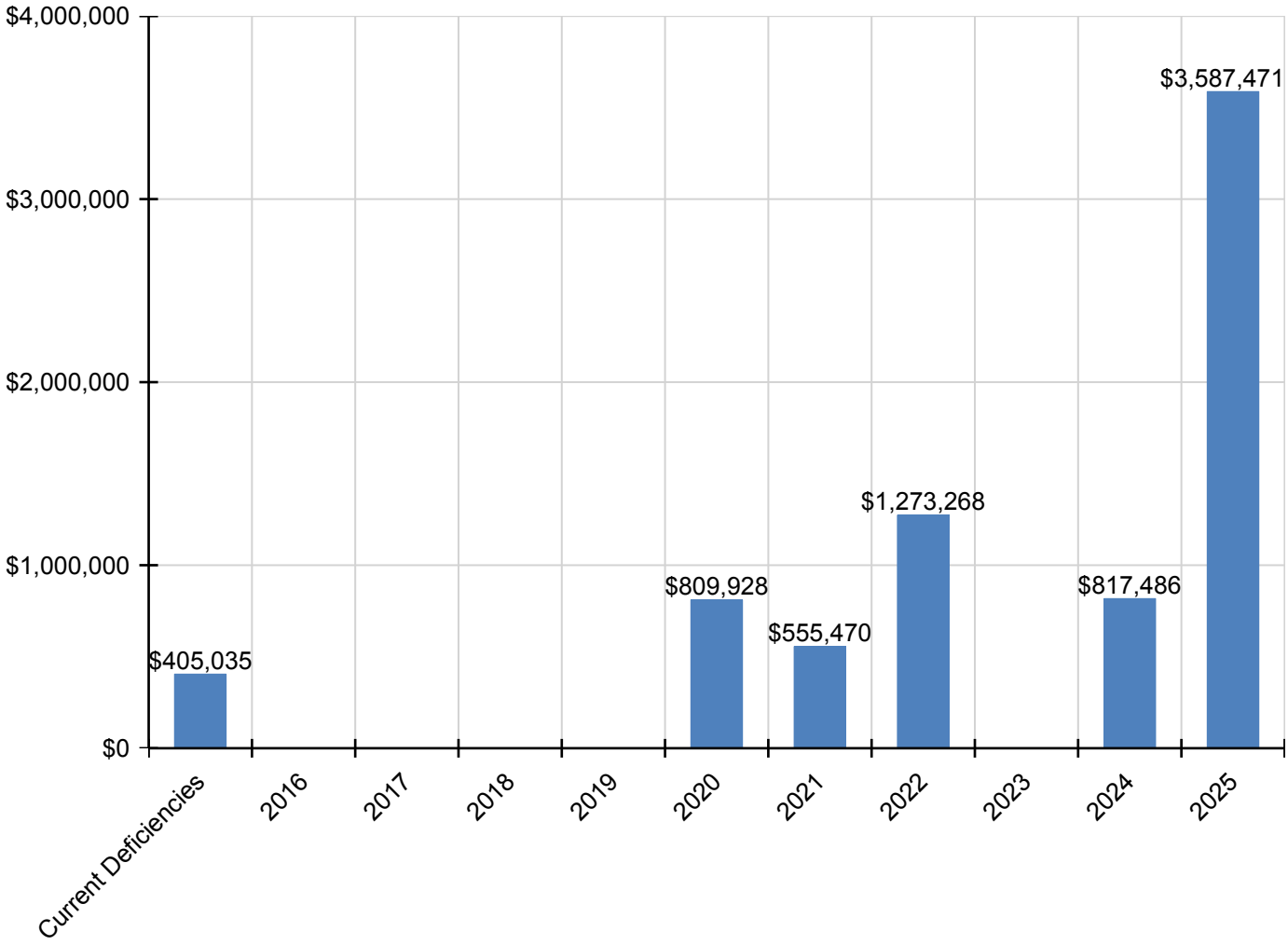
C1020 - Interior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$555,470	$0	$0	$0	$0	**$555,470**
C3010231 - Vinyl Wall Covering	$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**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$4,682	$0	$0	$0	$0	$0	**$4,682**
C3020412 - Terrazzo & Tile	$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**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$757,186	$0	**$757,186**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$15,041	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$15,041**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$107,855	**$107,855**
D2030 - Sanitary Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$107,855	**$107,855**
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**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,598,853	**$1,598,853**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$372,146	$0	$0	$0	$0	$0	**$372,146**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$433,100	$0	$0	$0	$0	$0	**$433,100**
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**
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 - Lighting and Branch Wiring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,289,793	**$1,289,793**
D5030 - Communications and Security	$112,560	$0	$0	$0	$0	$0	$0	$0	$0	$0	$483,115	**$595,675**
D5090 - Other Electrical Systems	$24,250	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$24,250**
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 Sustainment Requirement

