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.

Sheridan School

Governance	DISTRICT	Report Type	Elementary
Address	800 E. Ontario St.	Enrollment	731
	Philadelphia, Pa 19134	Grade Range	'00-04'
Phone/Fax	215-291-4724 / 215-291-5615	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Sheridan	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	**42.26%**	**$14,297,669**	**$33,831,097**
Building	41.74 %	$13,876,552	$33,249,124
Grounds	72.36 %	$421,117	$581,973

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$1,104,296
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$2,390,550
Windows (Shows functionality of exterior windows)	00.00 %	$0	$1,166,454
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$93,912
Interior Doors (Classroom doors)	249.78 %	$567,829	$227,332
Interior Walls (Paint and Finishes)	00.00 %	$0	$1,088,733
Plumbing Fixtures	00.00 %	$0	$875,650
Boilers	02.21 %	$26,678	$1,209,200
Chillers/Cooling Towers	64.12 %	$1,016,628	$1,585,496
Radiators/Unit Ventilators/HVAC	150.72 %	$4,196,438	$2,784,333
Heating/Cooling Controls	158.90 %	$1,389,389	$874,355
Electrical Service and Distribution	143.67 %	$902,603	$628,240
Lighting	48.50 %	$1,089,280	$2,246,120
Communications and Security (Cameras, Pa System and Fire Alarm)	93.42 %	$785,935	$841,323

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

S553001;Sheridan

Final

Site Assessment Report

January 31, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	64,767
Year Built:	1899
Last Renovation:	1998
Replacement Value:	$33,831,097
Repair Cost:	$14,297,669.47
Total FCI:	42.26 %
Total RSLI:	70.72 %

Description:

Facility Assessment
October, 2015

School District of Philadelphia
Sheridan Elementary School
800 E. Ontario Street
Philadelphia, PA 19134

64,767 SF / 636 Students / LN 05

The Sheridan Elementary School building is located at 800 E. Ontario Street in Philadelphia, PA. The 3 story, 64,767 square foot building was originally constructed in 1899. Two additional 3-story wings were added in 1910.The building has a full basement. A major renovation was conducted in 1998 consisting of roofing replacement, masonry restoration, toilet upgrades for ADA and interior finishes.

Mr. Scott Ovington, Facility Area Coordinator provided input to the Parsons assessment team on current problems and planned renovation projects. Mr. Dahvid Goodwin, building engineer, accompanied us on our tour of the school and provided us with detailed information on the building systems and recent maintenance history. The school principal, Ms. Awilda Balbuena provided additional

information about building condition.

STRUCTURAL/ EXTERIOR CLOSURE:

The building typically rests on stone masonry and concrete foundations and bearing walls that are not showing signs of settlement. There is no evidence of water penetration through walls.

The main structure consists typically of masonry load bearing walls supporting a combination of one-way concrete slabs with ceramic block fillers and heavy timber framing, in good condition.

The building envelope is typically granite ashlar facing on elevations facing streets and face brick on the playground side, facing E. Thayer St. In general, masonry is in good condition, recently restored and tuck-pointed. No water penetration was reported.

The original windows were replaced in 1998 with extruded aluminum double hung windows single glazed with acrylic glazing. The old window frames were left in place. All windows are generally in good condition; basement and first floor windows are fitted with the security screens in good condition.

The roof structure consists of heavy timber trusses, girders and purlins supporting wood board sheathing. The central (original) roof element of the building is sloped with dormers. The wings are also sloped same as original roof with flat sections on top. Roofing is typically asphalt shingles; flat sections are covered with built-up roofing. All roofing and flashing was installed in 2012.

Exterior doors are typically hollow metal in hollow metal frames, installed in 1998.

INTERIORS:

Partition wall types include plastered ceramic blocks (hollow brick) and drywall. Some classrooms have sliding wood partitions which are inoperable. The interior wall finishes are generally painted plaster and painted brick or stone in the basement. Generally, paint is in good condition, applied in 1998 on all floors. All toilet walls have ceramic tile finish, installed in 1998.

Most ceilings are 2x4 acoustic in classrooms and corridors, generally in good condition. Toilets and mechanical spaces have exposed or plaster ceilings, generally in good condition, however, some plaster deterioration was observed in boiler room.

Flooring in classrooms and corridors is typically hardwood with some finish deterioration. Toilet flooring is ceramic tile in good condition, installed in 1998. VCT is installed in few rooms and gymnasium, in good condition. Mechanical spaces floors are concrete.

Interior doors are wood rail and stile wood glazed doors with transoms, generally in various stages of deterioration. Most doors are fitted with door knobs and are not ADA compliant. Doors leading to exit stairways are retrofitted with hollow metal doors and frames in good condition.

Stair construction is generally steel stringers with steel pans supporting stone treads, in good condition.

Fittings include original chalk boards, generally in poor condition. Some classrooms are fitted with new AV smart boards. Toilets are fitted with phenolic panel partitions and accessories installed in 1998 and in good condition; accessible cubicles are provided.

Interior identifying signage is typically directly painted on wall or door surfaces in fair condition.

CONVEYING EQUIPMENT:

The building does not have an elevator.

ACCESSIBILITY:

The building does not have accessible entrance, and accessible routes. There is no elevator to reach floors above. Most of the doors in the building has ADA required door handles. Toilets are generally in compliance with ADA standards.

GROUNDS (SITE):

There is no parking lot at the site.

Playground adjacent to the building is in poor condition, paving is cracked and deteriorated; there is no playground equipment. Perimeter fence is typically picket fence in good condition. There is no landscaping.

PLUMBING:

Plumbing Fixtures - The plumbing fixtures were replaced in 1998, according to the Custodial Assistant, and are currently in good condition. Fixtures in the restrooms on each floor consist of wall mounted push button flush valve water closets, wall hung urinals, and lavatories with wheel handle faucets. The District should provide reliable service to the plumbing fixtures for the next 15-18 years.

Drinking fountains in the corridors consist of handicap accessible wall hung fixtures with integral refrigerated coolers. The fixtures are in good condition and the district should provide reliable service for the next 5-8 years.

A mop basin is available in a janitor closet in the corridor on each floor for use by the janitorial staff.

The Kitchen is a part of the Cafeteria and does not have any sinks or exhaust hoods installed.

Domestic Water Distribution - A 4" city water service enters the building in the basement mechanical room from East Ontario Street. The 4" meter and valves are located in the mechanical room and two reduced pressure backflow preventers are installed in parallel. Duplex skid mounted 3HP domestic pressure booster pumps and a pressure tank were installed in 1998. This ensures adequate pressure throughout the system on the domestic water line. The pumps, tank and meter are in good condition. 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 State Sandblaster gas fired, 70 gallon, vertical hot water heater with circulating pump supplies hot water for domestic use. The unit is located in the boiler room on the basement level and has an installation date of 2008. The hot water heater is equipped with a T&P relief valve. The domestic hot water heater is approaching the end of its service life and should be replaced in the next 3-5 years.

Sanitary Waste - The original sanitary sewer piping is still in use and is a mixture of threaded galvanized piping and cast iron piping with hub and spigot fittings. Some repairs have been made with steel piping and no-hub fittings.

The school does not have a sewage ejector or sump pump pit.

The maintenance staff reported mostly minor problems with the sanitary waste piping systems. The original sewer piping has been in service for over 100 years 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 consist of both internal and external rain leaders. The majority of rain water drains are external rain leaders connected to gutters with aluminum downspouts that run down the side of the building and connect to cast iron piping with hub and spigot fittings about eight feet above the ground. Several internal rain leaders are routed through mechanical chases in the building and appear to be original. It is cast iron piping with hub and spigot fittings; repairs have been made with HDPE piping and no-hub fittings. The cast iron rain leaders have been in use well beyond their service life and are showing signs of rust damage. 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.

MECHANICAL:

Energy Supply - A 6" city gas service enters the building in the basement boiler room from the paved play area adjacent to E. Thayer Street. The gas meter is 4" and a Spencer gas booster pump is installed. The new gas line and booster pump were installed with the new boilers in 2008.

The reserve oil supply is stored in an underground storage tank (UST) of unknown size, located in the paved play area on the South side of the school. Duplex pumps located in the basement boiler room circulate oil through the system; the pumps are in poor condition and should be inspected and replaced with a new system and control scheme. Oil is used as a backup fuel and the District receives credit from the gas utility as an interruptible service. The current supply has been in storage for some time and should be tested for quality on a regular schedule. The actual condition of the fuel side is unknown.

Heat Generating Systems - Low pressure steam is generated at a maximum of 15 lbs./sq. in. by two (2) 81HP HB Smith model 350

cast iron sectional boilers installed in approximately 2008, the building engineer did not know exact year. According to the serial number on the boilers, they were manufactured in 2001 but not necessarily installed at this school at that time. One boiler can handle the load in normal winter weather conditions; two units are required on very cold days. Each boiler is equipped with a Power Flame burner designed to operate on natural gas or fuel oil. Combustion air makeup is supplied by louvers equipped with motorized dampers. Induced draft fans with positive draft control are installed on the rear of each boiler. Burner controls provide full modulation with electronic ignition, digital flame sensing and pressure atomization on oil. Burner oil pumps are loose and not driven by the fan motor. 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 Building Engineer reports the system does not lose much condensate from the steam traps. Cast iron sectional boilers have an anticipated service life of 35 years or more; these units have been in service approximately 14 years. The boilers appear to have been maintained well. The District should provide reliable service for the next 20 to 25 years.

A Shipco condensate receiver, boiler feed tank assembly with two (2) pumps headered together are installed in the boiler room. The feed tank and pumps are in good condition and estimated to have been installed in 2008 with the boilers. A Marlo chemical treatment system is connected to the boiler feed tank, providing chemically treated water to the boilers. The Building Engineer reported that there is very little steam in the boiler room when she runs the boilers.

Distribution Systems - Steam piping is black steel with welded fittings. The condensate piping is black steel with threaded fittings. Steam and condensate piping mains from the basement level run up through the building to the radiators on all three floors. The distribution piping has been in use well beyond its service life 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 steam and condensate piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

There is no separate kitchen in this building, as the school only serves premade meals.

Two pipe cast iron radiators and the house fan provide heating for the classrooms, offices, and hallways. The radiators and house fan are original to the building and well beyond their service lives. The fan has been refurbished in the recent past, but the Building Engineer did not know when. Ventilation and heating for the building are provided by the house fan when it is in use, which does not meet current codes for outdoor air ventilation. The house fan only runs during the heating season, thus the building is without mechanical ventilation much of the year. Ventilation should be provided for the Gymnasium by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings. Similar units could be installed for the administration offices. Ventilation should be provided for the Cafeteria by installing a constant volume air handling unit with distribution ductwork and registers. A new heating system should be installed to meet ventilation requirements and achieve more efficient operation. These units would be equipped with hot water heating coils and chilled water cooling coils. Steam converters would be installed in the existing boiler room with circulating pumps, distribution piping and controls to provide heating hot water for the new coils.

