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.

Overbrook Ed Center School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	6722 Lansdowne Ave.	Enrollment	270
	Philadelphia, Pa 19151	Grade Range	'00-08'
Phone/Fax	215-581-5890 / 215-581-5677	Admissions Category	Citywide
Website	Www.Philasd.Org/Schools/Oec	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	**07.08%**	**$2,567,139**	**$36,270,402**
Building	00.89 %	$243,766	$27,439,245
Grounds	36.71 %	$232,982	$634,626

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$463,829
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$2,034,774
Windows (Shows functionality of exterior windows)	00.00 %	$0	$992,855
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$79,936
Interior Doors (Classroom doors)	00.00 %	$0	$193,499
Interior Walls (Paint and Finishes)	11.84 %	$128,506	$1,084,919
Plumbing Fixtures	00.57 %	$4,261	$745,331
Boilers	00.00 %	$0	$1,029,240
Chillers/Cooling Towers	03.94 %	$53,134	$1,349,533
Radiators/Unit Ventilators/HVAC	00.00 %	$0	$2,369,953
Heating/Cooling Controls	00.00 %	$0	$744,228
Electrical Service and Distribution	00.00 %	$0	$534,742
Lighting	00.00 %	$0	$1,911,839
Communications and Security (Cameras, Pa System and Fire Alarm)	00.00 %	$0	$716,113

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.

Overbrook Ed Center Annex School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	6722 Lansdowne Ave. Philadelphia, Pa 19151	Enrollment	
		Grade Range	'00-08'
Phone/Fax	215-581-5890 / 215-581-5677	Admissions Category	Citywide
Website	Www.Philasd.Org/Schools/Oec	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	**07.08%**	**$2,567,139**	**$36,270,402**
Building	25.50 %	$2,090,390	$8,196,531
Grounds	36.71 %	$232,982	$634,626

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	77.93 %	$121,521	$155,931
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.75 %	$3,329	$444,448
Windows (Shows functionality of exterior windows)	00.00 %	$0	$194,037
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$23,774
Interior Doors (Classroom doors)	00.00 %	$0	$53,527
Interior Walls (Paint and Finishes)	00.00 %	$0	$280,164
Plumbing Fixtures	10.47 %	$47,079	$449,573
Boilers	00.00 %	$0	$265,786
Chillers/Cooling Towers	00.00 %	$0	$348,497
Radiators/Unit Ventilators/HVAC	161.82 %	$990,331	$612,006
Heating/Cooling Controls	00.00 %	$0	$192,186
Electrical Service and Distribution	216.32 %	$298,712	$138,089
Lighting	00.00 %	$0	$493,704
Communications and Security (Cameras, Pa System and Fire Alarm)	41.81 %	$77,318	$184,926

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

S448001;Overbrook Educational Center

Final

Site Assessment Report

February 2, 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):	69,364
Year Built:	1915
Last Renovation:	1960
Replacement Value:	$36,270,402
Repair Cost:	$2,567,138.62
Total FCI:	7.08 %
Total RSLI:	56.66 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 4 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S448001		

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	39.26 %	0.00 %	$0.00
A20 - Basement Construction	39.61 %	0.00 %	$0.00
B10 - Superstructure	39.02 %	0.00 %	$0.00
B20 - Exterior Enclosure	49.64 %	0.09 %	$3,328.61
B30 - Roofing	58.29 %	19.61 %	$121,520.58
C10 - Interior Construction	78.73 %	0.59 %	$9,928.98
C20 - Stairs	71.69 %	106.12 %	$135,960.89
C30 - Interior Finishes	75.96 %	3.34 %	$128,699.98
D10 - Conveying	68.57 %	0.00 %	$0.00
D20 - Plumbing	58.15 %	10.31 %	$175,784.53
D30 - HVAC	71.38 %	13.52 %	$1,043,465.03
D40 - Fire Protection	74.29 %	35.57 %	$203,653.80
D50 - Electrical	44.52 %	12.37 %	$508,555.35
E10 - Equipment	58.76 %	0.00 %	$0.00
E20 - Furnishings	66.86 %	2.21 %	$3,258.74
G20 - Site Improvements	72.83 %	5.09 %	$22,861.62
G40 - Site Electrical Utilities	63.33 %	113.19 %	$210,120.51
Totals:	**56.66 %**	**7.08 %**	**$2,567,138.62**

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)
B448001;Overbrook Ed Center	55,128	0.89	$0.00	$136,025.80	$53,133.61	$54,606.72	$0.00
B448002;Overbrook Ed Center Annex	14,236	25.50	$257,481.47	$72,157.55	$444,461.76	$133,931.78	$1,182,357.80
G448001;Grounds	40,800	36.71	$0.00	$10,893.70	$196,345.37	$25,743.06	$0.00
Total:		**7.08**	**$257,481.47**	**$219,077.05**	**$693,940.74**	**$214,281.56**	**$1,182,357.80**

Deficiencies By Priority

1 - Response Time (< 2 yr) - $257,481.47
2 - Response Time (2-3 yrs) - $219,077.05
3 - Response Time (3-4 yrs) - $693,940.74
4 - Response Time (4-5 yrs) - $214,281.56
5 - Response Time (> 5 yrs) - $1,182,357.80

Budget Estimate Total: $2,567,138.62

Executive Summary

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

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) FCI is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor). Condition Index (CI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired).

Function:	Elementary School
Gross Area (SF):	55,128
Year Built:	1915
Last Renovation:	
Replacement Value:	$27,439,245
Repair Cost:	$243,766.13
Total FCI:	0.89 %
Total RSLI:	55.86 %

Description:

Facility Assessment
November 2015

School District of Philadelphia
Overbrook Educational Center
6722 Lansdowne Avenue
Philadelphia, PA 19151

55,128 SF / 616 Students / LN 02

General

The Overbrook Educational Center building is located at 6722 Lansdowne Avenue in Philadelphia, PA. The 3 story, 55,128 square foot building was originally constructed in 1915. There was a 3 story addition in 2004 that added a library, computer lab, science and art classrooms, administrative space, utility space, and an elevator. At the same time, the original building underwent major renovations and a secondary exit from the basement cafeteria was added. The original building and addition both have basements.

The school capacity, including the Annex, is approximately 616 students, with 2015/16 enrollment of 262 serving grades K-8. Approximately 30% of the students enrolled at this school are visually impaired.

The school plan is rectangular with the long axis running N/S. The main entrance is on 68th St., which does not correspond to the

street address of the building. The basement houses the kitchen, cafeteria, and utility spaces. The first floor has a gym/auditorium and administrative office. Second and third floors contain general classrooms, science and art classrooms, and the library.

Mr. Stewart Johnson, Building Engineer, and FAC Richard Toohey accompanied the team on its tour of the school and provided information on building systems and maintenance history. Ms. Meredith Foote, principal, provided input to the Parsons assessment team on current problems in the building.

Architectural/Structural Systems

The building bears on concrete foundations and basement walls that are not showing signs of significant settlement or damage. The basement floor is slab on grade. The original structure is cast in place concrete framing. The addition utilizes steel columns with bar joists with concrete filled metal deck for floors and roof structure. Exterior walls are stone at original construction and textured CMU at the addition. In general, masonry is in good condition with some previous repairs evident. Windows are dual pane glass in tubular aluminum frames. Operable units are hopper style. Windows are in generally good condition with some failed gaskets. Windows at the basement and first floor have security grilles. Exterior doors are hollow metal in hollow metal frames with glazing, in good condition. Roofing is low slope built-up with a granular cap sheet. Roofs are in fair condition. At the time of assessment, there was considerable bubbling of the membrane but little splitting. It was later reported to Parsons that repairs were made by the installer under warranty. There are stone and CMU parapet walls at roof edges. Perimeter flashing is in good condition. Drainage is via interior roof drains with overflow scuppers. Roof access is via stairwell to the main roofs and ladders between different roof levels. There is no fixed ladder to the small lower roof over the basement exit. Generally, the building is accessible per ADA requirements.

Partition walls are typically gypboard on metal studs in good condition. There are "window walls" of glass in hollow metal frames at the north vestibule on the first floor, and at the library to computer lab on the 3rd floor. Interior classroom and office doors are generally solid core wood veneer in hollow metal frames with slot lites and sidelites in hollow metal frame. Doors do have ADA hardware and are generally in good condition. One pair of doors at the north vestibule was noted to have damaged hinges and was sagging. Doors leading to exit stairways are hollow metal doors and frames with panic hardware in good condition. Doors swing in the direction of exit; however classroom doors are not recessed, swinging into the corridor. There is a coiling counter fire shutter at the main office and a coiling counter door at the cafeteria service counter, both in good condition.

Fittings include: toilet accessories and plastic toilet partitions in good condition and in conformance with ADA requirements; marker boards are present in all classrooms; bulletin boards are present in classrooms and corridors; interior signage that is in compliance with modern codes, i.e. it is mounted at the proper height and has tactile lettering.

Stair construction is concrete filled steel pans at the addition, in good condition. Stairs at the original building are concrete. Treads and landings have resilient finishes. Handrails are painted tubular steel, polished aluminum or wood. Handrails in the original building do not meet modern codes for configuration with no extensions at landings, and improper mounting height. Barrier rails at landings and stairs are too low. Handrails in the addition are compliant with modern codes.

Interior wall finishes are typically paint in generally good condition. There are areas of paint damage due to impact in a few places around the building. There are also some areas of paint damage due to moisture on east classroom walls in the original building, possibly due to mechanical leaks. Wood wainscot is installed in the gym. Toilet rooms and the kitchen have ceramic tile on walls, and the cafeteria has ceramic wainscot. There is a ceramic tile art installation wainscot in the north vestibule with painted murals above. Flooring is typically VCT in good condition. Linoleum tiles are used in the cafeteria and are in good condition. Carpeting is installed at the library and is good condition. The gym and stage have wood floors that are assumed to have been refurbished with the renovations in 2002. Toilet rooms have ceramic tile floors and the kitchen has quarry tile flooring, all in good condition. Ceilings are typically 2 x 4 suspended acoustical tile and are in well maintained good condition. Toilet rooms have painted gypboard or plaster ceilings. The gym has painted structure. Utility rooms are unfinished.

The building has one passenger elevator.

Institutional Equipment includes: stage draperies in fair condition; stage lighting; a motorized projection screen at the stage that is adequate; Smartboards in all the classrooms; a kiln; science classroom equipment; and library shelving that is in good condition. Other equipment includes kitchen equipment in good condition and portable gym equipment (basketball and volleyball) in good condition.

Furnishings include: fixed plastic laminate and wood veneer casework in classrooms and offices, generally in good condition; a wood veneer bench in the office lobby; recessed display cases with glass fronts; window roller shades, generally in good condition. Window shades are missing at the west wall of the gym and in the computer lab.

Mechanical Systems

Toilet room plumbing fixtures include porcelain wall mounted water closets, urinals, and lavatories. All fixtures were installed new in 2004 and are low flow. Flush valves are installed in pipe chases. Lavatory faucets are hot and cold mixing. Accessible fixtures exist throughout the building. Faucets in the second floor teacher's lounge and third floor girl's toilet room drip. There is an out of order water closet in the girl's toilet as well. These should be repaired or replaced. The cafeteria kitchen has a twin basin, floor standing, stainless steel, commercial sink with sprayer and disposal; a triple basin, twin faucet wash sink with sanitization chemical injection; and a wall mounted stainless lavatory. There is no grease trap. Kitchen sinks are in excellent condition and will not need replacement for 15 - 20 years. Second floor science room has three sinks and the art room has two. Floor level polymer service sinks with wall mounted faucets are located in cleaning closets adjacent to toilet rooms on each floor. Service sinks are stained but in fair condition otherwise and will remain serviceable for at least 15 years. There is a safety shower and eyewash in the boiler room in operable condition. Drinking fountains are accessible, stainless steel, wall mounted with integral chillers in excellent condition.

Domestic water distribution pipe is soldered copper. The entire building had new pipes installed in 2004. Municipal water service enters the basement through a 3 inch pipe. There is a water meter and pressure reducing valve with a bypass line, and then a 3 inch double backflow preventer. There is a backflow preventer for the boiler water supply line. The water entry equipment is in excellent condition and should last 25 years or longer. There is no pressure booster system. Two A.O. Smith 100 gallon water heaters are located in a third floor janitor closet and were installed in 2004. They have exceeded their expected life by 2 years, and one is in bad condition, so the district should plan to replace it.

Sanitary drain pipe is hubless cast iron with banded couplings. It was installed in 2004 and should last 30 more years. The building does not have a sewage ejector.

Rain water drain pipes are hubless cast iron with banded couplings and cast iron roof top strainers. Drain pipes run inside the building. There are overflow drains through parapets. The pipe was installed in 2004. There were no noticed or reported drainage problems. There is a rain water sump in the basement with two pumps. Rain water drains should remain serviceable for 30 more years.

The building is heated and ventilated by unit ventilators for classrooms and six air handlers for other areas. Air supply and exhaust grills are located in drop ceilings with the ceiling space serving as the return plenum.

Hot water is generated by two Smith model 19A-S/W-11, 1,349 MBH (40 HP) boilers with Power Flame burners for oil and natural gas. Gas meter is outside the building next to the front entrance and enters the boiler room through a 6 inch pipe. Oil supply pumps and pipes are not installed. Boilers are in good condition and have 25 year life expectancy. There is a 370 gallon (1,400 liter) pressurized expansion tank for the hydronic system.

There is a roof top, air cooled, 104 ton nominal capacity, scroll compressor, York chiller, installed in 2004. One compressor (out of 5) is not working and should be repaired. Otherwise the chiller has 15 years lifespan remaining. There is an AAON refrigerant condenser abandoned in place on the roof that formerly served classroom cooling units, but was decommissioned because the classroom units leaked too much according to the engineer and FAC. The classroom units were removed from the building in 2012.

There are six air handlers total for the building, two roof top units, one roof top heat pump, and 3 indoor units. They were all installed in 2004 and have expected lifespan remaining. AHU 1 serves the basement gym and stage; 2 serves the ground floor school office and nurse office; 3 serves the art and science rooms on the second floor. The rooftop units serve the third floor library and classrooms. Classrooms are conditioned and ventilated by unit ventilators. They were replaced in 2012 when the evaporation units were removed. They operate quietly and blow well. Ducts throughout the building were cleaned in 2012 as well. Hydronic pipe is threaded steel, installed new in 2004. There are 4 hydronic pumps, 2 hot water and 2 chilled water, 7.5 HP each. The cafeteria kitchen has a dedicated ventilation system with fire suppression system for the stove.

Heating for stairways and toilet rooms is provided by finned tube steam convection units. Convectors were installed in 2004 and are in excellent condition, but some covers are rusty. Cleaning and repainting should be accomplished by routine maintenance.

The building is equipped with Talon electronic controls and thermostats. Controls were installed in 2004 and are still working well and should continue to do so for 15 years.

The building has wet stand pipes and sprinklers. The fire water connection to the city supply is a 6 inch line located in the basement. There is no fire pump.

Electrical Systems

The electrical service for this facility is obtained via a Square D, 1200A, 120/208V service entrance switchboard which is located in the

basement. The service entrance switchboard was installed in 2002 and is expected to provide 20 more years of useful service life.

In each floor, there are recessed mounted panelboards located in the utility rooms. Panelboards serve lighting, receptacle and small motor loads. The panelboards and associated wiring were installed in 2002 and are expected to provide 20 more years of useful service life.