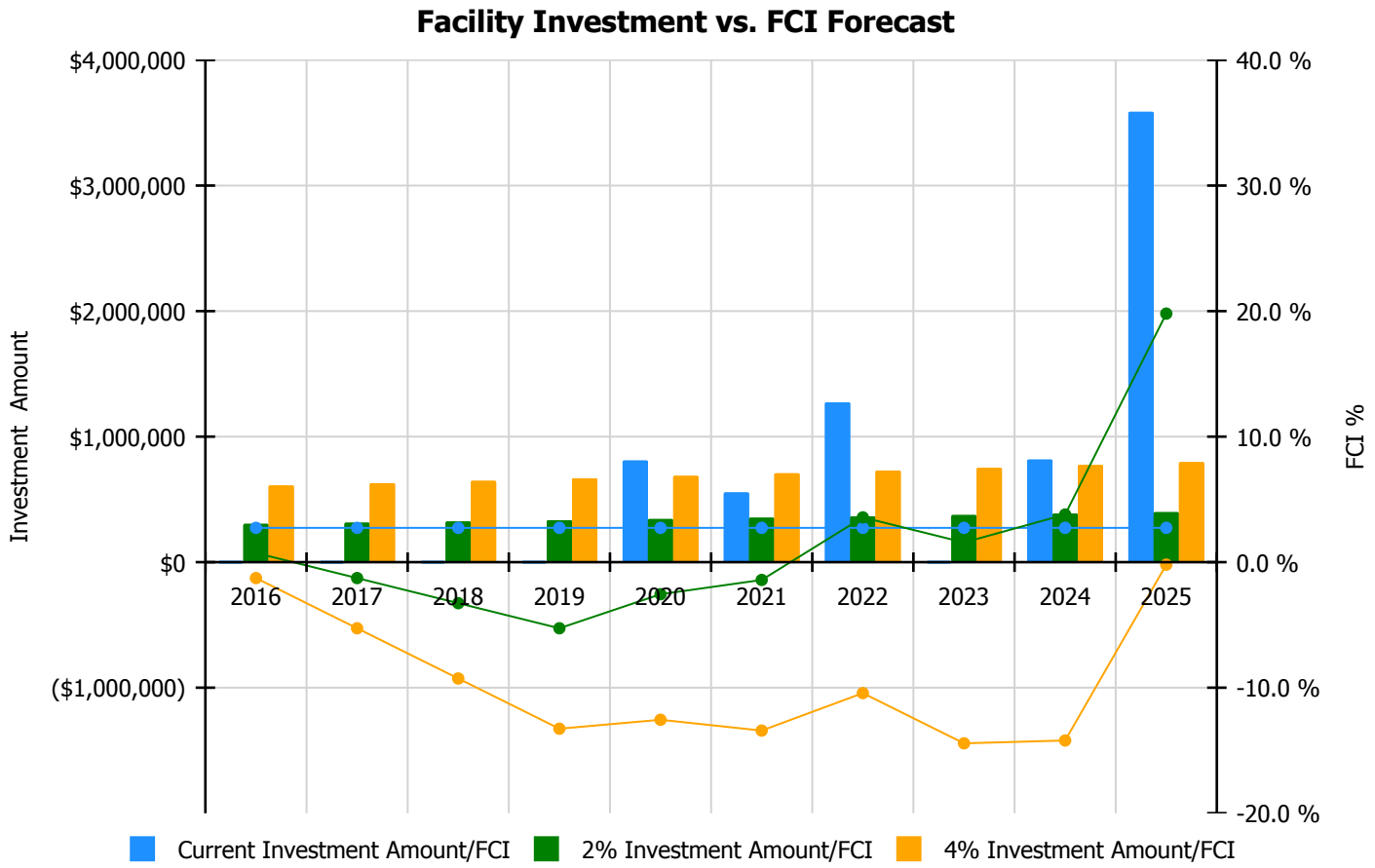
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

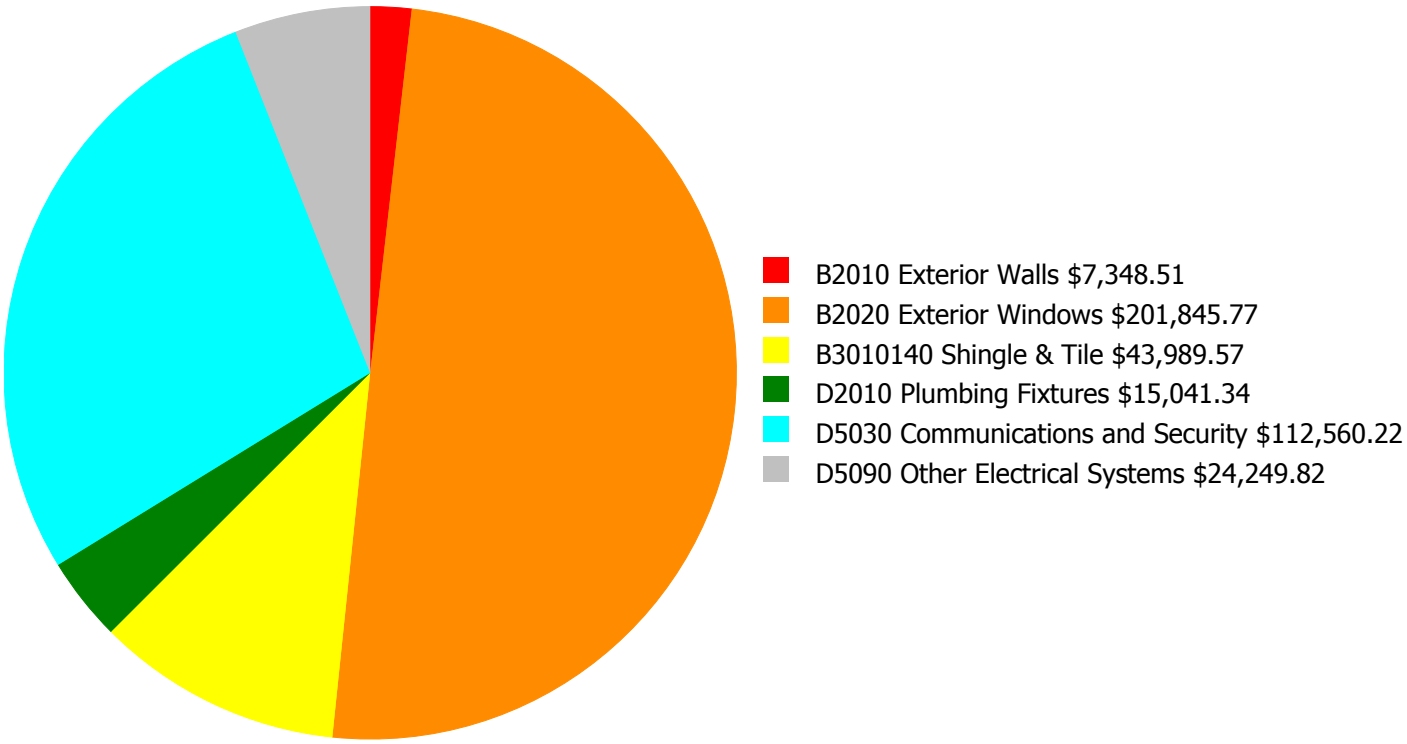
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 2.73%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$305,388.00	0.73 %	$610,776.00	-1.27 %
2017	$0	$314,549.00	-1.27 %	$629,099.00	-5.27 %
2018	$0	$323,986.00	-3.27 %	$647,972.00	-9.27 %
2019	$0	$333,705.00	-5.27 %	$667,411.00	-13.27 %
2020	$809,928	$343,717.00	-2.56 %	$687,433.00	-12.56 %
2021	$555,470	$354,028.00	-1.42 %	$708,056.00	-13.42 %
2022	$1,273,268	$364,649.00	3.57 %	$729,298.00	-10.43 %
2023	$0	$375,588.00	1.57 %	$751,177.00	-14.43 %
2024	$817,486	$386,856.00	3.79 %	$773,712.00	-14.21 %
2025	$3,587,471	$398,462.00	19.80 %	$796,924.00	-0.20 %
Total:	**$7,043,622**	**$3,500,928.00**		**$7,001,858.00**	

