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.

Blankenburg School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	4600 W. Girard Ave. Philadelphia, Pa 19131	Enrollment	478
		Grade Range	'00-08'
Phone/Fax	215-581-5505 / 215-581-5922	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Blankenburg	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	**28.34%**	**$9,728,508**	**$34,326,102**
Building	29.29 %	$9,469,804	$32,332,012
Grounds	12.97 %	$258,704	$1,994,090

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$799,896
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.35 %	$8,294	$2,362,240
Windows (Shows functionality of exterior windows)	105.07 %	$1,211,075	$1,152,640
Exterior Doors (Shows condition of exterior doors)	07.53 %	$6,987	$92,800
Interior Doors (Classroom doors)	100.41 %	$225,570	$224,640
Interior Walls (Paint and Finishes)	08.36 %	$89,954	$1,075,840
Plumbing Fixtures	10.79 %	$93,389	$865,280
Boilers	02.56 %	$30,541	$1,194,880
Chillers/Cooling Towers	46.13 %	$722,673	$1,566,720
Radiators/Unit Ventilators/HVAC	38.29 %	$1,053,500	$2,751,360
Heating/Cooling Controls	158.90 %	$1,372,931	$864,000
Electrical Service and Distribution	26.55 %	$164,821	$620,800
Lighting	35.57 %	$789,563	$2,219,520
Communications and Security (Cameras, Pa System and Fire Alarm)	47.13 %	$391,823	$831,360

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

S149001;Blankenburg

Final

Site Assessment Report

January 30, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	67,200
Year Built:	1923
Last Renovation:	2001
Replacement Value:	$34,326,102
Repair Cost:	$9,728,508.00
Total FCI:	28.34 %
Total RSLI:	65.11 %

Description:

Facility Assessment
October 1st, 2015

School District of Philadelphia
Blankenburg Elementary School
4600 W Girard Avenue
Philadelphia, PA 19131

64,000 SF / 596 Students / LN 02

Mr. Richard Toohey FAC, provided input to the assessment team on current problems. Mr. Ray Jackson Building Engineer accompanied us on our tour of the school and provided us with detailed information on the building systems and maintenance history. Building Engineer Mr. Ray Jackson has been 3 years in the school.

The 4 story, 64,000 square foot building was originally constructed in 1923. The building has a multi-level basement.

STRUCTURAL / EXTERIOR CLOSURE

The building typically rests on concrete foundations and bearing walls that are showing signs of settlement damage. The main structure typically consists of cast-in-place concrete columns, beams, and one way ribbed slab with area of concrete spalling and exposed steel reinforcement. Metal utility troughs in basement are rusted and failing and need replaced. The building envelope is typically masonry and concrete with face brick in good condition with a large crack in the chimney tower needing repair. Elevations are enhanced with decorative stonework around entrances. The windows were replaced in the early 1990s with extruded aluminum, double hung Lexan Plexiglas windows with insect/security screens. All windows are generally in poor condition with heavy hazing. Exterior doors are typically hollow metal in fair condition without accessible hardware. The main roof structure consists of concrete one-way slab supported by main structural frame. Main roofing is built up application in fair condition with some evidence of pooling.

Partition walls are plastered ceramic hollow blocks in good condition. Interior doors are generally wood frame with solid core doors and lites. Doors are in good condition but frames are failing to hold doors in correct position. Doors leading to exit stairways are hollow metal frame with rail and style type metal doors with wire glazing in poor condition and beyond service life. Most interior doors do not have lever type handles. Fittings include: toilet accessories in good condition; composite plastic and marble toilet partitions in poor condition due to doors hitting toilets when opened; and handrails and ornamental metals, generally in fair condition. Toilet partitions and accessories are not ADA accessible. Interior identifying signage is typically directly painted on wall or door surfaces in fair condition. Stair construction is generally concrete with cast iron nosing in good condition. Stair railings are cast iron balusters and wood railing in good condition but not meeting building codes.

The interior wall finishes include: painted plaster throughout with wood panel wainscot in auditorium in good condition; ceramic tile wainscot in toilets in good condition; and glazed brick wainscot in gym, IMC, cafeteria, fire towers, and basement areas in good condition. Paint is generally in good condition with small damaged areas throughout building due to water intrusion. Flooring includes patterned or bare concrete in stairways, corridors, some toilets, storage, and basement service areas in good condition; hardwood in most classrooms, auditorium, and stage in good condition; and vinyl tile kitchen, gym, IMC, office areas, some toilets and some classrooms in good condition. Ceiling finishes include: suspended acoustic tile system in IMC in good condition; direct mounted acoustic tiles in kitchen in good condition; and painted plaster or structural concrete in all other areas in good condition.

The building has no elevator and is not accessible.

Commercial and Institutional equipment includes: stage equipment in fair condition and gym equipment in poor condition and damaged. Other equipment includes: food service equipment in good condition.

Fixed furnishings include: fixed casework and large book lockers in classrooms, corridors and library, generally in fair to good condition; and fixed auditorium seating for 441 generally in poor condition with damaged and failing seats.

MECHANICAL SYSTEMS

Toilet room plumbing fixtures consist of vitreous china wall hung urinals and lavatories and floor standing water closets. Fixtures are contemporary low flow models (1.6 GPF water closets) and are in excellent condition, likely installed in 2013. Flush valves are exposed. Lavatories have hot and cold mixing faucets. Two water closets were not working and should be replaced or repaired. The cafeteria kitchen has one 2 basin, 2 faucet, stainless steel, floor standing, commercial sink. There is no chemical injection, disposal, or grease trap. Service sinks are installed in cleaning closets on each floor. They are enamel on cast iron with integral backsplash and trap, stainless steel rims, and long neck faucets with vacuum breakers. Drinking fountains are stainless steel without coolers and nonaccessible. One location has the fountain removed. The basement has triple fountain fixtures. They should be replaced with chilled accessible fountains. Aside from specifics mentioned here, the plumbing fixtures will not need replacement in the next 10 years.

Municipal water service enters the building in the boiler room along the north side from Girard Ave. through a 4 inch line. There is a 4 inch water meter with 4 inch bypass line followed by a 4 inch backflow preventer and a 2 inch backflow preventer bypass line in parallel. Makeup water for the steam system also has a backflow preventer. Domestic water distribution pipe is soldered copper. It is in poor condition with uneven flow rates from one fixture to another and noticeable pressure and flow variations while in use. The water meter bypass block valve is heavily rusted. Domestic water distribution piping should be replaced due to age and corrosion. The system includes a domestic pressure booster pump system with a double pump. The pump motors were installed in 2006, but they appear to be replacements for the original motors. The system was not running during the assessment, however the water pressure could be observed (via a manual pressure gauge) to fluctuate around 40 psi. The pressure booster system should have a hydro-pneumatic storage tank installed and have motor controls repaired. There is one Bradford White, gas fired, 48 gallon tank water heater manufactured in 2008. The hot water has a 1/6 HP recirculation pump, and it was running at the time of inspection. Hot water is available on the 3rd floor in less than 10 seconds.

Sanitary drain piping is hubless cast iron with banded couplings. It was completely replaced in 2013, based upon factory manufacture date printed on pipe. (The plumbing fixtures were likely replaced at this time as well.) The sanitary drains are in excellent condition and will not need replacement until 2038. There is no sewage ejector.

Rain water drain pipes are threaded galvanized steel. They are in fair condition where visible in pipe chases. The building engineer stated that fountains, sinks, and floor drains in the basement flood during rains. Drain pipes should be inspected in detail and repaired as needed due to age, material, and reported flooding. The roof does not have overflow drains. The building does not have any groundwater sumps.

The building was designed to be heated and ventilated by forced air from a single basement air handler with supplemental heat from steam radiators.

Two Smith brand, model 4500A, 15 section cast iron, 3,893 MBH (116 HP) capacity boilers provide steam for the building. They were installed in 2002 and have 15 year life remaining. Boilers are equipped with Power Flame natural gas burners, manufactured in 2002. Boiler #2 has severe pitting caused by rust on one of the water drums. A 3 inch gas line enters the building at the south east side. There is no gas booster. Each boiler exhaust vent has its own blower and constant draft damper before they connect to the chimney. There is a water softener and chemical injection for the steam system. Condensate collects in a sump in the floor of the boiler room with two pumps to transfer it to the feedwater tank. The feedwater tank has separate pumps and feed lines for each boiler and a third pump spare. The condensate system receives lots of steam and the sump equipment is very rusty and should be replaced. There is no history of steam trap maintenance and they should be surveyed and repaired due to large volumes of steam passing them. Combustion air enters the boiler room through louvers at the back of the building.

There is no central cooling generating system for the building. Cooling for select classrooms and offices is provided by 14 window units and a mini-split system serves a network equipment room. Total cooling capacity is approximately 30 tons. A central cooling system should be installed to serve the entire building with a capacity of approximately 150 tons.

There is one air handler for the entire building located in the basement mechanical room next to the boiler room. It originally consisted of cast iron primary steam heating coils, air washer, fan, and cast iron secondary heating coils. The air washer spray nozzles have been removed. Intake air filters have been installed along with asbestos free insulation for the steam supply pipes. There is a 25 HP fan motor. Heating coils are about 8 feet wide and 9 feet tall. Estimated air flow capacity is 32,000 CFM. There is no recirculation duct from the attic plenum; this unit supplies 100% outside air. Classroom air was supplied by ceiling located uninsulated sheet-metal ducts in the basement and up through built-in plaster lined clay block vertical ducts. Some classrooms have air filters installed over the supply duct openings. The air handler appears unused. Exhaust air goes up to the attic plenum through similar ducts and exits the building through gravity vents on the roof. There are 4 roof top power ventilators for toilet rooms, but two of them were inoperable during the assessment. They should be repaired or replaced. The kitchen does not have any fuel burning appliances, but it has an exhaust hood with fire suppression system anyway. The steam distribution pipe is threaded steel of unknown age. In the boiler room, pipe is flanged steel. There were no active steam leaks or mention of recent failures. Steam pipe is in fair condition and should last 5 – 10 years more.

Finned tube, steel pipe, and cast iron radiators now provide the only heating for the building. They have manually adjustable thermostatic steam control valves, and there is evidence of a former pneumatic control system. The rooms on the north side of the building do not receive sufficient heat. Heating levels vary from room to room and floor to floor. Radiators have exceeded their lifespan and should be replaced.

Heating and ventilation controls were pneumatic, but have been replaced with manual thermostatic steam valves on most radiators. The gravity vent dampers have an electronic control system installed, but it did not appear operational, because even though the power switch was on, none of the status lights were illuminated. The control system is generally nonexistent and should be upgraded to a modern digital system for the entire building.

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

ELECTRICAL SYSTEMS

A Siemens Service Entrance switchboard, 1600A 120/208V, serves this school. The Siemens service entrance switchboard and the utility meter PECO 02 016999698 are located in the basement electrical room. Electrical service was upgraded on 2006 and is expected to provide 30 more years of useful service life. The existing service has limited extra capacity for new Heating, Ventilation, and Air Conditioning (HVAC) system. A new 800A 480/277V service should be added to carries all the future HVAC loads.