There number of receptacles in classrooms is adequate; at a minimum, each classroom is provided with two recessed mounted receptacles per wall. Receptacles were installed in 2002 and are expected to provide 10 more years of useful service life

Classrooms, corridors and the library are illuminated with 2'x4' recessed fluorescent fixtures with parabolic lenses. The stairwells illuminated with surface mounted wraparound fluorescent fixtures. The multi-purpose room is illuminated with pendant HID fixtures. The mechanical rooms are illuminated with pendant mounted industrial type fluorescent fixtures. Fluorescent fixtures are provided with T-8 lamps. Fixtures were installed in 2002 and are expected to provide 10 more years of useful service life.

The gire alarm system is manufactured by FCI. The fire alarm mainly consists of a pull station at each exit door, audio/visual devices in classrooms and public areas and a smoke detector in front of the elevator lobby. The fire alarm system was installed in 2002 and is expected to provide 5 more years of useful service life.

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

An independent and separate PA system does not exist, or is not working. The school uses the telephone systems for public announcements. The system is working adequately for the most part.

The present clock control system is manufactured by Primex. The system is wireless, synchronized, battery operated. Clock system was installed in 2002 and is expected to provide 5 more years of useful service life.

There is not a television system.

The school security system consists of surveillance CCTV cameras. The basement is provided with (5) surveillance CCTV cameras, the first floor is provided with (3) surveillance CCTV cameras, the second floor is provided with (4) surveillance CCTV cameras and the third floor is provided with (2) surveillance CCTV cameras. Surveillance CCTV cameras are located strategically to provide a good coverage of the school interior. The surveillance CCTV cameras were installed in 2002 and are expected to provide 5 more years of useful service life.

The school emergency power system is obtained from a gas powered generator manufactured by Kohler Power Systems. The gas powered generator is rated 50KW 120/208V and serves cafeteria/kitchen, exit signs, corridors, library, sump pump, fire alarm, generator charger, multipurpose room. The generator was installed in 2002 and is expected to provide 20 more years of useful service life.

There is adequate UPS in the IT room.

The emergency lighting is obtained with dedicated fixtures connected to the emergency generator. Exit signs are located at each exit door and corridors.

The school lightning protection system is accomplished with air terminals around the building perimeter and tallest equipment/structure on the roof. Present lightning protection system provide full coverage to the school building

The school is provided with one hydraulic elevator. The elevator is manufactured by Thyssenkrupp Elevator model TAC 20, elevator is rated 20HP, 208V. Elevator was installed in 2002 and is expected to provide 25 more years of useful service life.

The school is provided with a multipurpose room with a stage. The stage is provided with two rows of theatrical downlight fixtures controlled by local panelboard. Since this multipurpose room is mainly used as a gymnasium, no modern theatrical lighting is required. The stage is provided with portable sound system. Since this multipurpose room is mainly used as a gymnasium. No permanent installed sound system is required.

Grounds Systems

The asphalt parking lot is located at the south end of the site with access from 68th Street. Striping is faded and there are no parking

bumpers, signage, or designated handicap parking. The asphalt is in good condition. The parking lot is not segregated from playground areas, creating a safety concern. Concrete steps and the ramp to the main entrance have electric heat tracing to de-ice the pavements in winter. Pedestrian paving is concrete along city streets with some repaired sections. Concrete steps and ramps connect the Annex to the main building at grade level, the site slopes considerably. Granite steps at the north entrance are in need of maintenance. The principal requested a sky bridge connection between the buildings. Playgrounds are asphalt surfaced in good condition. There is no separation from playground to the building. The principal reported several injuries on the playground due to lack of cushioning at the building.

Chain link fence surrounds the south and east sides of the site. The south end of the site is terraced with retaining structures of railroad timbers. Drop-offs are protected with chain link fencing as barriers. There is a flagpole on the site.

Landscaping consists of overgrown trees and shrubs on the north end of the building and around the annex. Grass areas are between the buildings and 68th and Lansdowne, and on the terraced hill at the south end of the site. There is no irrigation system.

The exterior of the school is well illuminated with wall mounted lighting fixtures along the building perimeter. There was no indication that additional lighting fixtures are required.

There are seven outdoor, surveillance CCTV cameras providing partial coverage of the building perimeter. Provide additional outdoor surveillance CCTV cameras for a complete coverage of the school building perimeter.

RECOMMENDATIONS:

- Repaint the interiors
- Proved exterior window shades where missing
- Remove overgrown vegetation close to the buildings
- Install a low fence barrier between parking and play areas
- Repair or replace leaking faucets, 2
- Repair or replace out of order water closet, 1
- Replace water heater due to age, 100 gallon
- Repair rooftop air cooled chiller with inoperative compressor
- Provide additional outdoor surveillance CCTV cameras for a complete coverage of the school building perimeter. Approximately 4
- Provide "soft" playground space
- Provide a "skywalk" link between the Ed Center and the Annex

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B448001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S448001		

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	48.83 %	0.00 %	$0.00
B30 - Roofing	45.00 %	0.00 %	$0.00
C10 - Interior Construction	84.54 %	0.00 %	$0.00
C20 - Stairs	89.00 %	0.00 %	$0.00
C30 - Interior Finishes	77.86 %	4.27 %	$128,506.14
D10 - Conveying	68.57 %	0.00 %	$0.00
D20 - Plumbing	65.16 %	5.23 %	$58,867.64
D30 - HVAC	69.61 %	0.87 %	$53,133.61
D40 - Fire Protection	68.57 %	0.00 %	$0.00
D50 - Electrical	38.73 %	0.00 %	$0.00
E10 - Equipment	68.57 %	0.00 %	$0.00
E20 - Furnishings	72.50 %	2.78 %	$3,258.74
Totals:	**55.86 %**	**0.89 %**	**$243,766.13**

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.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$1,014,355
A1030	Slab on Grade	$7.73	S.F.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$426,139
A2010	Basement Excavation	$6.55	S.F.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$361,088
A2020	Basement Walls	$12.70	S.F.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$700,126
B1010	Floor Construction	$75.10	S.F.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$4,140,113
B1020	Roof Construction	$13.88	S.F.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$765,177
B2010	Exterior Walls	$36.91	S.F.	55,128	100	1915	2015	2052	37.00 %	0.00 %	37			$2,034,774
B2020	Exterior Windows	$18.01	S.F.	55,128	40	2004	2044	2044	72.50 %	0.00 %	29			$992,855
B2030	Exterior Doors	$1.45	S.F.	55,128	25	2004	2029	2029	56.00 %	0.00 %	14			$79,936
B3010105	Built-Up	$37.76	S.F.	12,196	20	2004	2024	2024	45.00 %	0.00 %	9			$460,521
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.	55,128	20	2004	2024	2024	45.00 %	0.00 %	9			$3,308
C1010	Partitions	$17.91	S.F.	55,128	100	2004	2104	2104	89.00 %	0.00 %	89			$987,342
C1020	Interior Doors	$3.51	S.F.	55,128	40	2004	2044	2044	72.50 %	0.00 %	29			$193,499
C1030	Fittings	$3.12	S.F.	55,128	40	2004	2044	2044	72.50 %	0.00 %	29			$171,999
C2010	Stair Construction	$1.41	S.F.	55,128	100	2004	2104	2104	89.00 %	0.00 %	89			$77,730

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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	$17.70	S.F.	55,128	10	2004	2014	2027	120.00 %	13.17 %	12		$128,506.14	$975,766
C3010231	Vinyl Wall Covering	$0.00	S.F.	55,128	15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$1.98	S.F.	55,128	30	2004	2034	2034	63.33 %	0.00 %	19			$109,153
C3020411	Carpet	$7.30	S.F.	2,200	10	2004	2014	2027	120.00 %	0.00 %	12			$16,060
C3020412	Terrazzo & Tile	$75.52	S.F.	3,300	50	2004	2054	2054	78.00 %	0.00 %	39			$249,216
C3020413	Vinyl Flooring	$9.68	S.F.	38,628	20	2004	2024	2024	45.00 %	0.00 %	9			$373,919
C3020414	Wood Flooring	$22.27	S.F.	5,500	25	2004	2029	2029	56.00 %	0.00 %	14			$122,485
C3020415	Concrete Floor Finishes	$0.97	S.F.	5,500	50	2004	2054	2054	78.00 %	0.00 %	39			$5,335
C3030	Ceiling Finishes	$20.97	S.F.	55,128	25	2004	2029	2029	56.00 %	0.00 %	14			$1,156,034
D1010	Elevators and Lifts	$1.53	S.F.	55,128	35	2004	2039	2039	68.57 %	0.00 %	24			$84,346
D2010	Plumbing Fixtures	$13.52	S.F.	55,128	35	2004	2039		68.57 %	0.57 %	24		$4,260.92	$745,331
D2020	Domestic Water Distribution	$1.68	S.F.	55,128	25	2004	2029		56.00 %	58.96 %	14		$54,606.72	$92,615
D2030	Sanitary Waste	$2.90	S.F.	55,128	25	2004	2029		56.00 %	0.00 %	14			$159,871
D2040	Rain Water Drainage	$2.32	S.F.	55,128	30	2004	2034		63.33 %	0.00 %	19			$127,897
D3020	Heat Generating Systems	$18.67	S.F.	55,128	35	2004	2039		68.57 %	0.00 %	24			$1,029,240
D3030	Cooling Generating Systems	$24.48	S.F.	55,128	30	2004	2034		63.33 %	3.94 %	19		$53,133.61	$1,349,533
D3040	Distribution Systems	$42.99	S.F.	55,128	25	2012	2037		88.00 %	0.00 %	22			$2,369,953
D3050	Terminal & Package Units	$11.60	S.F.	55,128	20	2004	2024		45.00 %	0.00 %	9			$639,485
D3060	Controls & Instrumentation	$13.50	S.F.	55,128	20	2004	2024		45.00 %	0.00 %	9			$744,228
D4010	Sprinklers	$7.05	S.F.	55,128	35	2004	2039		68.57 %	0.00 %	24			$388,652
D4020	Standpipes	$1.01	S.F.	55,128	35	2004	2039		68.57 %	0.00 %	24			$55,679
D5010	Electrical Service/Distribution	$9.70	S.F.	55,128	30	2002	2032		56.67 %	0.00 %	17			$534,742
D5020	Lighting and Branch Wiring	$34.68	S.F.	55,128	20	2002	2022		35.00 %	0.00 %	7			$1,911,839
D5030	Communications and Security	$12.99	S.F.	55,128	15	2005	2020		33.33 %	0.00 %	5			$716,113
D5090	Other Electrical Systems	$1.41	S.F.	55,128	30	2002	2032		56.67 %	0.00 %	17			$77,730
E1020	Institutional Equipment	$4.82	S.F.	55,128	35	2004	2039	2039	68.57 %	0.00 %	24			$265,717
E1090	Other Equipment	$11.10	S.F.	55,128	35	2004	2039	2039	68.57 %	0.00 %	24			$611,921
E2010	Fixed Furnishings	$2.13	S.F.	55,128	40	2004	2044	2044	72.50 %	2.78 %	29		$3,258.74	$117,423
								Total	**55.86 %**	**0.89 %**			**$243,766.13**	**$27,439,245**

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:
Paint 90%
Tile 10%

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

Note:
Carpet 4%
Terrazzo/Tile 6%
Vinyl 70%
Wood10%
Concrete10%

System: C3030 - Ceiling Finishes — This system contains no images

Note:
2 x 4 Suspended Acoustical Tile 77%
Painted Structure 10%
Painted Gypboard 3%
Unpainted Structure 10%

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:	**$243,766**	**$0**	**$0**	**$0**	**$0**	**$913,188**	**$0**	**$2,586,453**	**$0**	**$3,188,352**	**$0**	**$6,931,759**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A10 - Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A20 - Basement Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2010 - Basement Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2020 - Basement Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$660,963	$0	**$660,963**
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	$4,747	$0	**$4,747**
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**

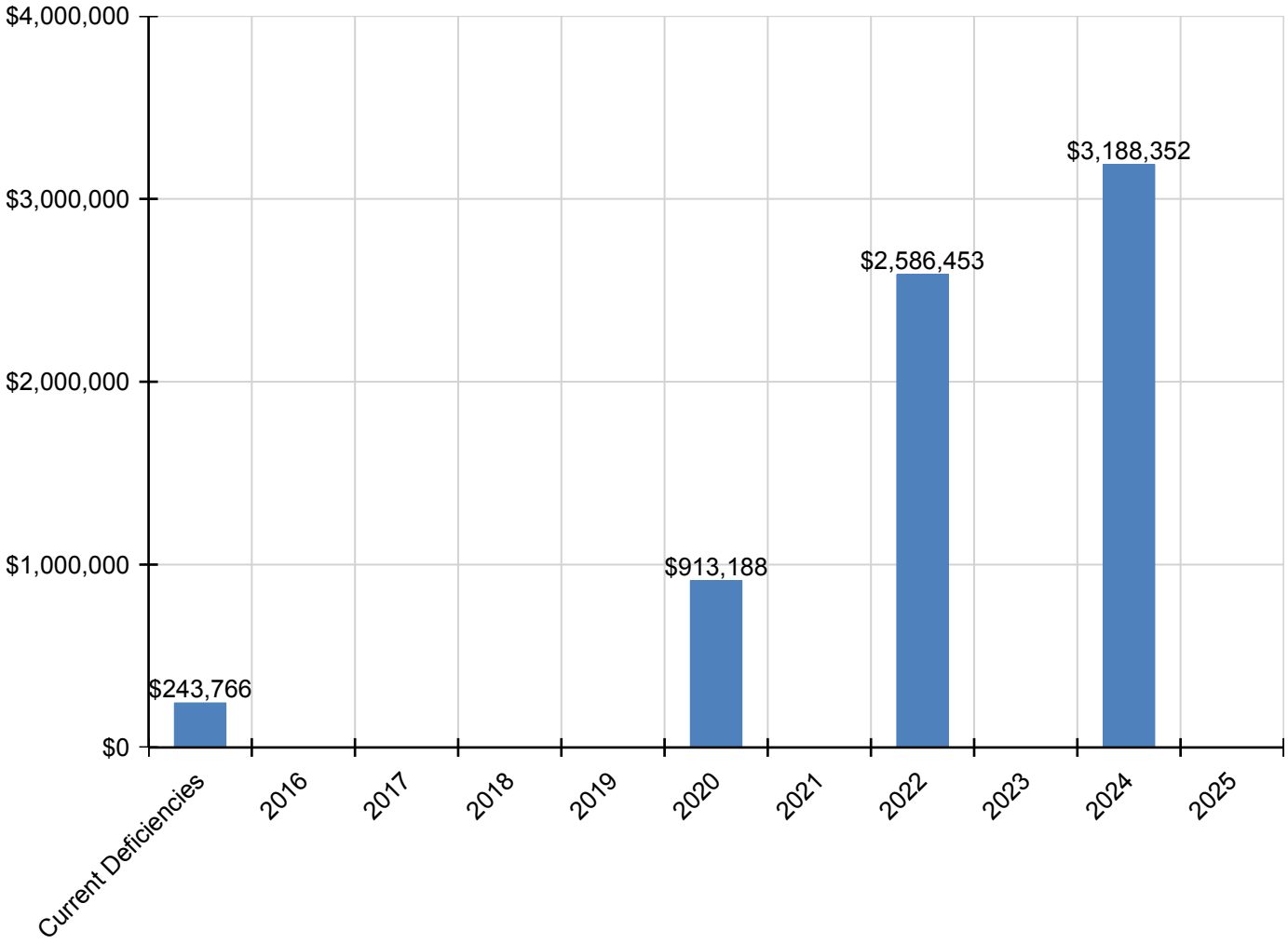
C1020 - Interior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$128,506	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$128,506**
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	$0	$0	$0	$0	$0	$0	**$0**
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	$536,668	$0	**$536,668**
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	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$4,261	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,261**
D2020 - Domestic Water Distribution	$54,607	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$54,607**
D2030 - Sanitary Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$53,134	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$53,134**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$917,821	$0	**$917,821**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,068,154	$0	**$1,068,154**
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	$2,586,453	$0	$0	$0	**$2,586,453**
D5030 - Communications and Security	$0	$0	$0	$0	$0	$913,188	$0	$0	$0	$0	$0	**$913,188**
D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$3,259	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,259**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