Deficiency Summary by System

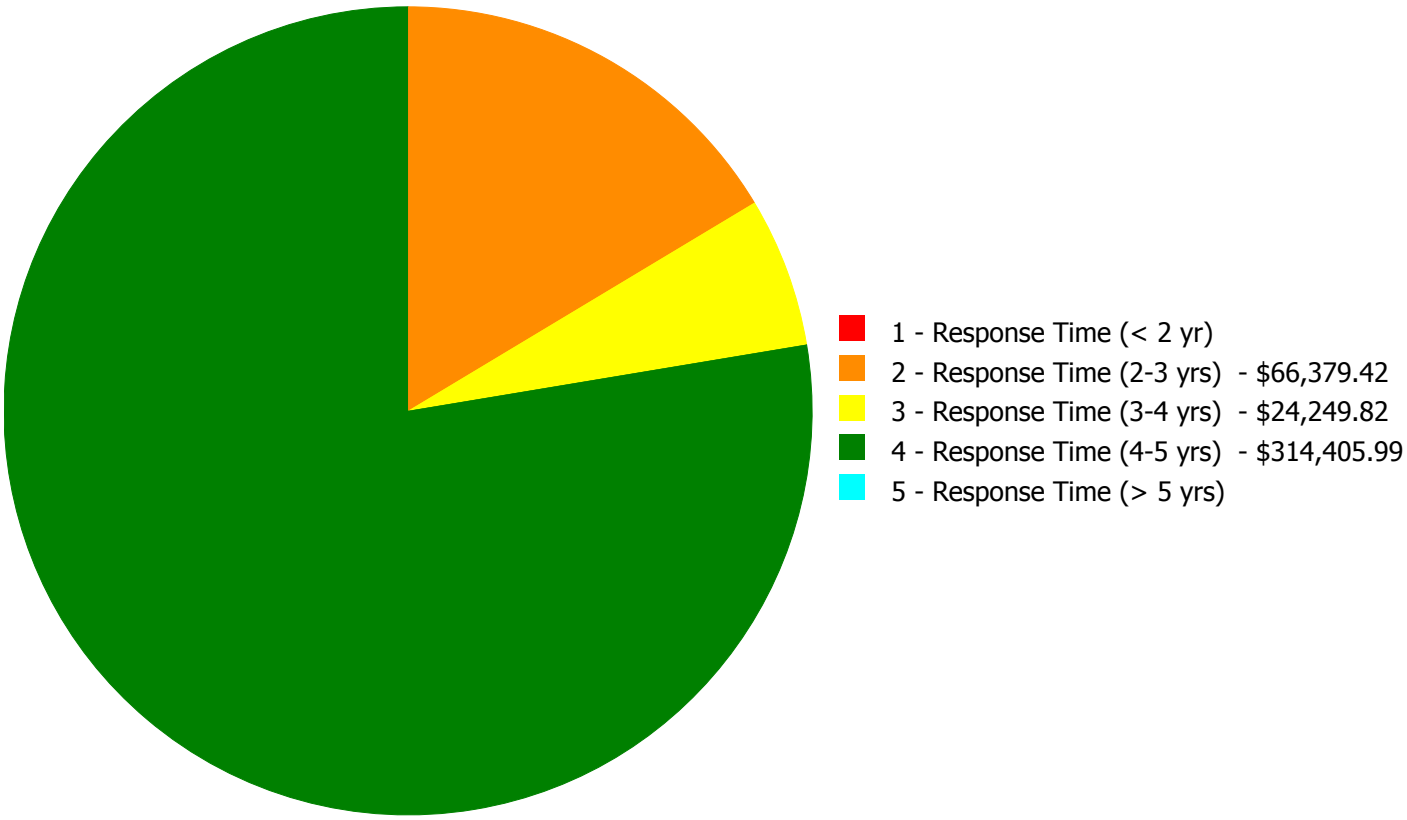
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $405,035.23