In each floor, new panelboards are being provided for lighting, receptacles and window type air conditioning units. They were installed in 2006 and are expected to provide 30 more years of useful service life.

The number of receptacles in classrooms varies, approximate in 80% of the classrooms the quantity of receptacles are inadequate. Teachers use extension cords. The teacher's whiteboard wall and the opposite of it need to be provided with double compartment surface raceways, the other two walls with minimum two-duplex outlets each, when feasible.

Classrooms, corridors, gymnasium, kitchen, mechanical room and stairways are illuminated with pendant mounted fluorescent fixtures. The auditorium is illuminated with pendant globe fixture with compact fluorescent downlight. Approximately 90% of the fluorescent lighting fixtures are with T-12 lamps. T-12 fluorescent lamps are becoming more expensive, use more energy and are difficult to find therefore provide new lighting fixtures with T-8 lamps.

The Fire Alarm system is manufactured by S.H. Couch Inc. The system is approximately 30 years old. The present Fire Alarm system does not meet current code and needs to be replaced. Fire alarm system is tested every day in the morning. Provide new fire alarm system.

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

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

The present clock system is old and difficult to find parts and repair. Replace clock system with wireless, synchronized, battery operated, clock system.

There is not television system.

The school is provided with Surveillance CCTV security system. One Surveillance CCTV camera is located at the basement and two surveillance CCTV cameras are at the first floor. The second and third floor are not provided with surveillance CCTV cameras. Provide surveillance CCTV cameras to the second and third floor and add cameras to the basement and first floor.

The emergency power system consists of a gas powered generator, manufactured by Kholer Fast Respond II, 20KW (estimated). The gas powered generator is approximately 20 years old and is expected to provide 10 more years of useful service life. For future emergency loads a 70KW outdoor diesel generator is required.

There is adequate UPS in the IT room.

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

This school is not provided with lightning protection system. A study should be conducted to determine if the school building requires lightning protection system.

The auditorium stage theatrical lighting is composed of one row of pendant mounted fixtures controlled by local panelboard. Modern school auditorium requires front, upstage, high side, back theatrical lighting and to create different scenes the theatrical lighting fixtures are controlled by a dimming system. Provide theatrical lighting and dimming system.

The auditorium sound system is portable and satisfy school requirements.

GROUNDS SYSTEMS

The site surrounds the building on all four sides which is set back from the street. 1st floor court yard is glazed brick tile in good condition with surrounding metal fence in poor condition, rusted and causing masonry damage at attachment points. Play yard area on the east side is asphalt paving in good condition. No parking for staff vehicles on site. Metal fence surrounding yard area is in good condition. Play structure and fall protection surface are in very good condition. Landscaping is extensive on north, south, and west sides of the building and is mature and in good condition with raised planters in play yard area also in good condition.

Accessibility: The building is not accessible per ADA requirements due to first floor grade separation with no access ramp. Public access doors have granite stoops and stairs that are in need of re-pointing, while service entrances have concrete stoops and stairs.

The building does have an accessible entrance or accessible routes. Toilets are not equipped with accessible fixtures, partitions and accessories, such as grab bars and accessible partitions. Most of the doors in the building do not have lever type door handles.

The school perimeter is illuminated with wall mounted lighting fixtures. Additional lighting fixtures are required at each exterior exit door.

Two outdoor surveillance CCTV cameras are provide facing the playground area. Provide additional CCTV cameras for a complete coverage of the school building perimeter.

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

RECOMMENDATIONS

- Repair damaged structural foundations in basement – spalled and exposed reinforcement
- Replace metal utility trough in basement – rusted and failing
- Repair structural masonry cracks in chimney and parapet wall
- Replace Plexiglas window – hazed
- Install accessible door hardware on at least one entrance door
- Replace interior door frames – beyond service life and failing

- Replace interior door handles with lever type handles and latch sets
- Replace exit stairway doors and frames – beyond service life and damaged
- Replace toilet partitions to fit and operate properly
- Install stair railing to meet current building codes
- Repair and paint interior plaster walls – damaged (10% of plaster area)
- Install elevator for accessibility
- Replace gymnasium equipment – damaged and beyond service life
- Replace auditorium seats – damaged and beyond service life
- Install accessible ramp on at least one entrance
- Re-point exterior public access stairs – failing
- Replace metal courtyard fence and repair masonry at attachment points

- Replace 2 water closets
- Replace fountains with accessible chilled units
- Replace domestic water distribution piping due to age and corrosion
- Install hydro-pneumatic storage tank for domestic water booster system
- Inspect and repair rain water drainage system due to basement flooding during storms
- Replace condensate receiver sump equipment due to rust
- Survey and repair steam traps due to passing large volumes of steam
- Install 150 ton cooling system to serve the entire building
- Replace 2 inoperable rooftop power ventilators for toilet rooms
- Replace obsolete air handler which lacks cooling coils and humidity control and radiators due to age and damage
- Upgrade HVAC controls to modern digital system for entire building
- Install fire protection sprinkler system including fire pump if needed

- Provide a new electrical service 480V/277V, 3 phase power, approximate 800 Amperes and will be located in the vicinity of the existing electrical service.
- Provide (2)25FT of surface raceways with 24” receptacles on center and two-duplex wall mount receptacles. Approximate 380
- Replace 90% of the existing lighting fixtures with up/down, pendant fluorescent fixtures with T8 lamps. Approximate 770 fixtures
- Replace old fire alarm system with addressable type with audio/visual devices at corridors and classrooms. Approximate 90 devices
- Replace clock and bell system with wireless, battery operated, clock system. Approximate 50 clocks
- Provide surveillance CCTV cameras to the second and third floor and add cameras to the basement and first floor. Approximate 24 CCTV cameras
- Provide 70KW, outdoor, diesel powered generator.
- Prepare a study to determine if the school building requires lightning protection system.
- Provide theatrical lighting and dimming system.
- Additional lighting fixtures are required at each exterior exit door. Approximate 10
- Provide additional outdoor surveillance CCTV cameras for a complete coverage of the school building perimeter. Approximate

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Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 3 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S149001		

Site Condition Summary

The Table below shows the CI and FCI for each major system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

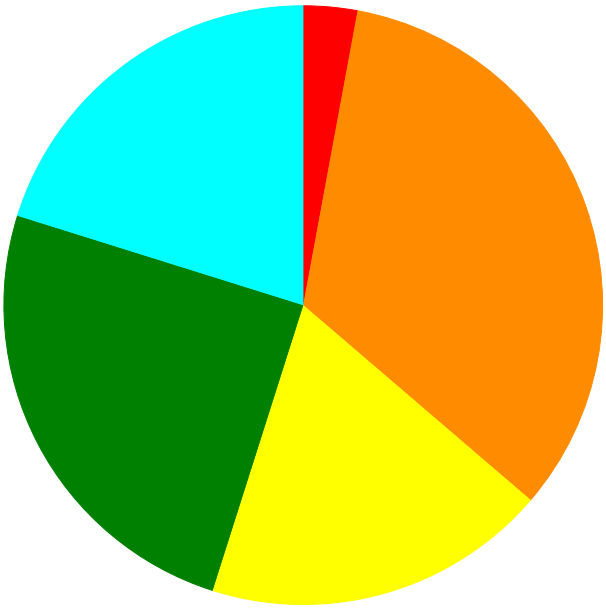
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	6.51 %	$80,177.82
B10 - Superstructure	37.00 %	0.25 %	$14,378.51
B20 - Exterior Enclosure	39.04 %	33.99 %	$1,226,356.05
B30 - Roofing	50.00 %	0.00 %	$0.00
C10 - Interior Construction	46.43 %	16.42 %	$257,838.76
C20 - Stairs	37.00 %	44.70 %	$40,335.36
C30 - Interior Finishes	37.38 %	2.71 %	$89,954.30
D10 - Conveying	105.71 %	207.36 %	$1,012,601.25
D20 - Plumbing	83.99 %	34.68 %	$453,237.03
D30 - HVAC	100.58 %	44.66 %	$3,179,644.98
D40 - Fire Protection	92.47 %	177.49 %	$915,550.01
D50 - Electrical	104.06 %	39.91 %	$1,501,252.72
E10 - Equipment	73.84 %	33.27 %	$339,004.89
E20 - Furnishings	105.00 %	263.70 %	$359,472.75
G20 - Site Improvements	74.12 %	2.14 %	$31,999.64
G40 - Site Electrical Utilities	38.08 %	45.16 %	$226,703.93
Totals:	**65.11 %**	**28.34 %**	**$9,728,508.00**

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)
B149001;Blankenburg	64,000	29.29	$256,914.04	$3,246,257.66	$1,621,212.56	$2,382,886.74	$1,962,533.43
G149001;Grounds	115,400	12.97	$25,981.81	$0.00	$190,395.29	$42,326.47	$0.00
Total:		**28.34**	**$282,895.85**	**$3,246,257.66**	**$1,811,607.85**	**$2,425,213.21**	**$1,962,533.43**

Deficiencies By Priority



1 - Response Time (< 2 yr) - $282,895.85
2 - Response Time (2-3 yrs) - $3,246,257.66
3 - Response Time (3-4 yrs) - $1,811,607.85
4 - Response Time (4-5 yrs) - $2,425,213.21
5 - Response Time (> 5 yrs) - $1,962,533.43

Budget Estimate Total: $9,728,508.00

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):	64,000
Year Built:	1923
Last Renovation:	
Replacement Value:	$32,332,012
Repair Cost:	$9,469,804.43
Total FCI:	29.29 %
Total RSLI:	65.12 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B149001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S149001		

Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	6.51 %	$80,177.82
B10 - Superstructure	37.00 %	0.25 %	$14,378.51
B20 - Exterior Enclosure	39.04 %	33.99 %	$1,226,356.05
B30 - Roofing	50.00 %	0.00 %	$0.00
C10 - Interior Construction	46.43 %	16.42 %	$257,838.76
C20 - Stairs	37.00 %	44.70 %	$40,335.36
C30 - Interior Finishes	37.38 %	2.71 %	$89,954.30
D10 - Conveying	105.71 %	207.36 %	$1,012,601.25
D20 - Plumbing	83.99 %	34.68 %	$453,237.03
D30 - HVAC	100.58 %	44.66 %	$3,179,644.98
D40 - Fire Protection	92.47 %	177.49 %	$915,550.01
D50 - Electrical	104.06 %	39.91 %	$1,501,252.72
E10 - Equipment	73.84 %	33.27 %	$339,004.89
E20 - Furnishings	105.00 %	263.70 %	$359,472.75
Totals:	**65.12 %**	**29.29 %**	**$9,469,804.43**