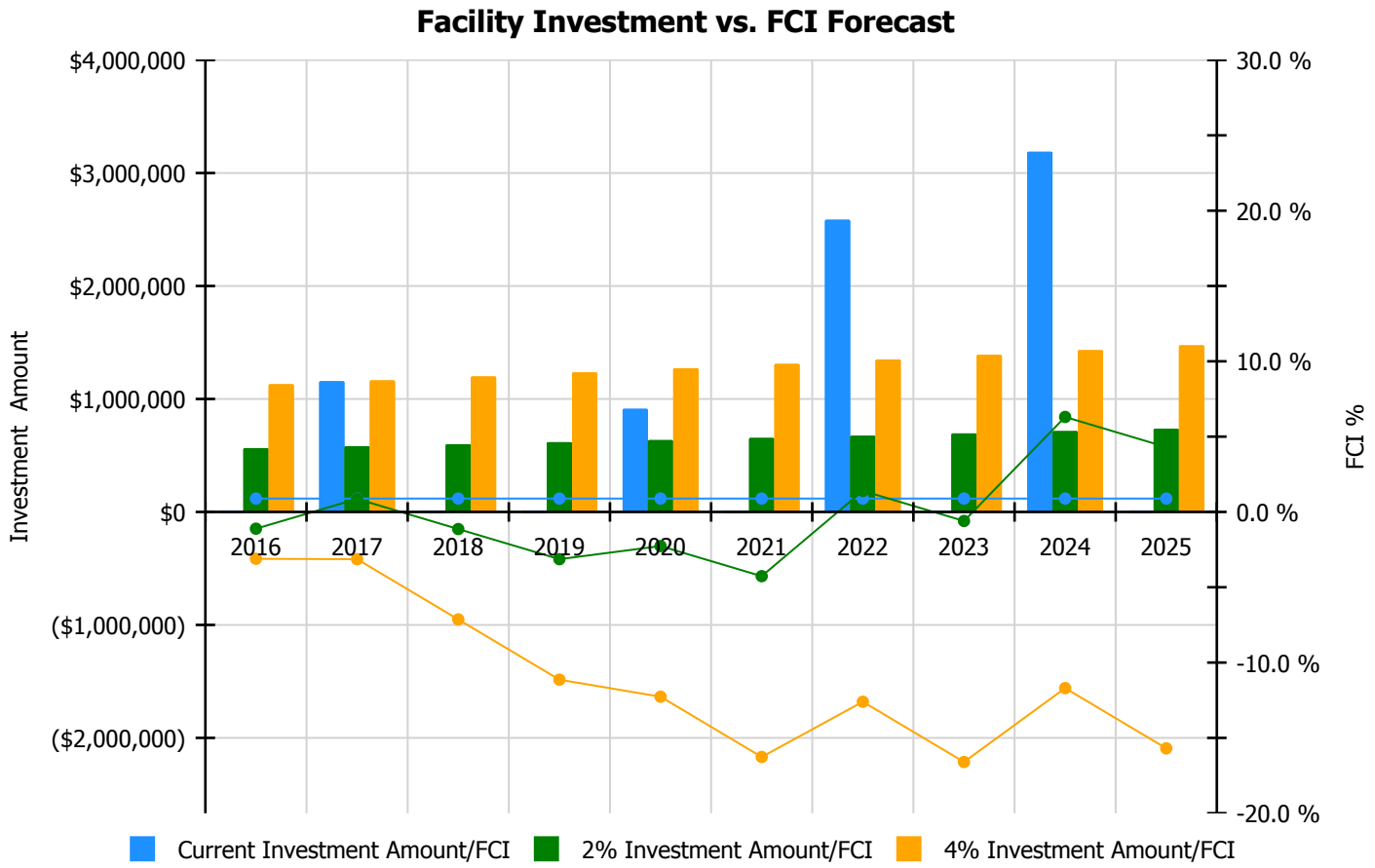
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

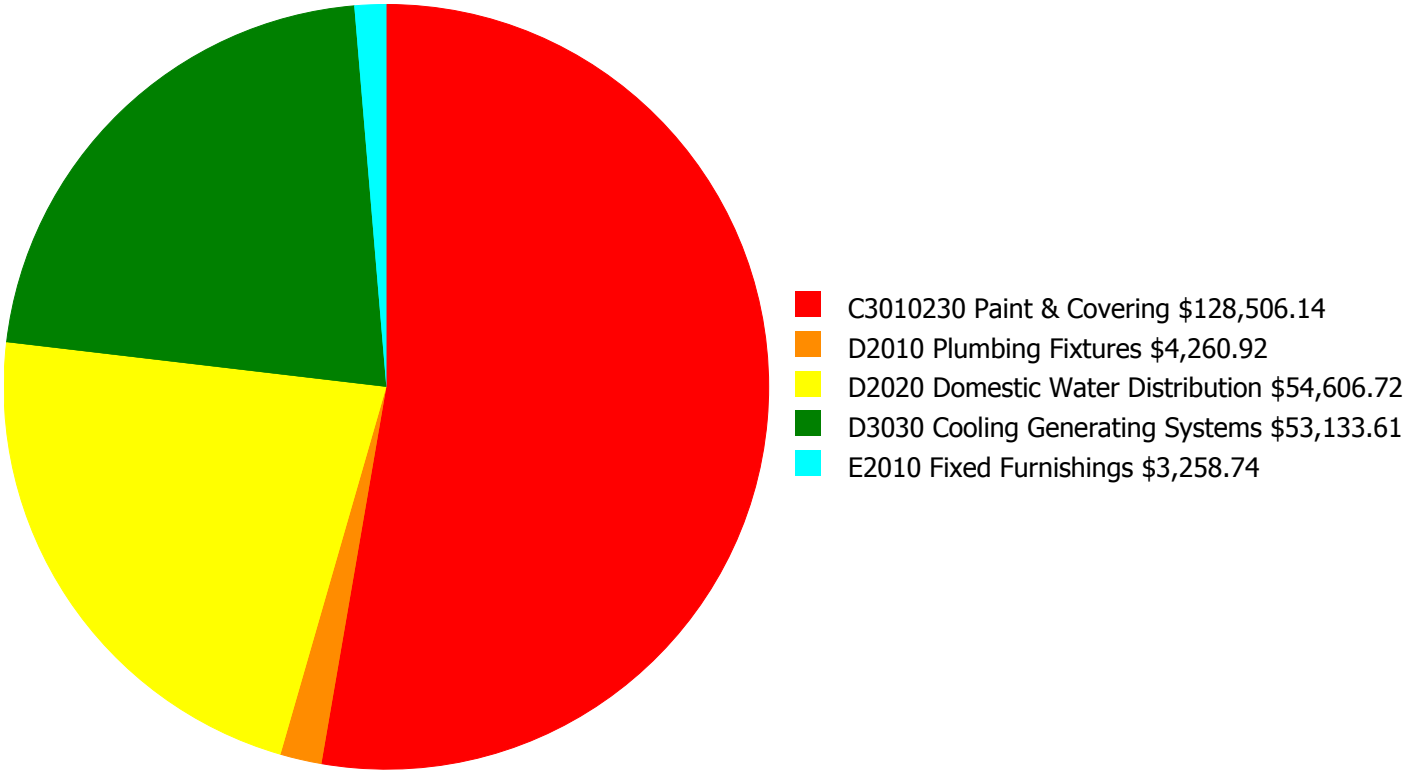
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 0.89%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$565,248.00	-1.11 %	$1,130,497.00	-3.11 %
2017	$1,157,450	$582,206.00	0.86 %	$1,164,412.00	-3.14 %
2018	$0	$599,672.00	-1.14 %	$1,199,344.00	-7.14 %
2019	$0	$617,662.00	-3.14 %	$1,235,324.00	-11.14 %
2020	$913,188	$636,192.00	-2.26 %	$1,272,384.00	-12.26 %
2021	$0	$655,278.00	-4.26 %	$1,310,556.00	-16.26 %
2022	$2,586,453	$674,936.00	1.40 %	$1,349,872.00	-12.60 %
2023	$0	$695,184.00	-0.60 %	$1,390,369.00	-16.60 %
2024	$3,188,352	$716,040.00	6.31 %	$1,432,080.00	-11.69 %
2025	$0	$737,521.00	4.31 %	$1,475,042.00	-15.69 %
Total:	**$7,845,443**	**$6,479,939.00**		**$12,959,880.00**	

Deficiency Summary by System

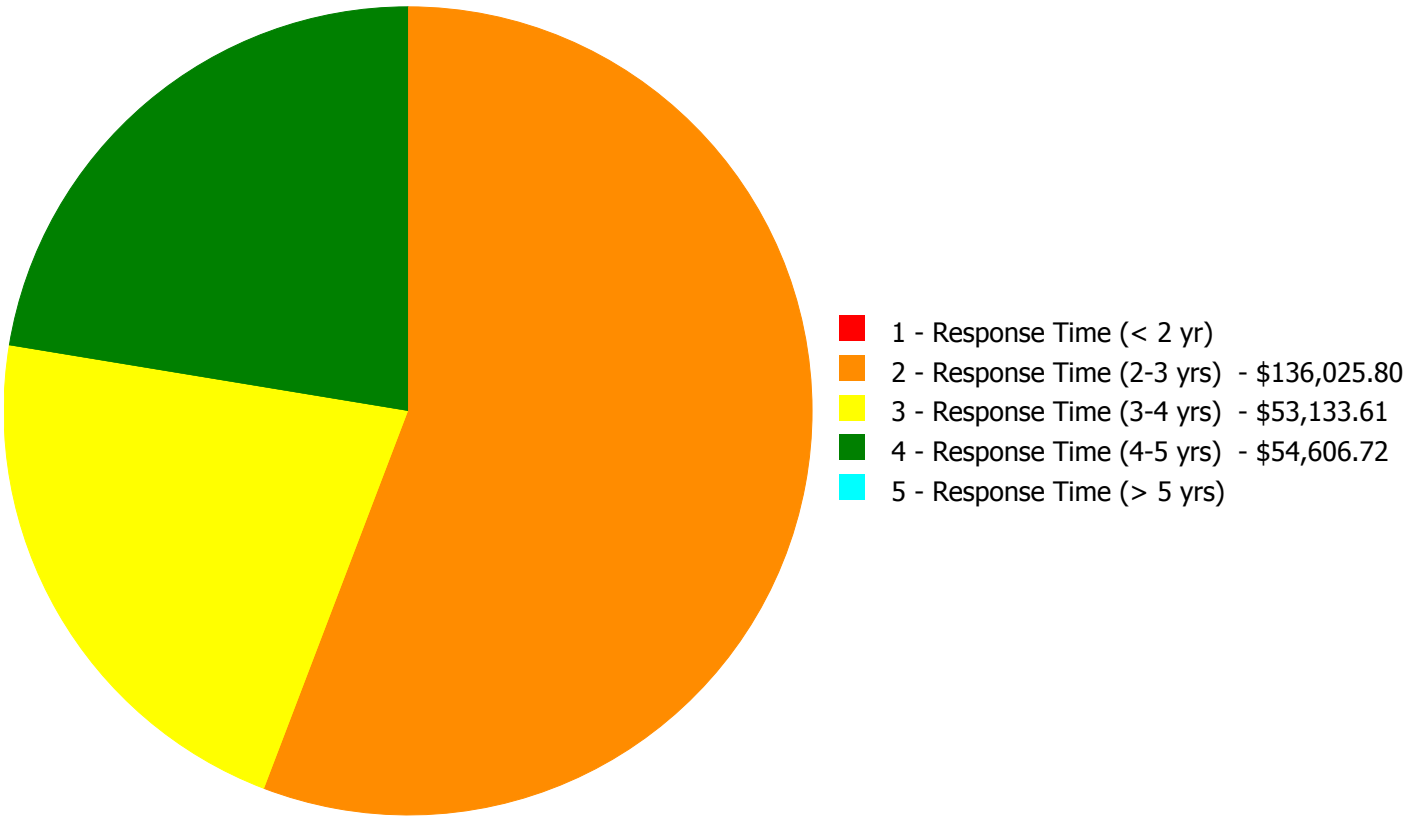
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $243,766.13

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: $243,766.13

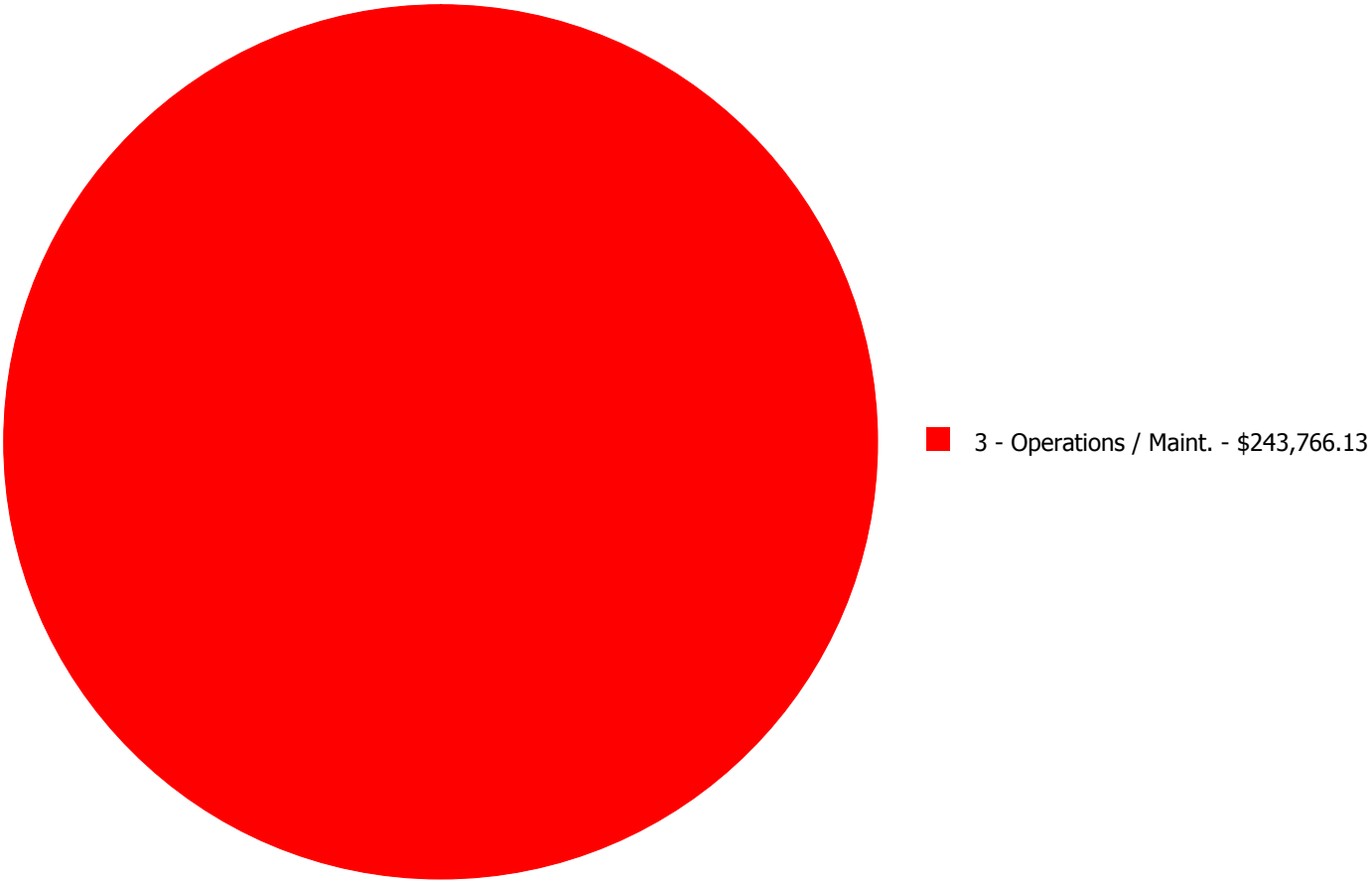
Deficiency By Priority Investment Table

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
C3010230	Paint & Covering	$0.00	$128,506.14	$0.00	$0.00	$0.00	$128,506.14
D2010	Plumbing Fixtures	$0.00	$4,260.92	$0.00	$0.00	$0.00	$4,260.92
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$54,606.72	$0.00	$54,606.72
D3030	Cooling Generating Systems	$0.00	$0.00	$53,133.61	$0.00	$0.00	$53,133.61
E2010	Fixed Furnishings	$0.00	$3,258.74	$0.00	$0.00	$0.00	$3,258.74
	Total:	$0.00	$136,025.80	$53,133.61	$54,606.72	$0.00	$243,766.13

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: $243,766.13

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: C3010230 - Paint & Covering

Location: Building wide

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

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

Qty: 15,000.00

Unit of Measure: S.F.