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: $405,035.23

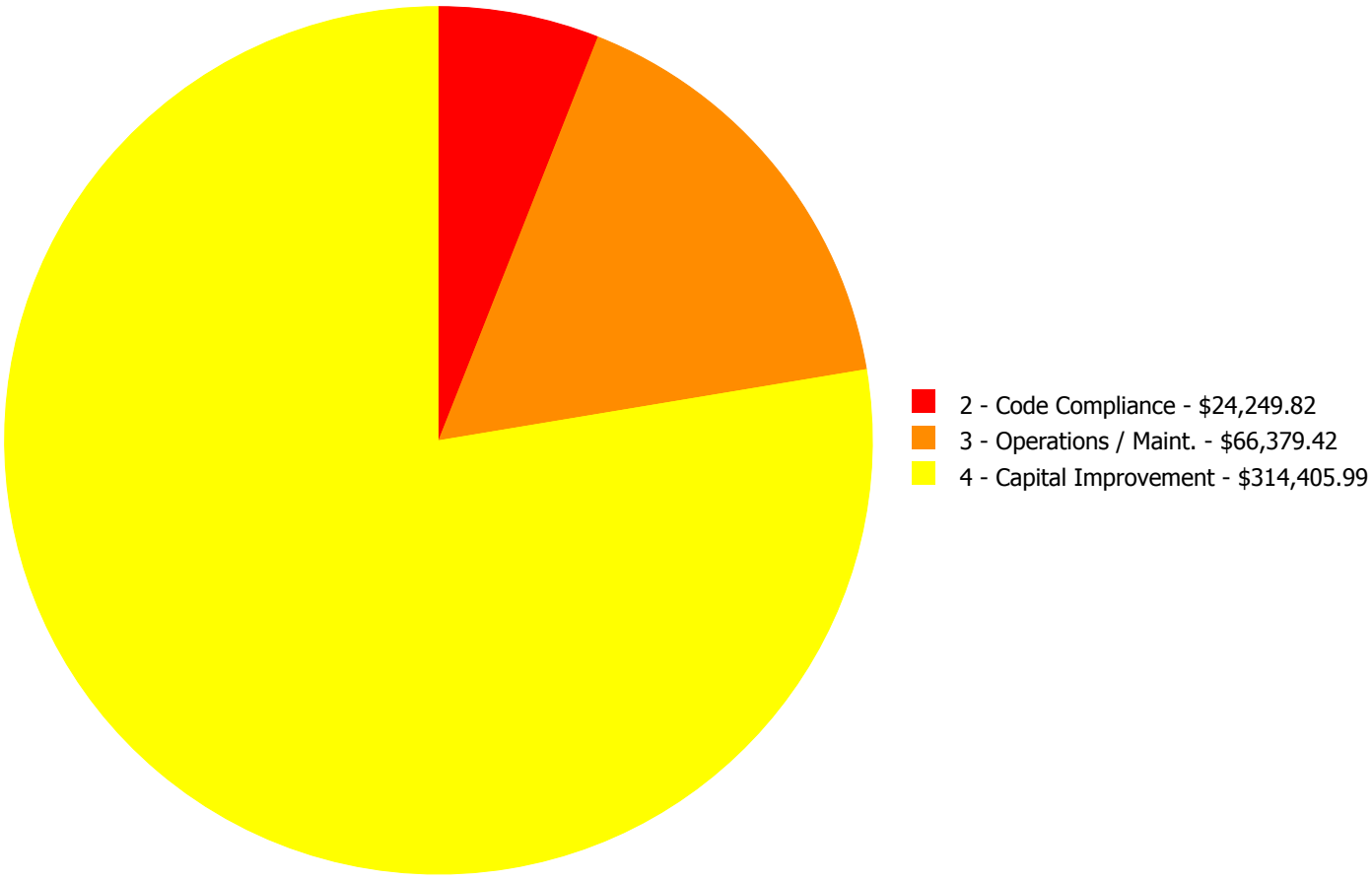
Deficiency By Priority Investment Table

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
B2010	Exterior Walls	$0.00	$7,348.51	$0.00	$0.00	$0.00	$7,348.51
B2020	Exterior Windows	$0.00	$0.00	$0.00	$201,845.77	$0.00	$201,845.77
B3010140	Shingle & Tile	$0.00	$43,989.57	$0.00	$0.00	$0.00	$43,989.57
D2010	Plumbing Fixtures	$0.00	$15,041.34	$0.00	$0.00	$0.00	$15,041.34
D5030	Communications and Security	$0.00	$0.00	$0.00	$112,560.22	$0.00	$112,560.22
D5090	Other Electrical Systems	$0.00	$0.00	$24,249.82	$0.00	$0.00	$24,249.82
	Total:	$0.00	$66,379.42	$24,249.82	$314,405.99	$0.00	$405,035.23

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: $405,035.23

Deficiency Details by Priority

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

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

System: B2010 - Exterior Walls

Location: Front columns

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

Qty: 80.00

Unit of Measure: S.F.

Estimate: $7,348.51

Assessor Name: Craig Anding

Date Created: 11/18/2015

Notes: Repair and replace exterior face brick on front columns

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System: B3010140 - Shingle & Tile

Location: Roof gutters

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace step flashing for shingle roofs

Qty: 760.00

Unit of Measure: L.F.

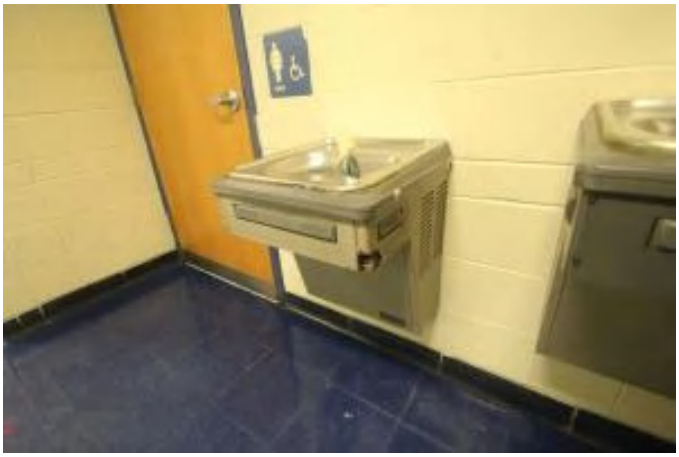
Estimate: $43,989.57

Assessor Name: Craig Anding

Date Created: 11/18/2015

Notes: Repair gutter drains and seal joint

System: D2010 - Plumbing Fixtures



Location: Corridor

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and Replace Water Fountains - without ADA new recessed alcove

Qty: 1.00

Unit of Measure: Ea.

Estimate: $7,579.19

Assessor Name: Craig Anding

Date Created: 01/15/2016

Notes: Repair or replace damaged fountain

System: D2010 - Plumbing Fixtures

Location: Classroom

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace water closet - quantify additional units

Qty: 1.00

Unit of Measure: Ea.

Estimate: $7,462.15

Assessor Name: Craig Anding

Date Created: 01/15/2016

Notes: Replace cracked water closet

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

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: Craig Anding

Date Created: 12/30/2015

Notes: Prepare a study to determine if lightning protection system is required in this building.

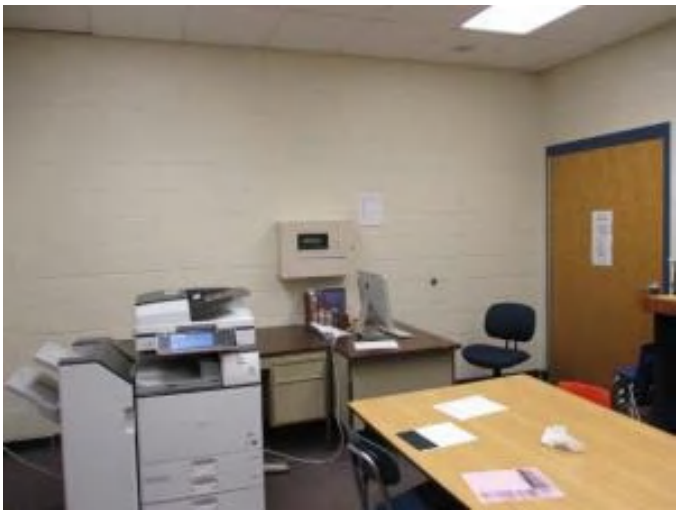
Priority 4 - Response Time (4-5 yrs):

System: B2020 - Exterior Windows

Location: Windows
Distress: Energy Efficiency
Category: 4 - Capital Improvement
Priority: 4 - Response Time (4-5 yrs)
Correction: Remove and replace double slider windows
Qty: 40.00
Unit of Measure: Ea.
Estimate: $201,845.77
Assessor Name: Craig Anding
Date Created: 11/18/2015

Notes: Replace Plexiglas window – hazed and not energy efficient

System: D5030 - Communications and Security



Location: Entire Building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Clock System or Components
Qty: 20.00
Unit of Measure: Ea.
Estimate: $112,560.22
Assessor Name: Craig Anding
Date Created: 12/30/2015