Ventilation for the restrooms is supposed to be provided by two (2) exhaust fans; one (1) on the East side of the building and one (1) on the West side. The fans were not operational during the site visit and should be replaced to provide code mandated ventilation.

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 160 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.

Controls & Instrumentation - The original pneumatic systems provide no control functions. Pneumatic room thermostats were intended to control the steam radiator control valves. In reality the radiator control valves have been replaced with manually adjustable controls at each radiator and heating control is achieved via the boilers, house fan, and to a smaller extent the control valves. The pneumatic systems are obsolete and the current system requires manual operation from the teachers and Building Engineer. The controls should be converted to DDC.

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 NOT equipped with standpipes.

ELECTRICAL:

Site electrical service - The primary power is at 13.2KV from the street power pole which feeds a 300KVA pole-top transformer (13.2KV – 120V/240V). The secondary power runs overhead into the building and finally into the electrical room. This electrical service although is fairly new (2002), but it does not have enough capacity for the new HVAC loads. The present main switchgear is rated at 600 Amp, 120V/240V, 2 phase, 3W, and is located in main electrical room. The PECO meter (PECO MU-16553) is also located inside the electrical room. The main 600A switchboard is fairly new but it has no extra capacity for the additional mechanical loads.

Distribution system - The electrical distribution is accomplished with a 120V/240V distribution switchboard, located in the electrical room, feeding several panels throughout the building. These panels are not in good condition. They have reached the end of their service life.

Receptacles - The receptacles in classrooms, computer rooms, libraries, and other areas are not adequate. Minimum of two receptacles on each wall of the classrooms and other rooms are required.

Lighting - Interior building is illuminated by various types of fixtures. Fluorescent lighting (T-8 lamp) is in most of the areas, including; classrooms, corridor, offices and Kitchen. Surface or pendant mounted industrial fluorescent fixtures are used in mechanical and electrical rooms. Gymnasium is illuminated by metal halide enclosed glass fixtures. The majority of interior lighting fixtures are in a poor condition and they have reached the end of their service life.

Fire alarm - The present Fire Alarm system is not automatic/addressable, and is not in compliance with safety code. There are manual pulls stations throughout the building. There is not 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. A main distribution frame (MDF) along with a telephone PBX system is providing the communication system function for the building. School is also equipped with Wi-Fi system.

Public address - A separate PA system does not exist. School uses the telephone systems for public announcement. This system is working properly. Each class room is provided by with an intercom telephone service. The system permits paging and intercom communication between main office to each classroom, between each classroom to main office, and 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, the clocks are not controlled properly by central master control panel.

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

Security Systems, access control, and video surveillance - The school is not provided with adequate video surveillance system. Cameras are not installed at all exit doors, corridors, exterior, and other critical areas. The cameras should be controlled by a Closed Circuit Television system (CCTV).

Emergency Power System - School is provided with a 30KW emergency power. The emergency generator feeds an emergency Panel through an Automatic Transfer Switch (ATS).

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

Lightning Protection System - There is adequate lightning protection system installed in the school. There are lightning rods installed on the roof that are properly connected to the ground via stranded aluminum cables.

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

Site Lighting - The school grounds and building perimeters are not properly and sufficiently 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 for proper notification and paging of the students in the ground area.

RECOMMENDATIONS:

- Replace sliding partitions with drywall partitions
- Replace all original interior doors
- Replace original chalkboards with marker boards
- Repair and repaint plaster ceilings (15%)
- Replace all carpet
- Repair and refinish hardwood flooring throughout the building
- Install new signage throughout
- Provide 3000 lb exterior elevator serving all floors and ground level
- Replace playground paving
- 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.
- Replace the existing vertical gas fired, 70 gallon, domestic hot water heater which is approaching the end of its service life with a new gas fired hot water heater.
- 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.
- Inspect and replace the current fuel oil pumping system, which was in poor condition during site visit, with a new system and control scheme.
- Hire a qualified contractor to examine the steam piping, in service for over 100 years, and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Remove the existing cast iron steam radiators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.
- Provide ventilation for the Gymnasium by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings.
- 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.
- Provide ventilation for the Cafeteria 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 160 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.
- Replace the two (2) exhaust fans serving the restrooms, which were not operational during the site visit.
- Replace the pneumatic controls 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 two new 480 V MCCs to handle the new HVAC loads.
- Install a new 300KV transformer (480V- 120V) to feed the existing 120V distribution panels.
- Install minimum two receptacles on each wall of the classroom. Install surface-mounted raceways and receptacles in all classrooms and other areas within the building.
- Install new lighting system for the entire building.
- Install new automated FA system.
- Install new Video Surveillance System with Cameras and CCTV.
- Install new Clock System.
- Install new emergency exit signs / emergency lights.
- Install additional outdoor lighting for the grounds
- Install additional speakers for the grounds.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 3 / Tm 4
Status:	Accepted by SDP	Team:	Tm 4
Site ID:	S553001		

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	52.00 %	0.00 %	$0.00
A20 - Basement Construction	52.00 %	0.00 %	$0.00
B10 - Superstructure	52.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	53.24 %	0.00 %	$0.00
B30 - Roofing	41.61 %	0.00 %	$0.00
C10 - Interior Construction	60.28 %	40.20 %	$638,921.07
C20 - Stairs	52.00 %	0.00 %	$0.00
C30 - Interior Finishes	74.31 %	11.98 %	$430,109.94
D10 - Conveying	105.71 %	253.31 %	$1,251,764.48
D20 - Plumbing	70.39 %	74.68 %	$987,740.35
D30 - HVAC	92.72 %	92.01 %	$6,629,134.28
D40 - Fire Protection	92.47 %	177.49 %	$926,523.01
D50 - Electrical	110.11 %	79.13 %	$3,012,359.01
E10 - Equipment	0.00 %	0.00 %	$0.00
E20 - Furnishings	0.00 %	0.00 %	$0.00
G20 - Site Improvements	81.90 %	68.33 %	$294,848.43
G40 - Site Electrical Utilities	106.67 %	83.91 %	$126,268.90
Totals:	**70.72 %**	**42.26 %**	**$14,297,669.47**

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)
B553001;Sheridan	64,767	41.74	$926,523.01	$287,204.74	$4,314,832.56	$1,513,480.52	$6,834,511.31
G553001;Grounds	25,900	72.36	$0.00	$0.00	$71,604.99	$349,512.34	$0.00
Total:		**42.26**	**$926,523.01**	**$287,204.74**	**$4,386,437.55**	**$1,862,992.86**	**$6,834,511.31**

Deficiencies By Priority

1 - Response Time (< 2 yr) - $926,523.01
2 - Response Time (2-3 yrs) - $287,204.74
3 - Response Time (3-4 yrs) - $4,386,437.55
4 - Response Time (4-5 yrs) - $1,862,992.86
5 - Response Time (> 5 yrs) - $6,834,511.31

Budget Estimate Total: $14,297,669.47

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):	64,767
Year Built:	1899
Last Renovation:	
Replacement Value:	$33,249,124
Repair Cost:	$13,876,552.14
Total FCI:	41.74 %
Total RSLI:	70.41 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B553001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S553001		

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	52.00 %	0.00 %	$0.00
A20 - Basement Construction	52.00 %	0.00 %	$0.00
B10 - Superstructure	52.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	53.24 %	0.00 %	$0.00
B30 - Roofing	41.61 %	0.00 %	$0.00
C10 - Interior Construction	60.28 %	40.20 %	$638,921.07
C20 - Stairs	52.00 %	0.00 %	$0.00
C30 - Interior Finishes	74.31 %	11.98 %	$430,109.94
D10 - Conveying	105.71 %	253.31 %	$1,251,764.48
D20 - Plumbing	70.39 %	74.68 %	$987,740.35
D30 - HVAC	92.72 %	92.01 %	$6,629,134.28
D40 - Fire Protection	92.47 %	177.49 %	$926,523.01
D50 - Electrical	110.11 %	79.13 %	$3,012,359.01
E10 - Equipment	0.00 %	0.00 %	$0.00
E20 - Furnishings	0.00 %	0.00 %	$0.00
Totals:	**70.41 %**	**41.74 %**	**$13,876,552.14**

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.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$1,191,713
A1030	Slab on Grade	$7.73	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$500,649
A2010	Basement Excavation	$6.55	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$424,224
A2020	Basement Walls	$12.70	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$822,541
B1010	Floor Construction	$75.10	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$4,864,002
B1020	Roof Construction	$13.88	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$898,966
B2010	Exterior Walls	$36.91	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$2,390,550
B2020	Exterior Windows	$18.01	S.F.	64,767	40	1998	2038		57.50 %	0.00 %	23			$1,166,454
B2030	Exterior Doors	$1.45	S.F.	64,767	25	1998	2023		32.00 %	0.00 %	8			$93,912
B3010105	Built-Up	$37.76	S.F.	3,500	20	1998	2018	2037	110.00 %	0.00 %	22			$132,160
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.	25,000	25	1998	2023		32.00 %	0.00 %	8			$968,250
B3020	Roof Openings	$0.06	S.F.	64,767	20	1998	2018	2037	110.00 %	0.00 %	22			$3,886
C1010	Partitions	$17.91	S.F.	64,767	100	1899	1999	2067	52.00 %	2.30 %	52		$26,735.40	$1,159,977
C1020	Interior Doors	$3.51	S.F.	64,767	40	1899	1939	2057	105.00 %	249.78 %	42		$567,829.36	$227,332
C1030	Fittings	$3.12	S.F.	64,767	40	1998	2038		57.50 %	21.95 %	23		$44,356.31	$202,073
C2010	Stair Construction	$1.41	S.F.	64,767	100	1899	1999	2067	52.00 %	0.00 %	52			$91,321