Estimate: $128,506.14

Assessor Name: Craig Anding

Date Created: 02/19/2016

Notes: Paint finishes date to renovations in 2002. Some wall damage has occurred and general re-painting is recommended. It is estimated that 25% of walls will require repainting.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 0.50

Unit of Measure: Ea.

Estimate: $3,731.09

Assessor Name: Craig Anding

Date Created: 02/09/2016

Notes: Repair or replace out of order water closet

System: D2010 - Plumbing Fixtures

Location: Toilet rooms

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace lavatory faucet

Qty: 2.00

Unit of Measure: Ea.

Estimate: $529.83

Assessor Name: Craig Anding

Date Created: 02/09/2016

Notes: Repair or replace leaking faucets

System: E2010 - Fixed Furnishings

Location: Computer lab and gym

Distress: Inadequate

Category: 3 - Operations / Maint.

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

Correction: Replace or add roller shades

Qty: 200.00

Unit of Measure: S.F.

Estimate: $3,258.74

Assessor Name: Craig Anding

Date Created: 02/19/2016

Notes: Provide window shades at west wall of gym where missing and in computer lab at exterior window.

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

System: D3030 - Cooling Generating Systems

Location: Roof

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace chiller, air-cooled (130 tons)

Qty: 0.20

Unit of Measure: Ea.

Estimate: $53,133.61

Assessor Name: Craig Anding

Date Created: 02/09/2016

Notes: Repair rooftop aircooled chiller with inoperative compressor

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

System: D2020 - Domestic Water Distribution

Location: Janitor closet

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace vertical tank type gas-fired water heater (75 gal)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $54,606.72

Assessor Name: Craig Anding

Date Created: 02/09/2016

Notes: Replace water heater due to age

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.	Basement elevetor room					35	2002	2037	$61,999.00	$68,198.90
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 1460 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.						35	2004	2039	$55,514.90	$122,132.78
D3030 Cooling Generating Systems	Water chiller, liquid chiller, packaged unit with integral air cooled condenser, 100 ton cooling, includes standard controls	1.00	Ea.	Roof					30	2004	2034	$94,116.00	$103,527.60
D3040 Distribution Systems	Air handling unit, packaged weatherproof, with cooling/heating coil section, filters, mixing box, constant volume, single zone, 10,000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	Roof					25	2004	2029	$69,052.50	$75,957.75
D3040 Distribution Systems	Air handling unit, packaged weatherproof, with cooling/heating coil section, filters, mixing box, constant volume, single zone, 5000 CFM, cooling coils may be chilled water or DX, heating coils may be hot water, steam or electric	1.00	Ea.	Roof					25	2004	2029	$34,270.50	$37,697.55
D3040 Distribution Systems	Air-handling unit, built-up, horizontal/vertical, constant volume, single zone, 11,500 CFM, with cooling/heating coil section, filters, mixing box	1.00	Ea.	Mechanical room					25	2004	2029	$30,178.50	$33,196.35
D3040 Distribution Systems	Air-handling unit, built-up, horizontal/vertical, constant volume, single zone, 7500 CFM, with cooling/heating coil section, filters, mixing box	1.00	Ea.	Mechanical room					25	2004	2029	$23,119.80	$25,431.78
D3040 Distribution Systems	Air-handling unit, built-up, horizontal/vertical, constant volume, single zone, 7500 CFM, with cooling/heating coil section, filters, mixing box	1.00	Ea.	Mechanical room					25	2004	2029	$23,119.80	$25,431.78
D3040 Distribution Systems	Heat pump, air to air split system, 5 ton cooling, 27 MBH heat @ 0Deg.F, includes outside condensing unit only, excludes interconnecting tubing, curbs, pads and ductwork	1.00	Ea.	Roof					25	2004	2029	$6,700.65	$7,370.72
D3040 Distribution Systems	Pump, circulating, cast iron, base mounted, coupling guard, bronze impeller, flanged joints, 7-1/2 H.P., to 350 GPM, 4" size	4.00	Ea.	Boiler room					25	2004	2029	$14,934.00	$65,709.60
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					30	2002	2032	$6,551.55	$7,206.71
												Total:	**$571,861.52**

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:	Annex
Gross Area (SF):	14,236
Year Built:	1960
Last Renovation:	
Replacement Value:	$8,196,531
Repair Cost:	$2,090,390.36
Total FCI:	25.50 %
Total RSLI:	58.29 %

Description:

Facility Assessment

November 2015

School District of Philadelphia
Overbrook Educational Center Annex
6714 Lansdowne Avenue
Philadelphia, PA 19151

14,236 SF /Students / LN 02

General

The Overbrook Educational Center Annex building is located at 6714 Lansdowne Avenue in Philadelphia, PA. The 3 story, 14,236 square foot building was originally constructed in 1960 as a convent. There have been no additions. It is assumed that interior renovations occurred at the same time as at the Ed Center, i.e. in 2004. The building has a basement.

This building serves grades K-2. Enrolment for this building is reported at the Overbrook Educational Center building. The school plan is rectangular with the long axis running E/W.

Architectural/Structural Systems

The building bears on concrete foundations and CMU basement walls that are not showing signs of significant settlement or damage. The basement floor is slab on grade. Moisture intrusion is a problem in the basement. The structure is cast in place concrete framing. Exterior walls are stone at exposed basement walls, at the east 2 story portion, and at the west stair tower. Elsewhere exterior walls are blond brick on CMU. In general, masonry is in good condition with no repairs recommended. Windows are dual pane acrylic in painted aluminum frames. Operable units are single hung. Windows are in generally good condition, however they are difficult to operate and have no insect screens. Windows at the front entrance are colored leaded glass in aluminum frames. Windows at the basement and first floor have security grilles. Window sills are marble. Exterior doors are hollow metal in hollow metal frames with glazing, in good condition. Roofing on the 3 story portion of the building is low slope built-up with a metallic reflective coating. The roof over the 2 story portion is also built-up but without the reflective coating. Roofs are in fair to poor condition with some mushiness noted while walking around, some alligatoring observed, ponding, and flaking of the coating. Roofing over the west stair tower is steep copper. Drainage is via interior roof drains. There are no overflow drains. Roof access is via stairwell to the main roofs. There is no fixed ladder to the lower roof at the east end of the building. There is a skylight in the roof that is concealed by a ceiling on the 3rd floor. The skylight leaks. Generally, the building is not fully accessible per ADA requirements.

Partition walls are typically gypboard on metal studs in good condition. Interior classroom and office doors are generally solid core wood veneer in hollow metal frames with slot lites n hollow metal frames. Doors do typically have ADA lever hardware and are generally in good condition. Doors leading to exit stairways are hollow metal doors and frames with panic hardware in good condition. Doors swing in the direction of exit. Classroom doors are recessed and do not reduce exit width. Doors are in good condition.

Fittings include: toilet accessories and plastic toilet partitions in good condition and in conformance with ADA requirements; chalk boards are present in classrooms; bulletin boards are present in classrooms and tack strips are mounted on corridor walls; and interior signage that is in compliance with modern codes, i.e. it is mounted at the proper height and has tactile lettering.

Stair construction is concrete filled steel pans in good condition. Treads and landings have terrazzo finishes with contrast strips at nosings. Some nosings have minor chips in them. Handrails are painted steel or wood. Handrails in the original building do not meet modern codes for configuration. There are extensions at landings at wall mounted outer handrails, but nit at inside handrail. Inside handrails do not have sufficient clearance to adjacent flights of steps.

Interior wall finishes are typically paint in generally good condition. Toilet rooms have ceramic tile on the walls. Ceramic tile is in good condition. Flooring is typically VCT in good condition. Toilet rooms have ceramic tile floors in good condition. The main entrance lobby has terrazzo flooring. The boiler room has concrete floors. Ceilings are typically 2 x 4 suspended acoustical tile and are in fair to good condition with some damage at the 2nd floor boys room. Toilet rooms have painted gypboard or plaster ceilings. A large office in the basement has a painted concrete ceiling. Utility room ceilings are unfinished.

The building has no elevator.

Institutional Equipment includes Smartboards in four classrooms.

Furnishings include: fixed plastic laminate casework in the teacher's lounge, in fair condition; window roller shades, generally in good condition; and vertical blinds in good condition.

Mechanical Systems

Toilet room plumbing fixtures include porcelain floor mounted water closets, and wall hung urinals and lavatories. Fixtures are a mix of original and replacements. Flush valves are exposed. Water closets have tanks, and two of them leak. Lavatory faucets have separate hot and cold spouts with momentary action handles. Accessible fixtures exist throughout the building. There is no cafeteria in the building, but a residential kitchen sink is installed in a first floor classroom. There is a cast iron service sink in the boiler room in fair condition. Sinks and toilet fixtures can be expected to last 10 - 15 more years. Drinking fountains are non-accessible, wall mounted with integral chillers in fair condition. They have exceeded their service life and should be replaced with accessible fixtures.

Domestic water distribution pipe is soldered copper. Some areas of pipe show light surface corrosion, but overall the pipe is in fair condition and should last 10 years. Municipal water service enters the basement through a 2 inch pipe. There is a water meter without a bypass line then two parallel 2 inch double backflow preventers. There is a backflow preventer for the boiler makeup water connection. There is a domestic water pressure booster system with two pumps and a storage tank. The water entry equipment is in excellent condition and should last 25 years or longer. A Bradford White 40 gallon water heater was installed in 2011 in parallel with a 50 gallon heater from 1993. The older heater is in poor condition and shut-off valves to it are closed. There is a circulation pump for the hot water.

Sanitary drain pipe is hub and spigot cast iron. It is likely original and should be inspected and repaired as needed. The building does not have a sewage ejector.

Rain water drain pipes are unknown construction as they were not visible during the inspection. Drain pipes run inside the building. There are no overflow drains. The pipe age is unknown. There were no noticed or reported drainage problems. There is no rain water sump in the basement. Rain water drains should remain serviceable for 10 more years.

Heating hot water is generated by one Weil-McLain model 580 cast iron boiler installed in 2008 with 448 MBH (13 HP) boiler with Carlin burner for natural gas. The boiler is in good condition and has 25 year life expectancy.

Air conditioning is provided by 5 ground mounted condensing units connected to 11 ductless indoor evaporators with 1½ ton capacity each. The refrigerant lines need new insulation due to weathering. Total cooling capacity is currently approximately 17 tons. A complete air conditioning system for the entire building should be installed with 35 ton capacity.

The only ventilation for the building is from rooftop exhaust fans. Hydronic pipe is soldered copper of unknown age. There are 3 inline, fractional horsepower, hydronic pumps located beside the boiler and the school is zoned by floors. A ventilation system should be installed for the entire building.

Heating for the entire building is provided by finned tube hydronic baseboard convection units. Convectors are likely original and in fair condition. Some locations have rusty covers and cleaning and repainting should be done the next time the building is painted.

Circulation pumps are controlled by thermostats on each floor. There is no pneumatic system and no air compressor. When cooling and ventilation systems are installed, their controls should be integrated.

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

Electrical Systems

A pole mounted transformer on Lansdowne Avenue and overhead lateral secondary conductors serve this school. The electrical room is located at ground level. The electrical room houses the utility main disconnect switch and 400A 120/240V distribution section. The electrical service was installed in 1997 and is expected to provide 12 more years of useful service life. The utility meter is mounted on the exterior wall of the electrical room, the meter No is PECO 124089727. The existing service has no extra capacity for expansion for a new Heating, Ventilation, Air Conditioning (HVAC) system. The electrical service entrance needs to be upgraded. The new service will be 600A, 120/208V, and 3 phase power. The new electrical service will feed HVAC (Heating, Ventilation and Air Conditioning) equipment, receptacles, lighting and other smaller loads.

In each floor, there are 120/240V surface, panel-boards for lighting and receptacles. Panel boards were installed in 1997 and are expected to provide 12 more years of useful service life. Since a new electrical service is to be provided and system voltages are different, replace all existing 120/240V, single phase panelboards with 120/208V, three phase panel boards.

There number of receptacles in classrooms is adequate. Most of the classrooms are provided with two recessed receptacles per wall.

Classrooms, corridors and office areas are illuminated with 2'x4', recessed mounted, acrylic lens fluorescent fixtures. The stairwells are illuminated with surface mounted, wraparound lens, fluorescent lighting fixtures. Fluorescent fixtures are provided with T-8 lamps. Lighting fixtures are expected to provide 10 more years of useful service life.

The fire alarm system is manufactured by Simplex 4005. The system is approximately 10 years old and is expected to provide 10 more years of useful service life. The fire alarm system does not comply with ADA requirement to provide audio/visual devices in the classroom. Provide audio/visual devices in the classrooms.

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

An independent and separate PA system does not exist, or is not working. The school uses the telephone systems for public announcements. The system is working adequately for the most part.

The annex is provided with a new clock controller, we were unable to determine the controller manufacturer. Some clocks are

operative and others are not. Provide new clocks compatible with the new clock controller.

There is not a television system.

The school security system consists of door contacts and motions detectors with the key pad at the school entrance. For a safer environment provide surveillance CCTV cameras in the school interior.

There is not an emergency power system in this facility. Provide an emergency power system to feed telephone system, public address system, fire alarm system, lighting, exit signs, and selected mechanical equipment.

We did not have access to the IT room. School District standard is to provide adequate UPS to the IT equipment.

The emergency lighting is obtained with wall mounted emergency lighting fixtures with battery backup. Emergency lighting fixtures are located along the exit pathways. Some stairways are not provided with emergency lighting.

The school is not provided with lightning protection system. A study needs to be prepared to determine if the school requires lightning protection system.

The school perimeter is illuminated with three wall mounted lighting fixtures. Provide additional wall mounted lighting fixtures along the building perimeter for a safer environment.

There are not outdoor, surveillance CCTV cameras around the building perimeter. For a safer environment provide outdoor, surveillance CCTV cameras.

There is not an outdoor loud speaker. There was no indication that additional loud speaker is required.