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.	64,000	100	1923	2023	2052	37.00 %	0.00 %	37			$1,177,600
A1030	Slab on Grade	$7.73	S.F.	64,000	100	1923	2023	2052	37.00 %	0.00 %	37			$494,720
A2010	Basement Excavation	$6.55	S.F.	64,000	100	1923	2023	2052	37.00 %	0.00 %	37			$419,200
A2020	Basement Walls	$12.70	S.F.	64,000	100	1923	2023	2052	37.00 %	9.86 %	37		$80,177.82	$812,800
B1010	Floor Construction	$75.10	S.F.	64,000	100	1923	2023	2052	37.00 %	0.30 %	37		$14,378.51	$4,806,400
B1020	Roof Construction	$13.88	S.F.	64,000	100	1923	2023	2052	37.00 %	0.00 %	37			$888,320
B2010	Exterior Walls	$36.91	S.F.	64,000	100	1923	2023	2052	37.00 %	0.35 %	37		$8,294.18	$2,362,240
B2020	Exterior Windows	$18.01	S.F.	64,000	40	1992	2032		42.50 %	105.07 %	17		$1,211,074.59	$1,152,640
B2030	Exterior Doors	$1.45	S.F.	64,000	25	1992	2017	2027	48.00 %	7.53 %	12		$6,987.28	$92,800
B3010105	Built-Up	$37.76	S.F.	21,082	20	2005	2025		50.00 %	0.00 %	10			$796,056
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		25				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	64,000	20	2005	2025		50.00 %	0.00 %	10			$3,840
C1010	Partitions	$17.91	S.F.	64,000	100	1923	2023	2052	37.00 %	0.00 %	37			$1,146,240
C1020	Interior Doors	$3.51	S.F.	64,000	40	1992	2032		42.50 %	100.41 %	17		$225,569.54	$224,640
C1030	Fittings	$3.12	S.F.	64,000	40	1992	2032	2057	105.00 %	16.16 %	42		$32,269.22	$199,680
C2010	Stair Construction	$1.41	S.F.	64,000	100	1923	2023	2052	37.00 %	44.70 %	37		$40,335.36	$90,240

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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	$14.29	S.F.	64,000	10	2005	2015		0.00 %	9.84 %	0		$89,954.30	$914,560
C3010231	Vinyl Wall Covering	$0.00	S.F.	64,000	15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.52	S.F.	64,000	30	1992	2022		23.33 %	0.00 %	7			$161,280
C3020411	Carpet	$7.30	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$75.52	S.F.	1,280	50	1982	2032		34.00 %	0.00 %	17			$96,666
C3020413	Vinyl Flooring	$9.68	S.F.	14,720	20	1992	2012	2022	35.00 %	0.00 %	7			$142,490
C3020414	Wood Flooring	$22.27	S.F.	28,800	25	1992	2017	2027	48.00 %	0.00 %	12			$641,376
C3020415	Concrete Floor Finishes	$0.97	S.F.	19,200	50	1982	2032		34.00 %	0.00 %	17			$18,624
C3030	Ceiling Finishes	$20.97	S.F.	64,000	25	2005	2030		60.00 %	0.00 %	15			$1,342,080
D1010	Elevators and Lifts	$7.63	S.F.	64,000	35			2052	105.71 %	207.36 %	37		$1,012,601.25	$488,320
D2010	Plumbing Fixtures	$13.52	S.F.	64,000	35	2013	2048		94.29 %	10.79 %	33		$93,388.78	$865,280
D2020	Domestic Water Distribution	$1.68	S.F.	64,000	25	2006	2031	2027	48.00 %	307.76 %	12		$330,898.45	$107,520
D2030	Sanitary Waste	$2.90	S.F.	64,000	25	2013	2038		92.00 %	15.60 %	23		$28,949.80	$185,600
D2040	Rain Water Drainage	$2.32	S.F.	64,000	30	1925	1955	2027	40.00 %	0.00 %	12			$148,480
D3020	Heat Generating Systems	$18.67	S.F.	64,000	35	2002	2037		62.86 %	2.56 %	22		$30,540.77	$1,194,880
D3030	Cooling Generating Systems	$24.48	S.F.	64,000	30			2047	106.67 %	46.13 %	32		$722,672.71	$1,566,720
D3040	Distribution Systems	$42.99	S.F.	64,000	25	1925	1950	2042	108.00 %	38.29 %	27		$1,053,500.17	$2,751,360
D3050	Terminal & Package Units	$11.60	S.F.	64,000	20	1925	1945	2037	110.00 %	0.00 %	22			$742,400
D3060	Controls & Instrumentation	$13.50	S.F.	64,000	20	1985	2005	2037	110.00 %	158.90 %	22		$1,372,931.33	$864,000
D4010	Sprinklers	$7.05	S.F.	64,000	35			2052	105.71 %	202.91 %	37		$915,550.01	$451,200
D4020	Standpipes	$1.01	S.F.	64,000	35				0.00 %	0.00 %				$64,640
D5010	Electrical Service/Distribution	$9.70	S.F.	64,000	30	2006	2036		70.00 %	26.55 %	21		$164,820.82	$620,800
D5020	Lighting and Branch Wiring	$34.68	S.F.	64,000	20	1925	1945	2037	110.00 %	35.57 %	22		$789,562.56	$2,219,520
D5030	Communications and Security	$12.99	S.F.	64,000	15	1925	1940	2032	113.33 %	47.13 %	17		$391,823.06	$831,360
D5090	Other Electrical Systems	$1.41	S.F.	64,000	30	1925	1955	2047	106.67 %	171.82 %	32		$155,046.28	$90,240
E1020	Institutional Equipment	$4.82	S.F.	64,000	35	1975	2010	2052	105.71 %	109.90 %	37		$339,004.89	$308,480
E1090	Other Equipment	$11.10	S.F.	64,000	35	2001	2036		60.00 %	0.00 %	21			$710,400
E2010	Fixed Furnishings	$2.13	S.F.	64,000	40	1975	2015	2057	105.00 %	263.70 %	42		$359,472.75	$136,320
								Total	**65.12 %**	**29.29 %**			**$9,469,804.43**	**$32,332,012**

System Notes

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

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

Note:
85% - Paint & Covering
15% - Wall Tile (13% glazed brick, 2% ceramic)

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

Note:
2% - Terrazzo & Tile
23% - Vinyl Flooring
45% - Wood Flooring
30% - Concrete Floor Finishes

Renewal Schedule

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

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$9,469,804**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$410,959**	**$0**	**$0**	**$2,534,495**	**$12,415,258**
*** 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	$80,178	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$80,178**
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	$14,379	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$14,379**
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	$8,294	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$8,294**
B2020 - Exterior Windows	$1,211,075	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,211,075**
B2030 - Exterior Doors	$6,987	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,987**
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	$1,176,817	**$1,176,817**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$5,677	**$5,677**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

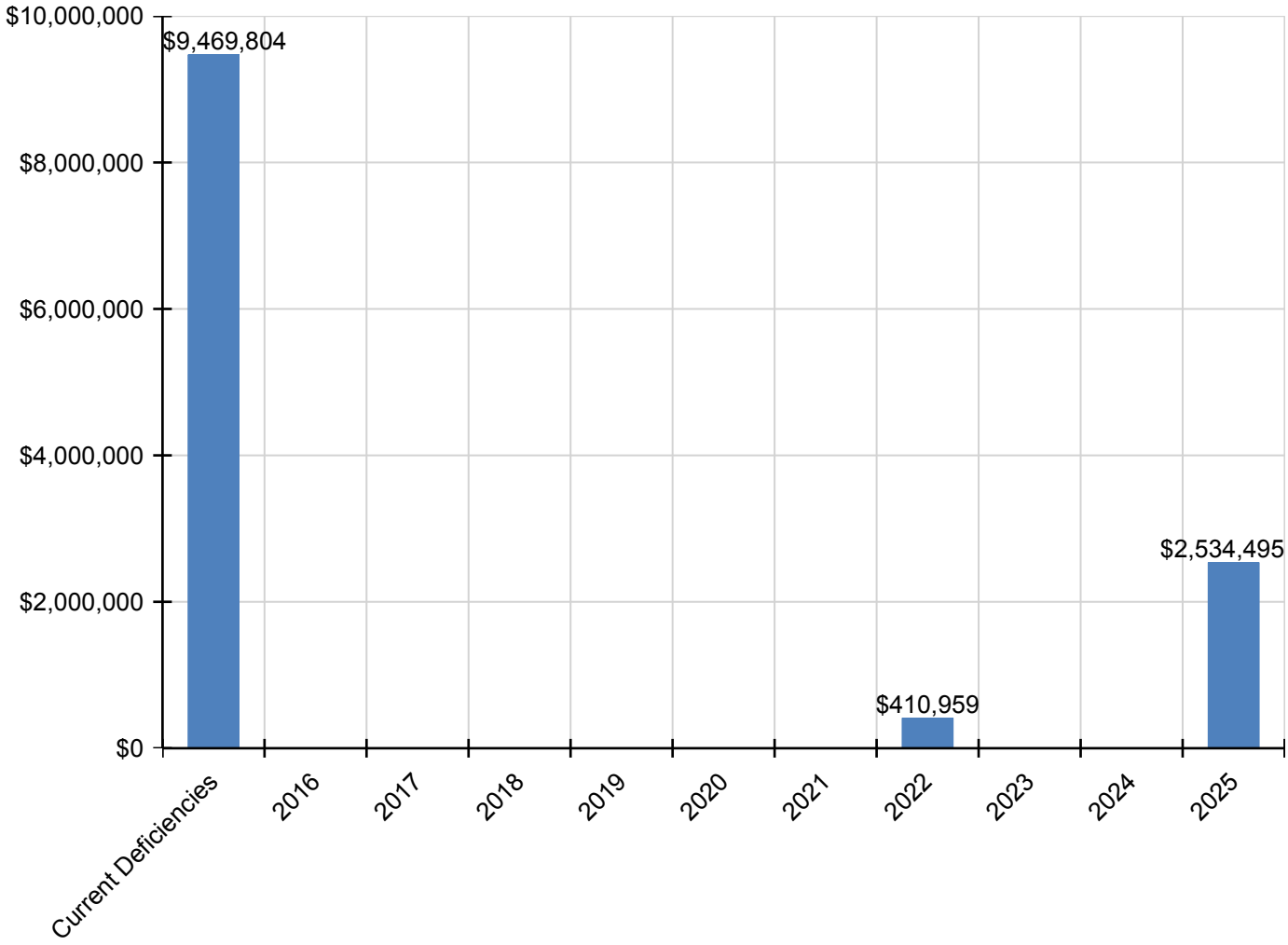
C1020 - Interior Doors	$225,570	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$225,570**
C1030 - Fittings	$32,269	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$32,269**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$40,335	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$40,335**
C30 - Interior Finishes	$0	$0	$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	$89,954	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,352,001	**$1,441,956**
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	$218,189	$0	$0	$0	**$218,189**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$192,769	$0	$0	$0	**$192,769**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$1,012,601	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,012,601**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$93,389	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$93,389**
D2020 - Domestic Water Distribution	$330,898	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$330,898**
D2030 - Sanitary Waste	$28,950	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$28,950**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$30,541	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$30,541**
D3030 - Cooling Generating Systems	$722,673	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$722,673**
D3040 - Distribution Systems	$1,053,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,053,500**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,372,931	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,372,931**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$915,550	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$915,550**
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	$164,821	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$164,821**
D5020 - Lighting and Branch Wiring	$789,563	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$789,563**
D5030 - Communications and Security	$391,823	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$391,823**
D5090 - Other Electrical Systems	$155,046	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$155,046**
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	$339,005	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$339,005**
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	$359,473	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$359,473**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

