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.

Shawmont School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	535 Shawmont Ave.	Enrollment	507
	Philadelphia, Pa 19128	Grade Range	'00-08'
Phone/Fax	215-487-4466 / 215-487-4815	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Shawmont	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	**29.71%**	**$12,899,807**	**$43,413,053**
Building	30.03 %	$12,580,066	$41,893,314
Grounds	21.04 %	$319,741	$1,519,739

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$1,073,657
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$3,082,354
Windows (Shows functionality of exterior windows)	00.00 %	$0	$1,504,015
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$121,090
Interior Doors (Classroom doors)	15.19 %	$44,526	$293,120
Interior Walls (Paint and Finishes)	00.00 %	$0	$1,640,971
Plumbing Fixtures	02.41 %	$27,264	$1,129,055
Boilers	00.00 %	$0	$1,559,132
Chillers/Cooling Towers	63.60 %	$1,300,211	$2,044,325
Radiators/Unit Ventilators/HVAC	119.35 %	$4,284,680	$3,590,095
Heating/Cooling Controls	158.90 %	$1,791,467	$1,127,385
Electrical Service and Distribution	122.72 %	$994,094	$810,047
Lighting	39.97 %	$1,157,654	$2,896,127
Communications and Security (Cameras, Pa System and Fire Alarm)	12.45 %	$135,072	$1,084,795

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

S638001;Shawmont

Final

Site Assessment Report

January 31, 2017

PARSONS

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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):	83,510
Year Built:	1928
Last Renovation:	
Replacement Value:	$43,413,053
Repair Cost:	$12,899,807.18
Total FCI:	29.71 %
Total RSLI:	65.30 %

Description:

Facility assessment, December 2015

School District of Philadelphia

Shawmont School

535 Shawmont Avenue

Philadelphia, PA 19128

83,510 SF / 656 Students / LN 06

The Shawmont School building is located at 535 Shawmont Ave in Philadelphia, PA. The 4 story, 83,510 square foot building was originally constructed in 1928 with an addition in the 1950s. The building has a multi-level basement and parking at grade level under the addition.

The Facility Area Coordinator was not able to accompany the Parsons assessment team on this site visit. Mr. Harry Walther, the Building Engineer, accompanied us on our tour of the school and provided us with detailed information on the building systems and recent maintenance history.

STRUCTURAL/ EXTERIOR CLOSURE:

The building typically rests on concrete foundations and bearing walls that are not showing signs of settlement or water penetration. Foundation walls do not show signs of deterioration. The basement slab does not show signs of heaving.

The main structure consists typically of cast-in-place concrete columns, beams and one-way concrete slabs. Long slab spans are supported with steel truss girders. The floor slabs and superstructure are generally in good condition.

The roof structure is typically similar to floor construction. The building envelope is typically masonry with face brick with decorative stone around entrances with CMU in addition. In general, masonry is in good condition.

The original building windows were retrofitted in 1990's with extruded aluminum double hung windows single glazed with acrylic glazing with extruded aluminum framing. Basement windows are fitted with galvanized steel security screens. All windows are generally in fair condition.

Roofing is typically built-up. All roofing and flashing is typically in fair condition with no leaks reported; nearing end of service life.

Exterior doors are typically hollow metal in good condition, weather-stripping is installed.

INTERIORS:

Partition wall types include plastered ceramic hollow blocks and painted CMU. Corridors and stairways have marble wainscot.

The interior wall finishes are generally painted plaster or CMU and some painted brick. Walls in toilets are covered with ceramic tile installed in 2000. Generally, paint is in fair condition with some deterioration in auditorium, stairways and other spaces.

Most ceilings are painted plaster in classrooms, auditorium and gym. 2x4 suspended acoustical panels are installed in some classrooms, offices and library; cafeteria and kitchen has 1x1 perforated metal tiles with concealed grid in poor condition and deteriorating.

Flooring in classrooms, and auditorium is generally hardwood, (10% requires refinishing); and patterned concrete in most corridors and stairways. Some classrooms and offices and gym have VCT installed in mid 1990's. Floor in toilets is concrete with ceramic tile in addition.

Interior doors are generally rail and stile wood doors, most glazed, in wood frames with transoms and solid core in hollow metal frames. Doors are typically in good condition. Most doors are fitted with door knobs and are not ADA compliant.

Fittings include original chalk boards, generally in poor condition. Toilet partitions and accessories in are in very good condition, installed in 2000 and ADA compliant; handrails, generally in good condition. Interior identifying signage is typically directly painted on wall or door surfaces generally in fair condition.

Stair construction is generally concrete with protective rubber on treads and nosing in good condition.

Furnishings include fixed casework in classrooms, corridors and library, generally in good condition; window shades/blinds, generally in good condition; fixed auditorium seating is original, generally in fair condition. Lockers are built-in along corridor walls and in good condition.

CONVEYING SYSTEMS:

The building has one 2100 lb. hydraulic elevator serving 6 stops and one chair lift at stage.

MECHANICAL

Plumbing Fixtures

The plumbing fixtures were replaced in 2002 according to the Building Engineer. Fixtures in the restrooms on each floor consist of wall mounted lever operated flush valve water closets, wall hung urinals, and lavatories with wheel handle faucets. Each floor has accessible restrooms. The water closets, urinals, and lavatories are in good condition and should provide reliable service for the next 20-25 years.

Drinking fountains in the corridors were also replaced in 2002 and are wall hung with integral refrigerated coolers. They are in good condition and within their service life; most are accessible type.

A service sink is available in a janitor closet in the corridor on each floor for use by the janitorial staff. The service sinks are beyond their service lives, in poor condition, and should be replaced.

The Kitchen has one (1) sink; a three-compartment stainless steel sink with lever operated faucets. A grease trap is not installed. Chemicals are injected manually into the sanitizing basins.

Domestic Water Distribution

A 2" city water service enters the building from Shawmont Avenue on the North side of the building at 80 PSI. The 2" meter and valves are located in the boiler room in the basement. A reduced pressure backflow preventer is not installed, but should be. An expansion tank is installed on the incoming domestic water line. The original domestic hot and cold water distribution piping was replaced with copper piping and sweat fittings. The maintenance staff reports no significant problems with scale build up in the domestic piping and the supply is adequate to the fixtures, but the piping has been in use for an unknown amount of time and should be inspected and repaired as necessary by a qualified contractor.

One (1) State Sandblaster gas fired, 70 gallon, vertical hot water heater with two (2) circulating pumps supplies hot water for domestic use. The unit is located in the boiler room on the basement level and has an installation date of 1999. The hot water heater is equipped with a T&P relief valve. The domestic hot water heater is beyond its useful service life and should be replaced within the next 0-2 years.

Sanitary Waste

The sanitary sewer piping is a mixture of galvanized piping with threaded fittings and cast iron piping with hub and spigot fittings. An extensive amount of piping has been replaced with cast iron piping and no-hub fittings.

The building does not have a sewage ejector pit.

The maintenance staff reported mostly minor problems with the sanitary waste piping systems. The sewer piping has been in service for an unknown amount of time and will require more frequent attention from the maintenance staff as time passes. The District should hire a qualified contractor to examine the sanitary waste piping using video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

Rain Water Drainage

Rain water drains from the roof are routed through mechanical chases in the building and appear to be original. The piping is a mixture of galvanized piping with threaded fittings and cast iron piping with hub and spigot fittings. Sections of the piping have been replaced with cast iron piping and no-hub fittings. The District should hire a qualified contractor to examine the rain water drainage piping using video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

Energy Supply

A high pressure 4" city gas service enters the building in the basement boiler room from Shawmont Avenue on the North side of the building. The high pressure gas goes through two (2) pressure reducing valves before hitting the 6" meter. Gas is currently the only fuel supplied to the boilers.

Heat Generating Systems

Building heating hot water is generated by three (3) 85HP De Dietrich model GT-414A cast iron boilers installed in 2003; located in the boiler room on the basement level. Each boiler is equipped with a Power Flame burner designed to operate on natural gas. Combustion air makeup is supplied by louvers equipped with motorized dampers. Burner controls provide full modulation with electronic ignition and digital flame sensing. The gas train serving the boilers appears to have code required venting of the regulators and dual solenoid valves with venting of the chamber between. The boilers are capable of operating on fuel oil or natural gas, but are equipped with burners that currently only run on natural gas. The boilers appear to be in good condition and the Building Engineer did not report any issues. Cast iron sectional boilers have an anticipated service life of 35 years or more; these units have been in service approximately 13 years. The District should provide reliable service for the next 20-25 years.

Distribution Systems

Building heating hot water piping is black steel with threaded fittings; some smaller branch piping is copper with sweat fittings. An air separator and expansion tank are installed on the hot water supply piping. All of the piping in the boiler room was covered in insulation and appears to be in good condition. The heating hot water distribution piping has been in use for an unknown amount of time and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes. The District should hire a qualified contractor to examine the

heating hot water distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

A two-pipe distribution system supplies building heating water to the unit ventilators, fin tube radiators, and heating and ventilation units (HV). Two (2) 10HP Taco end suction heating water supply pumps circulate building heating hot water. The pumps were installed with the boilers in 2003. All piping was covered with insulation. The Building Engineer did not report any problems with the pumps and they appear to be in good condition. The pumps have an anticipated service life of 25 years; the District should provide reliable service for the next 8-12 years.

Unit ventilators and fin tube radiators provide heating for the majority of classrooms, offices, and the corridors. Six (6) unit ventilators provide heating for the Cafeteria. The unit ventilators are beyond their service lives and in poor condition; they should be removed and new unit ventilators installed. Outdoor air for the building is provided by wall openings in the unit ventilators. Supplemental heating is provided in the corridors and along the perimeter of classrooms by fin tube radiators. Ventilation for the Cafeteria should be provided by installing a constant volume air handling unit with distribution ductwork and registers.

Two (2) HV units, installation dates unknown, provide supplemental heating to the Gymnasium and Auditorium. The main heating source is fin tube radiators located along the perimeter of each space. The HVs are located in the basement mechanical room and are operated as either “on” or “off”. The Building Engineer reported that the units are functional, but rarely used as the spaces stay warm without the units. The units are most likely beyond their service lives and should be replaced.

The school has mechanical ventilation via unit ventilators and exhaust fans which exhaust air from the restrooms and Kitchen. Six (6) exhaust fans are located on the South roof of the building; these fans serve the Kitchen and restrooms on the South side of the building. Through wall exhaust fans serve the individual restrooms on the North side of the building. All fans are operational according to the Building Engineer. No major issues were reported with the exhaust fans and they appear to in good condition. Eight (8) gravity ventilators, located on the North roof, allow relief air from the building. Two (2) power ventilators, located on the South roof, allow relief air from the building. All ventilators are in working order and good condition.

Terminal & Package Units

Several of the classrooms in the school building have window air conditioning units that have an anticipated service life of only 10 years. Installing a 250 ton air-cooled chiller with pumps located in a mechanical room and chilled water distribution piping would supply more reliable air conditioning for the building with a much longer service life.

