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.

Kirkbride School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	1501 S. 7Th St.	Enrollment	554
	Philadelphia, Pa 19147	Grade Range	'00-08'
Phone/Fax	215-952-6214 / 215-952-6253	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Kirkbride	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	**35.47%**	**$10,309,506**	**$29,063,320**
Building	35.67 %	$10,271,538	$28,799,363
Grounds	14.38 %	$37,968	$263,957

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$611,432
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$2,103,870
Windows (Shows functionality of exterior windows)	00.00 %	$0	$1,026,570
Exterior Doors (Shows condition of exterior doors)	08.45 %	$6,987	$82,650
Interior Doors (Classroom doors)	131.15 %	$262,382	$200,070
Interior Walls (Paint and Finishes)	08.49 %	$81,387	$958,170
Plumbing Fixtures	17.43 %	$134,343	$770,640
Boilers	71.15 %	$757,191	$1,064,190
Chillers/Cooling Towers	48.34 %	$674,495	$1,395,360
Radiators/Unit Ventilators/HVAC	27.25 %	$667,785	$2,450,430
Heating/Cooling Controls	158.90 %	$1,222,769	$769,500
Electrical Service and Distribution	161.23 %	$891,459	$552,900
Lighting	36.62 %	$723,978	$1,976,760
Communications and Security (Cameras, Pa System and Fire Alarm)	48.71 %	$360,660	$740,430

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

S258001;Kirkbride

Final

Site Assessment Report

January 31, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	80,000
Year Built:	1925
Last Renovation:	
Replacement Value:	$29,063,320
Repair Cost:	$10,309,506.43
Total FCI:	35.47 %
Total RSLI:	66.80 %

Description:

Facility Assessment

August 27th, 2015

School District of Philadelphia

Eliza Butler Kirkbride Elementary School

1501 S 7th Street

Philadelphia, PA 19147

57,000 SF / 636 Students / LN 01

GENERAL

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

The 4 story, 57,000 square foot building was originally constructed in 1925. The building has a multi-level basement.

ARCHITECHURAL/STRUCTURAL SYSTEMS

The building typically rests on concrete foundations and bearing walls that are not showing signs of settlement damage. The main structure typically consists of cast-in-place concrete columns, beams, and one way ribbed slab. The main roof structure consists of concrete one-way slab supported by main structural frame. Main roofing is built up application in good condition. The previous rooftop gym/play area has been abandoned and should be restored to usable space as no other outdoor areas are available. The building envelope is typically masonry and concrete with face brick in good condition. Elevations are enhanced with decorative stonework around entrances and windows. The windows were replaced in 2011 with extruded aluminum, double hung sliding windows with insect/security screens in very good condition. Exterior doors are typically hollow metal in good condition. Public access doors have granite stoops and stairs that are in need of repair and re-pointing while service entrances have concrete stoops and stairs. The building is not accessible per ADA requirements due to first floor grade separation with no access ramp.

Partition walls are plastered ceramic hollow blocks in good condition. Interior doors are generally wood frame and rail and stile wood doors with glazing and transoms in fair condition and beyond service life. Doors leading to exit stairways are hollow metal frame and doors in good condition. Most interior doors do not have lever type handles. Fittings include: toilet accessories in good condition; a combination of composite plastic, wood, and marble toilet partitions in fair condition with most being beyond service life; 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 fair condition. Stair railings are cast iron balusters and wood railing in good condition.

The interior wall finishes include: painted plaster throughout with marble wainscot in the entry stairway in good condition; ceramic tile wainscot in toilets in good condition; and glazed brick wainscot in gym, basement toilets, fire towers, and kitchen in good condition. Paint is generally in good condition with small damaged areas throughout building due to water intrusion. Kindergarten toilets have FRP covering all walls. Flooring includes patterned or bare concrete in stairways, corridors, toilets, storage, and basement service areas in good condition; hardwood in most classrooms, gym, and office areas in good condition; marble and terrazzo tile in entry in good condition; vinyl in once classroom and two offices in fair condition; and carpet in one office in fair condition. Ceiling finishes include: suspended acoustic tile system in classrooms, corridors, cafeteria, and office areas in varying condition with some new and some beyond service life and in need of replacement; and painted plaster or structural concrete in toilets, stairways, gym, and basement areas in fair condition with some water damaged areas needing repair.

The building has no elevator and is not accessible.

Commercial and Institutional equipment includes: gym equipment in fair to poor condition and beyond service life. Other equipment includes: food service equipment in good condition.