Grounds Systems

Please refer to the Overbrook Educational Center for a discussion of grounds systems,

RECOMMENDATIONS:

- Replace the built up roofs. Remove the skylight
- Install a ladder from the upper roof to the lower roof
- Replace handrails at exit stairs
- Repair 2 x 4 ceiling in 2nd floor boys room and at skylight
- Install whiteboards in classrooms
- Replace drinking fountains with accessible type, 3 pairs
- Inspect sanitary drain pipes and repair as needed
- Re-insulate refrigerant lines from outdoor condenser to indoor AC units
- Install 35 ton refrigeration ventilation system for entire building
- Install fire protection sprinkler system, including fire pump if needed
- Provide a new electrical service 120/208V, 3 phase power, 600 amperes
- Replace the entire distribution system with new panels and new wiring/conduits. Approximate (6) 208/120V panel boards
- Provide fire alarm audio/visual devices in each classroom. Approximately 10 devices
- Provide clocks compatible with the existing clock controller. Approximately 10
- Provide indoor surveillance CCTV cameras for a complete coverage of the school interior. Approximately 10 CCTV cameras
- Provide 20 KW, outdoor, diesel powered generator
- Provide emergency lighting fixtures with battery backup. Approximately 5
- Prepare a study to determine if the school requires lightning protection system.
- Provide outdoor, wall mounted, HID lighting fixtures along the building perimeter for a safer environment. Approximately 5 fixtures
- Provide outdoor surveillance CCTV cameras. Approximately 6 CCTV cameras

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B448002
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S448001		

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	45.00 %	0.00 %	$0.00
A20 - Basement Construction	45.00 %	0.00 %	$0.00
B10 - Superstructure	45.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	53.45 %	0.50 %	$3,328.61
B30 - Roofing	97.84 %	77.93 %	$121,520.58
C10 - Interior Construction	54.50 %	3.06 %	$9,928.98
C20 - Stairs	45.00 %	269.79 %	$135,960.89
C30 - Interior Finishes	69.21 %	0.02 %	$193.84
D20 - Plumbing	44.53 %	20.19 %	$116,916.89
D30 - HVAC	78.23 %	62.54 %	$990,331.42
D40 - Fire Protection	94.10 %	158.77 %	$203,653.80
D50 - Electrical	66.05 %	58.39 %	$508,555.35
E10 - Equipment	20.76 %	0.00 %	$0.00
E20 - Furnishings	45.00 %	0.00 %	$0.00
Totals:	**58.29 %**	**25.50 %**	**$2,090,390.36**

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.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$346,220
A1030	Slab on Grade	$15.51	S.F.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$220,800
A2010	Basement Excavation	$13.07	S.F.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$186,065
A2020	Basement Walls	$23.02	S.F.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$327,713
B1010	Floor Construction	$92.20	S.F.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$1,312,559
B1020	Roof Construction	$24.11	S.F.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$343,230
B2010	Exterior Walls	$31.22	S.F.	14,236	100	1960	2060	2060	45.00 %	0.75 %	45		$3,328.61	$444,448
B2020	Exterior Windows	$13.63	S.F.	14,236	40	2004	2044	2044	72.50 %	0.00 %	29			$194,037
B2030	Exterior Doors	$1.67	S.F.	14,236	25	2004	2029	2029	56.00 %	0.00 %	14			$23,774
B3010105	Built-Up	$37.76	S.F.	3,586	20	1995	2015	2037	110.00 %	89.74 %	22		$121,520.58	$135,407
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.	200	30	1995	2025	2025	33.33 %	0.00 %	10			$10,844
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.68	S.F.	14,236	20				0.00 %	0.00 %				$9,680
C1010	Partitions	$14.93	S.F.	14,236	100	1960	2060	2060	45.00 %	0.00 %	45			$212,543
C1020	Interior Doors	$3.76	S.F.	14,236	40	2004	2044	2044	72.50 %	0.00 %	29			$53,527
C1030	Fittings	$4.12	S.F.	14,236	40	2004	2044	2044	72.50 %	16.93 %	29		$9,928.98	$58,652
C2010	Stair Construction	$3.54	S.F.	14,236	100	1960	2060	2060	45.00 %	269.79 %	45		$135,960.89	$50,395

Site Assessment Report - B448002;Overbrook Ed Center Annex

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	$17.70	S.F.	14,236	10	2004	2014	2024	90.00 %	0.00 %	9			$251,977
C3010231	Vinyl Wall Covering	$0.00	S.F.	14,236	15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$1.98	S.F.	14,236	30	2004	2034	2034	63.33 %	0.00 %	19			$28,187
C3020411	Carpet	$7.30	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$75.52	S.F.	2,146	50	2004	2054	2054	78.00 %	0.00 %	39			$162,066
C3020413	Vinyl Flooring	$9.68	S.F.	10,950	20	2004	2024	2024	45.00 %	0.00 %	9			$105,996
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	1,140	50	2004	2054	2054	78.00 %	0.00 %	39			$1,106
C3030	Ceiling Finishes	$20.97	S.F.	14,236	25	2004	2029	2029	56.00 %	0.06 %	14		$193.84	$298,529
D2010	Plumbing Fixtures	$31.58	S.F.	14,236	35	1960	1995	2030	42.86 %	10.47 %	15		$47,078.70	$449,573
D2020	Domestic Water Distribution	$2.90	S.F.	14,236	25	1960	1985	2025	40.00 %	0.00 %	10			$41,284
D2030	Sanitary Waste	$2.90	S.F.	14,236	25	1960	1985	2035	80.00 %	169.17 %	20		$69,838.19	$41,284
D2040	Rain Water Drainage	$3.29	S.F.	14,236	30	1960	1990	2025	33.33 %	0.00 %	10			$46,836
D3020	Heat Generating Systems	$18.67	S.F.	14,236	35	2008	2043		80.00 %	0.00 %	28			$265,786
D3030	Cooling Generating Systems	$24.48	S.F.	14,236	30	1997	2027		40.00 %	0.00 %	12			$348,497
D3040	Distribution Systems	$42.99	S.F.	14,236	25	2008	2033	2040	100.00 %	161.82 %	25		$990,331.42	$612,006
D3050	Terminal & Package Units	$11.60	S.F.	14,236	20	1960	1980	2025	50.00 %	0.00 %	10			$165,138
D3060	Controls & Instrumentation	$13.50	S.F.	14,236	20	1960	1980	2035	100.00 %	0.00 %	20			$192,186
D4010	Sprinklers	$8.02	S.F.	14,236	35			2052	105.71 %	178.37 %	37		$203,653.80	$114,173
D4020	Standpipes	$0.99	S.F.	14,236	35				0.00 %	0.00 %				$14,094
D5010	Electrical Service/Distribution	$9.70	S.F.	14,236	30	1997	2027	2047	106.67 %	216.32 %	32		$298,711.59	$138,089
D5020	Lighting and Branch Wiring	$34.68	S.F.	14,236	20	1997	2017	2025	50.00 %	0.00 %	10			$493,704
D5030	Communications and Security	$12.99	S.F.	14,236	15	1960	1975	2025	66.67 %	41.81 %	10		$77,317.66	$184,926
D5090	Other Electrical Systems	$3.81	S.F.	14,236	30	1960	1990	2047	106.67 %	244.34 %	32		$132,526.10	$54,239
E1020	Institutional Equipment	$4.82	S.F.	14,236	35	2004	2039	2039	68.57 %	0.00 %	24			$68,618
E1090	Other Equipment	$11.10	S.F.	14,236	35				0.00 %	0.00 %				$158,020
E2010	Fixed Furnishings	$2.13	S.F.	14,236	20	2004	2024	2024	45.00 %	0.00 %	9			$30,323
								Total	**58.29 %**	**25.50 %**			**$2,090,390.36**	**$8,196,531**

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:
Paint & covering 90%
Wall tile 10%

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

Note:
Terrazzo/Tile 15%
Vinyl 77%
Concrete 8%

System: C3030 - Ceiling Finishes — This system contains no images

Note:
2 x 4 acoustical tile 70%
Paint 25%
Unfinished 5%

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:	**$2,090,390**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$557,303**	**$1,393,648**	**$4,041,341**
*** 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	$3,329	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,329**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$121,521	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$121,521**
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	$16,030	**$16,030**
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**

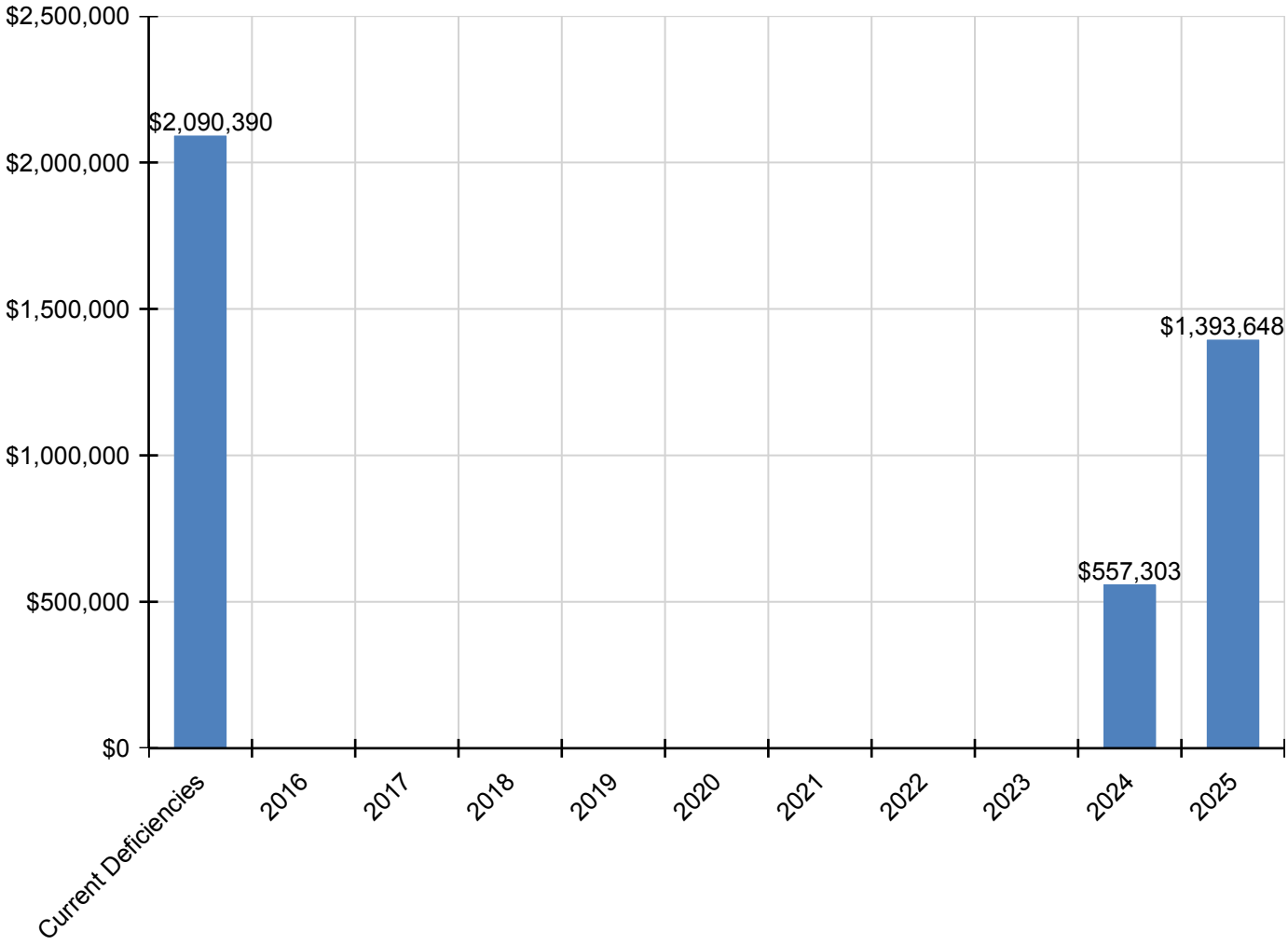
C1020 - Interior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1030 - Fittings	$9,929	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$9,929**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$135,961	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$135,961**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$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	$0	$0	$0	$361,651	$0	**$361,651**
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	$0	$0	$0	$0	$0	$0	**$0**
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	$152,131	$0	**$152,131**
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	$194	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$194**
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	$47,079	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$47,079**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$61,031	**$61,031**
D2030 - Sanitary Waste	$69,838	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$69,838**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$69,239	**$69,239**
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	$990,331	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$990,331**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$244,124	**$244,124**
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	$203,654	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$203,654**
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	$298,712	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$298,712**

D5020 - Lighting and Branch Wiring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$729,847	**$729,847**
D5030 - Communications and Security	$77,318	$0	$0	$0	$0	$0	$0	$0	$0	$0	$273,377	**$350,694**
D5090 - Other Electrical Systems	$132,526	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$132,526**
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	$43,521	$0	**$43,521**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

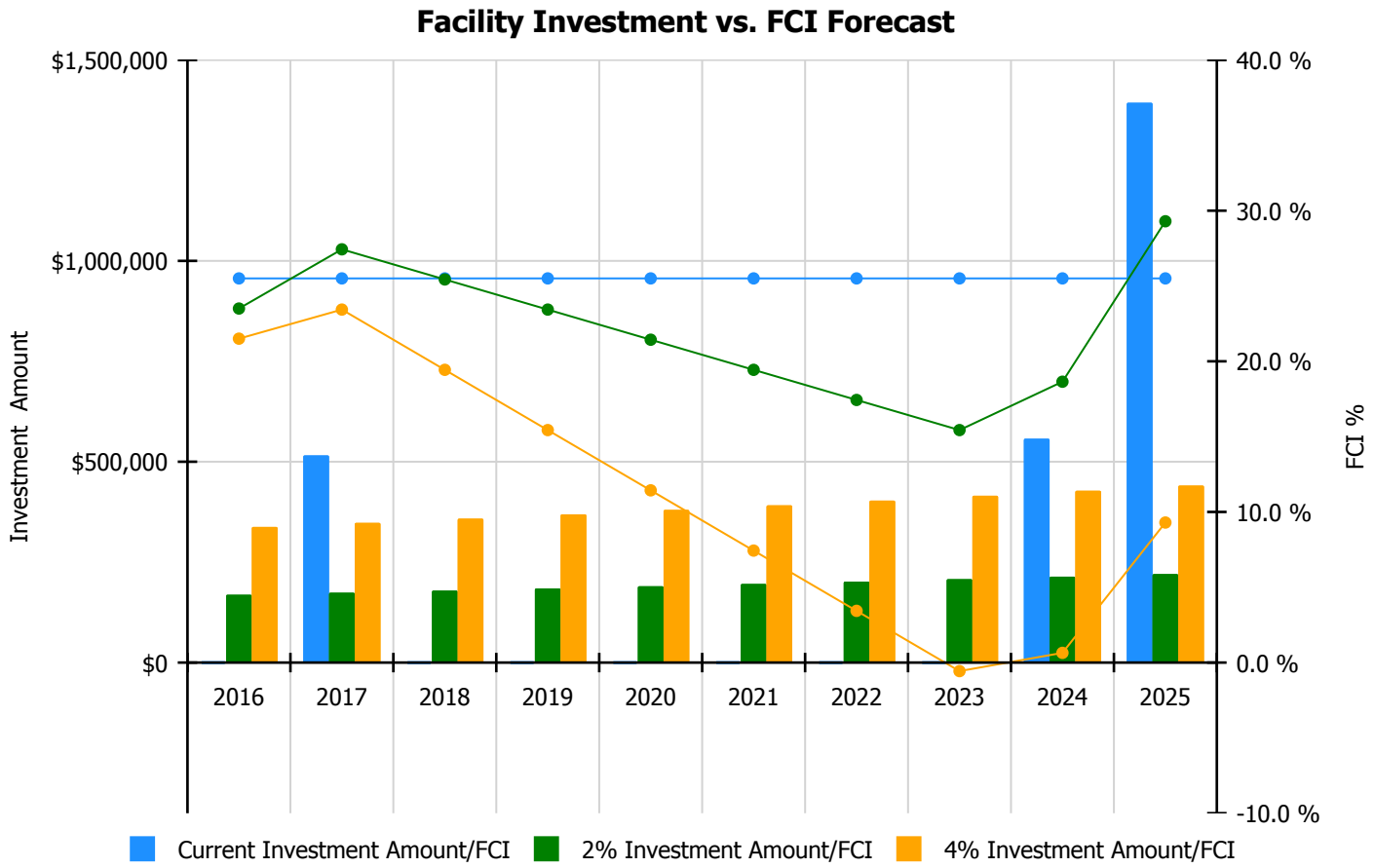
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