Cooling is provided to the computer room on the third floor by one (1) Carrier model 50TM packaged rooftop unit (RTU), installed in 2006. The unit is located on the roof above the computer room, provides a nominal 12.5 tons of cooling to the space, and has two (2) compressors. The Building Engineer reported that the roof area around the RTU leaks into the classroom; the District should fix the cause of the leak. RTUs have an anticipated service life of 15 years; this unit has been in service approximately 10 years. The District should provide reliable service for the next 4-6 years.

Two (2) kitchen hoods with an integral Range Guard fire suppression system are installed above the gas fired cooking equipment. An automatic gas shutoff system is NOT installed with the kitchen equipment; the equipment is within its service life. A gas fired make-up air unit is not installed, but should be.

Controls & Instrumentation

A Niagara building monitoring system (BMS) is installed in this building; which allows the mechanical equipment to be monitored, but not controlled. The Building Engineer reported that the BMS, installed when the boilers were replaced in 2003, is operational. The Building Engineer can monitor the set points of the boilers, HVs, unit ventilators, exhaust fans, and temperatures of each classroom. The system provides no control over the equipment, all equipment is controlled at the panel board or wall mounted switches and is either “on” or “off”. This system is within its service life and should provide reliable operation for the next 5-8 years. These controls should be updated with a new DDC system and computer interface to provide more efficient operation.

A new building automation system (BAS) with modern DDC modules and communications network should be installed to serve the HVAC systems in this building to improve reliability and energy efficiency. An interface should be provided with the preferred system in use throughout the District.

Sprinklers

The school building is NOT covered by an automatic sprinkler system. Installing a sprinkler system with quick response type heads should reduce insurance costs by providing protection for the property investment. A fire pump may be required depending on the available city water pressure.

The building is equipped with dry type fire standpipes in the two (2) fire towers on the East and West sides of the building. The installation date of the standpipes is unknown, but they appear to be in good condition.

ELECTRICAL:

Site electrical service - The primary power is at 13.2KV from the street power pole (Shawmont St) which goes underground and feeds three vault-mounted transformers (total of 500 KVA, 13.2KV – 120V/208V, 3 Phase). The electrical service is old and has reached the end of its useful service. The main disconnect switch is rated at 1200A, 120V/208V, 3 phase, and is located in main electrical room. The PECO meter (PECO 02 016953028) is also located inside the electrical room. The service entrance and the main building electrical distribution systems are old, in very poor condition, and do not have ample capacity for future growth.

Distribution system - The electrical distribution is accomplished by using the 1200A, 120V/208V, 3 phase distribution switchboard in the basement feeding all the 120V lighting and receptacle panels throughout the building (two in each floor). These panels are in poor condition and have reached the end of their useful service (12 total).

Receptacles - There is not enough receptacles in classrooms, computer rooms, libraries, and most other areas (50% of the total building). There should be minimum of two receptacles on each wall of the classrooms, and other areas.

Lighting - Interior building is illuminated by various types of fixtures. They include fluorescent lighting (with T-12 & T-8 lamp) in majority of the areas, including; classrooms, corridor, offices, Gymnasium, and Kitchen. Surface or pendant mounted industrial fluorescent fixtures are used in mechanical and electrical rooms. Auditorium has decorative fixtures that have been recently retrofitted with high efficiency lamps. The majority of interior lighting fixtures are in a poor condition and have reached the end of their useful service (50% of total building).

Fire alarm - The present Fire Alarm system is fairly new (2013) automatic/addressable, and is in compliance with safety codes. There are manual pulls stations throughout the building. There are sufficient number of horn/strobes installed in the classrooms, corridors, offices and other areas in the school.

Telephone/LAN - The school telephone and data systems are new and working adequately. The main distribution frame (MDF) along with a telephone PBX system are providing the necessary communication function of the building. School is also equipped with Wi-Fi system.

Public Address - Separate PA system does not exist. School uses the telephone systems for public announcement. This system is working adequately. The present Intercom System is functioning fine. Each class room is provided with intercom telephone service. The system permits paging and intercom communication between main office to classrooms, and vice versa (classrooms to main office), and communication between classrooms to classrooms.

Clock and Program system - Clock and program systems are not working adequately. Classrooms are provided with 12-inch wall mounted round clock, however, these clocks are not controlled properly by central master control panel.

Television System - Television system is not provided in the school. Most classes are equipped with smart boards having the ability to connect with computers and internet.

Security Systems, access control, and video surveillance - The school does not have a video surveillance system. There is no cameras at exit doors, corridors, exterior, and other critical areas. The school principal expressed strong desire to have a video surveillance system, especially since they also have a Pre-K Program. The new cameras should be controlled by a Closed Circuit Television system (CCTV).

Emergency Power System - School has a fairly new 100KW emergency generator (installed in 2010). The emergency generator through an Automatic Transfer Switch (ATS) provides power to the emergency power panel. The emergency panel feeds elevators, emergency lighting and other emergency loads.

Emergency lighting system, including exit lighting - there are insufficient emergency lighting fixtures in corridors and other exit ways. Exit signs and emergency fixtures are old and have reached the end of their useful service.

Auditorium - The general lighting in the auditorium is adequate, however the stage lighting's controller is old and has reached the end of its useful service life.

Lightning Protection System - There is inadequate lightning protection system in the school. The roof has lightning rods, however they are not connected to the ground properly. The stranded aluminum cables are disconnected (removed) and the rods are not connected all the way to the

ground level.

Grounding - The present grounding system is adequate. All equipment are correctly bonded to the ground.

GROUNDS (SITE):

Staff and visitor parking is located under the addition building and on the south edge of the site. Asphalt paving is in fair condition with no accessible stalls or signage.

Play yard on west side is asphalt paving in good condition. Fencing surrounding play yard is chain link in good condition. Landscaping is grass areas and mature trees around site in good condition.

Site Lighting - The school grounds and building Perimeters are not adequately lighted for safety of the people and security of property.

Site Paging - The present Site paging System is not adequate. There are insufficient number of speaker on building's exterior walls.

ACCESSIBILITY:

The building does have accessible entrance and accessible route. Ramps have been installed throughout the building where floors change elevation. The toilets are equipped with accessible fixtures, partitions and accessories, such as grab bars. Most doors in the building do not have ADA required door handles.

RECOMMENDATIONS:

- Repair & refinish hardwood flooring (10% of wood flooring)
- Replace acoustic tile in cafeteria and kitchen
- Provide ADA compliant hardware on interior doors
- Replace four (4) existing service sinks which are beyond their service lives and in poor condition.
- Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for an unknown amount of time, and replace any damaged piping.
- Install a reduced pressure backflow preventer on the incoming 2" domestic water line.

- Replace the existing vertical gas fired, 70 gallon, domestic hot water heater which is beyond its service life with a new gas fired hot water heater within the next 0-2 years.

- Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Hire a qualified contractor to perform a detailed examination of the rain water drainage piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Hire a qualified contractor to examine the building heating water distribution piping, in service for an unknown amount of time, and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Replace the existing unit ventilators, which are beyond their service life and in poor condition, with two pipe units that have integral heat exchangers to introduce outdoor air to the building.
- Provide more reliable ventilation for the Cafeteria by installing a constant volume air handling unit with distribution ductwork and registers.
- Replace the heating and ventilation unit serving the Gymnasium by installing a fan coil air handling unit installed in the basement mechanical room with outdoor air ducted to the unit from the existing outdoor air intake.
- Replace the heating and ventilation unit serving the Auditorium by installing a fan coil air handling unit installed in the basement mechanical room with outdoor air ducted to the unit from the existing outdoor air intake.
- Provide ventilation for the administration offices by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in window openings.
- Remove the window air conditioning units and install a 250 ton air-cooled chiller with chilled water distribution piping and pumps located in a mechanical room to supply more reliable air conditioning for the building with a much longer service life.
- Install a gas fired make-up air unit in the Kitchen for when the exhaust hoods are in operation.
- Replace the manual controls and BMS for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency. Provide a new building automation system (BAS) with communication interface to the

preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.

- Install new Site electrical service 2000KVA, 480V, 3 Phase to feed the existing loads plus new HVAC additional loads.

- Install new 480V, 3 phase switchgear.

- Install a new MCC for the new HVAC loads.

- Install new 120V panelboards throughout the building for lighting, and receptacles loads.

- Install new receptacles in all classrooms and other areas the building with minimum two receptacles on each wall (70% of the total building).

- Install new a lighting system for 70% of the entire building.

- Install a new Clock System.

- Install new emergency exit signs & emergency lights.

- Install a new lighting controller for the auditorium stage lighting.

- Install a new Lightning Rods with aluminum cables all the way to the ground.

- Install new site lighting for safety of the people and security of property.

- Install new site paging on building exterior walls.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 5 / Tm 4
Status:	Accepted by SDP	Team:	Tm 4
Site ID:	S638001		

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.

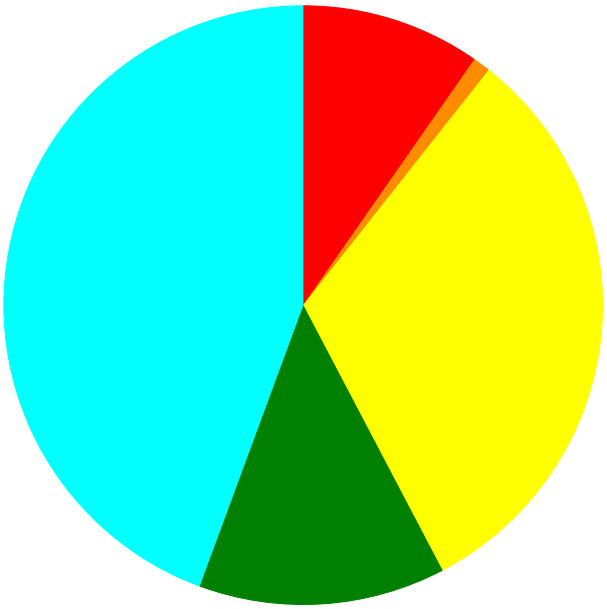
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	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	38.83 %	0.00 %	$0.00
B30 - Roofing	25.00 %	0.00 %	$0.00
C10 - Interior Construction	40.99 %	2.17 %	$44,525.56
C20 - Stairs	37.00 %	0.00 %	$0.00
C30 - Interior Finishes	75.62 %	1.79 %	$80,885.28
D10 - Conveying	60.00 %	0.00 %	$0.00
D20 - Plumbing	77.96 %	77.28 %	$1,317,806.50
D30 - HVAC	90.32 %	79.40 %	$7,376,357.61
D40 - Fire Protection	96.05 %	177.49 %	$1,194,646.39
D50 - Electrical	110.11 %	50.42 %	$2,475,042.47
E10 - Equipment	57.14 %	6.83 %	$90,802.49
E20 - Furnishings	62.50 %	0.00 %	$0.00
G20 - Site Improvements	58.43 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	78.11 %	$319,740.88
Totals:	**65.30 %**	**29.71 %**	**$12,899,807.18**