Notes: Provide wireless, synchronized, battery operated clock system. Approximate 20

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
D2020 Domestic Water Distribution	Water heater, gas fired, 260 MBH input, 250 GPH, includes standard controls, excludes vent	2.00	Ea.	Boiler room	Nickleshield	27 N 125A-G	0900102092		25	2000	2021	$14,250.00	$31,350.00
D2020 Domestic Water Distribution	Water heater, gas fired, 260 MBH input, 250 GPH, includes standard controls, excludes vent	2.00	Ea.	Boiler room	Nickleshield	27 N 125A-G	0900102091		25	2000	2021	$14,250.00	$31,350.00
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 876 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler room	Smith	19A-S/W-8	FA2000-59		35	2000	2035	$31,387.70	$69,052.94
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 876 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler room	Smith	19A-S/W-8	FA2000-56		35	2000	2035	$31,387.70	$69,052.94
D3030 Cooling Generating Systems	Packaged water chiller, scroll, liquid chiller, packaged unit with integral air cooled condenser, 30 ton cooling, includes standard controls	1.00	Ea.	Behind building					30	2000	2030	$39,487.80	$43,436.58
D5010 Electrical Service/Distribution	Switchboards, distribution section, aluminum bus bars, 4 W, 120/208 or 277/480 V, 600 amp, excl breakers	1.00	Ea.	First Floor Electrical Room					30	2000	2030	$3,819.15	$4,201.07
												Total:	**$248,443.53**

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):	153,600
Year Built:	1971
Last Renovation:	
Replacement Value:	$2,584,878
Repair Cost:	$600,406.22
Total FCI:	23.23 %
Total RSLI:	39.17 %

Description:

Attributes:

General Attributes:

Bldg ID:	S144001	Site ID:	S144001

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	36.56 %	4.20 %	$80,474.45
G40 - Site Electrical Utilities	46.67 %	77.82 %	$519,931.77
Totals:	**39.17 %**	**23.23 %**	**$600,406.22**

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 thesystem 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.	3,100	30				0.00 %	0.00 %				$35,712
G2020	Parking Lots	$7.65	S.F.	33,000	30				0.00 %	0.00 %				$252,450
G2030	Pedestrian Paving	$11.52	S.F.	66,500	40	1999	2039		60.00 %	5.63 %	24		$43,148.55	$766,080
G2040	Site Development	$4.36	S.F.	153,600	25	1999	2024		36.00 %	5.57 %	9		$37,325.90	$669,696
G2050	Landscaping & Irrigation	$3.78	S.F.	51,000	15				0.00 %	0.00 %				$192,780
G4020	Site Lighting	$3.58	S.F.	153,600	30	1999	2029		46.67 %	22.85 %	14		$125,635.28	$549,888
G4030	Site Communications & Security	$0.77	S.F.	153,600	30	1999	2029		46.67 %	333.38 %	14		$394,296.49	$118,272
								Total	**39.17 %**	**23.23 %**			**$600,406.22**	**$2,584,878**

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.

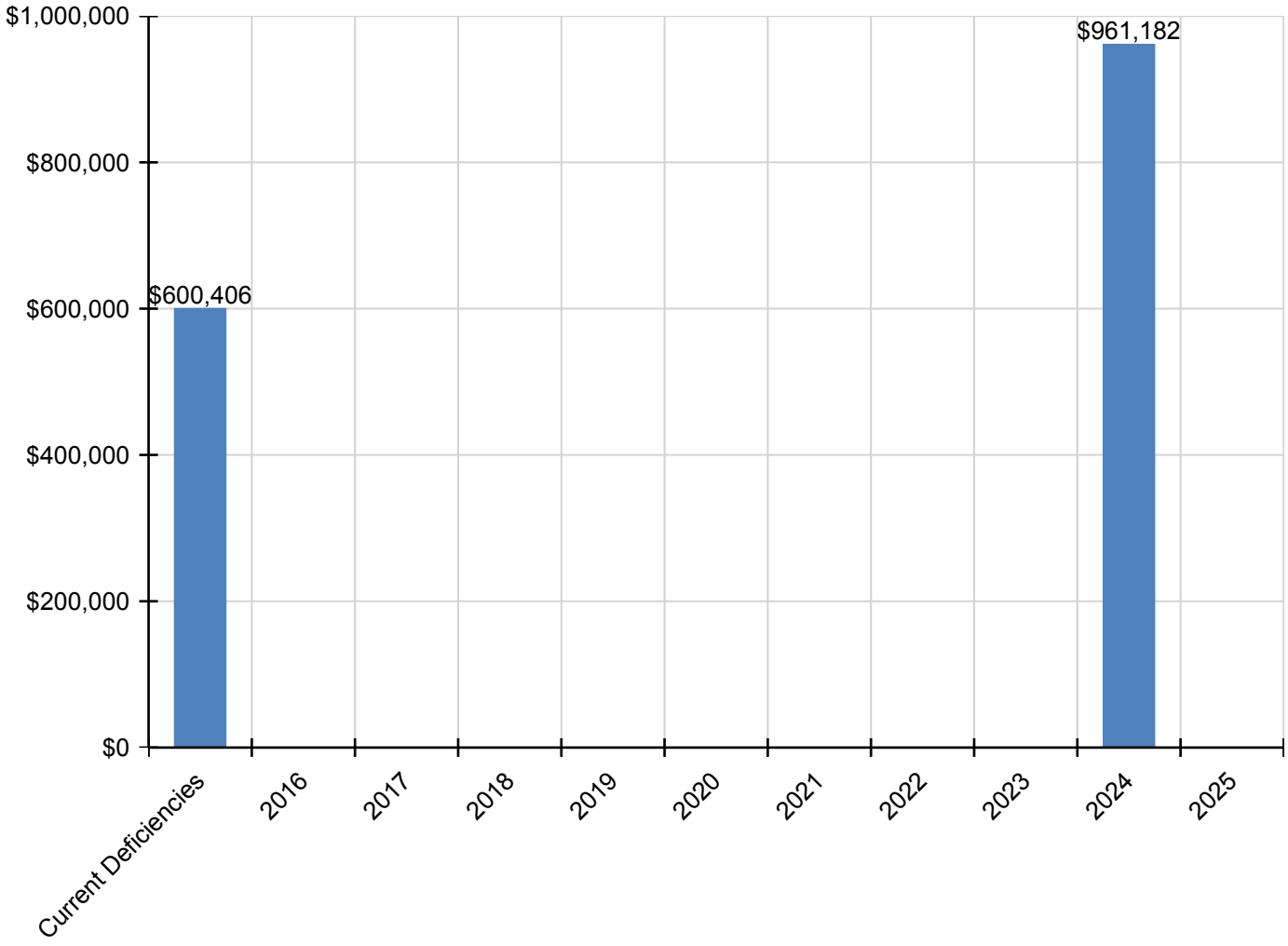
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$600,406**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$961,182**	**$0**	**$1,561,588**
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	$43,149	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$43,149**
G2040 - Site Development	$37,326	$0	$0	$0	$0	$0	$0	$0	$0	$961,182	$0	**$998,508**
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	$125,635	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$125,635**
G4030 - Site Communications & Security	$394,296	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$394,296**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