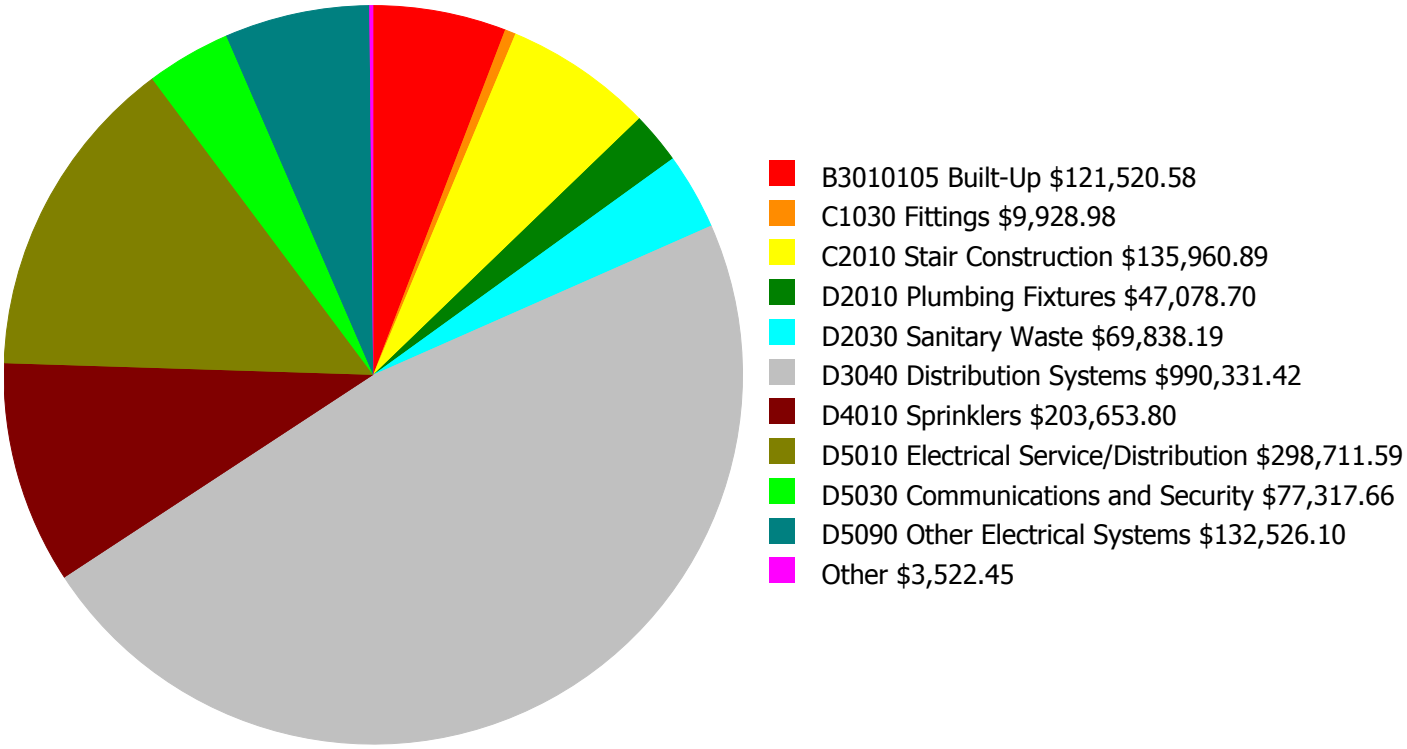
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 25.5%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$168,849.00	23.50 %	$337,697.00	21.50 %
2017	$515,702	$173,914.00	27.43 %	$347,828.00	23.43 %
2018	$0	$179,131.00	25.43 %	$358,263.00	19.43 %
2019	$0	$184,505.00	23.43 %	$369,011.00	15.43 %
2020	$0	$190,041.00	21.43 %	$380,081.00	11.43 %
2021	$0	$195,742.00	19.43 %	$391,483.00	7.43 %
2022	$0	$201,614.00	17.43 %	$403,228.00	3.43 %
2023	$0	$207,662.00	15.43 %	$415,325.00	-0.57 %
2024	$557,303	$213,892.00	18.64 %	$427,785.00	0.64 %
2025	$1,393,648	$220,309.00	29.30 %	$440,618.00	9.30 %
Total:	**$2,466,653**	**$1,935,659.00**		**$3,871,319.00**	

Deficiency Summary by System

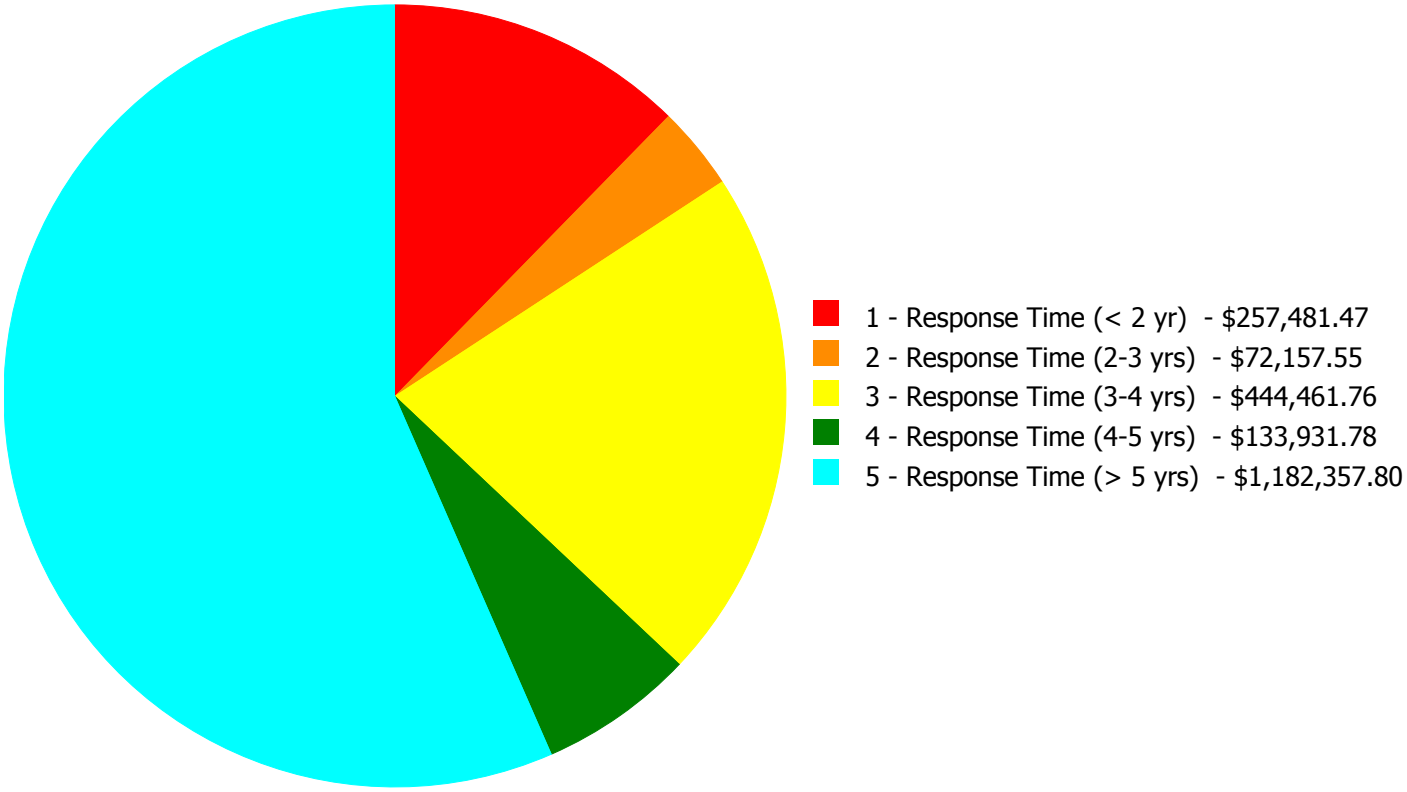
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $2,090,390.36

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: $2,090,390.36

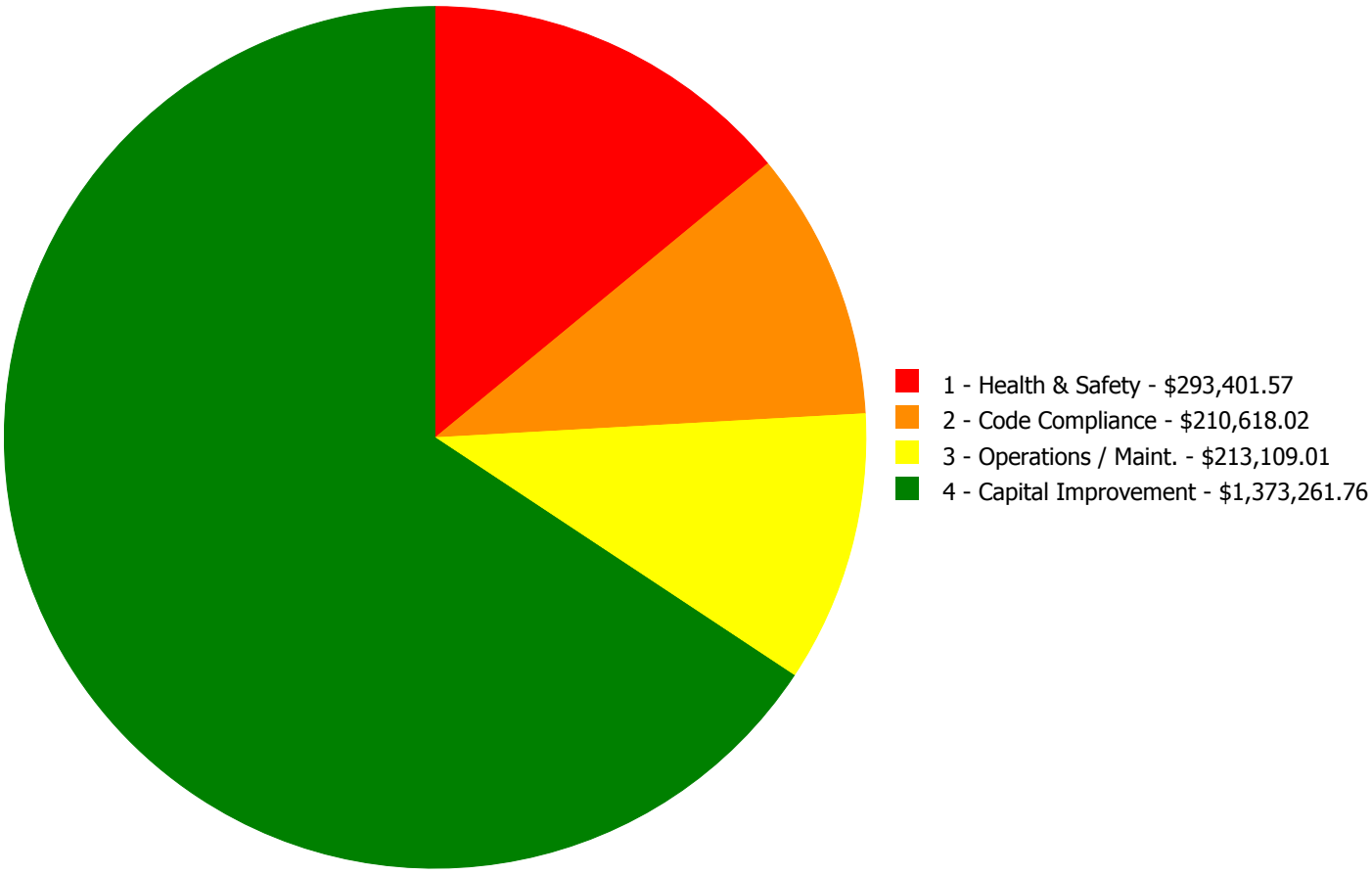
Deficiency By Priority Investment Table

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	$3,328.61	$0.00	$0.00	$0.00	$3,328.61
B3010105	Built-Up	$121,520.58	$0.00	$0.00	$0.00	$0.00	$121,520.58
C1030	Fittings	$0.00	$9,928.98	$0.00	$0.00	$0.00	$9,928.98
C2010	Stair Construction	$135,960.89	$0.00	$0.00	$0.00	$0.00	$135,960.89
C3030	Ceiling Finishes	$0.00	$193.84	$0.00	$0.00	$0.00	$193.84
D2010	Plumbing Fixtures	$0.00	$47,078.70	$0.00	$0.00	$0.00	$47,078.70
D2030	Sanitary Waste	$0.00	$0.00	$0.00	$69,838.19	$0.00	$69,838.19
D3040	Distribution Systems	$0.00	$11,627.42	$0.00	$0.00	$978,704.00	$990,331.42
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$203,653.80	$203,653.80
D5010	Electrical Service/Distribution	$0.00	$0.00	$298,711.59	$0.00	$0.00	$298,711.59
D5030	Communications and Security	$0.00	$0.00	$13,224.07	$64,093.59	$0.00	$77,317.66
D5090	Other Electrical Systems	$0.00	$0.00	$132,526.10	$0.00	$0.00	$132,526.10
	Total:	$257,481.47	$72,157.55	$444,461.76	$133,931.78	$1,182,357.80	$2,090,390.36

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: $2,090,390.36

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: B3010105 - Built-Up

Location: Roof

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and Replace Built Up Roof

Qty: 3,586.00

Unit of Measure: S.F.

Estimate: $121,520.58

Assessor Name: Craig Anding

Date Created: 02/20/2016

Notes: Replace built up roof. Remove skylight.

System: C2010 - Stair Construction

Location: Exit stairwells

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

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

Qty: 240.00

Unit of Measure: L.F.

Estimate: $135,960.89

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Replace handrails in exit stairwells.

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

System: B2010 - Exterior Walls

Location: East end high roof

Distress: OSHA

Category: 2 - Code Compliance

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

Correction: Add fixed ladders to wall

Qty: 12.00

Unit of Measure: V.L.F.

Estimate: $3,328.61

Assessor Name: Craig Anding

Date Created: 02/20/2016

Notes: Provide roof access ladder from high roof to low roof at east end of building to facilitate safe access for inspection and maintenance.

System: C1030 - Fittings

Location: Classrooms

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Replace blackboards with marker boards - pick the appropriate size and insert the quantities

Qty: 8.00

Unit of Measure: Ea.

Estimate: $9,928.98

Assessor Name: Craig Anding

Date Created: 02/19/2016

Notes: Install whiteboards in classrooms with chalkboards.