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)
B638001;Shawmont	83,510	30.03	$1,249,253.11	$122,210.79	$3,814,129.35	$1,670,408.21	$5,724,064.84
G638001;Grounds	94,100	21.04	$0.00	$0.00	$271,786.25	$47,954.63	$0.00
Total:		**29.71**	**$1,249,253.11**	**$122,210.79**	**$4,085,915.60**	**$1,718,362.84**	**$5,724,064.84**

Deficiencies By Priority



1 - Response Time (< 2 yr) - $1,249,253.11
2 - Response Time (2-3 yrs) - $122,210.79
3 - Response Time (3-4 yrs) - $4,085,915.60
4 - Response Time (4-5 yrs) - $1,718,362.84
5 - Response Time (> 5 yrs) - $5,724,064.84

Budget Estimate Total: $12,899,807.18

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):	83,510
Year Built:	1928
Last Renovation:	
Replacement Value:	$41,893,314
Repair Cost:	$12,580,066.30
Total FCI:	30.03 %
Total RSLI:	65.08 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B638001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S638001		

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	38.83 %	0.00 %	$0.00
B30 - Roofing	25.00 %	0.00 %	$0.00
C10 - Interior Construction	40.99 %	2.17 %	$44,525.56
C20 - Stairs	37.00 %	0.00 %	$0.00
C30 - Interior Finishes	75.62 %	1.79 %	$80,885.28
D10 - Conveying	60.00 %	0.00 %	$0.00
D20 - Plumbing	77.96 %	77.28 %	$1,317,806.50
D30 - HVAC	90.32 %	79.40 %	$7,376,357.61
D40 - Fire Protection	96.05 %	177.49 %	$1,194,646.39
D50 - Electrical	110.11 %	50.42 %	$2,475,042.47
E10 - Equipment	57.14 %	6.83 %	$90,802.49
E20 - Furnishings	62.50 %	0.00 %	$0.00
Totals:	**65.08 %**	**30.03 %**	**$12,580,066.30**

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.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$1,536,584
A1030	Slab on Grade	$7.73	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$645,532
A2010	Basement Excavation	$6.55	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$546,991
A2020	Basement Walls	$12.70	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$1,060,577
B1010	Floor Construction	$75.10	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$6,271,601
B1020	Roof Construction	$13.88	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$1,159,119
B2010	Exterior Walls	$36.91	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$3,082,354
B2020	Exterior Windows	$18.01	S.F.	83,510	40	1992	2032		42.50 %	0.00 %	17			$1,504,015
B2030	Exterior Doors	$1.45	S.F.	83,510	25	1992	2017	2025	40.00 %	0.00 %	10			$121,090
B3010105	Built-Up	$37.76	S.F.	28,301	20	1995	2015	2020	25.00 %	0.00 %	5			$1,068,646
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.	83,510	20	1995	2015	2020	25.00 %	0.00 %	5			$5,011
C1010	Partitions	$17.91	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$1,495,664
C1020	Interior Doors	$3.51	S.F.	83,510	40	1991	2031		40.00 %	15.19 %	16		$44,525.56	$293,120
C1030	Fittings	$3.12	S.F.	83,510	40	2001	2041		65.00 %	0.00 %	26			$260,551
C2010	Stair Construction	$1.41	S.F.	83,510	100	1928	2028	2052	37.00 %	0.00 %	37			$117,749

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System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
C3010230	Paint & Covering	$16.71	S.F.	83,510	10	2011	2021		60.00 %	0.00 %	6			$1,395,452
C3010231	Vinyl Wall Covering	$0.00	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.94	S.F.	83,510	30	1991	2021		20.00 %	0.00 %	6			$245,519
C3020411	Carpet	$7.30	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$75.52	S.F.	1,670	50	1991	2041		52.00 %	0.00 %	26			$126,118
C3020413	Vinyl Flooring	$9.68	S.F.	23,383	20	1991	2011	2025	50.00 %	0.00 %	10			$226,347
C3020414	Wood Flooring	$22.27	S.F.	33,404	25	1991	2016	2030	60.00 %	4.83 %	15		$35,961.58	$743,907
C3020415	Concrete Floor Finishes	$0.97	S.F.	25,053	50	1985	2035		40.00 %	0.00 %	20			$24,301
C3030	Ceiling Finishes	$20.97	S.F.	83,510	25	1975	2000	2042	108.00 %	2.57 %	27		$44,923.70	$1,751,205
D1010	Elevators and Lifts	$1.53	S.F.	83,510	35	2001	2036		60.00 %	0.00 %	21			$127,770
D2010	Plumbing Fixtures	$13.52	S.F.	83,510	35	2002	2037		62.86 %	2.41 %	22		$27,264.37	$1,129,055
D2020	Domestic Water Distribution	$1.68	S.F.	83,510	25	1928	1953	2042	108.00 %	363.90 %	27		$510,543.83	$140,297
D2030	Sanitary Waste	$2.90	S.F.	83,510	25	1928	1953	2042	108.00 %	169.16 %	27		$409,679.08	$242,179
D2040	Rain Water Drainage	$2.32	S.F.	83,510	30	1928	1958	2047	106.67 %	191.14 %	32		$370,319.22	$193,743
D3020	Heat Generating Systems	$18.67	S.F.	83,510	35	2003	2038		65.71 %	0.00 %	23			$1,559,132
D3030	Cooling Generating Systems	$24.48	S.F.	83,510	20			2037	110.00 %	63.60 %	22		$1,300,211.43	$2,044,325
D3040	Distribution Systems	$42.99	S.F.	83,510	25	1928	1953	2042	108.00 %	119.35 %	27		$4,284,679.55	$3,590,095
D3050	Terminal & Package Units	$11.60	S.F.	83,510	20				0.00 %	0.00 %				$968,716
D3060	Controls & Instrumentation	$13.50	S.F.	83,510	20	2003	2023	2037	110.00 %	158.90 %	22		$1,791,466.63	$1,127,385
D4010	Sprinklers	$7.05	S.F.	83,510	35			2052	105.71 %	202.91 %	37		$1,194,646.39	$588,746
D4020	Standpipes	$1.01	S.F.	83,510	35	1990	2025		28.57 %	0.00 %	10			$84,345
D5010	Electrical Service/Distribution	$9.70	S.F.	83,510	30	1928	1958	2047	106.67 %	122.72 %	32		$994,093.50	$810,047
D5020	Lighting and Branch Wiring	$34.68	S.F.	83,510	20	1928	1948	2037	110.00 %	39.97 %	22		$1,157,654.13	$2,896,127
D5030	Communications and Security	$12.99	S.F.	83,510	15	1928	1943	2032	113.33 %	12.45 %	17		$135,072.27	$1,084,795
D5090	Other Electrical Systems	$1.41	S.F.	83,510	30	1928	1958	2047	106.67 %	159.85 %	32		$188,222.57	$117,749
E1020	Institutional Equipment	$4.82	S.F.	83,510	35	2000	2035		57.14 %	22.56 %	20		$90,802.49	$402,518
E1090	Other Equipment	$11.10	S.F.	83,510	35	2000	2035		57.14 %	0.00 %	20			$926,961
E2010	Fixed Furnishings	$2.13	S.F.	83,510	40	2000	2040		62.50 %	0.00 %	25			$177,876
								Total	**65.08 %**	**30.03 %**			**$12,580,066.30**	**$41,893,314**

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:
85% - Paint & Covering
15% - Wall Tile (10% glazed block, 5% ceramic)

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

Note:
2% - Terrazzo & Tile (ceramic)
28% - Vinyl Flooring
40% - Wood Flooring
30% - Concrete Floor Finishes

Renewal Schedule

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

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$12,580,066**	**$0**	**$0**	**$0**	**$0**	**$1,369,128**	**$2,155,346**	**$0**	**$0**	**$0**	**$638,307**	**$16,742,847**
*** 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	$179,007	**$179,007**
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	$1,362,738	$0	$0	$0	$0	$0	**$1,362,738**
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	$6,390	$0	$0	$0	$0	$0	**$6,390**
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**

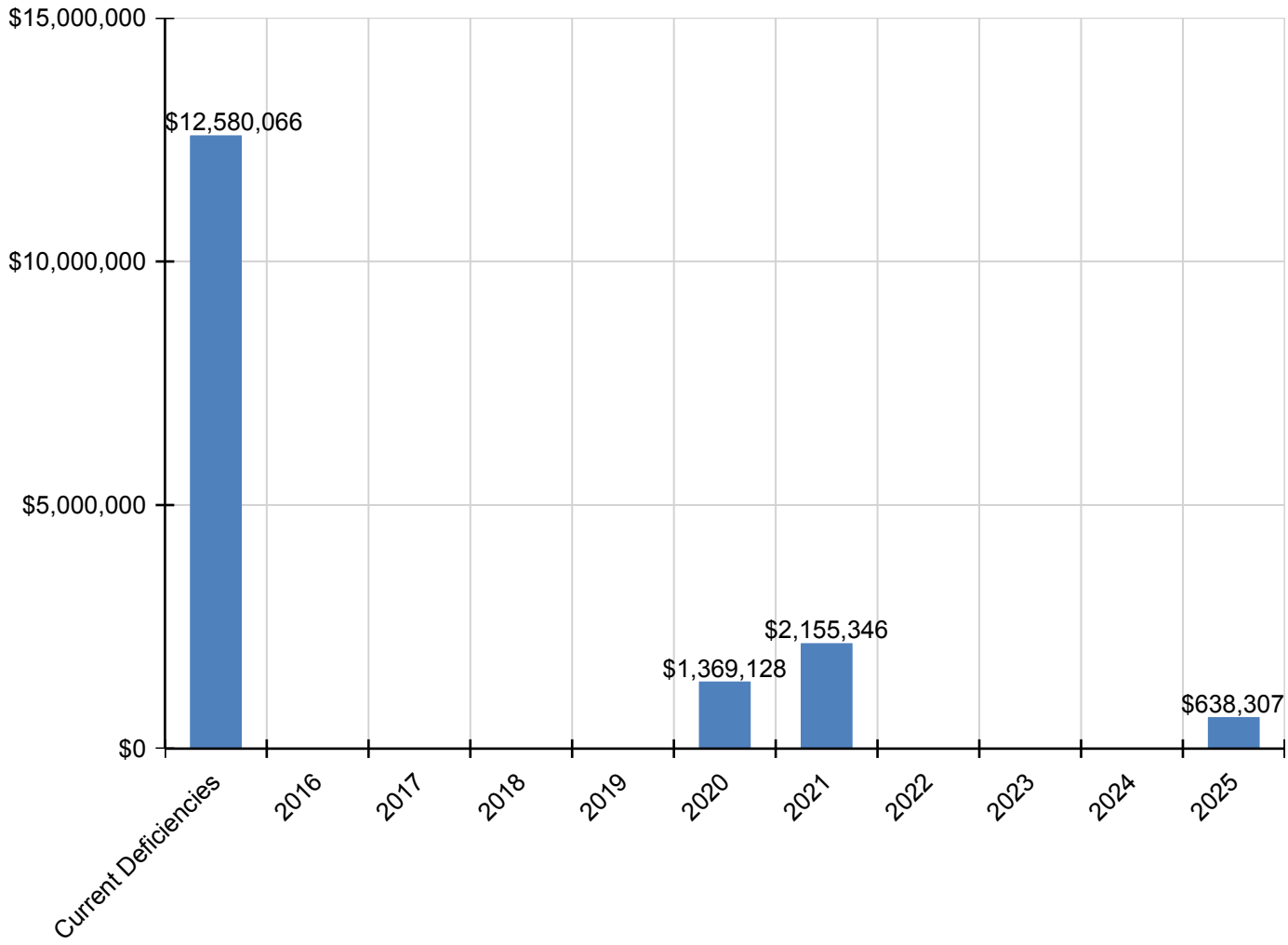
C1020 - Interior Doors	$44,526	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$44,526**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$1,832,867	$0	$0	$0	$0	**$1,832,867**
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	$322,479	$0	$0	$0	$0	**$322,479**
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	$0	$334,611	**$334,611**
C3020414 - Wood Flooring	$35,962	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$35,962**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$44,924	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$44,924**
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	$27,264	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$27,264**
D2020 - Domestic Water Distribution	$510,544	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$510,544**
D2030 - Sanitary Waste	$409,679	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$409,679**
D2040 - Rain Water Drainage	$370,319	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$370,319**
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	$1,300,211	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,300,211**
D3040 - Distribution Systems	$4,284,680	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,284,680**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,791,467	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,791,467**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,194,646	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,194,646**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$124,689	**$124,689**