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

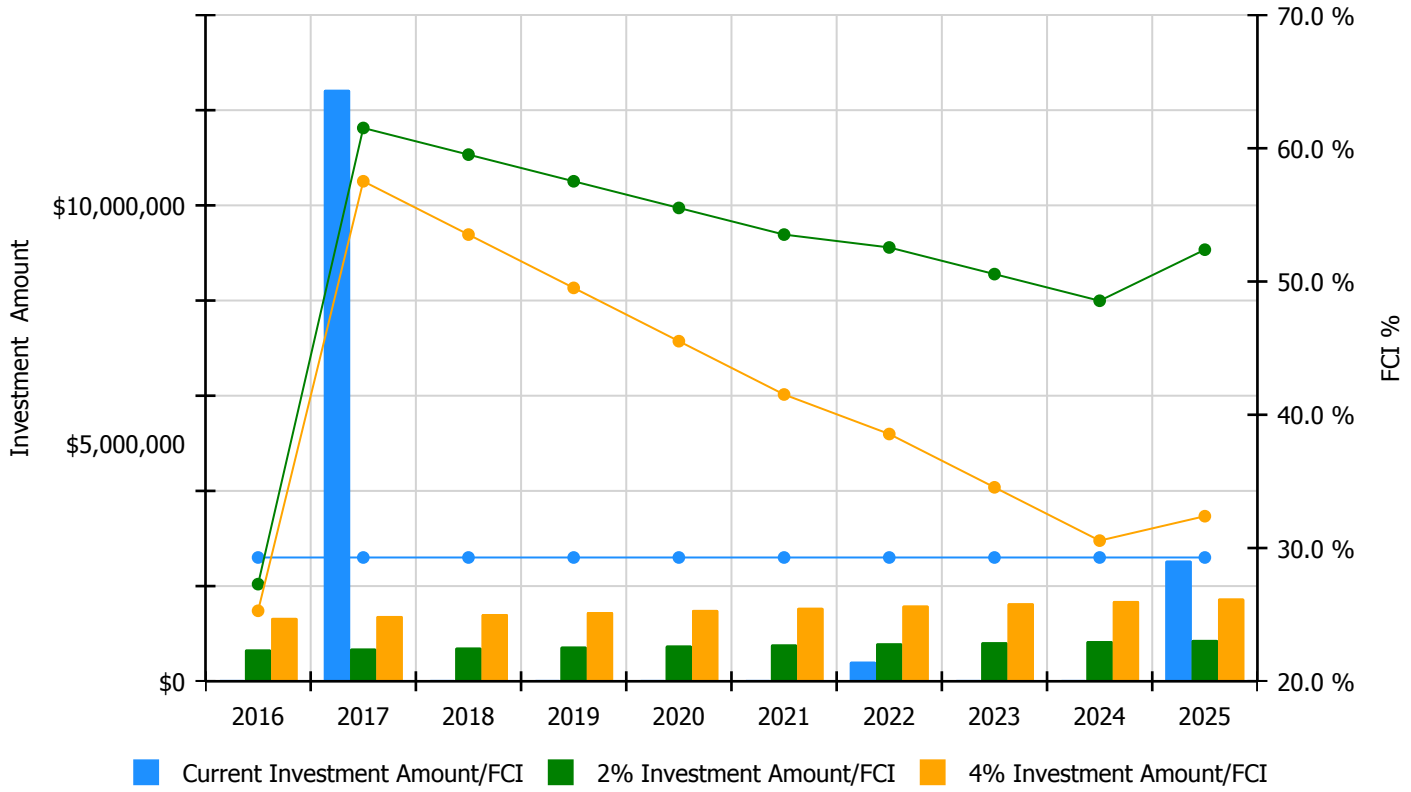


10 Year FCI Forecast by Investment Scenario

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

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

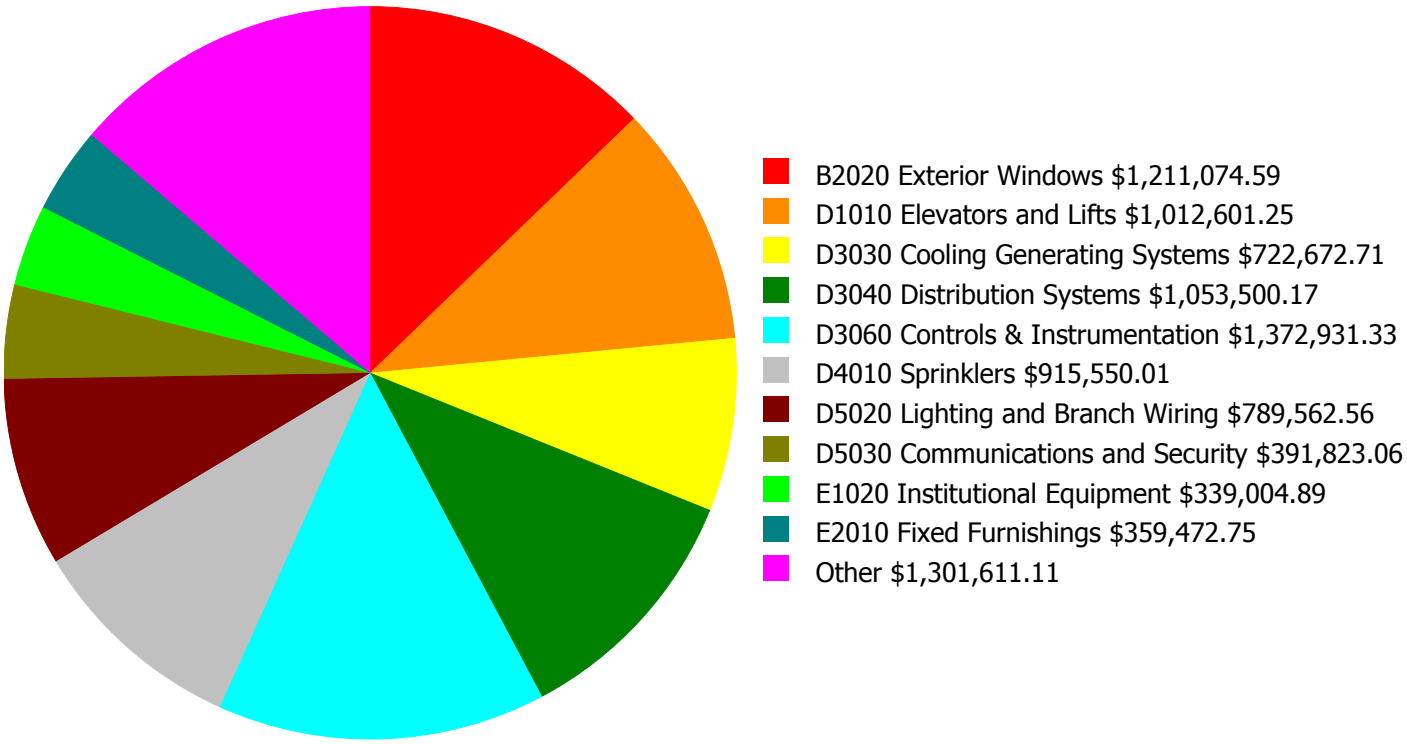
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 29.29%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$666,039.00	27.29 %	$1,332,079.00	25.29 %
2017	$12,427,977	$686,021.00	61.52 %	$1,372,041.00	57.52 %
2018	$0	$706,601.00	59.52 %	$1,413,202.00	53.52 %
2019	$0	$727,799.00	57.52 %	$1,455,599.00	49.52 %
2020	$0	$749,633.00	55.52 %	$1,499,267.00	45.52 %
2021	$0	$772,122.00	53.52 %	$1,544,245.00	41.52 %
2022	$410,959	$795,286.00	52.55 %	$1,590,572.00	38.55 %
2023	$0	$819,145.00	50.55 %	$1,638,289.00	34.55 %
2024	$0	$843,719.00	48.55 %	$1,687,438.00	30.55 %
2025	$2,534,495	$869,030.00	52.39 %	$1,738,061.00	32.39 %
Total:	**$15,373,430**	**$7,635,395.00**		**$15,270,793.00**	

Deficiency Summary by System

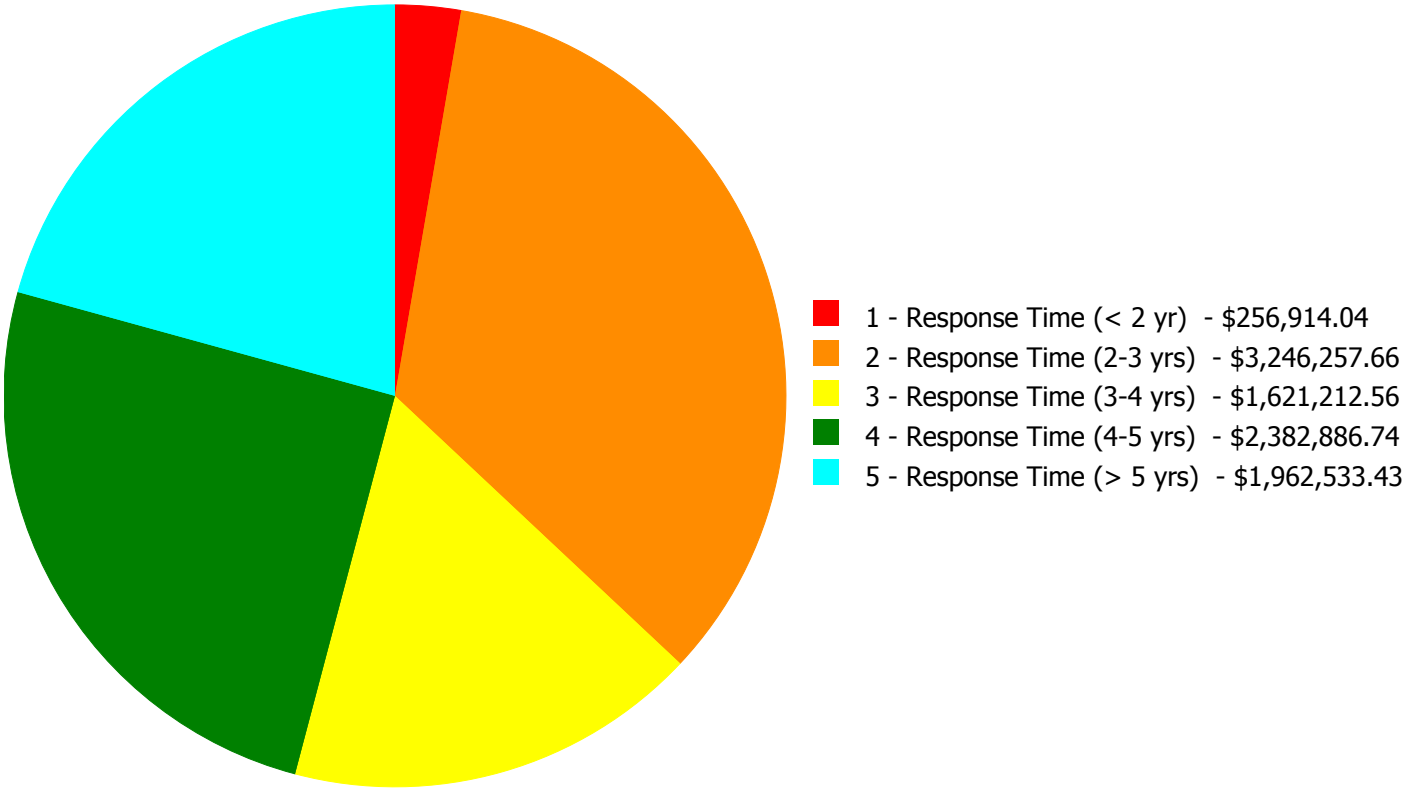
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $9,469,804.43