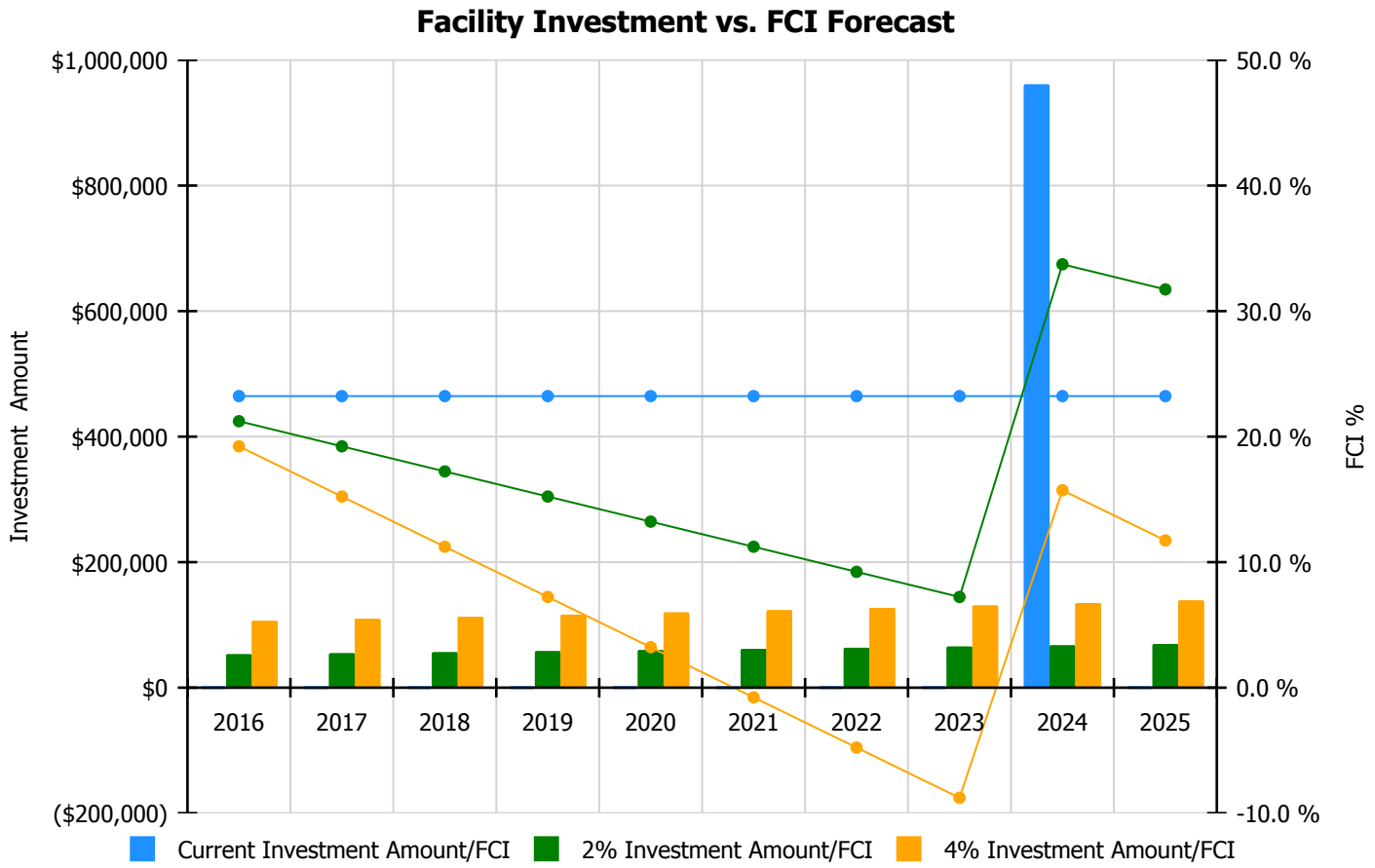
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