System: C3030 - Ceiling Finishes

Location: Boys toilet room and under skylight

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Remove and replace ceiling tiles only in suspended ceiling - pick the proper material

Qty: 64.00

Unit of Measure: S.F.

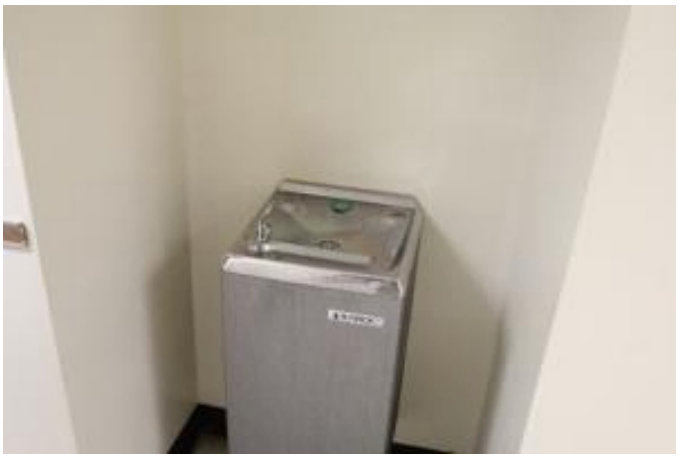
Estimate: $193.84

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Repair 2 x 4 ceiling at boys toilet room and under skylight.

System: D2010 - Plumbing Fixtures



Location: Corridors

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: Craig Anding

Date Created: 02/10/2016

Notes: Replace drinking fountains with accessible type

System: D3040 - Distribution Systems

Location: Outside

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 660.00

Unit of Measure: L.F.

Estimate: $11,627.42

Assessor Name: Craig Anding

Date Created: 02/10/2016

Notes: Re-insulate refrigerant lines from outdoor condenser to indoor AC units

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

System: D5010 - Electrical Service/Distribution

Location: Entire Building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Electrical Distribution System (U)
Qty: 1.00
Unit of Measure: Ea.
Estimate: $161,718.12
Assessor Name: Craig Anding
Date Created: 01/20/2016

Notes: Replace the entire distribution system with new panels and new wiring/conduits. Approximate (6) 208/120V panel boards.

System: D5010 - Electrical Service/Distribution

Location: Ground level
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Switchboard
Qty: 1.00
Unit of Measure: Ea.
Estimate: $136,993.47
Assessor Name: Craig Anding
Date Created: 01/20/2016

Notes: Provide a new electrical service 120/208V, 3 phase power, 600 amperes

System: D5030 - Communications and Security

Location: Entire Building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add fire alarm device
Qty: 10.00
Unit of Measure: Ea.
Estimate: $13,224.07
Assessor Name: Craig Anding
Date Created: 01/20/2016

Notes: Provide fire alarm audio/visual devices in each classroom. Approximate 10 devices

System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: Outdoor
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $91,306.05
Assessor Name: Craig Anding
Date Created: 01/20/2016

Notes: Provide 20 KW, outdoor, diesel powered generator.

System: D5090 - Other Electrical Systems

Location: Roof

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Repair Lightning Protection System

Qty: 1.00

Unit of Measure: Job

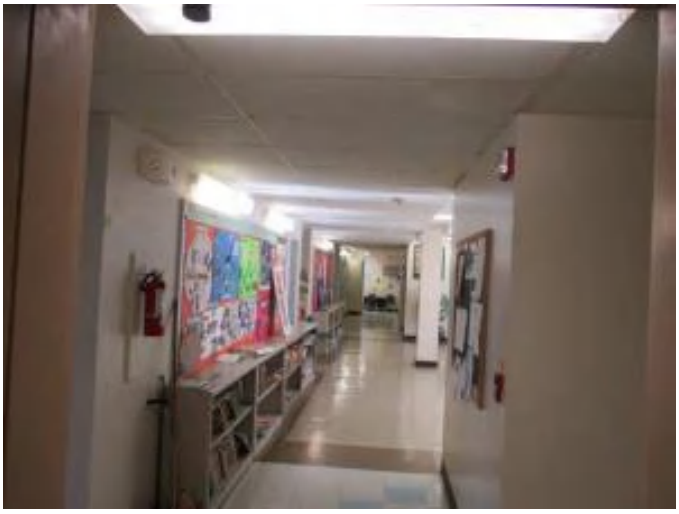
Estimate: $24,249.82

Assessor Name: Craig Anding

Date Created: 01/20/2016

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

System: D5090 - Other Electrical Systems



Location: Entire Building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Replace Emergency/Exit Lighting

Qty: 5.00

Unit of Measure: Ea.

Estimate: $16,970.23

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide emergency lighting fixtures with battery backup. Approximate 5

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

System: D2030 - Sanitary Waste

Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 14,236.00

Unit of Measure: S.F.

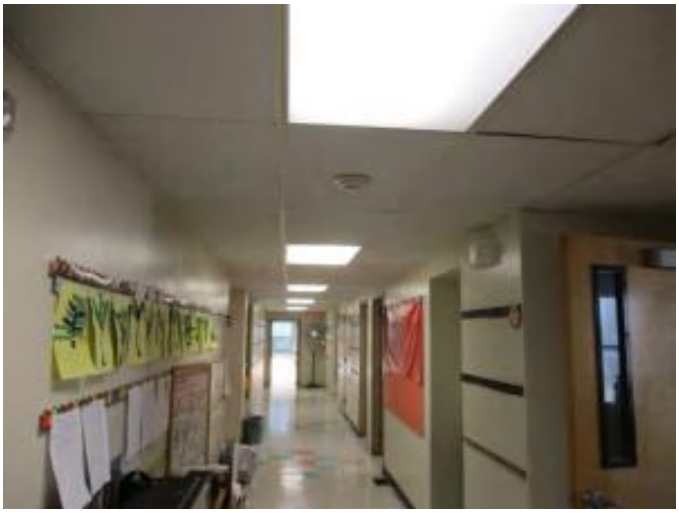
Estimate: $69,838.19

Assessor Name: Craig Anding

Date Created: 02/10/2016

Notes: Inspect sanitary drain pipes and repair as needed

System: D5030 - Communications and Security



Location: Entire Building

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add/Replace Video Surveillance System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $59,553.47

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide indoor surveillance CCTV cameras for a complete coverage of the school interior. Approximate 10 CCTV cameras

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: 10.00

Unit of Measure: Ea.

Estimate: $4,540.12

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide clocks compatible with the existing clock controller. Approximate 10

Priority 5 - Response Time (> 5 yrs):

System: D3040 - Distribution Systems

Location: Entire building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 5 - Response Time (> 5 yrs)
Correction: Replace Rooftop Unit (25T) and air terminals
Qty: 35.00
Unit of Measure: Ton
Estimate: $978,704.00
Assessor Name: Craig Anding
Date Created: 02/10/2016

Notes: Install 35 ton refrigeration ventilation system for entire building

System: D4010 - Sprinklers

Location: Entire building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 5 - Response Time (> 5 yrs)
Correction: Install a fire protection sprinkler system
Qty: 14,236.00
Unit of Measure: S.F.
Estimate: $203,653.80
Assessor Name: Craig Anding
Date Created: 02/10/2016

Notes: Install fire protection sprinkler system with fire pump if needed

Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D2020 Domestic Water Distribution	Pump, pressure booster system, 3 HP pump, includes diaphragm tank, control and pressure switch	1.00	Ea.	Basement					2000	1960	3960	$9,861.00	$10,847.10
D5010 Electrical Service/Distribution	Load centers, 1 phase, 3 wire, main lugs, rainproof, 120/240 V, 400 amp, 42 circuits, incl 20 A 1 pole plug-in breakers	1.00	Ea.	Ground level					30	1997	2027	$3,663.90	$4,030.29
												Total:	**$14,877.39**

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):	40,800
Year Built:	1960
Last Renovation:	
Replacement Value:	$634,626
Repair Cost:	$232,982.13
Total FCI:	36.71 %
Total RSLI:	70.05 %

Description:

Attributes:

General Attributes:

Bldg ID:	S448001	Site ID:	S448001

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	72.83 %	5.09 %	$22,861.62
G40 - Site Electrical Utilities	63.33 %	113.19 %	$210,120.51
Totals:	**70.05 %**	**36.71 %**	**$232,982.13**

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.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$7.65	S.F.	6,000	30	2004	2034	2034	63.33 %	23.73 %	19		$10,893.70	$45,900
G2030	Pedestrian Paving	$11.52	S.F.	12,100	40	2004	2044	2044	72.50 %	0.00 %	29			$139,392
G2040	Site Development	$4.36	S.F.	40,800	25	2004	2029	2029	56.00 %	0.00 %	14			$177,888
G2050	Landscaping & Irrigation	$3.78	S.F.	22,700	15	2004	2019	2032	113.33 %	13.95 %	17		$11,967.92	$85,806
G4020	Site Lighting	$3.58	S.F.	40,800	30	2004	2034		63.33 %	17.62 %	19		$25,743.06	$146,064
G4030	Site Communications & Security	$0.97	S.F.	40,800	30	2004	2034		63.33 %	465.88 %	19		$184,377.45	$39,576
								Total	**70.05 %**	**36.71 %**			**$232,982.13**	**$634,626**

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.

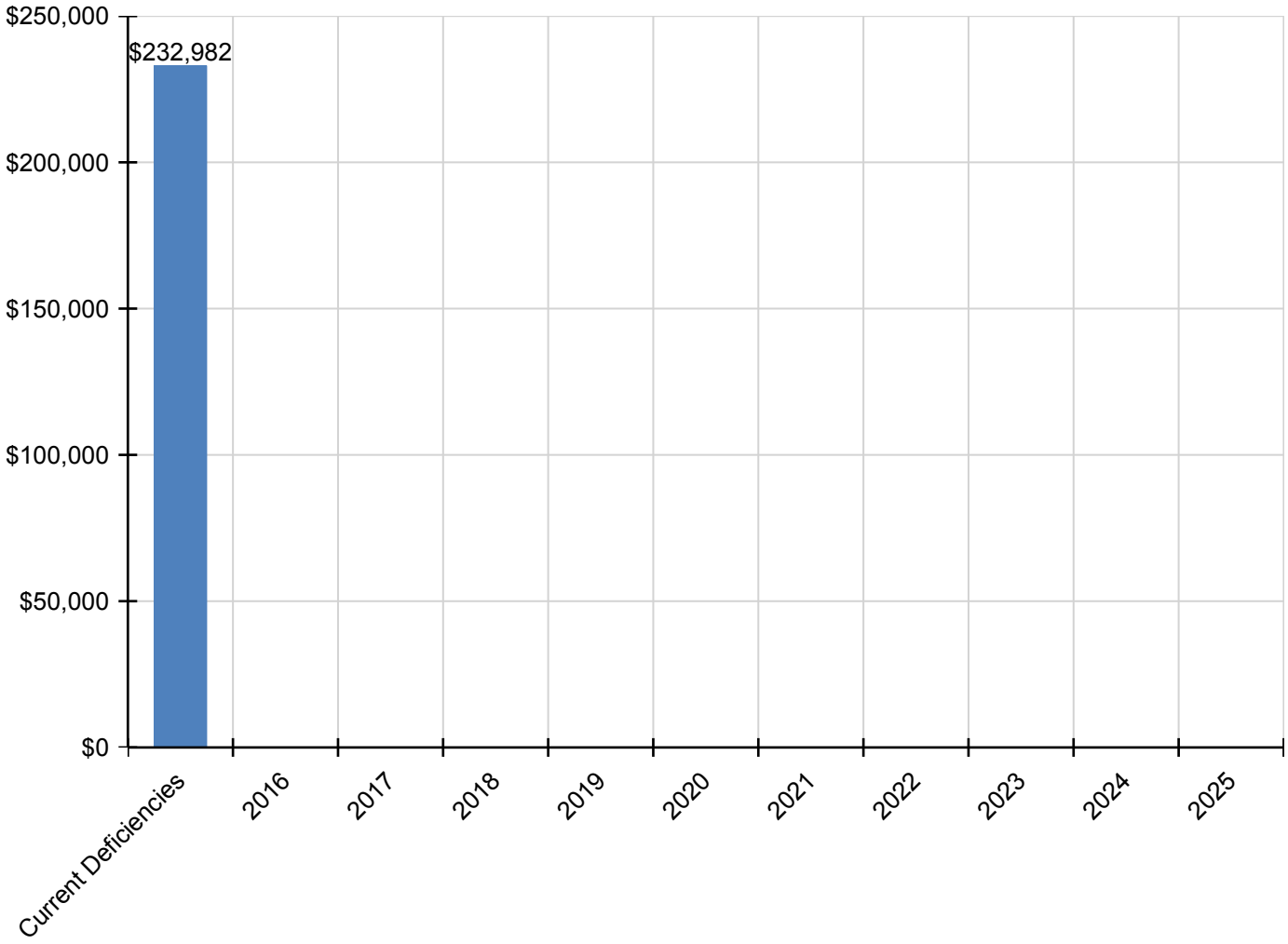
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$232,982**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$232,982**
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	$10,894	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$10,894**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040 - Site Development	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2050 - Landscaping & Irrigation	$11,968	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$11,968**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$25,743	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$25,743**
G4030 - Site Communications & Security	$184,377	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$184,377**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

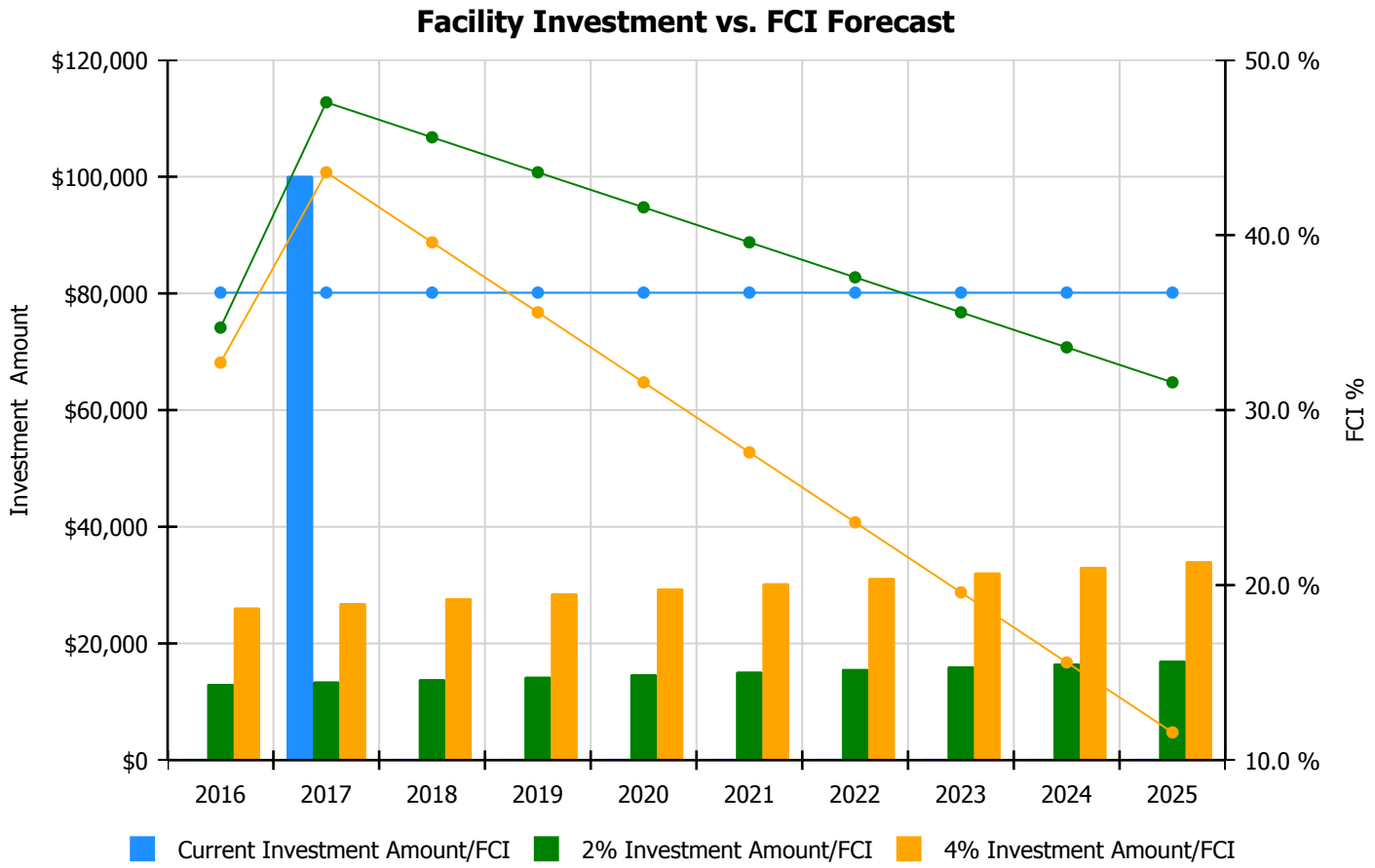
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