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: $9,469,804.43

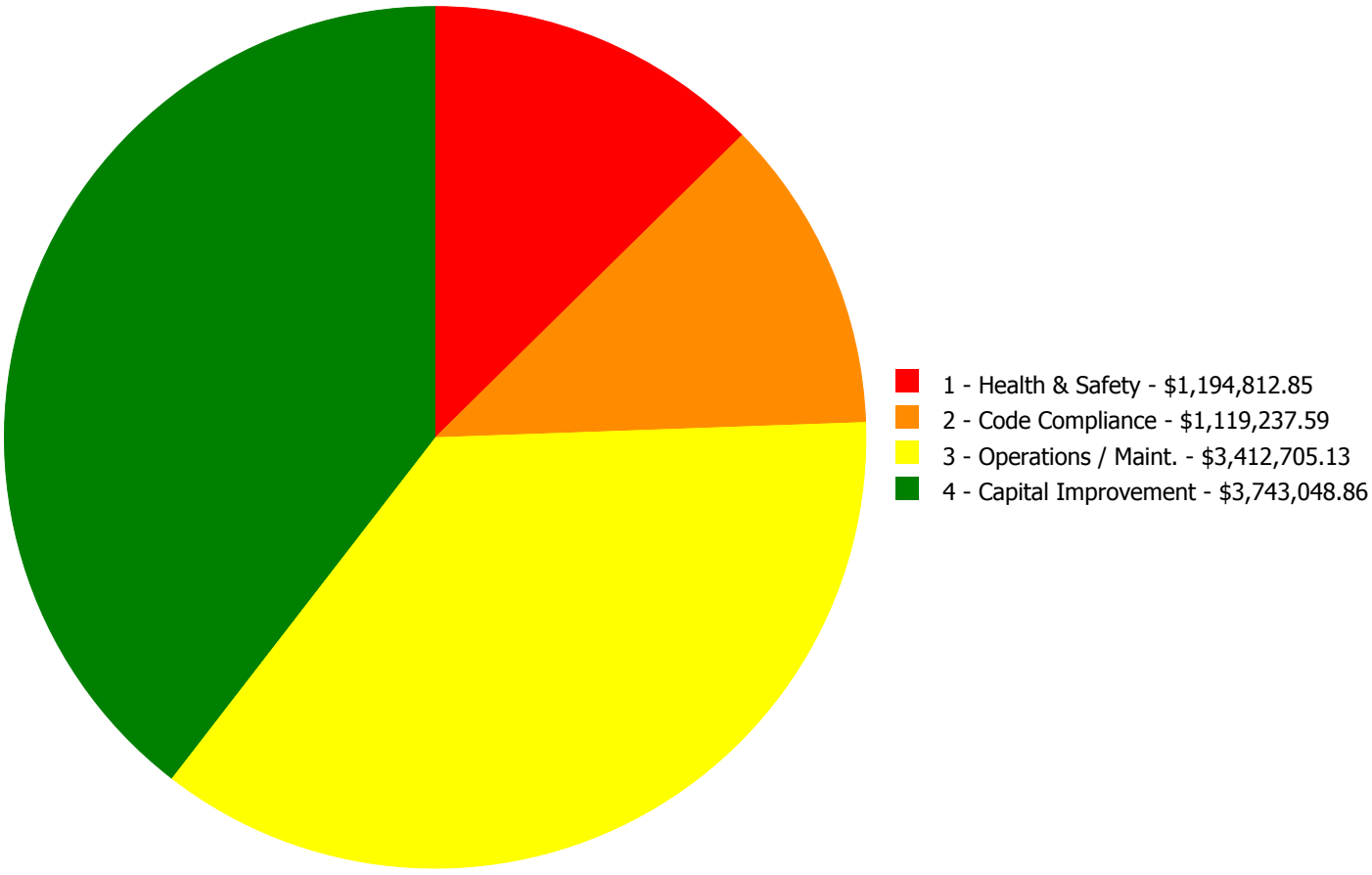
Deficiency By Priority Investment Table

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
A2020	Basement Walls	$0.00	$80,177.82	$0.00	$0.00	$0.00	$80,177.82
B1010	Floor Construction	$0.00	$14,378.51	$0.00	$0.00	$0.00	$14,378.51
B2010	Exterior Walls	$0.00	$8,294.18	$0.00	$0.00	$0.00	$8,294.18
B2020	Exterior Windows	$0.00	$0.00	$0.00	$1,211,074.59	$0.00	$1,211,074.59
B2030	Exterior Doors	$0.00	$6,987.28	$0.00	$0.00	$0.00	$6,987.28
C1020	Interior Doors	$0.00	$116,311.67	$109,257.87	$0.00	$0.00	$225,569.54
C1030	Fittings	$0.00	$32,269.22	$0.00	$0.00	$0.00	$32,269.22
C2010	Stair Construction	$40,335.36	$0.00	$0.00	$0.00	$0.00	$40,335.36
C3010230	Paint & Covering	$0.00	$89,954.30	$0.00	$0.00	$0.00	$89,954.30
D1010	Elevators and Lifts	$0.00	$1,012,601.25	$0.00	$0.00	$0.00	$1,012,601.25
D2010	Plumbing Fixtures	$0.00	$93,388.78	$0.00	$0.00	$0.00	$93,388.78
D2020	Domestic Water Distribution	$6,587.74	$0.00	$0.00	$0.00	$324,310.71	$330,898.45
D2030	Sanitary Waste	$0.00	$28,949.80	$0.00	$0.00	$0.00	$28,949.80
D3020	Heat Generating Systems	$0.00	$30,540.77	$0.00	$0.00	$0.00	$30,540.77
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$722,672.71	$722,672.71
D3040	Distribution Systems	$209,990.94	$0.00	$843,509.23	$0.00	$0.00	$1,053,500.17
D3060	Controls & Instrumentation	$0.00	$1,372,931.33	$0.00	$0.00	$0.00	$1,372,931.33
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$915,550.01	$915,550.01
D5010	Electrical Service/Distribution	$0.00	$0.00	$164,820.82	$0.00	$0.00	$164,820.82
D5020	Lighting and Branch Wiring	$0.00	$0.00	$140,752.95	$648,809.61	$0.00	$789,562.56
D5030	Communications and Security	$0.00	$0.00	$162,415.22	$229,407.84	$0.00	$391,823.06
D5090	Other Electrical Systems	$0.00	$0.00	$155,046.28	$0.00	$0.00	$155,046.28
E1020	Institutional Equipment	$0.00	$0.00	$45,410.19	$293,594.70	$0.00	$339,004.89
E2010	Fixed Furnishings	$0.00	$359,472.75	$0.00	$0.00	$0.00	$359,472.75
	Total:	$256,914.04	$3,246,257.66	$1,621,212.56	$2,382,886.74	$1,962,533.43	$9,469,804.43

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: $9,469,804.43

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: C2010 - Stair Construction

Location: Stairs

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

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

Qty: 300.00

Unit of Measure: L.F.

Estimate: $40,335.36

Assessor Name: System

Date Created: 10/30/2015

Notes: Install stair railing to meet current building codes

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Maintenance Required

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Provide expansion tank for water heater.

Qty: 1.00

Unit of Measure: Ea.

Estimate: $6,587.74

Assessor Name: System

Date Created: 12/30/2015

Notes: Install hydro-pneumatic storage tank for domestic water booster system

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System: D3040 - Distribution Systems

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Conduct a steam trap survey and replace failed units.

Qty: 64,000.00

Unit of Measure: S.F.

Estimate: $209,990.94

Assessor Name: System

Date Created: 12/30/2015

Notes: Survey and repair steam traps

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

System: A2020 - Basement Walls

Location: Basement

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair concrete wall in poor condition including rebar dowelling - insert the SF of wall area

Qty: 350.00

Unit of Measure: S.F.

Estimate: $80,177.82

Assessor Name: System

Date Created: 10/30/2015

Notes: Repair damaged structural foundations in basement – spalled and exposed reinforcement

System: B1010 - Floor Construction

Location: Basement

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace metal floor grate or traffic mat

Qty: 150.00

Unit of Measure: S.F.

Estimate: $14,378.51

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace metal utility trough in basement – rusted and failing

System: B2010 - Exterior Walls

Location: Courtyard wall

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repoint masonry at masonry to steel picket connection, refinish steel picket and repoint masonry - insert LF of masonry pointing and SF of picket

Qty: 30.00

Unit of Measure: L.F.

Estimate: $6,356.81

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace metal courtyard fence and repair masonry at attachment points

System: B2010 - Exterior Walls

Location: Chimney/parapet wall

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 60.00

Unit of Measure: S.F.

Estimate: $1,937.37

Assessor Name: System

Date Created: 10/30/2015

Notes: Repair structural masonry cracks in chimney and parapet wall

System: B2030 - Exterior Doors

Location: Entrance

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Replace hardware with compliant hardware, paint and weatherstrip - per leaf

Qty: 2.00

Unit of Measure: Ea.

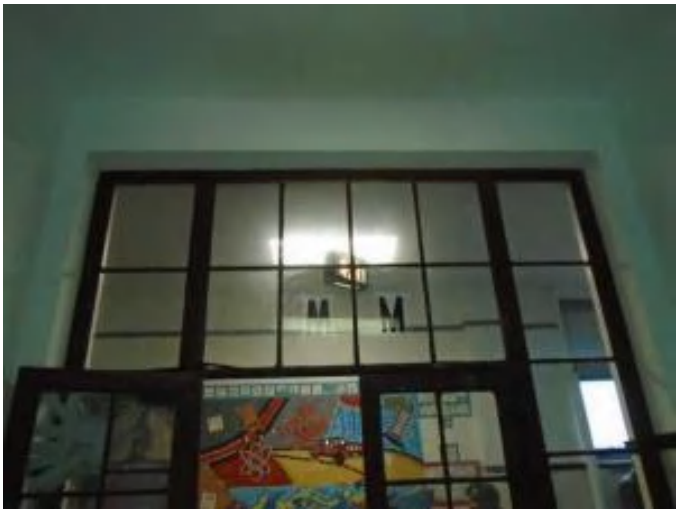
Estimate: $6,987.28

Assessor Name: System

Date Created: 10/30/2015

Notes: Install accessible door hardware on at least one entrance door

System: C1020 - Interior Doors



Location: Exit stairways

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace hollow metal frames and doors

Qty: 16.00

Unit of Measure: Ea.

Estimate: $81,247.79

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace exit stairway doors and frames – beyond service life and damaged

System: C1020 - Interior Doors

Location: Throughout

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Replace door knobs with compliant lever type

Qty: 63.00

Unit of Measure: Ea.