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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	$13.21	S.F.	64,767	10	1998	2008	2027	120.00 %	0.00 %	12			$855,572
C3010231	Vinyl Wall Covering	$0.97	S.F.	64,767	15				0.00 %	0.00 %				$62,824
C3010232	Wall Tile	$2.63	S.F.	64,767	30	1998	2028		43.33 %	0.00 %	13			$170,337
C3020411	Carpet	$7.30	S.F.	250	10	1998	2008	2027	120.00 %	153.30 %	12		$2,797.70	$1,825
C3020412	Terrazzo & Tile	$75.52	S.F.	3,250	50	1998	2048		66.00 %	0.00 %	33			$245,440
C3020413	Vinyl Flooring	$9.68	S.F.	2,530	20	1998	2018	2037	110.00 %	0.00 %	22			$24,490
C3020414	Wood Flooring	$22.27	S.F.	38,900	25	1899	1924	2042	108.00 %	41.88 %	27		$362,788.56	$866,303
C3020415	Concrete Floor Finishes	$0.97	S.F.	6,900	50	1899	1949	2067	104.00 %	0.00 %	52			$6,693
C3030	Ceiling Finishes	$20.97	S.F.	64,767	25	1998	2023		32.00 %	4.75 %	8		$64,523.68	$1,358,164
D1010	Elevators and Lifts	$7.63	S.F.	64,767	35			2052	105.71 %	253.31 %	37		$1,251,764.48	$494,172
D2010	Plumbing Fixtures	$13.52	S.F.	64,767	35	1998	2033		51.43 %	0.00 %	18			$875,650
D2020	Domestic Water Distribution	$1.68	S.F.	64,767	25	1899	1924	2042	108.00 %	351.81 %	27		$382,804.91	$108,809
D2030	Sanitary Waste	$2.90	S.F.	64,767	25	1899	1924	2042	108.00 %	169.16 %	27		$317,730.70	$187,824
D2040	Rain Water Drainage	$2.32	S.F.	64,767	30	1899	1929	2047	106.67 %	191.14 %	32		$287,204.74	$150,259
D3020	Heat Generating Systems	$18.67	S.F.	64,767	35	2008	2043		80.00 %	2.21 %	28		$26,678.08	$1,209,200
D3030	Cooling Generating Systems	$24.48	S.F.	64,767	20			2037	110.00 %	64.12 %	22		$1,016,628.28	$1,585,496
D3040	Distribution Systems	$42.99	S.F.	64,767	25	1899	1924	2042	108.00 %	150.72 %	27		$4,196,438.45	$2,784,333
D3050	Terminal & Package Units	$11.60	S.F.	64,767	20				0.00 %	0.00 %				$751,297
D3060	Controls & Instrumentation	$13.50	S.F.	64,767	20	1980	2000	2037	110.00 %	158.90 %	22		$1,389,389.47	$874,355
D4010	Sprinklers	$7.05	S.F.	64,767	35			2052	105.71 %	202.91 %	37		$926,523.01	$456,607
D4020	Standpipes	$1.01	S.F.	64,767	35				0.00 %	0.00 %				$65,415
D5010	Electrical Service/Distribution	$9.70	S.F.	64,767	30	1899	1929	2047	106.67 %	143.67 %	32		$902,602.94	$628,240
D5020	Lighting and Branch Wiring	$34.68	S.F.	64,767	20	1899	1919	2037	110.00 %	48.50 %	22		$1,089,279.68	$2,246,120
D5030	Communications and Security	$12.99	S.F.	64,767	15	1899	1914	2032	113.33 %	93.42 %	17		$785,935.26	$841,323
D5090	Other Electrical Systems	$1.41	S.F.	64,767	30	1899	1929	2047	106.67 %	256.83 %	32		$234,541.13	$91,321
E1020	Institutional Equipment	$4.82	S.F.	64,767	35				0.00 %	0.00 %				$312,177
E1090	Other Equipment	$11.10	S.F.	64,767	35				0.00 %	0.00 %				$718,914
E2010	Fixed Furnishings	$2.13	S.F.	64,767	40				0.00 %	0.00 %				$137,954
								Total	**70.41 %**	**41.74 %**			**$13,876,552.14**	**$33,249,124**

System Notes

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

System: C3010 - Wall Finishes — This system contains no images

Note: Paint 94%
Ceramic tile 6%

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

Note: Hardwood 75%
VCT 5%
Ceramic tile 6%
Carpet <1%
Concrete 13%

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

Note: ACT 65%
Exposed/plaster painted 35%

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:	**$13,876,552**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,372,595**	**$0**	**$0**	**$17,249,148**
*** 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	$130,861	$0	$0	**$130,861**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$1,349,205	$0	$0	**$1,349,205**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$26,735	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$26,735**

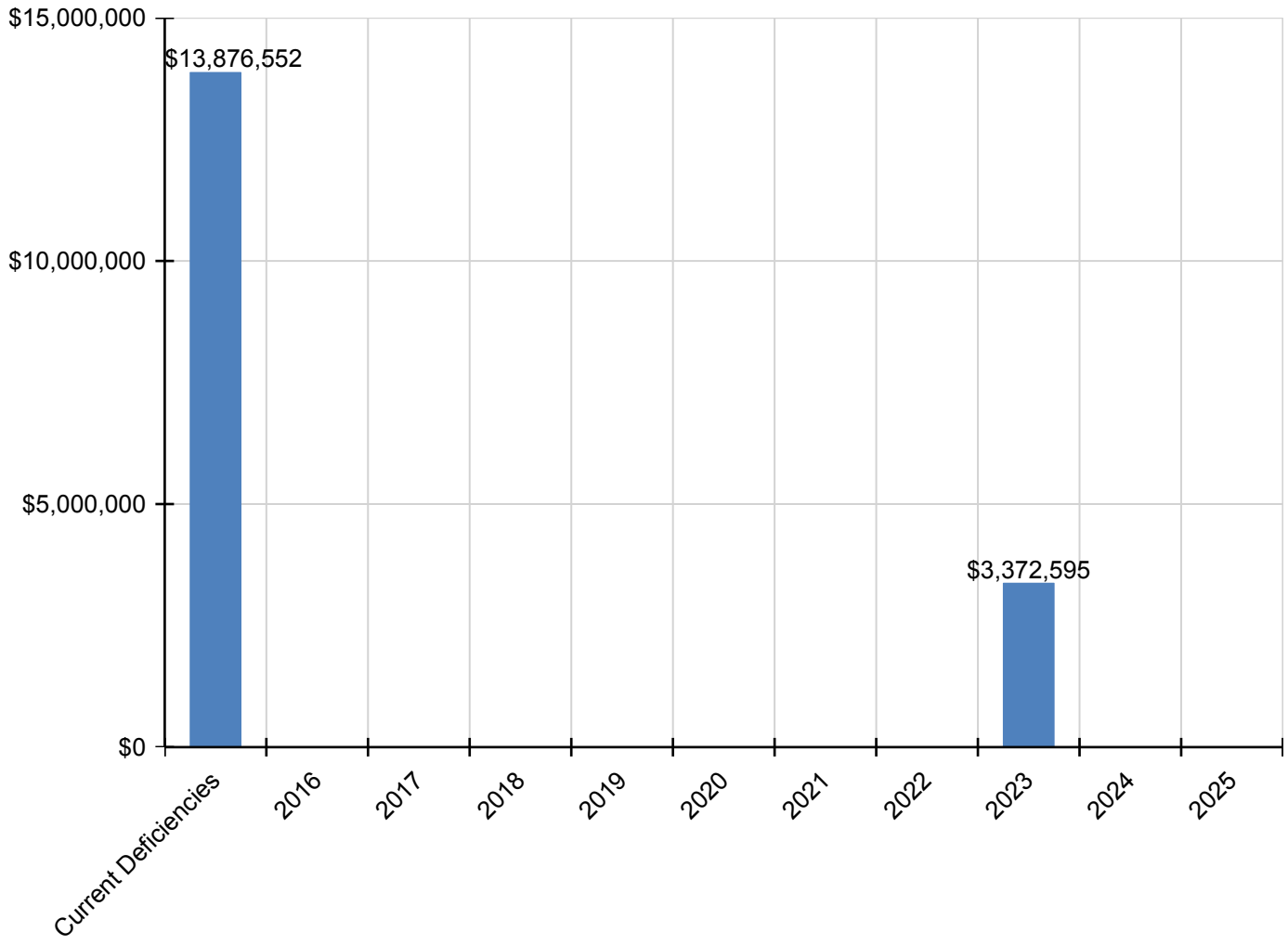
C1020 - Interior Doors	$567,829	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$567,829**
C1030 - Fittings	$44,356	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$44,356**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$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	$0	$0	$0	$0	$0	**$0**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$2,798	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,798**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$362,789	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$362,789**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$64,524	$0	$0	$0	$0	$0	$0	$0	$1,892,529	$0	$0	**$1,957,053**
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	$1,251,764	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,251,764**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2020 - Domestic Water Distribution	$382,805	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$382,805**
D2030 - Sanitary Waste	$317,731	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$317,731**
D2040 - Rain Water Drainage	$287,205	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$287,205**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$26,678	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$26,678**
D3030 - Cooling Generating Systems	$1,016,628	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,016,628**
D3040 - Distribution Systems	$4,196,438	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,196,438**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,389,389	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,389,389**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$926,523	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$926,523**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$902,603	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$902,603**
D5020 - Lighting and Branch Wiring	$1,089,280	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,089,280**
D5030 - Communications and Security	$785,935	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$785,935**
D5090 - Other Electrical Systems	$234,541	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$234,541**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