D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$994,094	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$994,094**
D5020 - Lighting and Branch Wiring	$1,157,654	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,157,654**
D5030 - Communications and Security	$135,072	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$135,072**
D5090 - Other Electrical Systems	$188,223	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$188,223**
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	$90,802	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$90,802**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

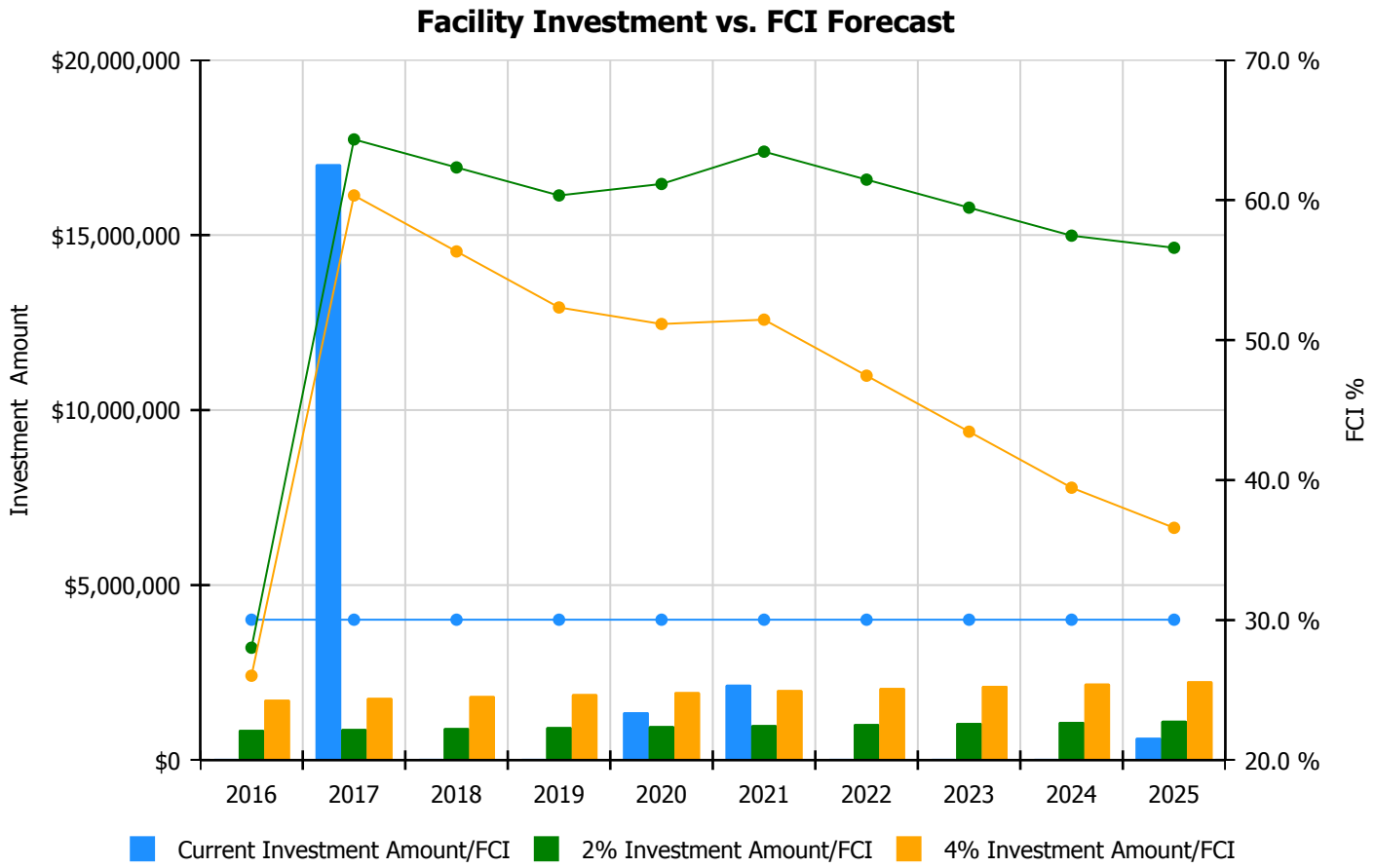
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

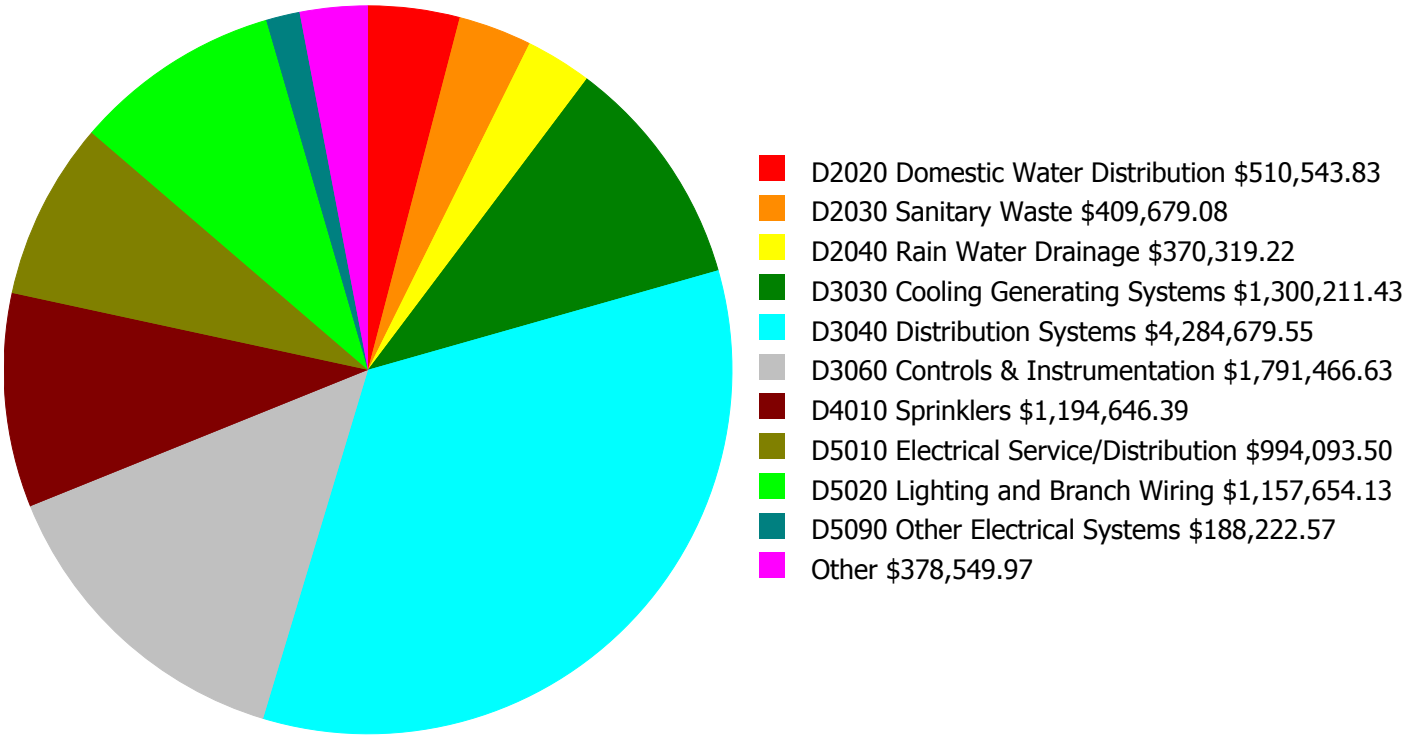
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 30.03%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$863,002.00	28.03 %	$1,726,005.00	26.03 %
2017	$17,022,522	$888,892.00	64.33 %	$1,777,785.00	60.33 %
2018	$0	$915,559.00	62.33 %	$1,831,118.00	56.33 %
2019	$0	$943,026.00	60.33 %	$1,886,052.00	52.33 %
2020	$1,369,128	$971,317.00	61.15 %	$1,942,633.00	51.15 %
2021	$2,155,346	$1,000,456.00	63.46 %	$2,000,912.00	51.46 %
2022	$0	$1,030,470.00	61.46 %	$2,060,940.00	47.46 %
2023	$0	$1,061,384.00	59.46 %	$2,122,768.00	43.46 %
2024	$0	$1,093,225.00	57.46 %	$2,186,451.00	39.46 %
2025	$638,307	$1,126,022.00	56.59 %	$2,252,044.00	36.59 %
Total:	**$21,185,303**	**$9,893,353.00**		**$19,786,708.00**	