Estimate: $35,063.88

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace interior door handles with lever type handles and latch sets

System: C1030 - Fittings

Location: Toilets

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace damaged toilet paritions - handicap units

Qty: 33.00

Unit of Measure: Ea.

Estimate: $32,269.22

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace toilet partitions to fit and operate properly

System: C3010230 - Paint & Covering

Location: Throughout

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 10,500.00

Unit of Measure: S.F.

Estimate: $89,954.30

Assessor Name: System

Date Created: 10/30/2015

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

System: D1010 - Elevators and Lifts

Location: TBD

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Add external 4 stop elevator - adjust the electrical run lengths to hook up the elevator

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,012,601.25

Assessor Name: System

Date Created: 10/30/2015

Notes: Install elevator for accessibility

System: D2010 - Plumbing Fixtures

Location: Corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 5.00

Unit of Measure: Ea.

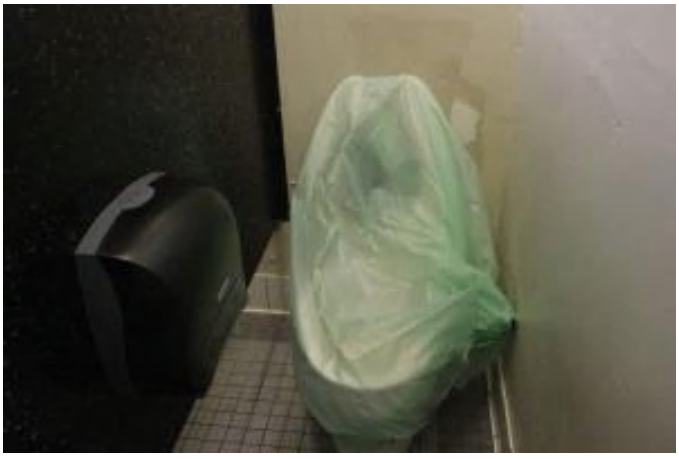
Estimate: $78,464.48

Assessor Name: System

Date Created: 12/30/2015

Notes: Replace fountains with accessible chilled units

System: D2010 - Plumbing Fixtures



Location: Toilet rooms

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

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

Qty: 2.00

Unit of Measure: Ea.

Estimate: $14,924.30

Assessor Name: System

Date Created: 12/30/2015

Notes: Replace two water closets

System: D2030 - Sanitary Waste

Location: Basement

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Install backwater prevention system to prevent storm water from backing up into the sanitary sewer system - 6" - change the pipe lengths if necessary - assumes 100 SF hardscape repair

Qty: 1.00

Unit of Measure: Ea.

Estimate: $28,949.80

Assessor Name: System

Date Created: 12/30/2015

Notes: Inspect and repair rain water drainage system due to basement flooding during storms

System: D3020 - Heat Generating Systems

Location: Boiler room

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace boiler feed pump (duplex) and surge tank

Qty: 1.00

Unit of Measure: Ea.

Estimate: $30,540.77

Assessor Name: System

Date Created: 12/30/2015

Notes: Replace condensate receiver sump equipment due to rust

System: D3060 - Controls & Instrumentation

Location: Entire building

Distress: Energy Efficiency

Category: 4 - Capital Improvement

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

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 64,000.00

Unit of Measure: S.F.

Estimate: $1,372,931.33

Assessor Name: System

Date Created: 12/30/2015

Notes: Upgrade HVAC controls to modern digital system for entire building

System: E2010 - Fixed Furnishings

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace auditorium seating - add tablet arms if required. Veneer seating is an option.

Qty: 441.00

Unit of Measure: Ea.

Estimate: $359,472.75

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace auditorium seats – damaged and beyond service life

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

System: C1020 - Interior Doors

Location: Throughout

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace interior doors - wood doors with hollow metal frames - per leaf

Qty: 63.00

Unit of Measure: Ea.

Estimate: $109,257.87

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace interior door frames – beyond service life and failing

System: D3040 - Distribution Systems

Location: Mechanical room

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Install / replace HVAC unit for Auditorium (800 seat).

Qty: 800.00

Unit of Measure: Seat

Estimate: $796,343.60

Assessor Name: System

Date Created: 12/30/2015

Notes: Replace obsolete air handler which lacks cooling coils and humidity control and radiators due to age and damage

System: D3040 - Distribution Systems

Location: Roof

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace power roof ventilator (24" dia.)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $47,165.63

Assessor Name: System

Date Created: 12/30/2015

Notes: Replace 2 inoperable rooftop power ventilators for toilet rooms

System: D5010 - Electrical Service/Distribution

Location: Basement Electrical Room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: $164,820.82

Assessor Name: System

Date Created: 12/21/2015

Notes: Provide a new electrical service 480V/277V, 3 phase power, approximate 800 Amperes and will be located in the vicinity of the existing electrical service.

System: D5020 - Lighting and Branch Wiring

Location: Entire Buildiing

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add wiring device

Qty: 380.00

Unit of Measure: Ea.

Estimate: $140,752.95

Assessor Name: System

Date Created: 12/21/2015

Notes: Provide (2)25FT of surface raceways with 24" receptacles on center and two-duplex wall mount receptacles. Approximate 380

System: D5030 - Communications and Security

Location: Entire Building

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Replace fire alarm system

Qty: 1.00

Unit of Measure: S.F.

Estimate: $162,415.22

Assessor Name: System

Date Created: 12/21/2015

Notes: Replace old fire alarm system with addressable type with audio/visual devices at corridors and classrooms. Approximate 90 devices

System: D5090 - Other Electrical Systems

Location: Outdoor

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Standby Generator System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $130,796.46

Assessor Name: System

Date Created: 12/21/2015

Notes: Provide 70KW, outdoor, diesel powered generator

System: D5090 - Other Electrical Systems

Location: Roof

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Repair Lightning Protection System

Qty: 1.00

Unit of Measure: Job

Estimate: $24,249.82

Assessor Name: System

Date Created: 12/21/2015

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

System: E1020 - Institutional Equipment

Location: Gym

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or install basketball backstop and hoop - pick the appropriate style of backstop

Qty: 6.00

Unit of Measure: Ea.

Estimate: $45,410.19

Assessor Name: System

Date Created: 10/30/2015

Notes: Replace gymnasium equipment – damaged and beyond service life

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

System: B2020 - Exterior Windows

Location: Throughout
Distress: Energy Efficiency
Category: 4 - Capital Improvement
Priority: 4 - Response Time (4-5 yrs)
Correction: Remove and replace double slider windows
Qty: 240.00
Unit of Measure: Ea.
Estimate: $1,211,074.59
Assessor Name: System
Date Created: 10/30/2015

Notes: Replace Plexiglas window – hazed

System: D5020 - Lighting and Branch Wiring

Location: Entire Building
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add Lighting Fixtures
Qty: 770.00
Unit of Measure: Ea.
Estimate: $648,809.61
Assessor Name: System
Date Created: 12/21/2015

Notes: Replace 90% of the existing lighting fixtures with up/down, pendant fluorescent fixtures with T8 lamps. Approximate 770 fixtures

System: D5030 - Communications and Security

Location: Entire Building
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Video Surveillance System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $116,847.62
Assessor Name: System
Date Created: 12/21/2015

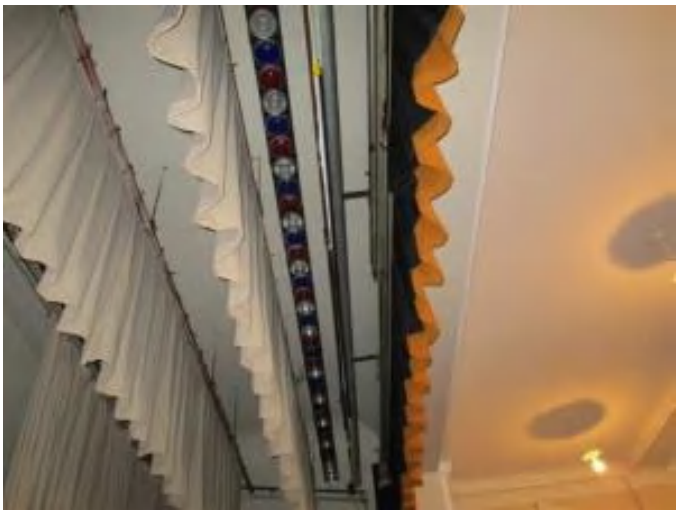
Notes: Provide surveillance CCTV cameras to the second and third floor and add cameras to the basement and first floor. Approximate 24 CCTV cameras

System: D5030 - Communications and Security

Location: Entire building
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Clock System or Components
Qty: 50.00
Unit of Measure: Ea.
Estimate: $112,560.22
Assessor Name: System
Date Created: 12/21/2015

Notes: Replace clock and bell system with wireless, battery operated, clock system. Approximate 50 clocks

System: E1020 - Institutional Equipment



Location: Auditorium

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Stage Theatrical Lighting System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $293,594.70

Assessor Name: System

Date Created: 12/21/2015

Notes: Provide theatrical lighting and dimming system.

Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace domestic water piping (75 KSF)

Qty: 64,000.00

Unit of Measure: S.F.

Estimate: $324,310.71

Assessor Name: System

Date Created: 12/30/2015

Notes: Replace domestic water distribution piping due to age and corrosion

System: D3030 - Cooling Generating Systems

Location: Entire building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 45,000.00

Unit of Measure: S.F.

Estimate: $722,672.71

Assessor Name: System

Date Created: 12/30/2015

Notes: Install 150 ton cooling system to serve the entire building

System: D4010 - Sprinklers

Location: Entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 64,000.00

Unit of Measure: S.F.

Estimate: $915,550.01

Assessor Name: System

Date Created: 12/30/2015

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

Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D2020 Domestic Water Distribution	Pump, pressure booster system, 5 HP pump, includes diaphragm tank, control and pressure switch	1.00	Ea.	Boiler room					25	2006	2031	$10,972.50	$12,069.75
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, steam, gross output, 3570 MBH, includes standard controls and insulated jacket, packaged	2.00	Ea.	Boiler room	Smith	4500A-15	unknown		35	2002	2037	$61,435.00	$135,157.00
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, steam, gross output, 3570 MBH, includes standard controls and insulated jacket, packaged	2.00	Ea.	Boiler room	Smith	4500A-15	MB2002-95		35	2002	2037	$61,435.00	$135,157.00
D3040 Distribution Systems	AHU, field fabricated, built up, cool/heat coils, filters, constant volume, 40,000 CFM	1.00	Ea.	Mechanical room					25			$151,511.80	$166,662.98
D5010 Electrical Service/Distribution	Switchboards, distribution section, aluminum bus bars, 4 W, 120/208 or 277/480 V, 1600 amp, excl breakers	1.00	Ea.	Basement electrical room					30	2006	2036	$7,358.85	$8,094.74
												Total:	**$457,141.47**

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:	
Gross Area (SF):	115,400
Year Built:	1923
Last Renovation:	
Replacement Value:	$1,994,090
Repair Cost:	$258,703.57
Total FCI:	12.97 %
Total RSLI:	65.05 %

Description:

Attributes:

General Attributes:

Bldg ID:	S149001	Site ID:	S149001

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	74.12 %	2.14 %	$31,999.64
G40 - Site Electrical Utilities	38.08 %	45.16 %	$226,703.93
Totals:	**65.05 %**	**12.97 %**	**$258,703.57**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$7.65	S.F.		30				0.00 %	0.00 %				$0
G2030	Pedestrian Paving	$11.52	S.F.	78,300	40	2005	2045		75.00 %	3.55 %	30		$31,999.64	$902,016
G2040	Site Development	$4.36	S.F.	115,400	25	2005	2030		60.00 %	0.00 %	15			$503,144
G2050	Landscaping & Irrigation	$3.78	S.F.	23,000	15	1992	2007	2037	146.67 %	0.00 %	22			$86,940
G4020	Site Lighting	$3.58	S.F.	115,400	30	1925	1955	2022	23.33 %	10.25 %	7		$42,326.47	$413,132
G4030	Site Communications & Security	$0.77	S.F.	115,400	30	1925	1955	2047	106.67 %	207.50 %	32		$184,377.46	$88,858
								Total	**65.05 %**	**12.97 %**			**$258,703.57**	**$1,994,090**

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.