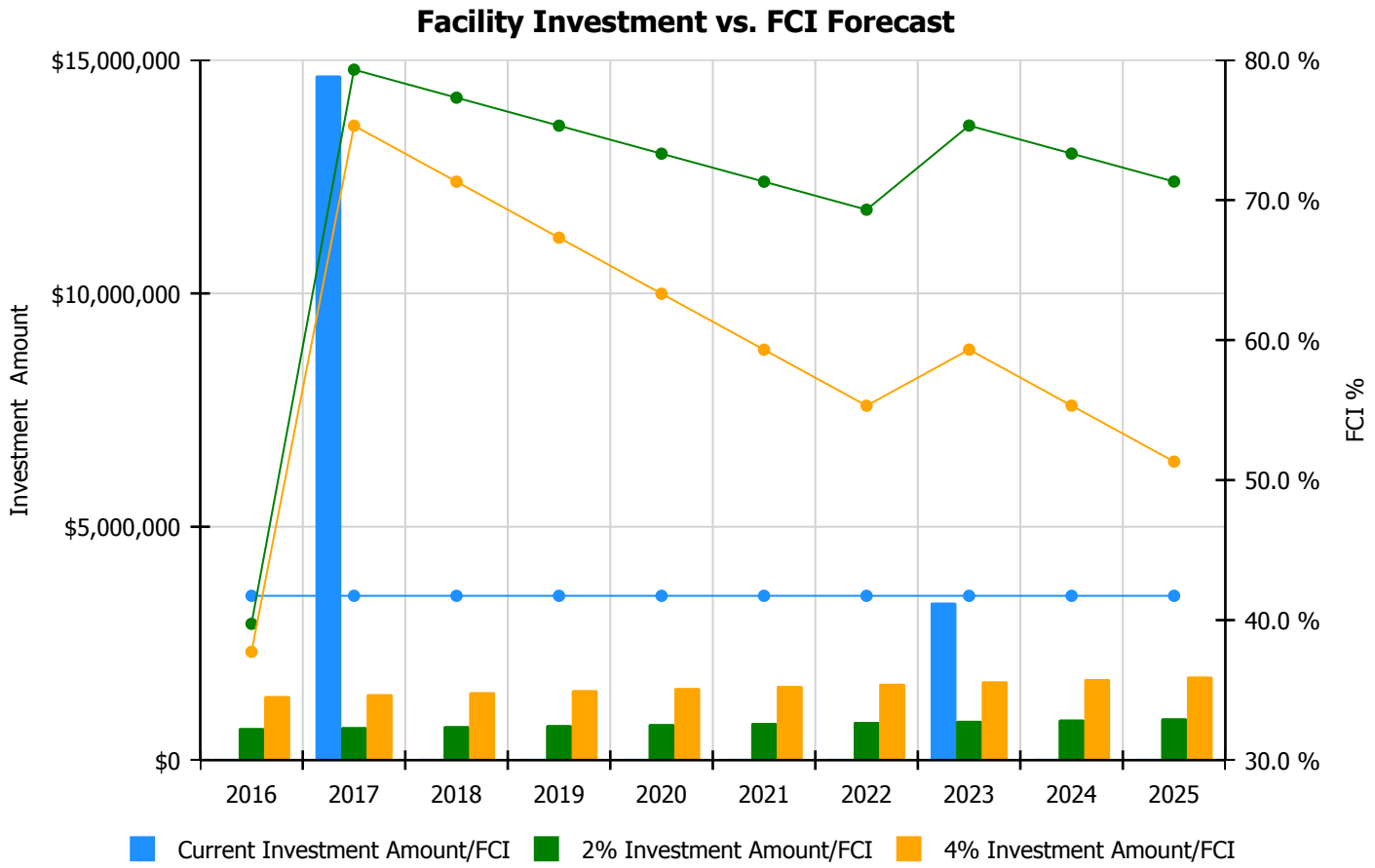
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

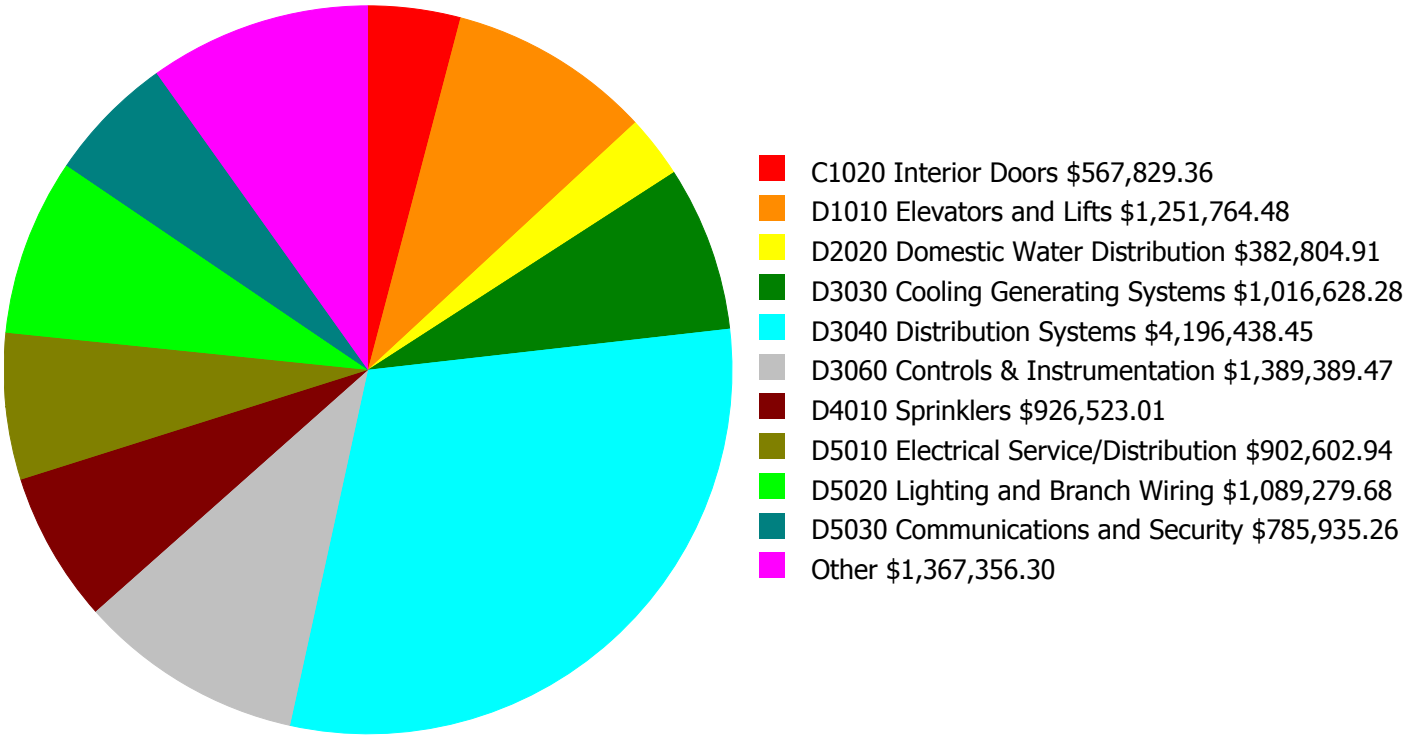
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 41.74%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$684,932.00	39.74 %	$1,369,864.00	37.74 %
2017	$14,665,705	$705,480.00	79.31 %	$1,410,960.00	75.31 %
2018	$0	$726,644.00	77.31 %	$1,453,289.00	71.31 %
2019	$0	$748,444.00	75.31 %	$1,496,887.00	67.31 %
2020	$0	$770,897.00	73.31 %	$1,541,794.00	63.31 %
2021	$0	$794,024.00	71.31 %	$1,588,048.00	59.31 %
2022	$0	$817,845.00	69.31 %	$1,635,689.00	55.31 %
2023	$3,372,595	$842,380.00	75.32 %	$1,684,760.00	59.32 %
2024	$0	$867,651.00	73.32 %	$1,735,303.00	55.32 %
2025	$0	$893,681.00	71.32 %	$1,787,362.00	51.32 %
Total:	**$18,038,301**	**$7,851,978.00**		**$15,703,956.00**	

Deficiency Summary by System

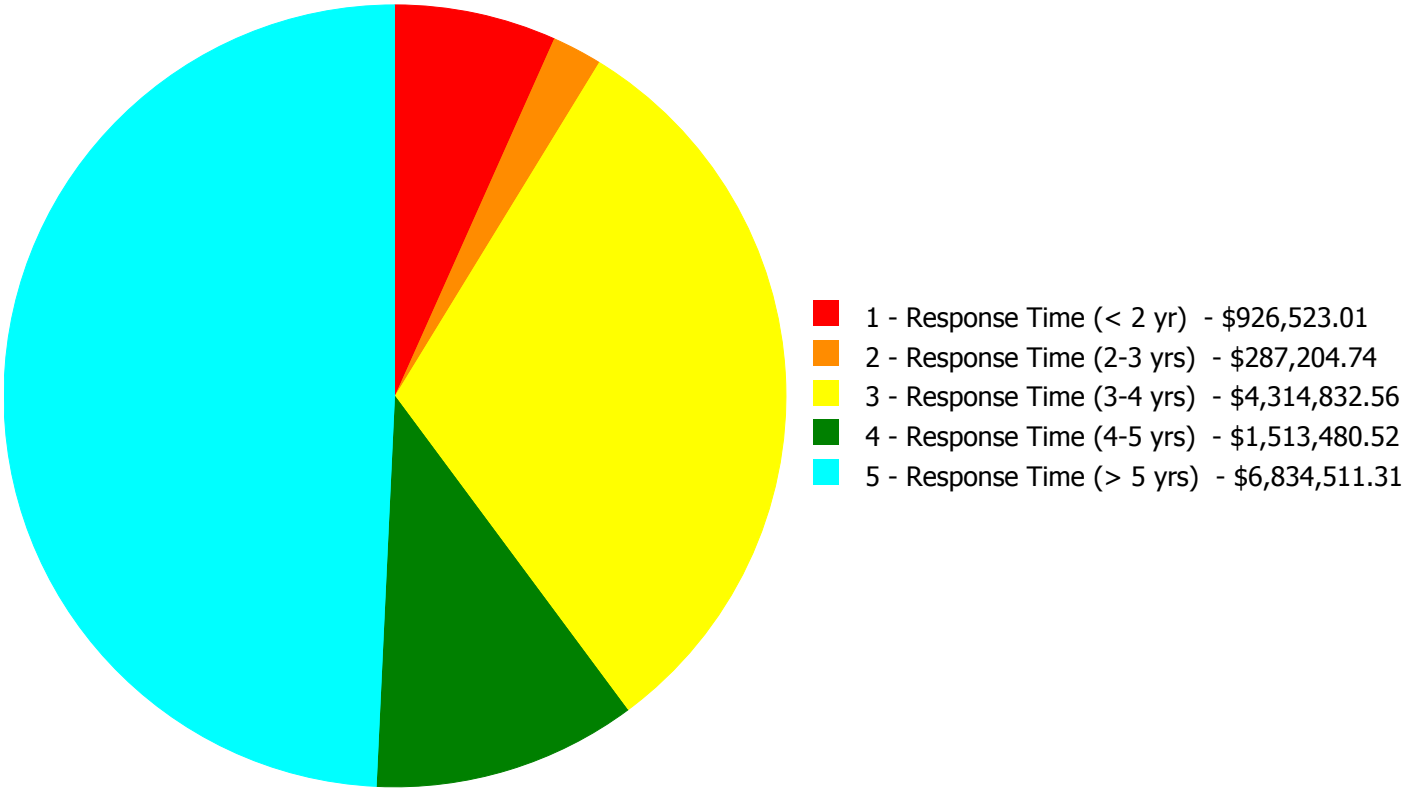
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $13,876,552.14