Deficiency Summary by System

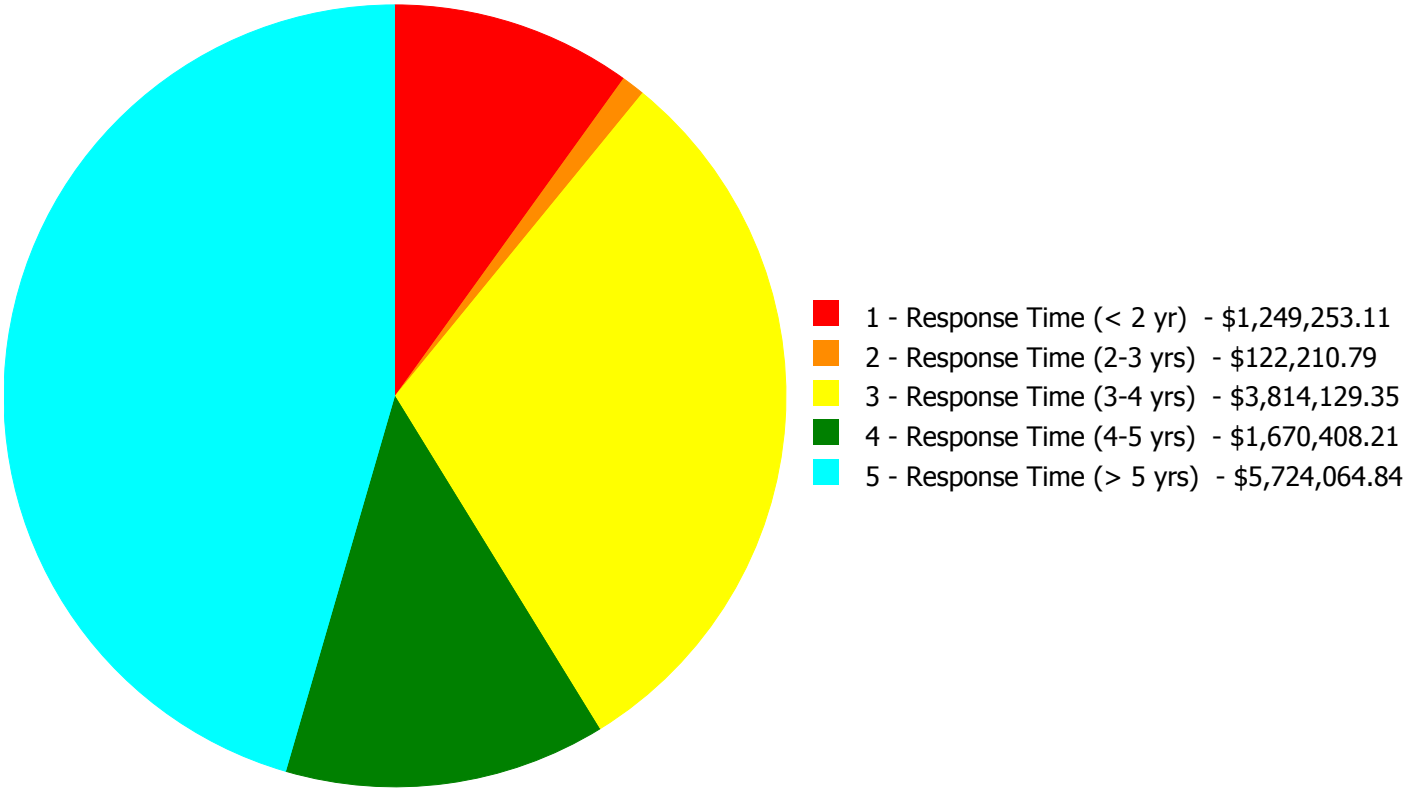
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $12,580,066.30

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: $12,580,066.30

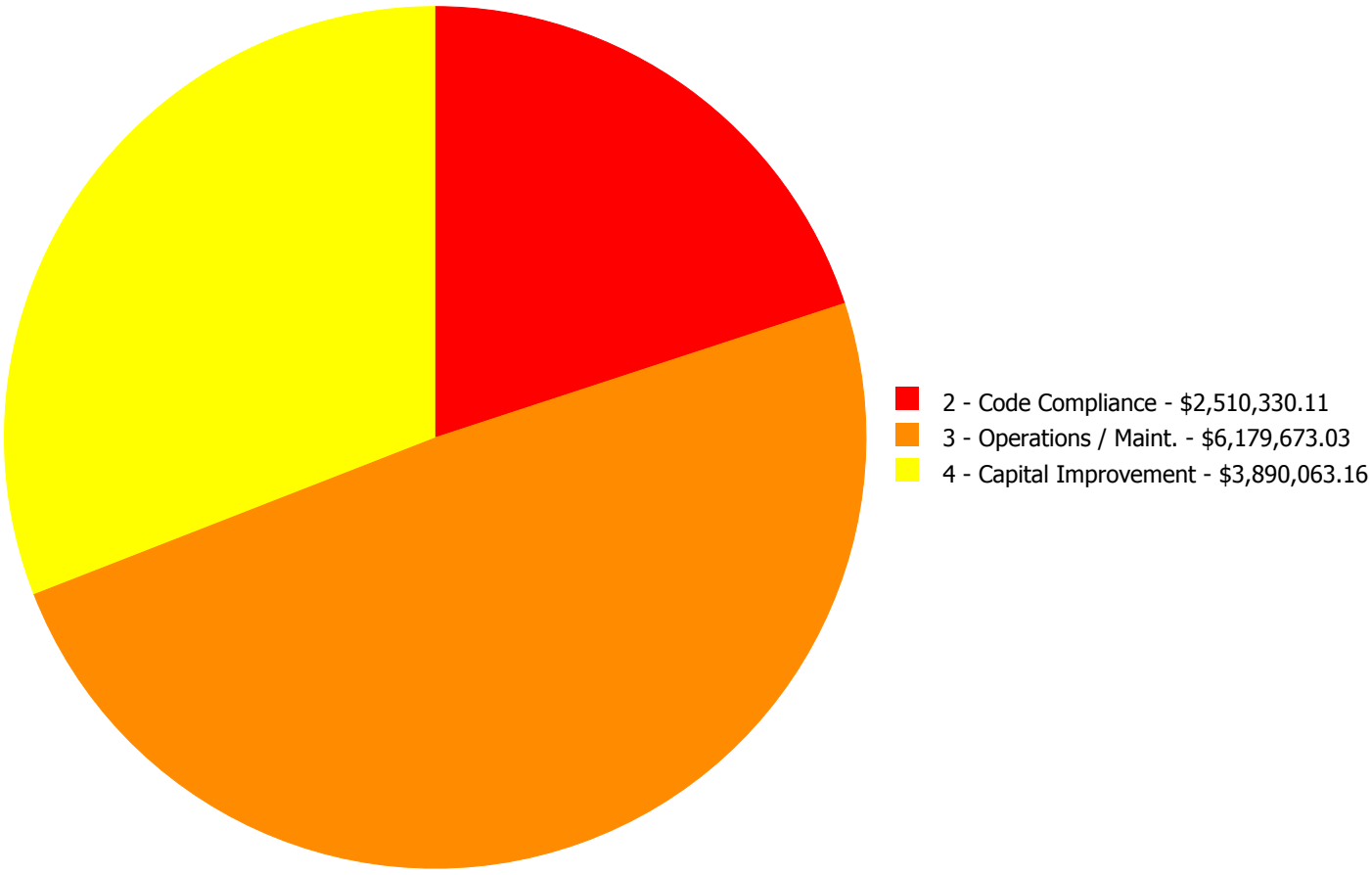
Deficiency By Priority Investment Table

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
C1020	Interior Doors	$0.00	$44,525.56	$0.00	$0.00	$0.00	$44,525.56
C3020414	Wood Flooring	$0.00	$0.00	$35,961.58	$0.00	$0.00	$35,961.58
C3030	Ceiling Finishes	$0.00	$44,923.70	$0.00	$0.00	$0.00	$44,923.70
D2010	Plumbing Fixtures	$0.00	$0.00	$0.00	$27,264.37	$0.00	$27,264.37
D2020	Domestic Water Distribution	$54,606.72	$32,761.53	$0.00	$423,175.58	$0.00	$510,543.83
D2030	Sanitary Waste	$0.00	$0.00	$409,679.08	$0.00	$0.00	$409,679.08
D2040	Rain Water Drainage	$0.00	$0.00	$370,319.22	$0.00	$0.00	$370,319.22
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,300,211.43	$1,300,211.43
D3040	Distribution Systems	$0.00	$0.00	$1,652,292.77	$0.00	$2,632,386.78	$4,284,679.55
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$0.00	$1,791,466.63	$1,791,466.63
D4010	Sprinklers	$1,194,646.39	$0.00	$0.00	$0.00	$0.00	$1,194,646.39
D5010	Electrical Service/Distribution	$0.00	$0.00	$0.00	$994,093.50	$0.00	$994,093.50
D5020	Lighting and Branch Wiring	$0.00	$0.00	$1,157,654.13	$0.00	$0.00	$1,157,654.13
D5030	Communications and Security	$0.00	$0.00	$0.00	$135,072.27	$0.00	$135,072.27
D5090	Other Electrical Systems	$0.00	$0.00	$188,222.57	$0.00	$0.00	$188,222.57
E1020	Institutional Equipment	$0.00	$0.00	$0.00	$90,802.49	$0.00	$90,802.49
	Total:	$1,249,253.11	$122,210.79	$3,814,129.35	$1,670,408.21	$5,724,064.84	$12,580,066.30

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: $12,580,066.30

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $54,606.72

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the existing vertical gas fired, 70 gallon, domestic hot water heater which is beyond its service life with a new gas fired hot water heater within the next 0-2 years.

System: D4010 - Sprinklers

Location: Throughout building

Distress: Life Safety / NFPA / PFD

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install a fire protection sprinkler system

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $1,194,646.39

Assessor Name: System

Date Created: 01/29/2016

Notes: Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.

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

System: C1020 - Interior Doors

Location: Throughout

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace door knobs with compliant lever type

Qty: 80.00

Unit of Measure: Ea.

Estimate: $44,525.56

Assessor Name: System

Date Created: 02/22/2016

Notes: Provide ADA compliant hardware on interior doors

System: C3030 - Ceiling Finishes

Location: Kitchen, Cafeteria

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace glued on or mechanically attached acoustical ceiling tiles

Qty: 3,600.00

Unit of Measure: S.F.

Estimate: $44,923.70

Assessor Name: System

Date Created: 02/22/2016

Notes: Replace acoustic tile in cafeteria and kitchen

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Provide 3" reduced pressure back flow preventer

Qty: 1.00

Unit of Measure: Ea.

Estimate: $32,761.53

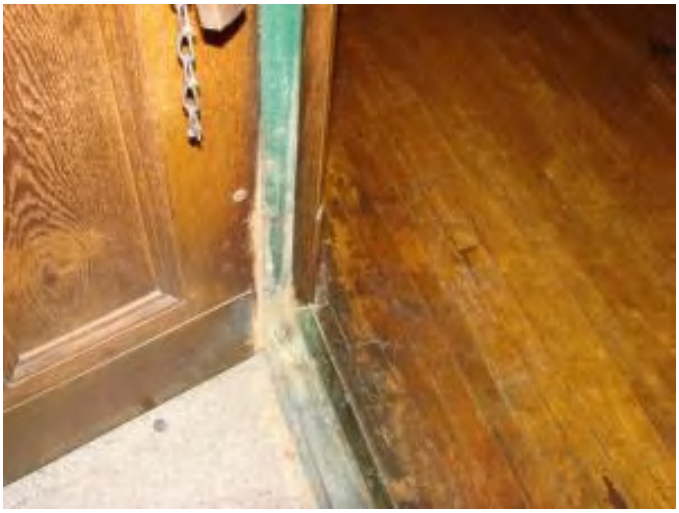
Assessor Name: System

Date Created: 01/29/2016

Notes: Install a reduced pressure backflow preventer on the incoming 2” domestic water line.