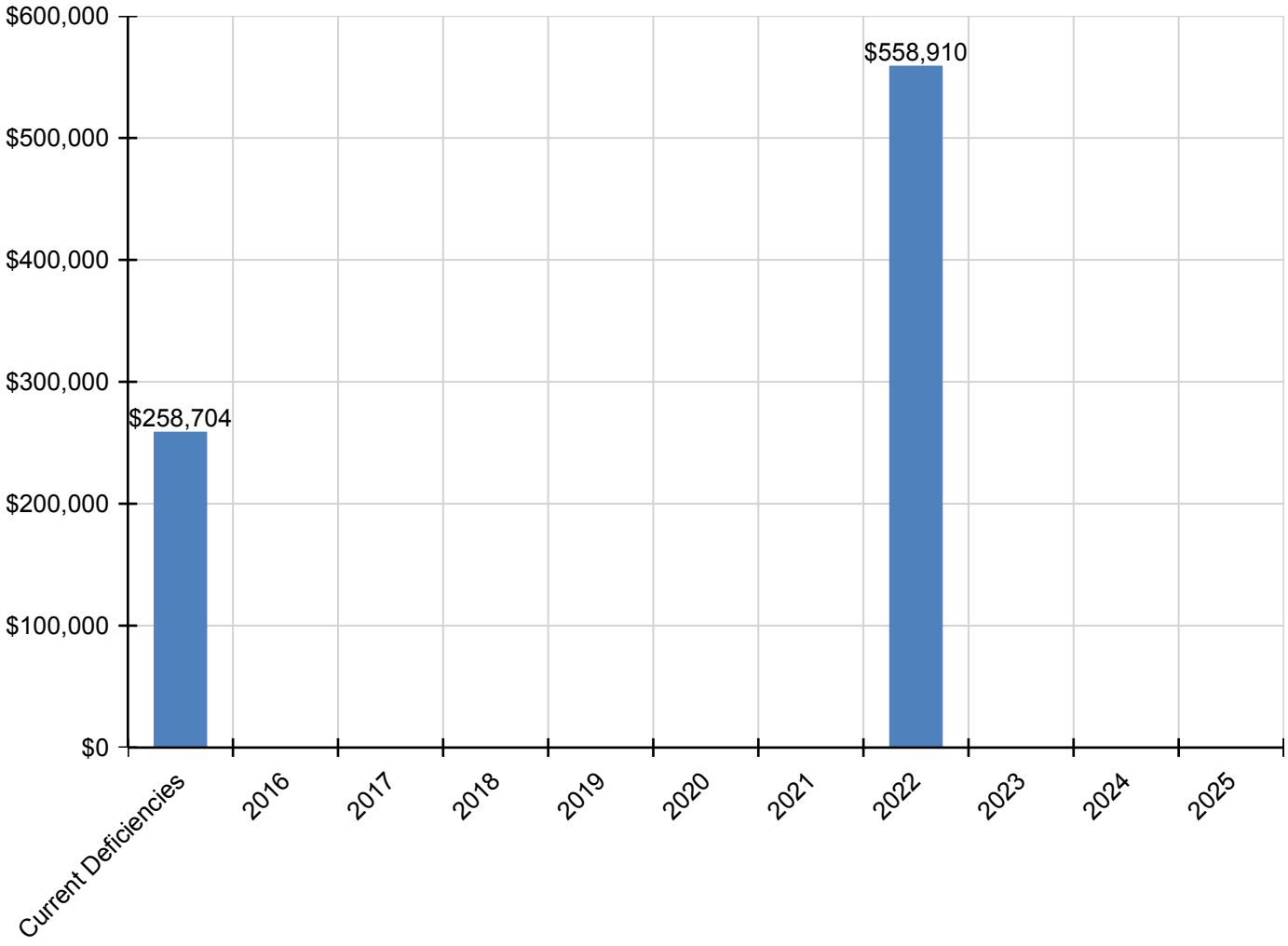
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$258,704**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$558,910**	**$0**	**$0**	**$0**	**$817,614**
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	$32,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$32,000**
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	$42,326	$0	$0	$0	$0	$0	$0	$558,910	$0	$0	$0	**$601,236**
G4030 - Site Communications & Security	$184,377	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$184,377**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

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

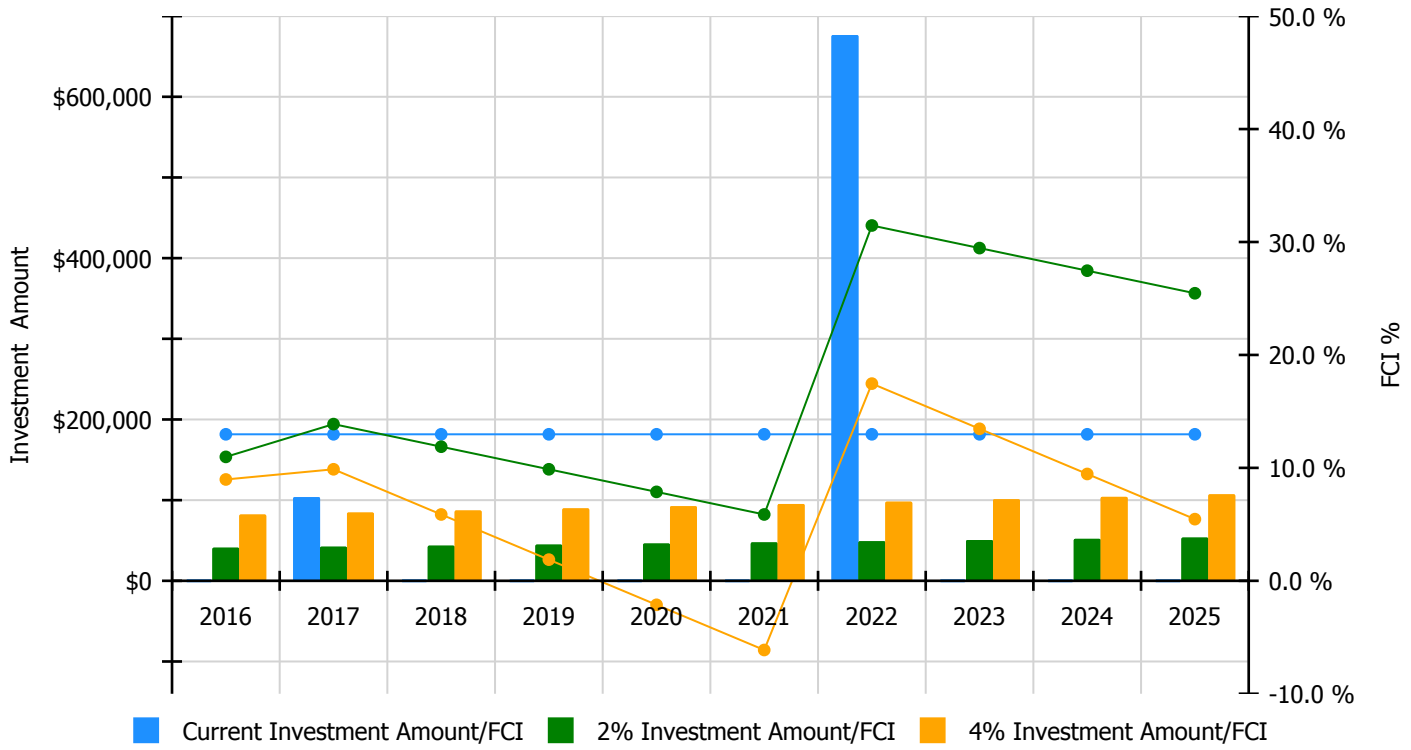


10 Year FCI Forecast by Investment Scenario

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

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

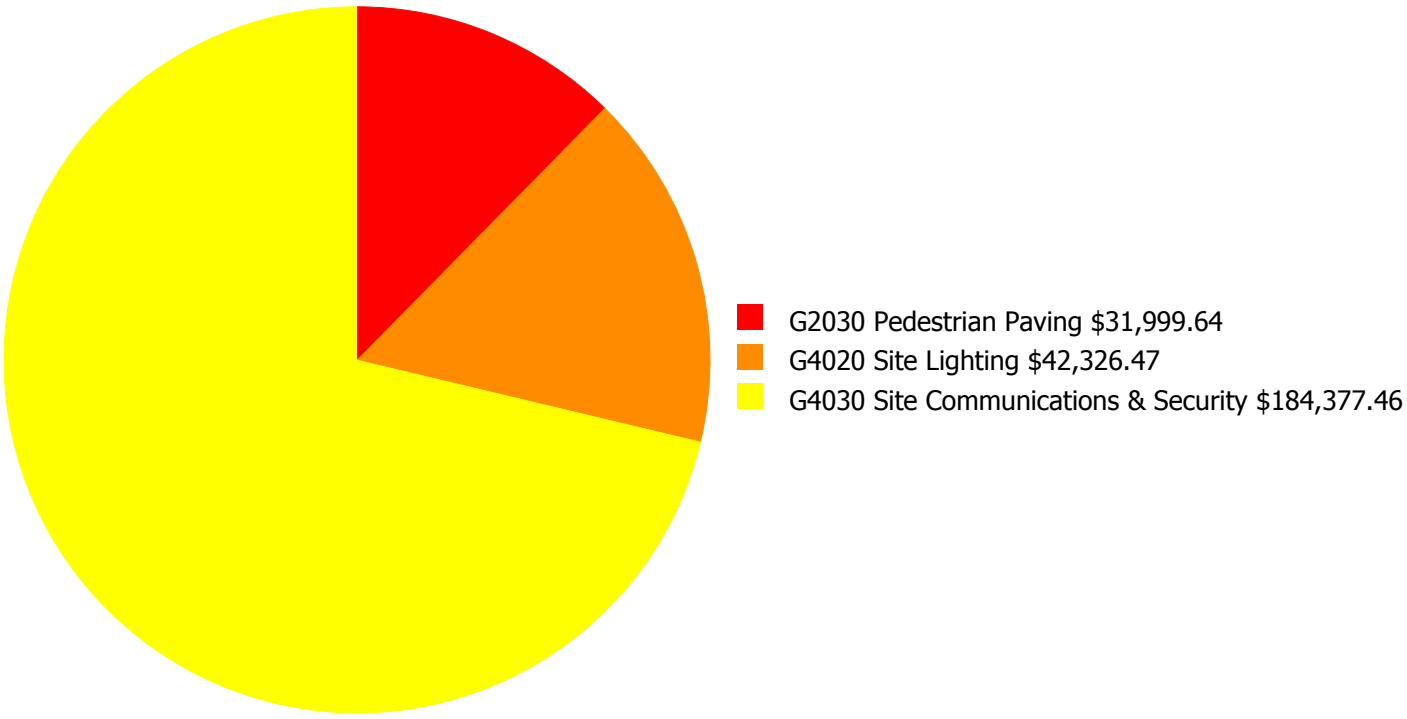
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 12.97%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$41,078.00	10.97 %	$82,157.00	8.97 %
2017	$103,697	$42,311.00	13.88 %	$84,621.00	9.88 %
2018	$0	$43,580.00	11.88 %	$87,160.00	5.88 %
2019	$0	$44,887.00	9.88 %	$89,775.00	1.88 %
2020	$0	$46,234.00	7.88 %	$92,468.00	-2.12 %
2021	$0	$47,621.00	5.88 %	$95,242.00	-6.12 %
2022	$676,528	$49,050.00	31.46 %	$98,099.00	17.46 %
2023	$0	$50,521.00	29.46 %	$101,042.00	13.46 %
2024	$0	$52,037.00	27.46 %	$104,073.00	9.46 %
2025	$0	$53,598.00	25.46 %	$107,196.00	5.46 %
Total:	**$780,224**	**$470,917.00**		**$941,833.00**	