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: $13,876,552.14

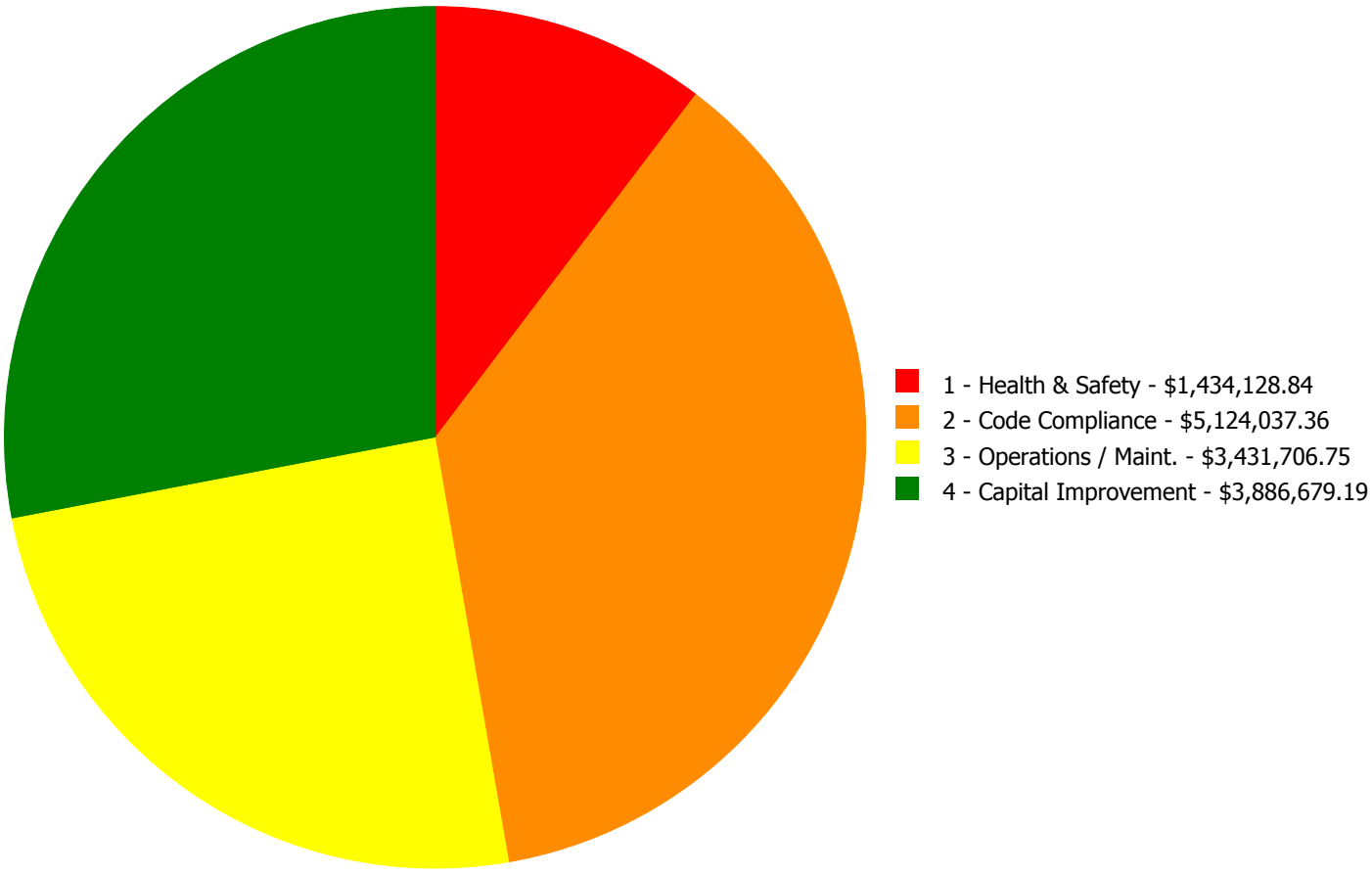
Deficiency By Priority Investment Table

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
C1010	Partitions	$0.00	$0.00	$0.00	$0.00	$26,735.40	$26,735.40
C1020	Interior Doors	$0.00	$0.00	$0.00	$0.00	$567,829.36	$567,829.36
C1030	Fittings	$0.00	$0.00	$0.00	$44,356.31	$0.00	$44,356.31
C3020411	Carpet	$0.00	$0.00	$0.00	$2,797.70	$0.00	$2,797.70
C3020414	Wood Flooring	$0.00	$0.00	$0.00	$362,788.56	$0.00	$362,788.56
C3030	Ceiling Finishes	$0.00	$0.00	$64,523.68	$0.00	$0.00	$64,523.68
D1010	Elevators and Lifts	$0.00	$0.00	$1,251,764.48	$0.00	$0.00	$1,251,764.48
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$54,606.72	$328,198.19	$382,804.91
D2030	Sanitary Waste	$0.00	$0.00	$317,730.70	$0.00	$0.00	$317,730.70
D2040	Rain Water Drainage	$0.00	$287,204.74	$0.00	$0.00	$0.00	$287,204.74
D3020	Heat Generating Systems	$0.00	$0.00	$26,678.08	$0.00	$0.00	$26,678.08
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,016,628.28	$1,016,628.28
D3040	Distribution Systems	$0.00	$0.00	$690,707.84	$0.00	$3,505,730.61	$4,196,438.45
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$0.00	$1,389,389.47	$1,389,389.47
D4010	Sprinklers	$926,523.01	$0.00	$0.00	$0.00	$0.00	$926,523.01
D5010	Electrical Service/Distribution	$0.00	$0.00	$0.00	$902,602.94	$0.00	$902,602.94
D5020	Lighting and Branch Wiring	$0.00	$0.00	$1,089,279.68	$0.00	$0.00	$1,089,279.68
D5030	Communications and Security	$0.00	$0.00	$639,606.97	$146,328.29	$0.00	$785,935.26
D5090	Other Electrical Systems	$0.00	$0.00	$234,541.13	$0.00	$0.00	$234,541.13
	Total:	$926,523.01	$287,204.74	$4,314,832.56	$1,513,480.52	$6,834,511.31	$13,876,552.14

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: $13,876,552.14

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: D4010 - Sprinklers

Location: Throughout building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Install a fire protection sprinkler system

Qty: 64,767.00

Unit of Measure: S.F.

Estimate: $926,523.01

Assessor Name: System

Date Created: 11/19/2015

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: D2040 - Rain Water Drainage

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 64,767.00

Unit of Measure: S.F.

Estimate: $287,204.74

Assessor Name: System

Date Created: 11/19/2015

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.

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

System: C3030 - Ceiling Finishes

Location: Interior

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace plaster ceilings

Qty: 2,800.00

Unit of Measure: S.F.

Estimate: $64,523.68

Assessor Name: System

Date Created: 01/20/2016

Notes: Repair and repaint plaster ceilings (15%)

System: D1010 - Elevators and Lifts

This deficiency has no image.

Location: Exterior/Interior

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Add external 5 stop elevator - adjust the electrical run lengths to hook up the elevator

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,251,764.48

Assessor Name: System

Date Created: 01/20/2016

Notes: Provide 3000 LB exterior elevator serving all floors and ground level

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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: 64,767.00

Unit of Measure: S.F.

Estimate: $317,730.70

Assessor Name: System

Date Created: 11/19/2015

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: D3020 - Heat Generating Systems

Location: Boiler room

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace fuel oil pumps

Qty: 1.00

Unit of Measure: Ea.

Estimate: $26,678.08

Assessor Name: System

Date Created: 11/19/2015

Notes: Inspect and replace the current fuel oil pumping system, which was in poor condition during site visit, with a new system and control scheme.

System: D3040 - Distribution Systems

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 64,676.00

Unit of Measure: S.F.

Estimate: $611,858.94

Assessor Name: System

Date Created: 11/19/2015

Notes: Hire a qualified contractor to examine the steam piping, in service for over 100 years, 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: Roof

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace utility set exhaust fan (5 HP)

Qty: 2.00

Unit of Measure: Ea.

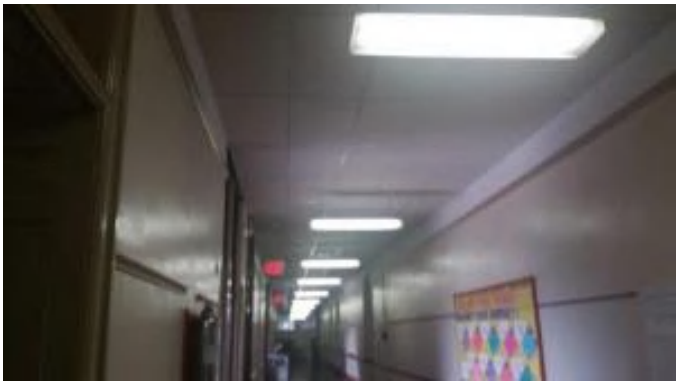
Estimate: $78,848.90

Assessor Name: System

Date Created: 11/19/2015

Notes: Replace the two (2) exhaust fans serving the restrooms, which were not operational during the site visit.

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: $684,284.87

Assessor Name: System

Date Created: 10/23/2015

Notes: Install new lighting system for the entire building.

System: D5020 - Lighting and Branch Wiring

Location: Throughout the building

Distress: Inadequate

Category: 4 - Capital Improvement

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: $404,994.81

Assessor Name: System

Date Created: 10/23/2015

Notes: Install adequate (two on each wall minimum) surface-mounted receptacles in all classrooms and other areas within the building.

System: D5030 - Communications and Security

Location: Throughout the building
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace fire alarm system
Qty: 1.00
Unit of Measure: S.F.
Estimate: $366,542.27
Assessor Name: System
Date Created: 10/23/2015

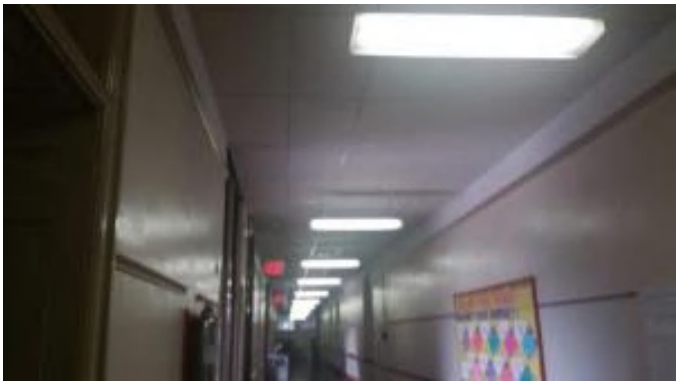
Notes: Install new automated FA system.

System: D5030 - Communications and Security

Location: Throughout the building
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Communications and Alarm Systems
Qty: 0.00
Unit of Measure: S.F.
Estimate: $273,064.70
Assessor Name: System
Date Created: 10/23/2015

Notes: Install new Video Surveillance System with Cameras and CCTV.

System: D5090 - Other Electrical Systems



Location:	Throughout the building
Distress:	Life Safety / NFPA / PFD
Category:	1 - Health & Safety
Priority:	3 - Response Time (3-4 yrs)
Correction:	Add Emergency/Exit Lighting
Qty:	1.00
Unit of Measure:	Ea.
Estimate:	$234,541.13
Assessor Name:	System
Date Created:	10/23/2015

Notes: Install new emergency lights and exit signs.