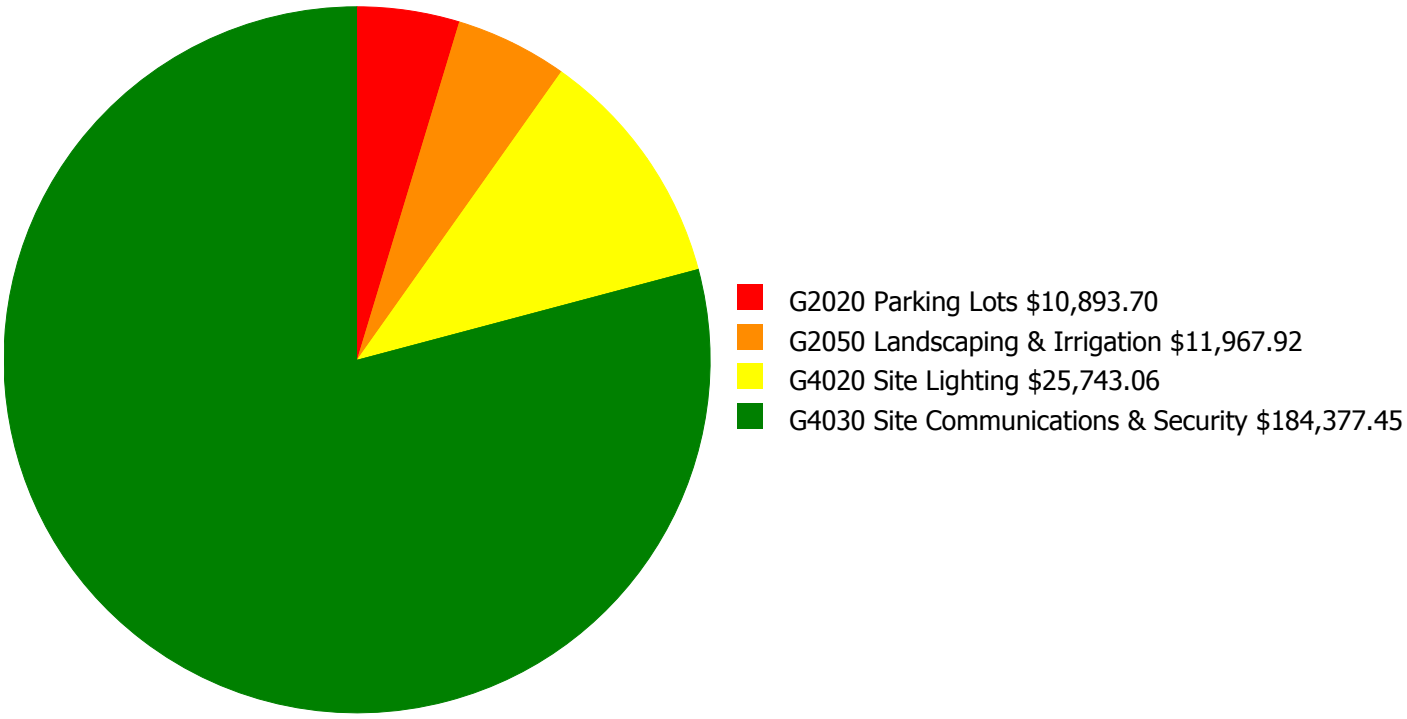
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 36.71%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$13,073.00	34.71 %	$26,147.00	32.71 %
2017	$100,135	$13,465.00	47.58 %	$26,931.00	43.58 %
2018	$0	$13,869.00	45.58 %	$27,739.00	39.58 %
2019	$0	$14,286.00	43.58 %	$28,571.00	35.58 %
2020	$0	$14,714.00	41.58 %	$29,428.00	31.58 %
2021	$0	$15,156.00	39.58 %	$30,311.00	27.58 %
2022	$0	$15,610.00	37.58 %	$31,220.00	23.58 %
2023	$0	$16,079.00	35.58 %	$32,157.00	19.58 %
2024	$0	$16,561.00	33.58 %	$33,122.00	15.58 %
2025	$0	$17,058.00	31.58 %	$34,115.00	11.58 %
Total:	**$100,135**	**$149,871.00**		**$299,741.00**	

Deficiency Summary by System

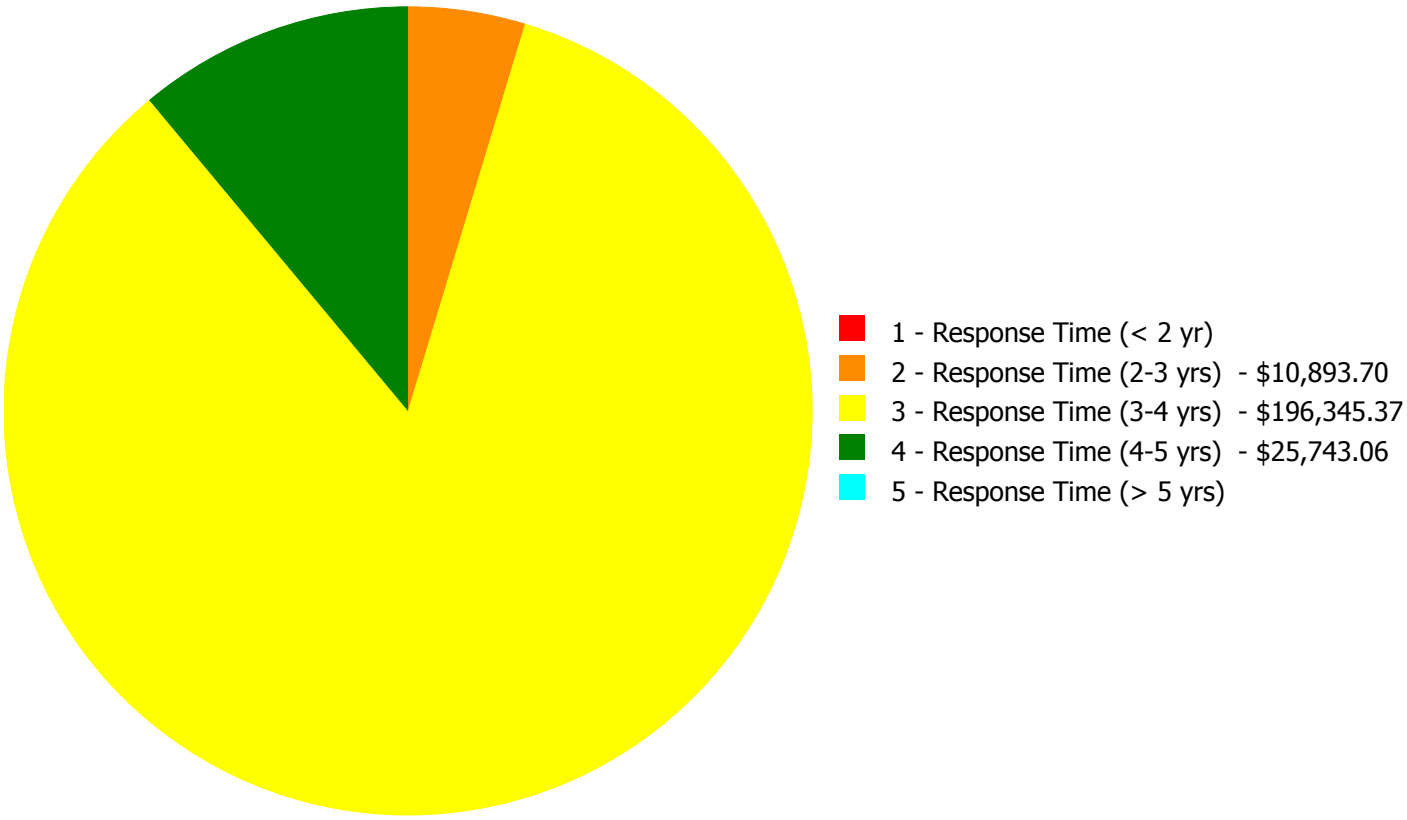
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $232,982.13

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: $232,982.13

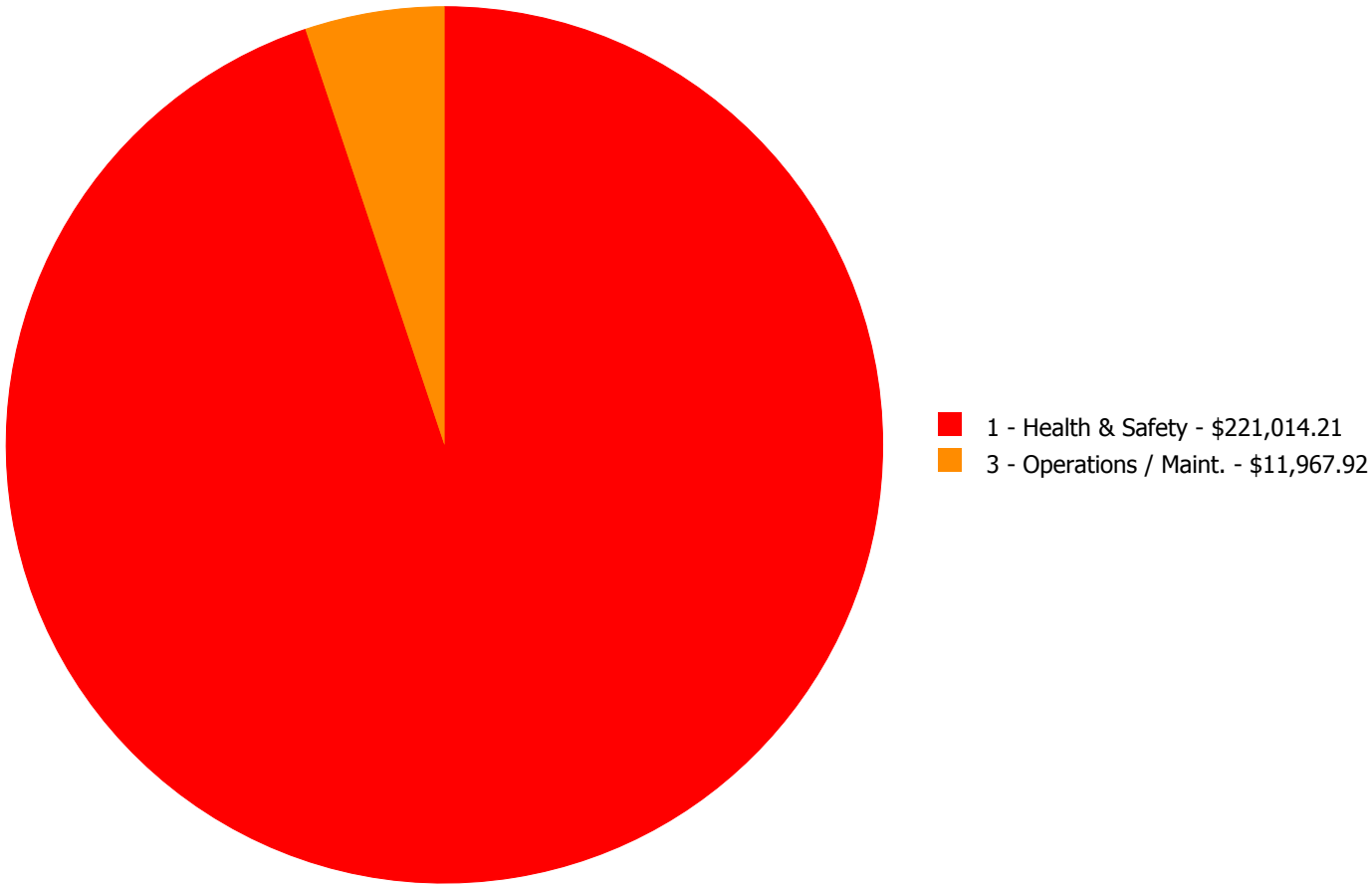
Deficiency By Priority Investment Table

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
G2020	Parking Lots	$0.00	$10,893.70	$0.00	$0.00	$0.00	$10,893.70
G2050	Landscaping & Irrigation	$0.00	$0.00	$11,967.92	$0.00	$0.00	$11,967.92
G4020	Site Lighting	$0.00	$0.00	$0.00	$25,743.06	$0.00	$25,743.06
G4030	Site Communications & Security	$0.00	$0.00	$184,377.45	$0.00	$0.00	$184,377.45
	Total:	$0.00	$10,893.70	$196,345.37	$25,743.06	$0.00	$232,982.13

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: $232,982.13

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: G2020 - Parking Lots

Location: Parking lot

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Stripe parking stalls, install parking bumpers, provide handicap symbol and handicap post mounted sign - insert proper quantities in estimate

Qty: 12.00

Unit of Measure: Ea.

Estimate: $10,893.70

Assessor Name: Craig Anding

Date Created: 02/19/2016

Notes: Provide a low fence barrier to segregate parking and playground areas. Provide gates to facilitate deliveries. Install striping at parking stalls and signage for accessible spaces.

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

System: G2050 - Landscaping & Irrigation

Location: North end of site

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace tree

Qty: 6.00

Unit of Measure: Ea.

Estimate: $11,967.92

Assessor Name: Craig Anding

Date Created: 02/19/2016

Notes: Shrubbery at the north end of the building and around the annex is overgrown, creating hiding places and encroaching on the buildings. Removal is recommended.

System: G4030 - Site Communications & Security

Location: Bldg Perimeter- Annex

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: $110,626.47

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide outdoor surveillance CCTV cameras. Approximate 6 CCTV cameras

System: G4030 - Site Communications & Security

Location: Bldg. Perimeter- Overbrook Ed Center

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Video Surveillance System

Qty: 4.00

Unit of Measure: Ea.

Estimate: $73,750.98

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide additional outdoor surveillance CCTV cameras for a complete coverage of the school building perimeter. Approximate 4

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

System: G4020 - Site Lighting

Location: Bldg perimeter- Annex

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add site lighting fixtures

Qty: 5.00

Unit of Measure: Ea.

Estimate: $25,743.06

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide outdoor, wall mounted, HID lighting fixtures along the building perimeter for a safer environment. Approximate 5 fixtures.

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