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

System: C3020414 - Wood Flooring



Location: Various

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Refinish wood floors

Qty: 3,340.00

Unit of Measure: S.F.

Estimate: $35,961.58

Assessor Name: System

Date Created: 02/22/2016

Notes: Repair refinish hardwood flooring (10% of wood flooring)

System: D2030 - Sanitary Waste

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $409,679.08

Assessor Name: System

Date Created: 01/29/2016

Notes: Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D2040 - Rain Water Drainage

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Inspect internal rain water drainage piping and replace pipe - based on SF of multi-story building - insert SF of building

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $370,319.22

Assessor Name: System

Date Created: 01/29/2016

Notes: Hire a qualified contractor to perform a detailed examination of the rain water drainage piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D3040 - Distribution Systems

Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace classroom unit ventilator (htg/clg coils, 5 tons, 2,000 CFM)

Qty: 33.00

Unit of Measure: Ea.

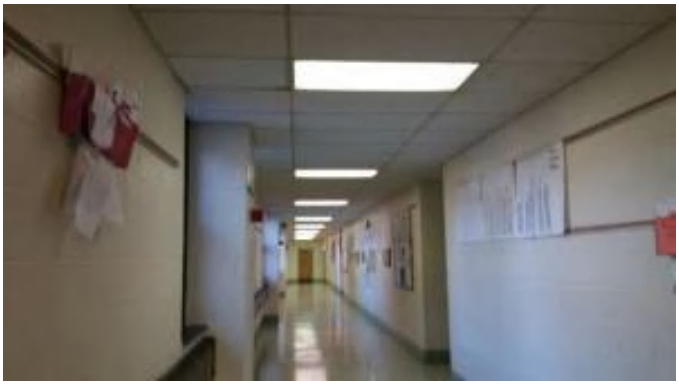
Estimate: $1,652,292.77

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the existing unit ventilators, which are beyond their service life and in poor condition, with two pipe units that have integral heat exchangers to introduce outdoor air to the building.

System: D5020 - Lighting and Branch Wiring



Location: throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Lighting Fixtures (SF)

Qty: 0.00

Unit of Measure: S.F.

Estimate: $831,965.97

Assessor Name: System

Date Created: 02/10/2016

Notes: Install new a lighting system for 70% of the entire building.
83,510 SF x 70% = 58,457 SF

System: D5020 - Lighting and Branch Wiring

Location: throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Wiring Devices (SF) - surface mounted conduit and boxes

Qty: 0.00

Unit of Measure: S.F.

Estimate: $325,688.16

Assessor Name: System

Date Created: 02/10/2016

Notes: Install new receptacles in all classrooms and other areas the building with minimum two receptacles on each wall (70% of the total building).
83,510 SF x 70% = 58,457 SF

System: D5090 - Other Electrical Systems

Location: throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Emergency/Exit Lighting
Qty: 1.00
Unit of Measure: Ea.
Estimate: $166,122.65
Assessor Name: System
Date Created: 02/10/2016

Notes: Install new emergency exit signs emergency lights.

System: D5090 - Other Electrical Systems

Location: roof
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Repair Lightning Protection System
Qty: 1.00
Unit of Measure: Job
Estimate: $22,099.92
Assessor Name: System
Date Created: 02/10/2016

Notes: Install a new Lightning Rods with aluminum cables all the way to the ground.

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

System: D2010 - Plumbing Fixtures

Location: Corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace floor janitor or mop sink - insert the quantity

Qty: 4.00

Unit of Measure: Ea.

Estimate: $27,264.37

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace four (4) existing service sinks which are beyond their service lives and in poor condition.

System: D2020 - Domestic Water Distribution

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water piping (75 KSF)

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $423,175.58

Assessor Name: System

Date Created: 01/29/2016

Notes: Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for an unknown amount of time, and replace any damaged piping.

System: D5010 - Electrical Service/Distribution

Location: throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Panelboard - 225A

Qty: 0.00

Unit of Measure: Ea.

Estimate: $452,141.15

Assessor Name: System

Date Created: 02/10/2016

Notes: Install new 120V panel-boards throughout the building for lighting, and receptacles loads.

System: D5010 - Electrical Service/Distribution

Location: electrical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Service Transformer, Add Switchboard

Qty: 0.00

Unit of Measure: Ea.

Estimate: $347,521.79

Assessor Name: System

Date Created: 02/10/2016

Notes: Install new Site electrical service 2000KVA, 480V, 3 Phase to feed the existing loads plus new HVAC additional loads. Install new 480V, 3 phase switchgear.

System: D5010 - Electrical Service/Distribution

This deficiency has no image.

Location: electrical room
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 4 - Response Time (4-5 yrs)
Correction: Add service entrance switchboard
Qty: 1.00
Unit of Measure: Ea.
Estimate: $194,430.56
Assessor Name: System
Date Created: 02/10/2016

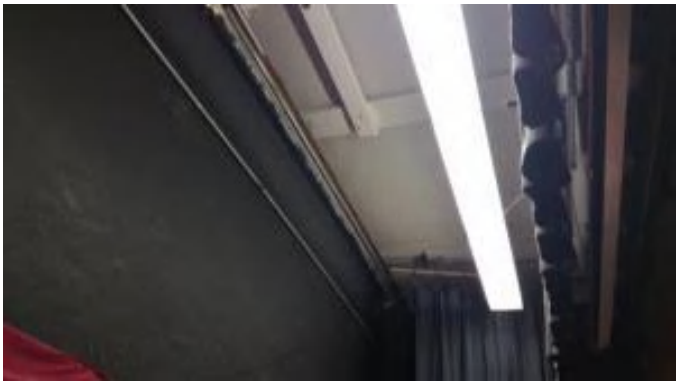
Notes: Install new MCCs for the additional mechanical loads.
Note: There is no picture attached since school at the present time has no MCC.

System: D5030 - Communications and Security

Location: throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Clock System or Components
Qty: 0.00
Unit of Measure: Ea.
Estimate: $135,072.27
Assessor Name: System
Date Created: 02/10/2016

Notes: Install a new Clock System.
Note: A multiplier of 1.2 is used (instead of 1.0) to cover the additional cost of other related construction

System: E1020 - Institutional Equipment



Location: auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Stage Theatrical Lighting System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $90,802.49

Assessor Name: System

Date Created: 02/10/2016

Notes: Install a new lighting controller for the auditorium stage lighting.

Priority 5 - Response Time (> 5 yrs):

System: D3030 - Cooling Generating Systems

Location: Throughout building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $1,300,211.43

Assessor Name: System

Date Created: 01/29/2016

Notes: Remove the window air conditioning units and install a 250 ton air-cooled chiller with chilled water distribution piping and pumps located in a mechanical room to supply more reliable air conditioning for the building with a much longer service life.

System: D3040 - Distribution Systems

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $790,035.61

Assessor Name: System

Date Created: 01/29/2016

Notes: Hire a qualified contractor to examine the building heating water distribution piping, in service for an unknown amount of time, and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D3040 - Distribution Systems

Location: Auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Auditorium (200 seat).

Qty: 420.00

Unit of Measure: Seat

Estimate: $625,165.76

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the heating and ventilation unit serving the Auditorium by installing a fan coil air handling unit installed in the basement mechanical room with outdoor air ducted to the unit from the existing outdoor air intake.

System: D3040 - Distribution Systems

Location: Gymnasium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Gymnasium (single station).

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $362,060.10

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the heating and ventilation unit serving the Gymnasium by installing a fan coil air handling unit installed in the basement mechanical room with outdoor air ducted to the unit from the existing outdoor air intake.

System: D3040 - Distribution Systems

Location: Cafeteria

Distress: Building / MEP Codes

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Cafeteria (850 students).

Qty: 656.00

Unit of Measure: Student

Estimate: $335,688.89

Assessor Name: System

Date Created: 01/29/2016

Notes: Provide more reliable ventilation for the Cafeteria by installing a constant volume air handling unit with distribution ductwork and registers.

System: D3040 - Distribution Systems

Location: Administration offices

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Administration (2000 students).

Qty: 656.00

Unit of Measure: Student

Estimate: $283,932.30

Assessor Name: System

Date Created: 01/29/2016

Notes: Provide ventilation for the administration offices by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in window openings.

System: D3040 - Distribution Systems

Location: Kitchen

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install GF makeup air unit for kitchen exhaust hood (single 10 ft hood).

Qty: 1.00

Unit of Measure: Ea.

Estimate: $235,504.12

Assessor Name: System

Date Created: 01/29/2016

Notes: Install a gas fired make-up air unit in the Kitchen for when the exhaust hoods are in operation.

System: D3060 - Controls & Instrumentation

Location: Throughout building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 83,510.00

Unit of Measure: S.F.

Estimate: $1,791,466.63

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the manual controls and BMS for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency. Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.

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
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2856 MBH, includes standard controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	De Dietrich	GT 414A	457320/4		35	2003	2038	$53,169.20	$175,458.36
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2856 MBH, includes standard controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	De Dietrich	GT 414A	457320/3		35	2003	2038	$53,169.20	$175,458.36
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2856 MBH, includes standard controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	De Dietrich	GT 414A	457320/1		35	2003	2038	$53,169.20	$175,458.36
D3040 Distribution Systems	Pump, circulating, cast iron, base mounted, coupling guard, bronze impeller, flanged joints, 10 H.P., to 600 GPM, 5" size	2.00	Ea.	Boiler Room	Taco	CT2511E2KAA B699D			25	2003	2028	$19,608.00	$43,137.60
D3040 Distribution Systems	Pump, circulating, cast iron, base mounted, coupling guard, bronze impeller, flanged joints, 10 H.P., to 600 GPM, 5" size	2.00	Ea.	Boiler Room	Taco	CT2511E2KAA B699D			25	2003	2028	$19,608.00	$43,137.60
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 300 kVA & below, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	1.00	Ea.	electrrical room					30	1928	1958	$42,600.60	$46,860.66
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 600 A, 5 stories, 50' horizontal	3.00	Ea.	electrical room					30	2010	2040	$34,030.80	$112,301.64
D5090 Other Electrical Systems	Generator set, diesel, 3 phase 4 wire, 277/480 V, 125 kW, incl battery, charger, muffler, & day tank, excl conduit, wiring, & concrete	1.00	Ea.	electrical room					30	2010	2040	$50,797.80	$55,877.58
												Total:	**$827,690.16**

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):	94,100
Year Built:	1928
Last Renovation:	
Replacement Value:	$1,519,739
Repair Cost:	$319,740.88
Total FCI:	21.04 %
Total RSLI:	71.42 %

Description:

Attributes:

General Attributes:

Bldg ID:	S638001	Site ID:	S638001

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	58.43 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	78.11 %	$319,740.88
Totals:	**71.42 %**	**21.04 %**	**$319,740.88**

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	1990	2020	2030	50.00 %	0.00 %	15			$0
G2020	Parking Lots	$7.65	S.F.	29,000	30	1990	2020	2030	50.00 %	0.00 %	15			$221,850
G2030	Pedestrian Paving	$11.52	S.F.	30,000	40	2001	2041		65.00 %	0.00 %	26			$345,600
G2040	Site Development	$4.36	S.F.	94,100	25	2001	2026		44.00 %	0.00 %	11			$410,276
G2050	Landscaping & Irrigation	$3.78	S.F.	35,100	15	2001	2016	2030	100.00 %	0.00 %	15			$132,678
G4020	Site Lighting	$3.58	S.F.	94,100	30	1928	1958	2047	106.67 %	44.67 %	32		$150,489.99	$336,878
G4030	Site Communications & Security	$0.77	S.F.	94,100	30	1928	1958	2047	106.67 %	233.59 %	32		$169,250.89	$72,457
								Total	**71.42 %**	**21.04 %**			**$319,740.88**	**$1,519,739**

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.