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

System: C1030 - Fittings

Location: Interior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 28.00

Unit of Measure: Ea.

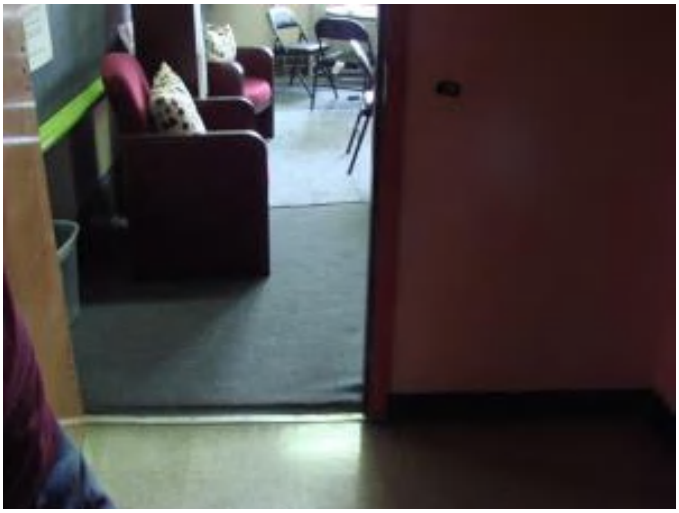
Estimate: $44,356.31

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace original chalkboards with marker boards

System: C3020411 - Carpet



Location: Interior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace carpet

Qty: 250.00

Unit of Measure: S.F.

Estimate: $2,797.70

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace all carpet

System: C3020414 - Wood Flooring

Location: Interior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace partial area of wood flooring and refinish entire floor - set replacement area

Qty: 38,900.00

Unit of Measure: S.F.

Estimate: $362,788.56

Assessor Name: System

Date Created: 01/20/2016

Notes: Repair and refinish hardwood flooring throughout the building

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $54,606.72

Assessor Name: System

Date Created: 11/19/2015

Notes: Replace the existing vertical gas fired, 70 gallon, domestic hot water heater which is approaching the end of its service life with a new gas fired hot water heater.

System: D5010 - Electrical Service/Distribution

Location: Electrical Room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Electrical Switchgear and Distribution System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $583,760.81

Assessor Name: System

Date Created: 10/23/2015

Notes: Install two new 480 V MCCs to handle the new HVAC loads.
Also, install a new 120V switchboard to handle 120V loads.

System: D5010 - Electrical Service/Distribution

Location: Electrical Room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Service Transformer, Add Switchboard

Qty: 0.00

Unit of Measure: Ea.

Estimate: $272,651.55

Assessor Name: System

Date Created: 10/23/2015

Notes: Install a new 1000 KVA, electric service, including a new 1600A, 480V switchgear.

System: D5010 - Electrical Service/Distribution

Location: Electrical Room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Step Down Transformer

Qty: 0.00

Unit of Measure: Ea.

Estimate: $46,190.58

Assessor Name: System

Date Created: 10/23/2015

Notes: Install a new 300KV transformer (480V- 120V) to feed the existing 120V distribution panels.
Note: A multiplier of 1.4 is used instead of 1.0 to cover the cost for conduits/wiring and other related work.

System: D5030 - Communications and Security

Location: Throughout the building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add/Replace Clock System or Components

Qty: 0.00

Unit of Measure: Ea.

Estimate: $146,328.29

Assessor Name: System

Date Created: 10/23/2015

Notes: Install new Clock System.
Note: A multiplier of 1.3 instead of 1.0 was used to cover the additional cost of other related work.

Priority 5 - Response Time (> 5 yrs):

System: C1010 - Partitions

Location: Interior

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove folding wood partitions; replace with metal studs and gypsum board painted

Qty: 1,200.00

Unit of Measure: S.F.

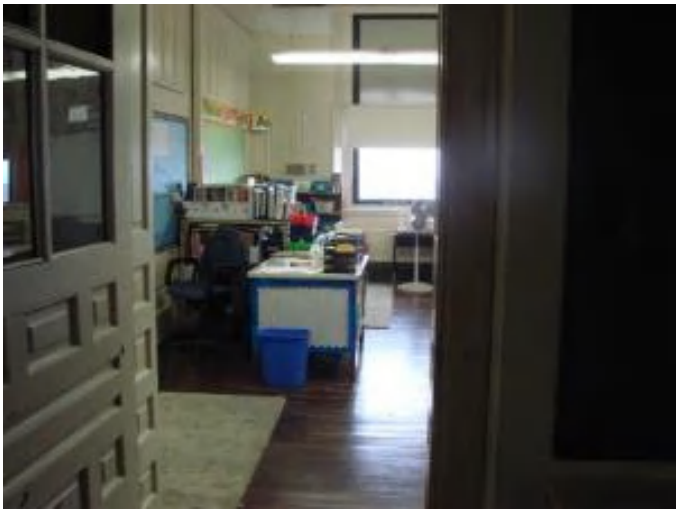
Estimate: $26,735.40

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace sliding partitions with drywall partitions

System: C1020 - Interior Doors



Location: Interior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 122.00

Unit of Measure: Ea.

Estimate: $567,829.36

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace all original interior doors

System: D2020 - Domestic Water Distribution

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace domestic water piping (75 KSF)

Qty: 64,767.00

Unit of Measure: S.F.

Estimate: $328,198.19

Assessor Name: System

Date Created: 11/19/2015

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: 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: 64,767.00

Unit of Measure: S.F.

Estimate: $1,016,628.28

Assessor Name: System

Date Created: 11/19/2015

Notes: Remove the window air conditioning units and install a 160 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: Classrooms

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Provide classroom FC units and dedicated OA ventilation system. (20 clsrms)

Qty: 32.00

Unit of Measure: C

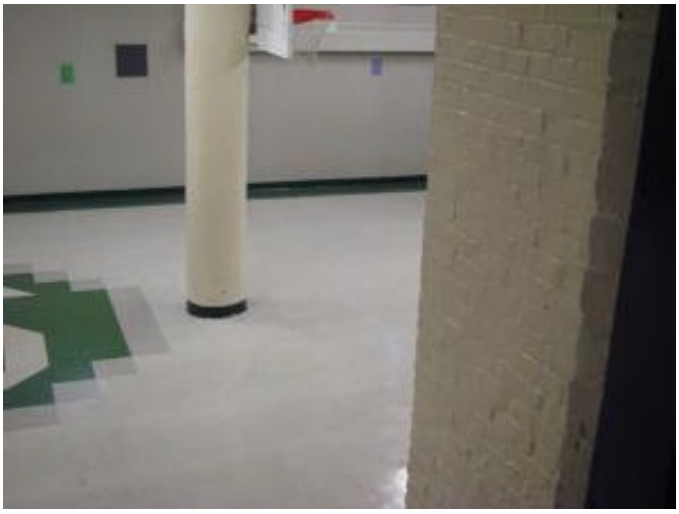
Estimate: $2,657,951.61

Assessor Name: System

Date Created: 11/19/2015

Notes: Remove the existing cast iron steam radiators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.

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: Ea.

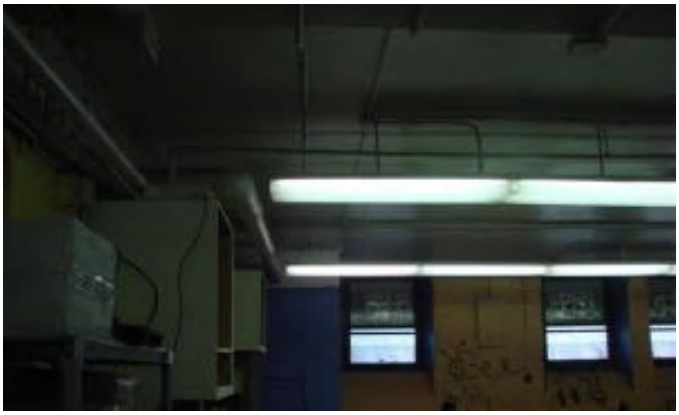
Estimate: $308,301.04

Assessor Name: System

Date Created: 11/19/2015

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

System: D3040 - Distribution Systems



Location: Cafeteria

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 636.00

Unit of Measure: Pr.

Estimate: $297,353.12

Assessor Name: System

Date Created: 11/19/2015

Notes: Provide ventilation for the Cafeteria 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: Administration

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 636.00

Unit of Measure: Pr.

Estimate: $242,124.84

Assessor Name: System

Date Created: 11/19/2015

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: 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: 64,767.00

Unit of Measure: S.F.

Estimate: $1,389,389.47

Assessor Name: System

Date Created: 11/19/2015

Notes: Replace the pneumatic controls 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
D2020 Domestic Water Distribution	Pump, pressure booster system, 3 HP pump, includes diaphragm tank, control and pressure switch	1.00	Ea.	Basement Mechanical Room	Shipco				25	1998	2023	$9,861.00	$10,847.10
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 2700 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler Room	Smith	3500A-11	MA2001-9		35	2001	2036	$50,376.70	$110,828.74
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 2700 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler Room	Smith	3500A-11	MA2001-10		35	2001	2036	$50,376.70	$110,828.74
												Total:	**$232,504.58**

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):	25,900
Year Built:	1899
Last Renovation:	
Replacement Value:	$581,973
Repair Cost:	$421,117.33
Total FCI:	72.36 %
Total RSLI:	88.30 %

Description:

Attributes:

General Attributes:

Bldg ID:	S553001	Site ID:	S553001

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	81.90 %	68.33 %	$294,848.43
G40 - Site Electrical Utilities	106.67 %	83.91 %	$126,268.90
Totals:	**88.30 %**	**72.36 %**	**$421,117.33**

Condition Detail

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II classification. The columns in the System Listing table below represent the following:

1. System Code: A code that identifies the system.
2. System Description: A brief description of a system present in the building.
3. Unit Price $: The unit price of the system.
4. UoM: The unit of measure for of the system.
5. Qty: The quantity for the system
6. Life: anticipated service life for thesystem based on Building Owners and Managers Association (BOMA) recommendations.
7. Year Installed: The date of system installation.
8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
10. CI: The Condition Index of the system.
11. FCI: The Facility Condition Index of the system.
12. RSL: Remaining Service Life.
13. eCR: eCOMET Condition Rating (not used).
14. Deficiency $: The financial investment to repair/replace system.