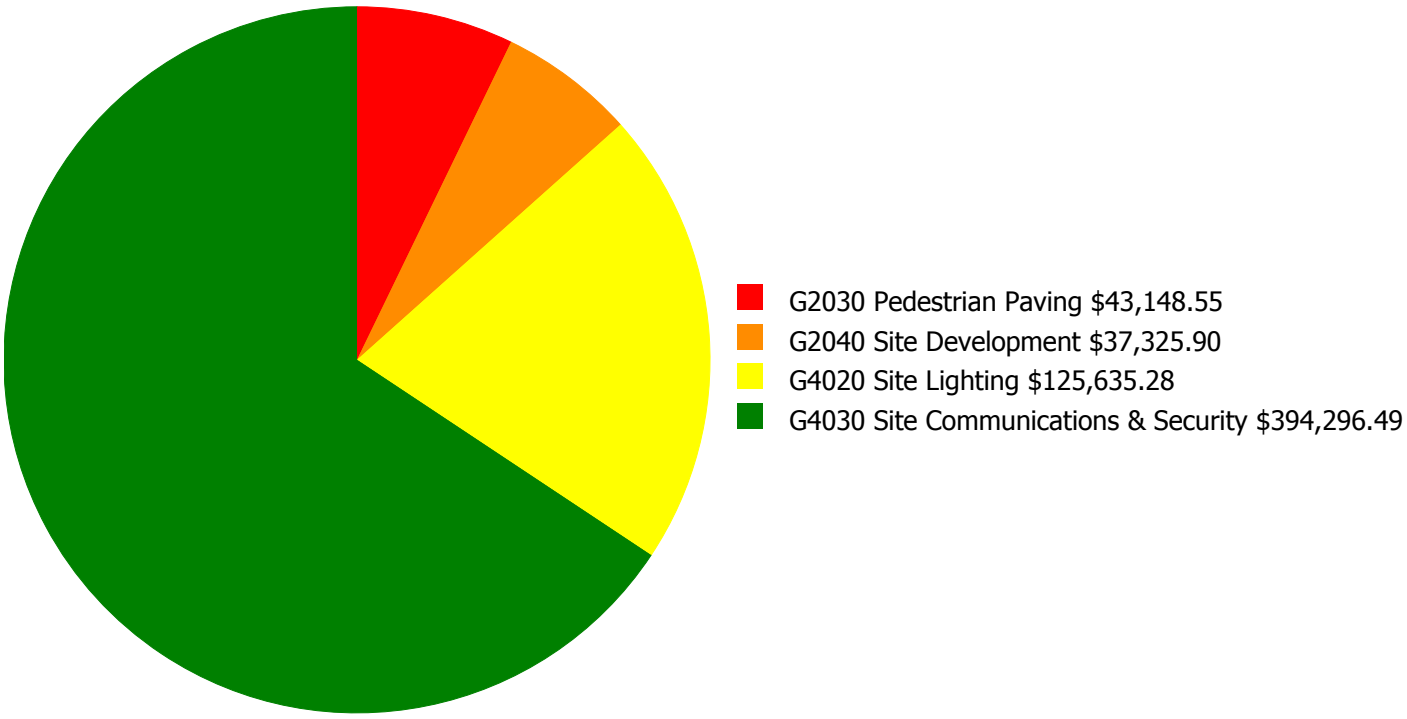
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 23.23%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$53,248.00	21.23 %	$106,497.00	19.23 %
2017	$0	$54,846.00	19.23 %	$109,692.00	15.23 %
2018	$0	$56,491.00	17.23 %	$112,983.00	11.23 %
2019	$0	$58,186.00	15.23 %	$116,372.00	7.23 %
2020	$0	$59,932.00	13.23 %	$119,863.00	3.23 %
2021	$0	$61,730.00	11.23 %	$123,459.00	-0.77 %
2022	$0	$63,581.00	9.23 %	$127,163.00	-4.77 %
2023	$0	$65,489.00	7.23 %	$130,978.00	-8.77 %
2024	$961,182	$67,454.00	33.73 %	$134,907.00	15.73 %
2025	$0	$69,477.00	31.73 %	$138,954.00	11.73 %
Total:	**$961,182**	**$610,434.00**		**$1,220,868.00**	

Deficiency Summary by System

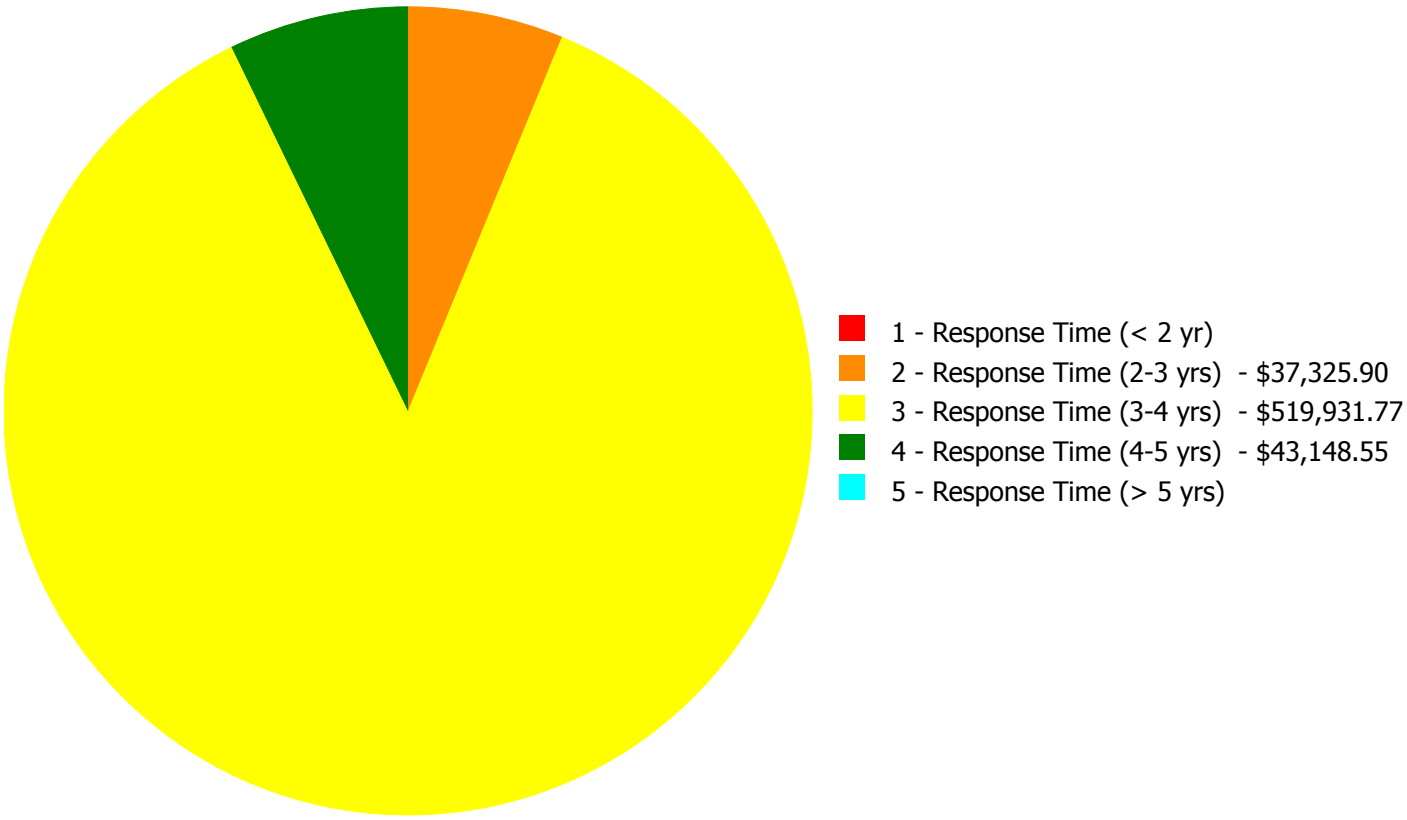
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $600,406.22