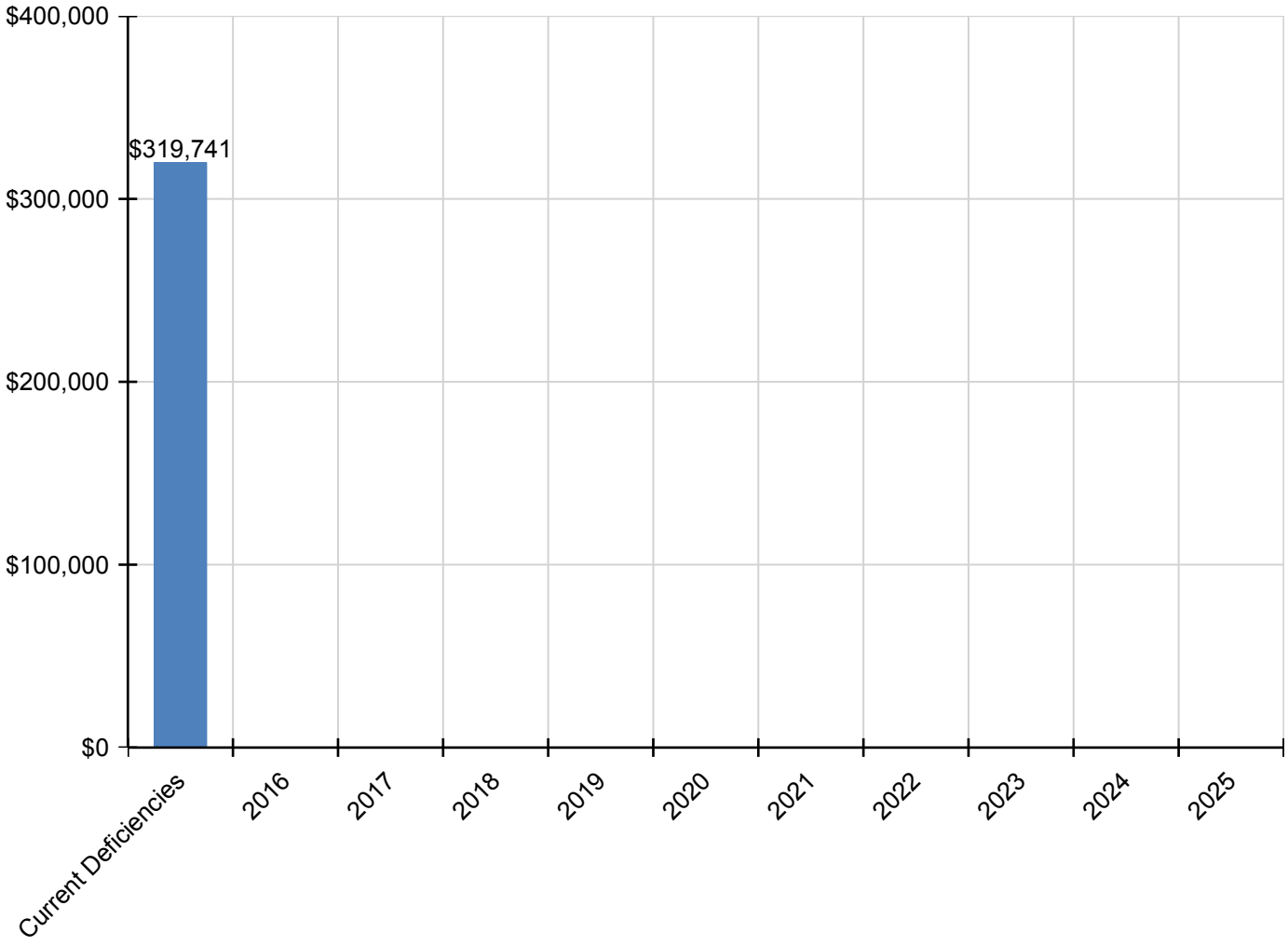
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$319,741**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$319,741**
G - Building Sitework	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G20 - Site Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2010 - Roadways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2020 - Parking Lots	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040 - Site Development	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$150,490	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$150,490**
G4030 - Site Communications & Security	$169,251	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$169,251**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

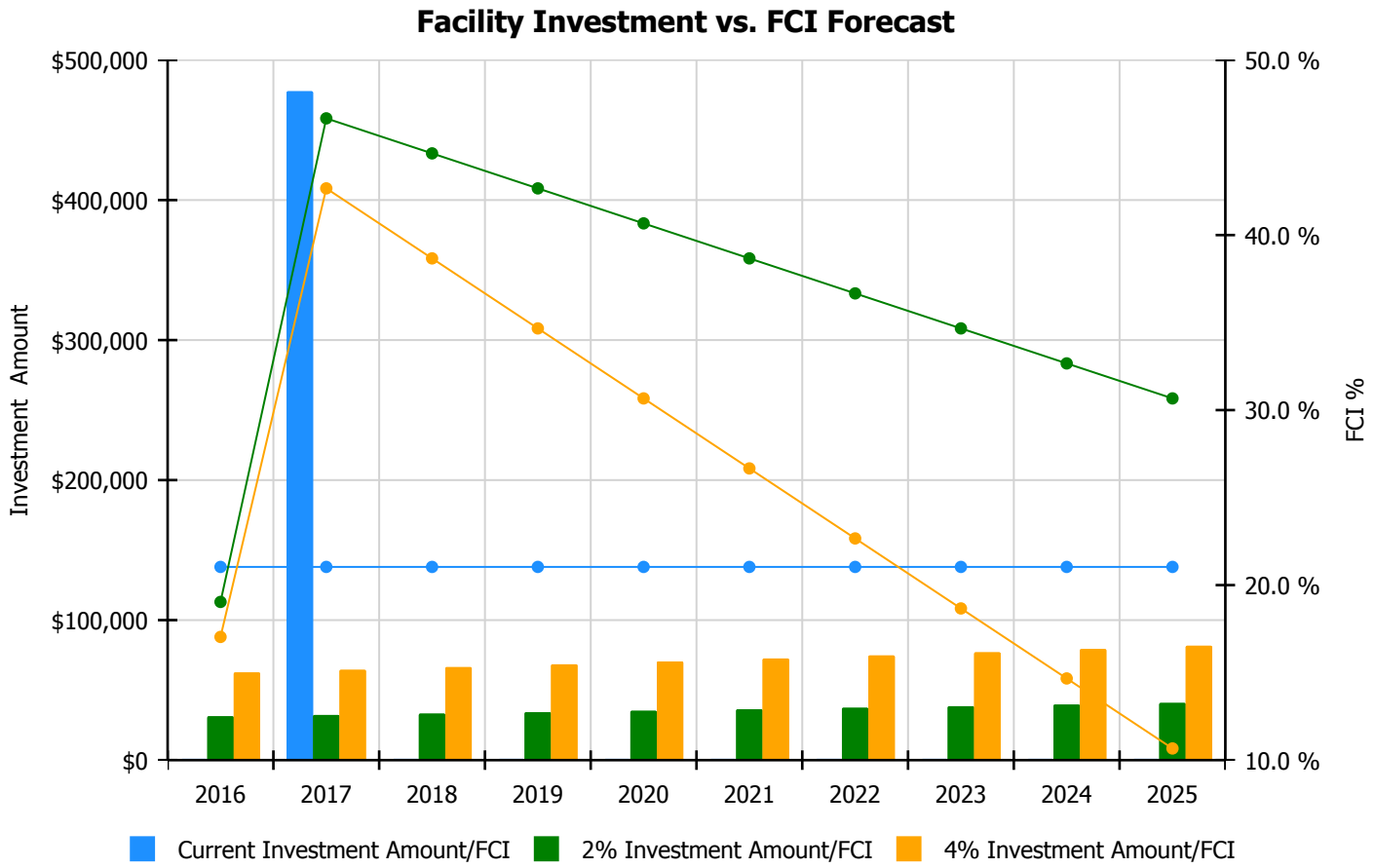
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