System Listing

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$8.50	S.F.		30				0.00 %	0.00 %				$0
G2030	Pedestrian Paving	$12.30	S.F.	25,900	40	1899	1939	2052	92.50 %	92.55 %	37		$294,848.43	$318,570
G2040	Site Development	$4.36	S.F.	25,900	25	1899	1924	2028	52.00 %	0.00 %	13			$112,924
G2050	Landscaping & Irrigation	$4.36	S.F.		15				0.00 %	0.00 %				$0
G4020	Site Lighting	$4.84	S.F.	25,900	30	1899	1929	2047	106.67 %	57.12 %	32		$71,604.99	$125,356
G4030	Site Communications & Security	$0.97	S.F.	25,900	30	1899	1929	2047	106.67 %	217.59 %	32		$54,663.91	$25,123
								Total	**88.30 %**	**72.36 %**			**$421,117.33**	**$581,973**

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.

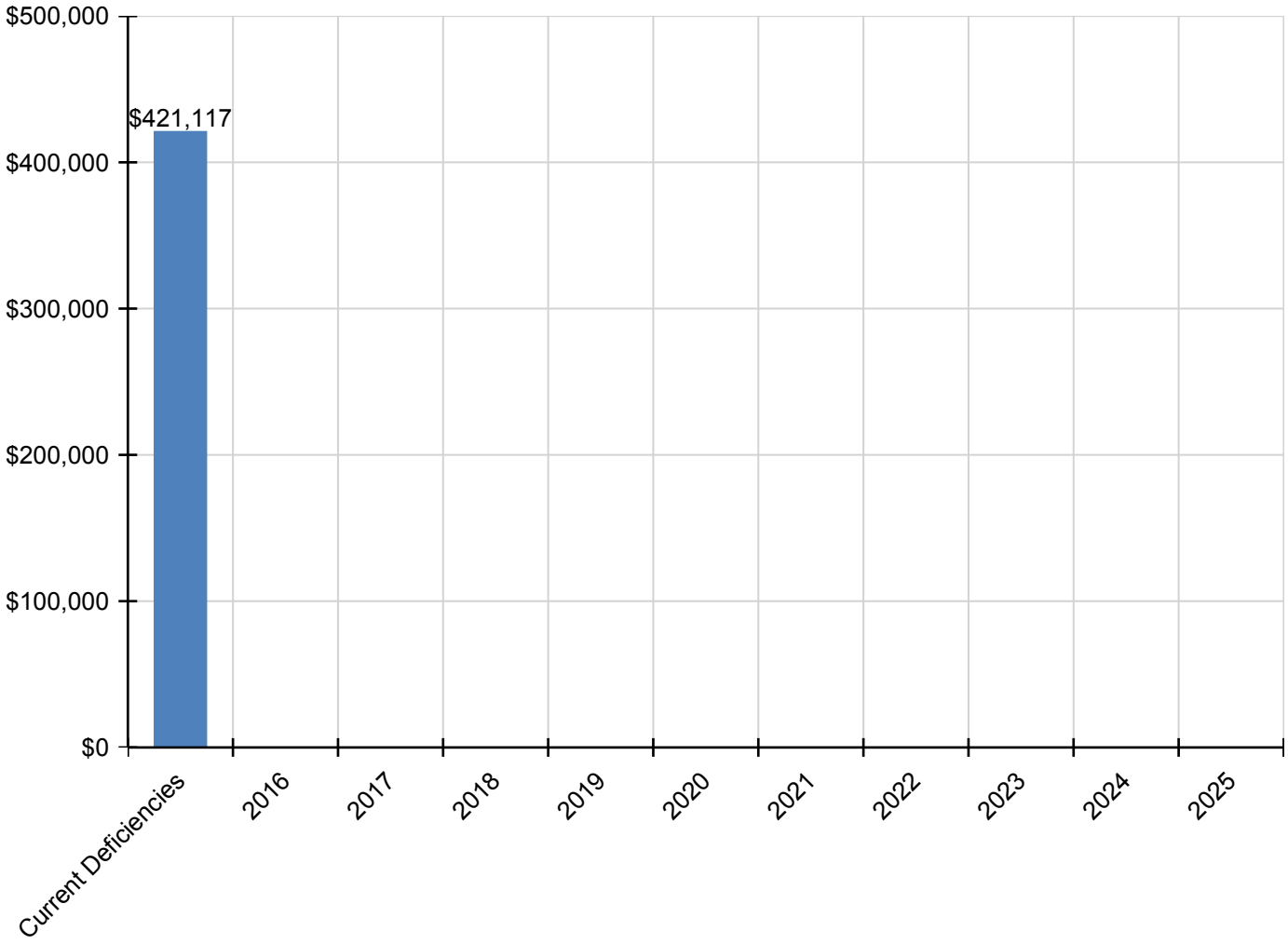
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$421,117**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$421,117**
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	$294,848	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$294,848**
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	$71,605	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$71,605**
G4030 - Site Communications & Security	$54,664	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$54,664**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

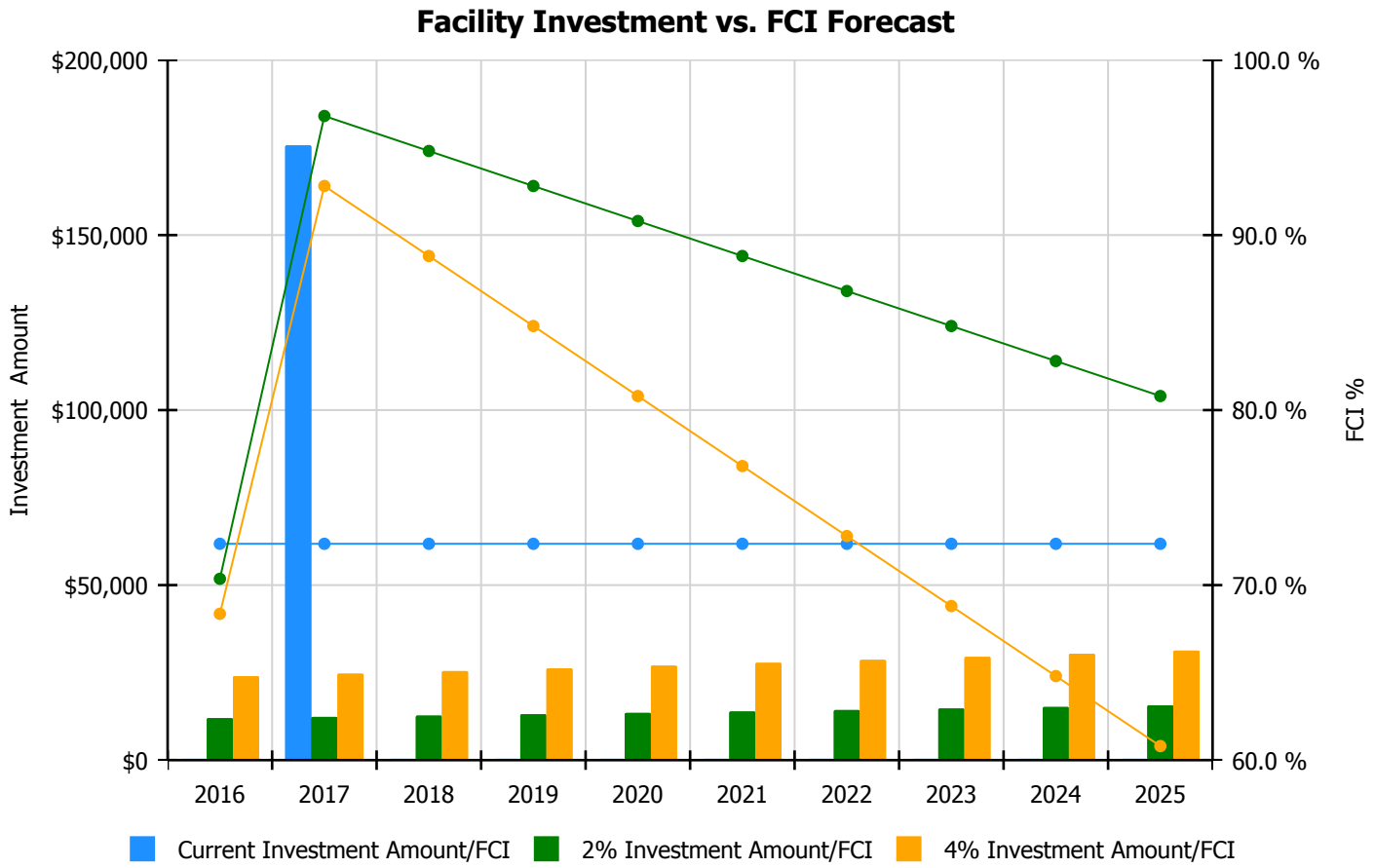
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

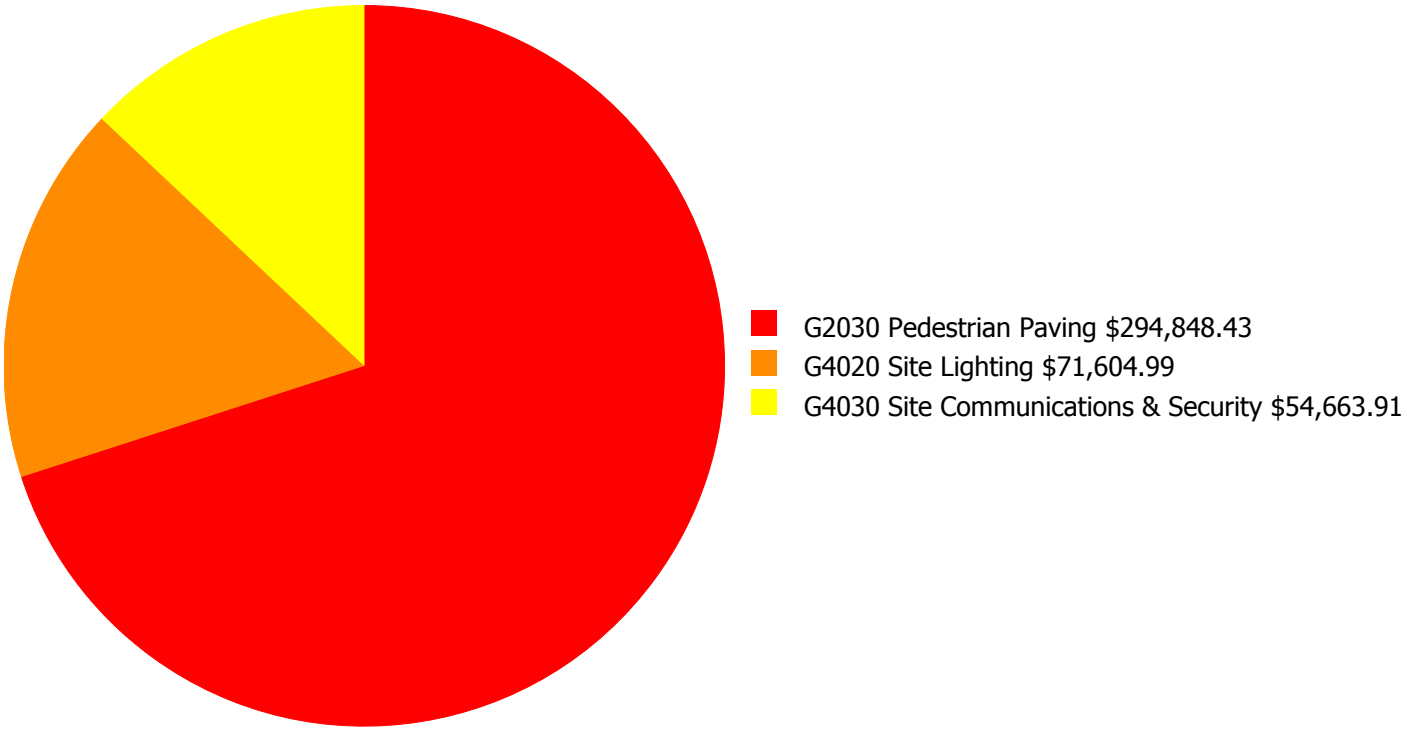
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 72.36%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$11,989.00	70.36 %	$23,977.00	68.36 %
2017	$175,608	$12,348.00	96.80 %	$24,697.00	92.80 %
2018	$0	$12,719.00	94.80 %	$25,438.00	88.80 %
2019	$0	$13,100.00	92.80 %	$26,201.00	84.80 %
2020	$0	$13,493.00	90.80 %	$26,987.00	80.80 %
2021	$0	$13,898.00	88.80 %	$27,796.00	76.80 %
2022	$0	$14,315.00	86.80 %	$28,630.00	72.80 %
2023	$0	$14,745.00	84.80 %	$29,489.00	68.80 %
2024	$0	$15,187.00	82.80 %	$30,374.00	64.80 %
2025	$0	$15,642.00	80.80 %	$31,285.00	60.80 %
Total:	**$175,608**	**$137,436.00**		**$274,874.00**	