Deficiency Summary by System

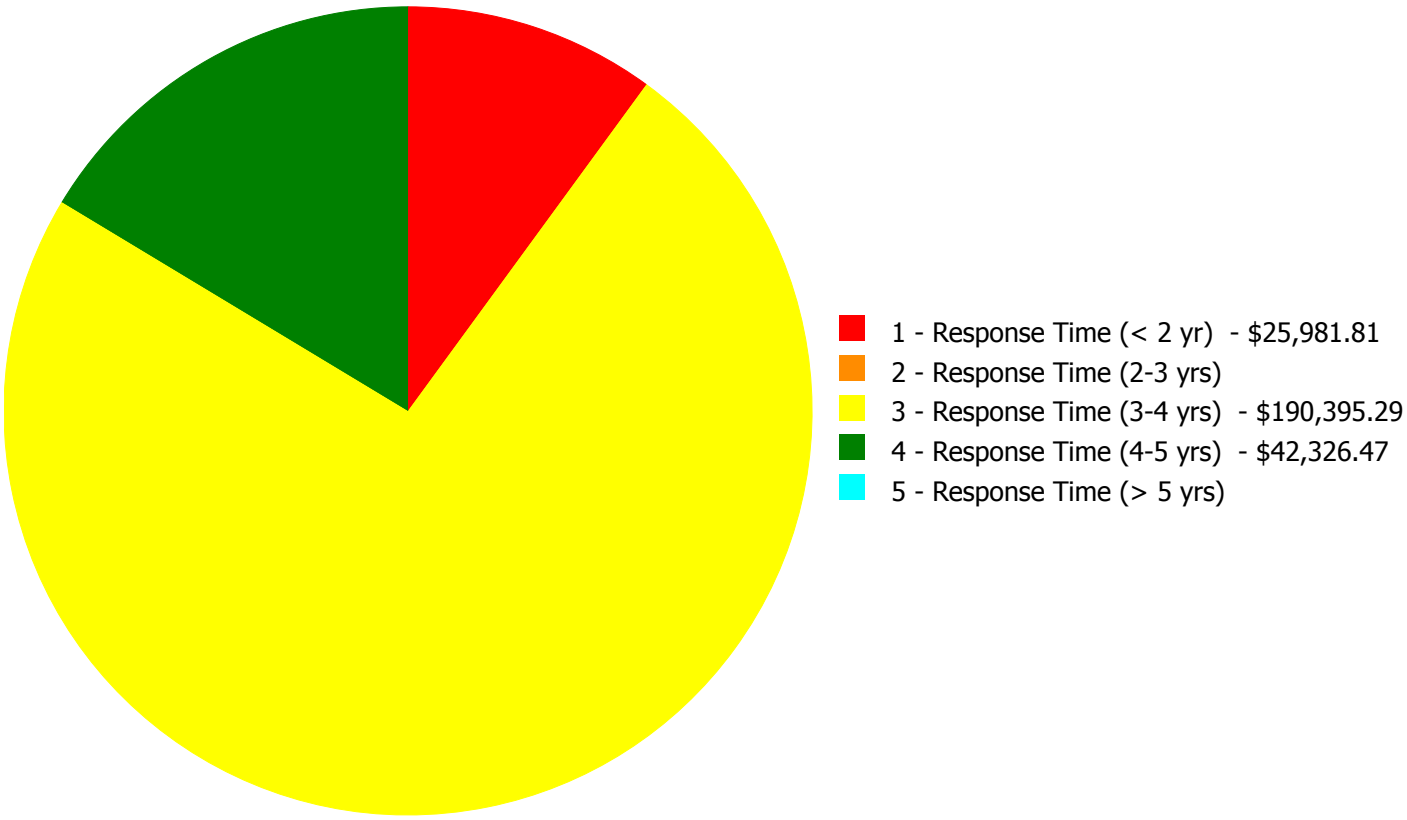
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $258,703.57

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: $258,703.57

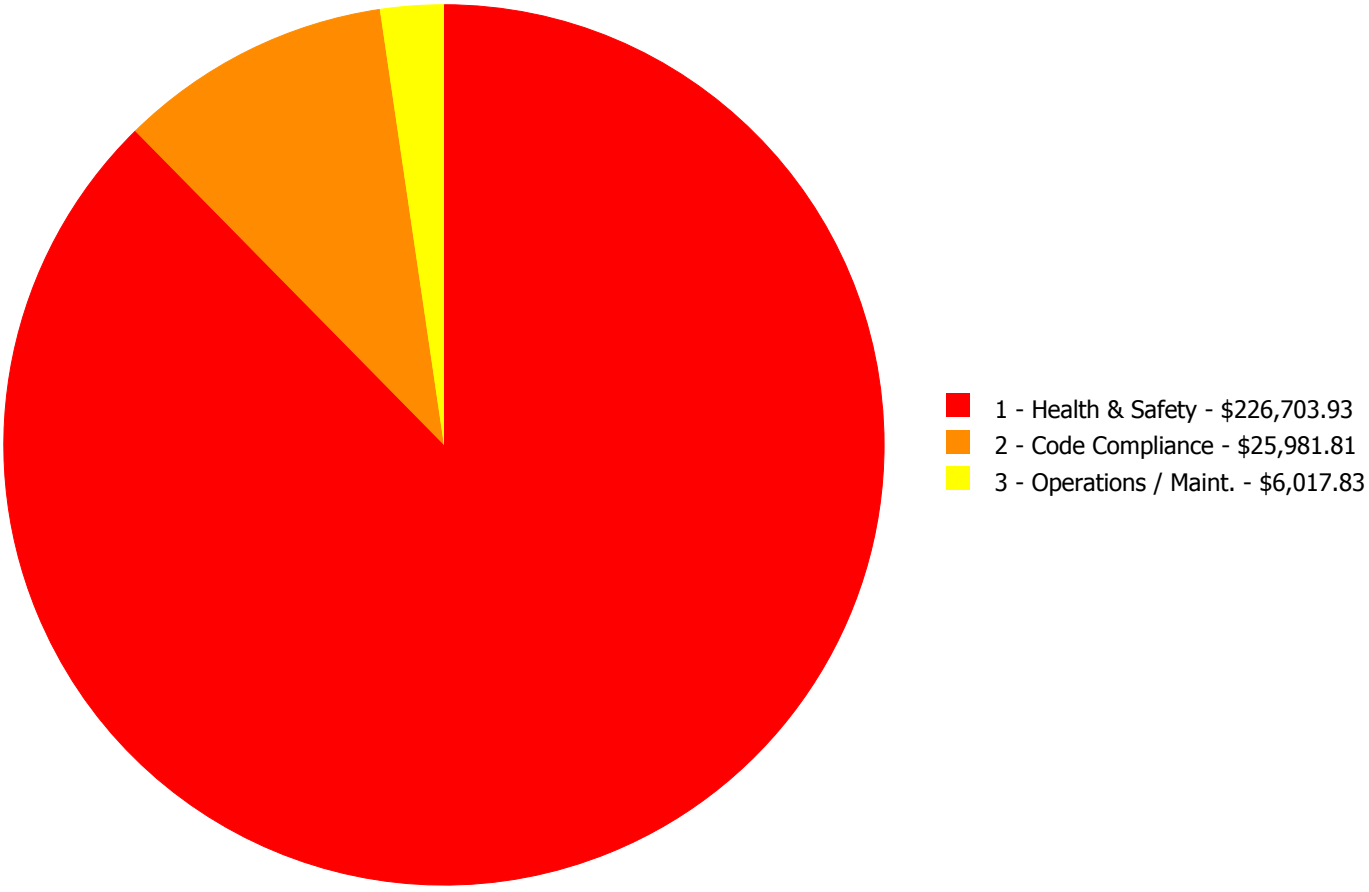
Deficiency By Priority Investment Table

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	$25,981.81	$0.00	$6,017.83	$0.00	$0.00	$31,999.64
G4020	Site Lighting	$0.00	$0.00	$0.00	$42,326.47	$0.00	$42,326.47
G4030	Site Communications & Security	$0.00	$0.00	$184,377.46	$0.00	$0.00	$184,377.46
	Total:	$25,981.81	$0.00	$190,395.29	$42,326.47	$0.00	$258,703.57

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: $258,703.57

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: G2030 - Pedestrian Paving

Location: Entrance

Distress: Accessibility

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to a 48" rise - per LF of ramp - figure 1 LF per inch of rise

Qty: 20.00

Unit of Measure: L.F.

Estimate: $25,981.81

Assessor Name: Craig Anding

Date Created: 10/30/2015

Notes: Install accessible ramp on at least one entrance

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

System: G2030 - Pedestrian Paving

Location: Ext. steps

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 370.00

Unit of Measure: L.F.

Estimate: $6,017.83

Assessor Name: Craig Anding

Date Created: 11/02/2015

Notes: Re-point exterior public access stairs – failing

System: G4030 - Site Communications & Security

Location: Building Perimeter

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Video Surveillance System

Qty: 10.00

Unit of Measure: Ea.

Estimate: $184,377.46

Assessor Name: Craig Anding

Date Created: 12/21/2015

Notes: Provide additional outdoor surveillance CCTV cameras for a complete coverage of the school building perimeter. Approximate 10

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

System: G4020 - Site Lighting

Location: Exit Doors

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add site lighting fixtures

Qty: 10.00

Unit of Measure: Ea.

Estimate: $42,326.47

Assessor Name: Craig Anding

Date Created: 12/21/2015

Notes: Additional lighting fixtures are required at each exterior exit door. Approximate 10

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