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: $600,406.22

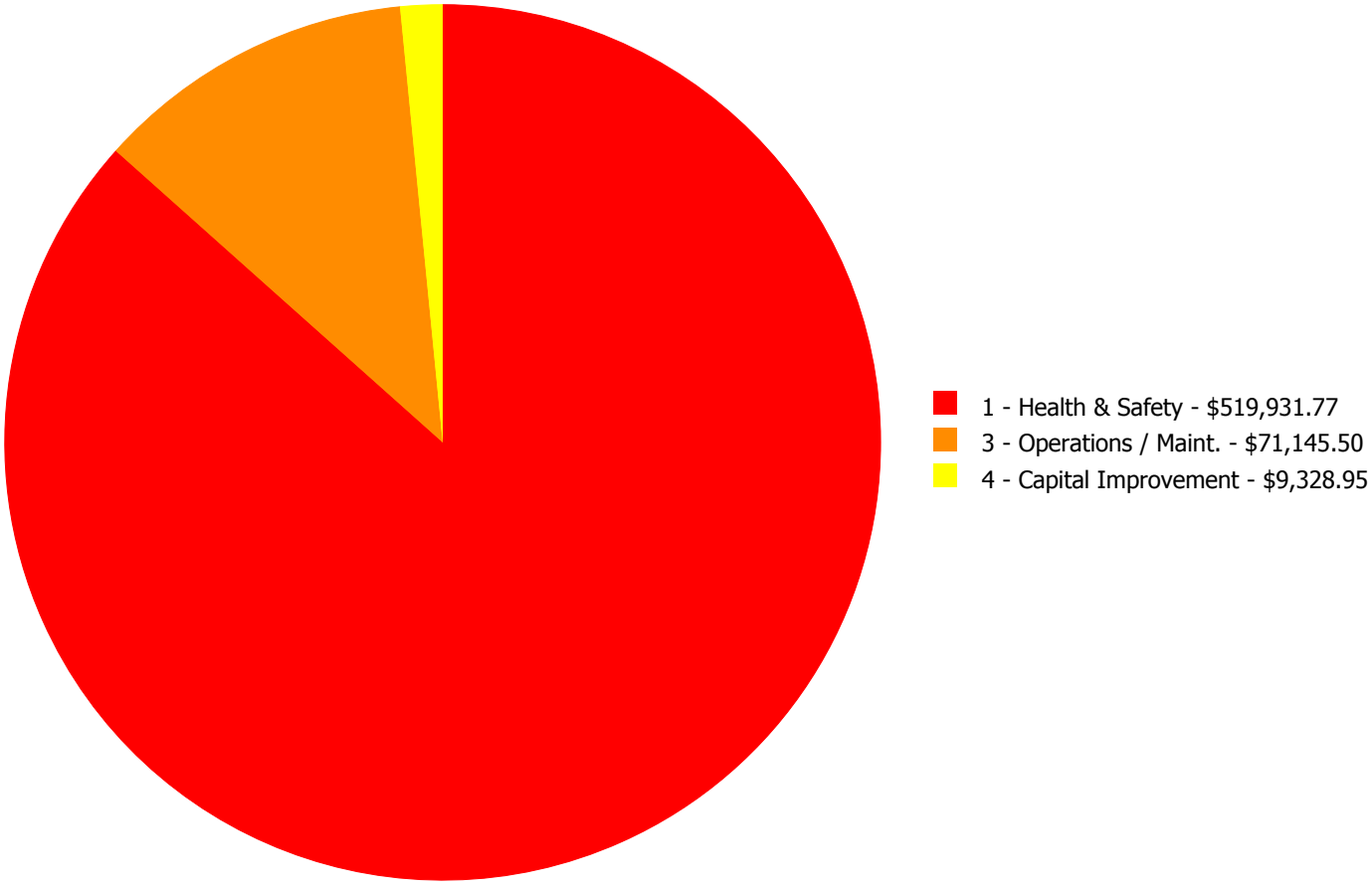
Deficiency By Priority Investment Table

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
G2030	Pedestrian Paving	$0.00	$0.00	$0.00	$43,148.55	$0.00	$43,148.55
G2040	Site Development	$0.00	$37,325.90	$0.00	$0.00	$0.00	$37,325.90
G4020	Site Lighting	$0.00	$0.00	$125,635.28	$0.00	$0.00	$125,635.28
G4030	Site Communications & Security	$0.00	$0.00	$394,296.49	$0.00	$0.00	$394,296.49
	Total:	$0.00	$37,325.90	$519,931.77	$43,148.55	$0.00	$600,406.22

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: $600,406.22

Deficiency Details by Priority

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

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

System: G2040 - Site Development

Location: West side
Distress: Failing
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace chain link fence - 8' high
Qty: 250.00
Unit of Measure: L.F.
Estimate: $27,996.95
Assessor Name: Eduardo Zambrano
Date Created: 11/17/2015

Notes: Replace fence on west side of site

System: G2040 - Site Development

Location: Center of site
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 2 - Response Time (2-3 yrs)
Correction: Repair and regrout stone retaining wall - LF of wall - up to 4' tall
Qty: 20.00
Unit of Measure: L.F.
Estimate: $9,328.95
Assessor Name: Eduardo Zambrano
Date Created: 11/17/2015

Notes: Install retention wall for storm water diversion

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

System: G4020 - Site Lighting

Location: Outdoor

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Site Lighting - pole mounted - select the proper light and pole

Qty: 6.00

Unit of Measure: Ea.

Estimate: $125,635.28

Assessor Name: Eduardo Zambrano

Date Created: 12/30/2015

Notes: Provide pole mounted floodlights for a safer environment. Approximate 6

System: G4030 - Site Communications & Security

Location: LSH Building Perimeter

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Video Surveillance System

Qty: 10.00

Unit of Measure: Ea.

Estimate: $237,784.38

Assessor Name: Eduardo Zambrano

Date Created: 12/30/2015

Notes: Provide outdoor surveillance CCTV cameras around the LSH building perimeter. Approximate 10

System: G4030 - Site Communications & Security

This deficiency has no image.

Location: Outdoor

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Video Surveillance System

Qty: 6.00

Unit of Measure: Ea.

Estimate: $156,512.11

Assessor Name: Eduardo Zambrano

Date Created: 12/30/2015

Notes: Provide pole mounted outdoor surveillance CCTV cameras at the parking lot. Approximate 6

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

System: G2030 - Pedestrian Paving

Location: Entry yard

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace concrete sidewalk or concrete paving - 4" concrete thickness

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $43,148.55

Assessor Name: Eduardo Zambrano

Date Created: 11/17/2015

Notes: Replace concrete paving – damaged (10% of site concrete paving area)

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

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

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

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.

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

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

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.

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	Photovotaic system

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

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

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