Deficiency Summary by System

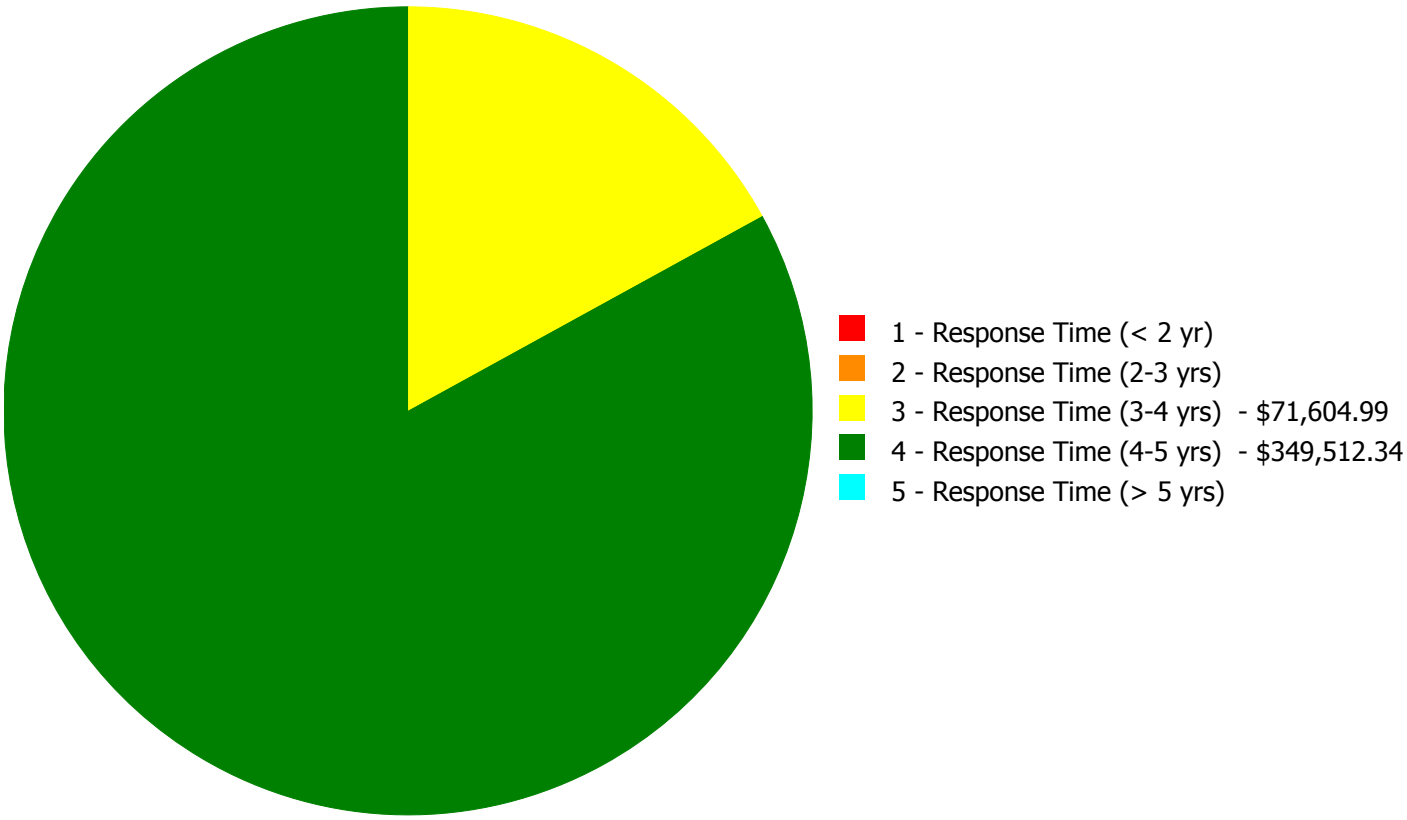
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $421,117.33

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: $421,117.33

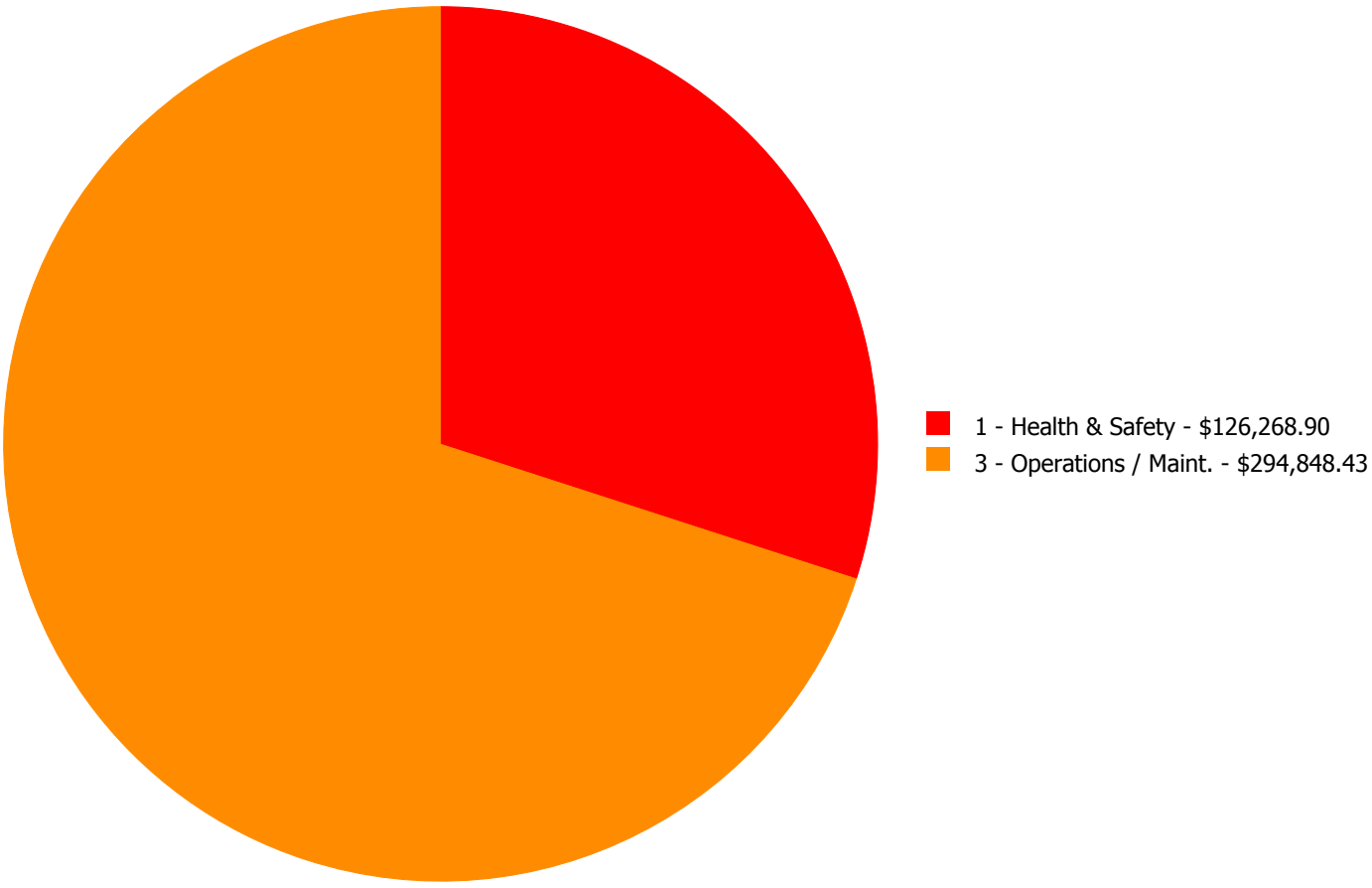
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2030	Pedestrian Paving	$0.00	$0.00	$0.00	$294,848.43	$0.00	$294,848.43
G4020	Site Lighting	$0.00	$0.00	$71,604.99	$0.00	$0.00	$71,604.99
G4030	Site Communications & Security	$0.00	$0.00	$0.00	$54,663.91	$0.00	$54,663.91
	Total:	$0.00	$0.00	$71,604.99	$349,512.34	$0.00	$421,117.33

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: $421,117.33

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: Health Hazard / Risk

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: $71,604.99

Assessor Name: Craig Anding

Date Created: 10/23/2015

Notes: Install additional outdoor lighting for the grounds , two poles with two floodlights on each pole.
.

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

System: G2030 - Pedestrian Paving

Location: Grounds

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 20,500.00

Unit of Measure: S.F.

Estimate: $294,848.43

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Replace playground paving

System: G4030 - Site Communications & Security

Location: Grounds

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Add Site Paging System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $54,663.91

Assessor Name: Craig Anding

Date Created: 10/23/2015

Notes: Install additional speakers for the grounds

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