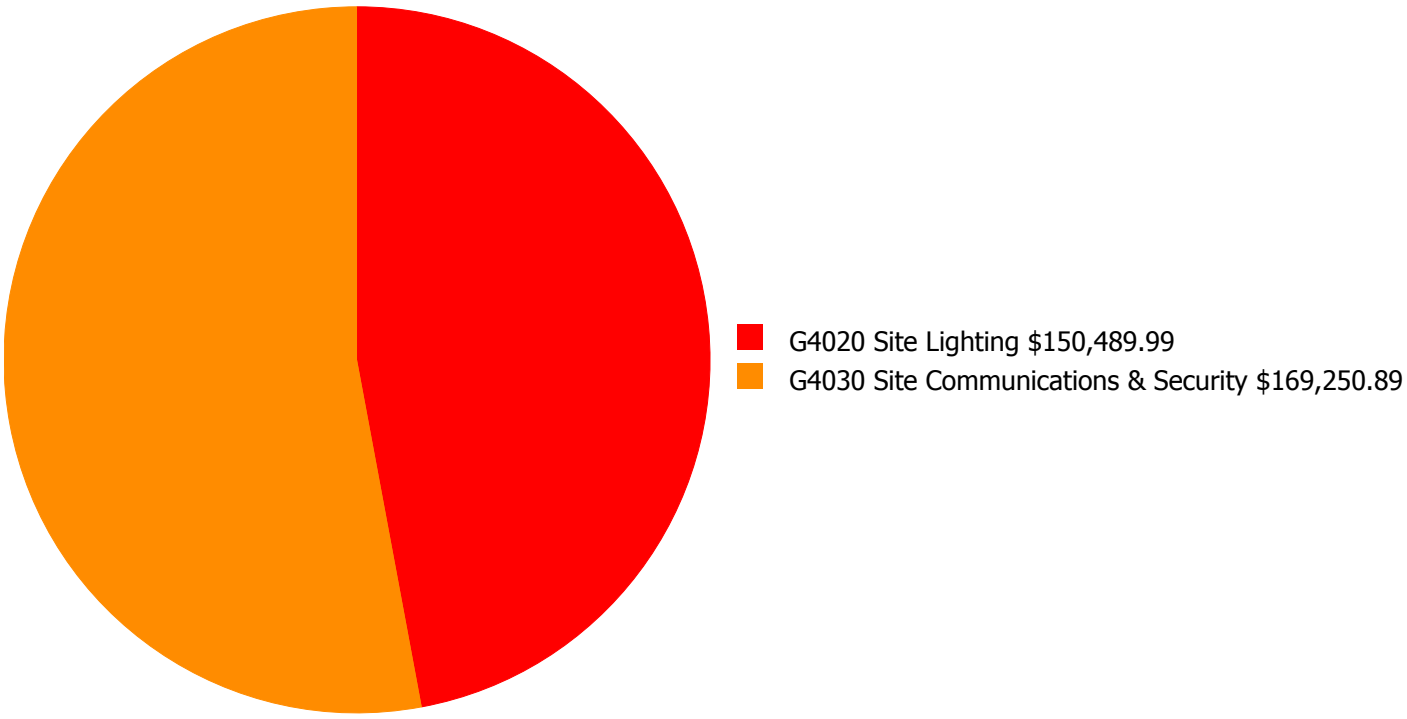
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 21.04%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$31,307.00	19.04 %	$62,613.00	17.04 %
2017	$477,690	$32,246.00	46.67 %	$64,492.00	42.67 %
2018	$0	$33,213.00	44.67 %	$66,426.00	38.67 %
2019	$0	$34,210.00	42.67 %	$68,419.00	34.67 %
2020	$0	$35,236.00	40.67 %	$70,472.00	30.67 %
2021	$0	$36,293.00	38.67 %	$72,586.00	26.67 %
2022	$0	$37,382.00	36.67 %	$74,763.00	22.67 %
2023	$0	$38,503.00	34.67 %	$77,006.00	18.67 %
2024	$0	$39,658.00	32.67 %	$79,317.00	14.67 %
2025	$0	$40,848.00	30.67 %	$81,696.00	10.67 %
Total:	**$477,690**	**$358,896.00**		**$717,790.00**	

Deficiency Summary by System

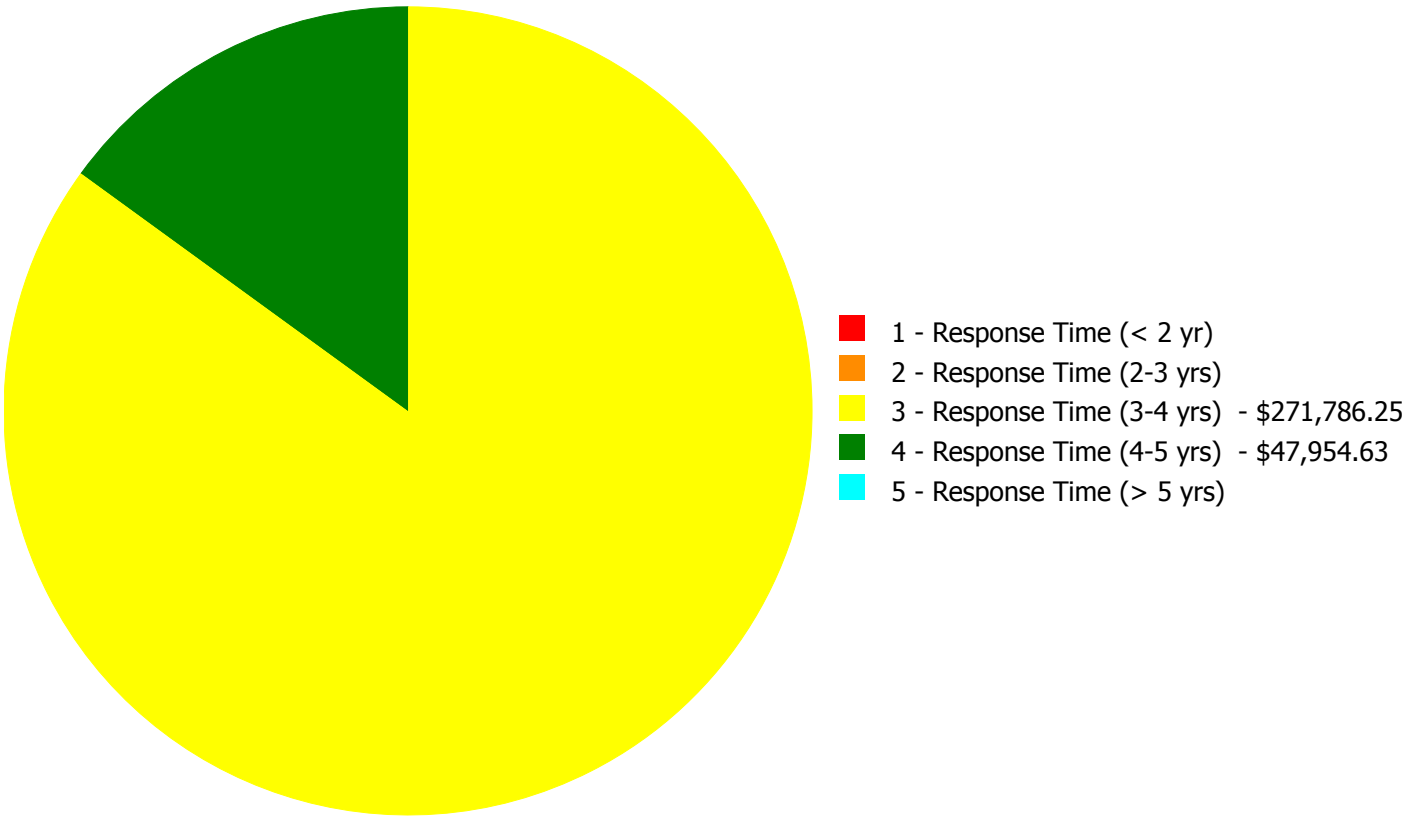
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $319,740.88

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: $319,740.88

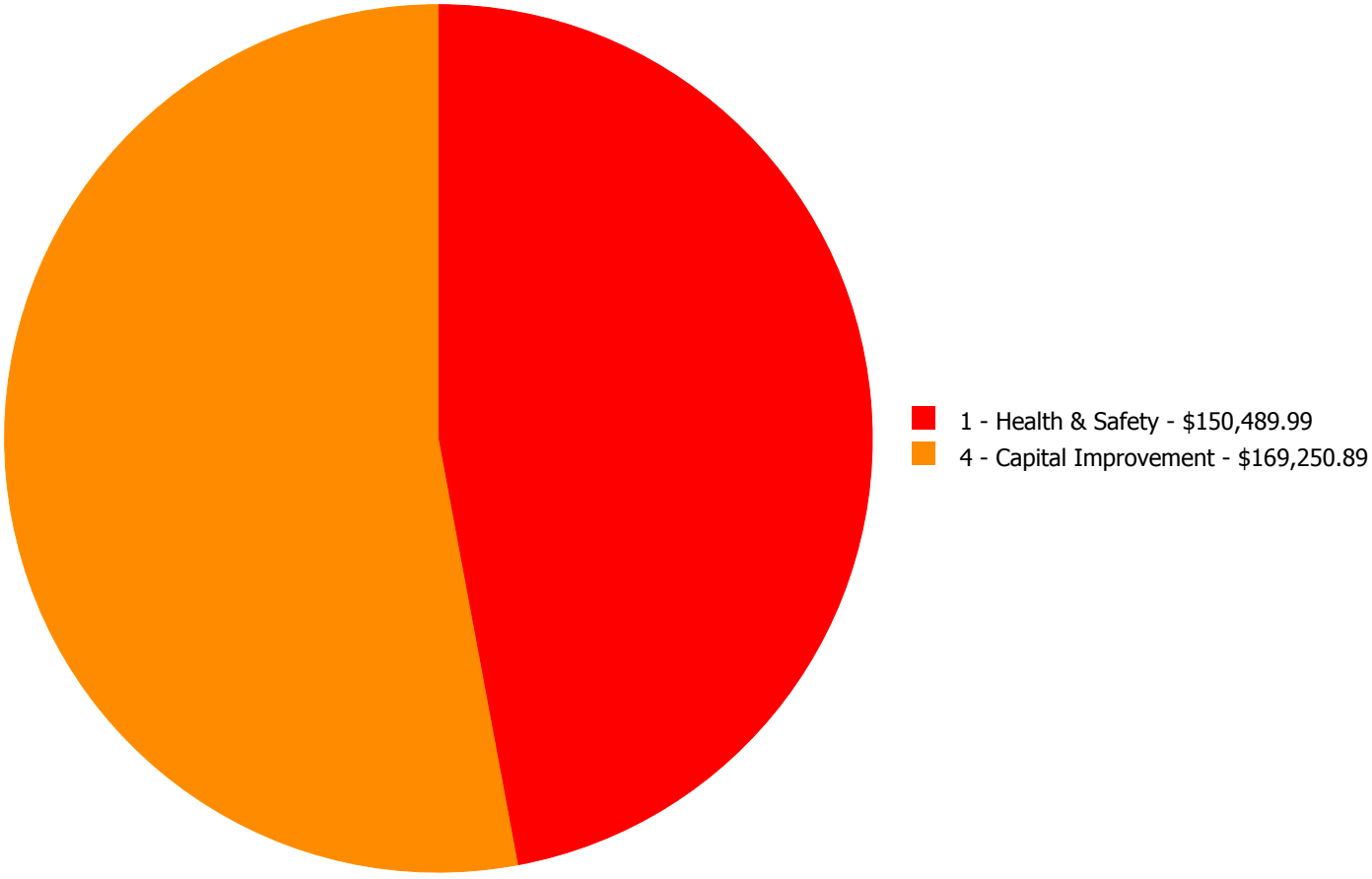
Deficiency By Priority Investment Table

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
G4020	Site Lighting	$0.00	$0.00	$150,489.99	$0.00	$0.00	$150,489.99
G4030	Site Communications & Security	$0.00	$0.00	$121,296.26	$47,954.63	$0.00	$169,250.89
	Total:	$0.00	$0.00	$271,786.25	$47,954.63	$0.00	$319,740.88

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: $319,740.88

Deficiency Details by Priority

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

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

System: G4020 - Site Lighting

Location: grounds

Distress: Security Issue

Category: 1 - Health & Safety

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $150,489.99

Assessor Name: Craig Anding

Date Created: 02/10/2016

Notes:
Install new site lighting for safety of the people and security of property.

System: G4030 - Site Communications & Security

Location: grounds

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Video Surveillance System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $121,296.26

Assessor Name: Matt Mahaffey

Date Created: 02/10/2016

Notes: Install exterior cameras for video surveillance of activities outside of the building

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

System: G4030 - Site Communications & Security

Location: grounds

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Site Paging System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $47,954.63

Assessor Name: Matt Mahaffey

Date Created: 02/10/2016

Notes: Install additional exterior speakers for better communication and paging students playing outside.

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