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

MECHANICAL SYSTEMS

Plumbing fixtures throughout the building are of various ages, and some appear to be original 1926 vintage. Individual toilet rooms have floor mounted water closets with exposed flush valves, while group toilets have wall mounted water closets with push button valves in pipe chases. Wall mounted urinals have push button operated flush valves in pipe chases. Approximately 25% of flush valves do not function properly and should be replaced. Toilet room lavatories have both mixing and non-mixing faucets, with momentary action valves. The gang toilet rooms in the basement do not have enough lavatories, for example the girls' toilet has 12 water closets and only 1 lavatory. Ten new lavatories should be installed in toilet rooms throughout the building, 5 should be replaced due to rust stains.

The school cafeteria has a commercial twin basin, two faucet, and stainless steel, floor standing sink without disposal, grease trap, or sanitization chemical injection. The basement faculty lunch room and the art room have residential, stainless steel, single and twin basin (respectively) sinks. Cleaning closets on all floors have cast iron service sinks with integral backsplash and traps, without stainless steel rim, and with short neck faucets with vacuum breakers. Sinks are in fair condition and will last at least 10 more years.

Vitreous china, stainless steel, and cast iron drinking fountains are located in hallways throughout the building. They are non-accessible without coolers. There was a rooftop gym fountain that has been removed and should be replaced to restore functionality to that area of the building. All

fountains should be replaced due to age and lack of accessibility.

Domestic water distribution plumbing is copper with soldered connections. Visible areas of pipe overall are in fair condition with no reported problems and can be expected to last 10 – 15 more years. There is a domestic water pressure booster system including a pair of 3 HP water pumps. One pump leaks, and the other does not run at all. There is no storage tank. Both pumps should be removed and replaced with a packaged system including a pressurized hydro-pneumatic storage tank. Water enters the building in the basement storage room on the south side of the building through a 4 inch line, a 4 inch water meter with 4 inch bypass, and a 4 inch double backflow preventer with a 2 inch bypass also with backflow preventer. There is a double backflow preventer on the connection to the water softener for the boiler. Water is heated by a 75 gallon, vertical tank, gas burning, Bradford White water heater manufactured in 2012. Gas service for water heating and cooking enters the basement along Dickinson St. through a 1 inch line. It is in good condition and can be expected to last at 10 more years. There is a 1/6 HP circulation pump, and it works well since hot water was available in lavatories upstairs instantly.

Sanitary waste pipes are threaded galvanized steel, hub and spigot cast iron, and hubless cast iron with banded couplings. The basement drinking fountain floods occasionally due to sewer backups. Due to age, reports of problems from the building staff, and noticeable slow drains during the inspection, the waste piping should be inspected and repaired where needed. The building does not have a sewage ejector.

Rain water drainage are installed in pipe chases inside the building. Pipes are galvanized steel and in fair condition. There were no problems reported with rain water drain pipes leaking. Rain water drain system should last 10 to 15 more years without need for replacement. There is a floor sump in the boiler room fed by 4 floor drains with a single pump. A second pump should be added for redundancy.

Classrooms were originally heated primarily with forced air from a basement air handler via built in ducts and offices, hallways, etc. by steam radiators. Presently, radiators are the only heat system.

Heat generation is provided by 2 Weil McLain, 23 section, cast iron, 4,015 MBH (120 HP) capacity steam boilers. They were installed in basement boiler room in 1977. They are equipped with Power Flame oil burners manufactured in 2005. There is no condensate collection tank. The feedwater tank has 2 pumps, and they both leak. The exhaust chimneys have constant draft dampers, and both dampers are broken. There are two oil pumps with an 8,000 gallon tank. Both oil pumps run. The boiler room has electrically operated louvers for outside makeup air, but they only function manually. In all, the boiler system is in poor condition and should be completely replaced.

There is no central cooling generating equipment. The building has 8 window air-conditioners. Total installed capacity is approximately 16 tons. They are old, inefficient, and inadequate. A 140 ton capacity system should be installed to cool the entire building.

The original air handler is still in the basement. The primary heat coil section is 12 feet wide and 9 feet tall. The fan motor is 20 HP, and the air washer pump motor is 10 HP. Estimated air flow capacity is 56,000 CFM. The building engineer stated he never ran it due to environmental problems. The air handler is obsolete and should be replaced to restore ventilation to the classrooms and including a cooling coil allow for central air-conditioning. The air handler supplies the west side of the building directly through sheet metal ducts and the east side through concrete plenum below the basement floor. Vertical, plaster lined, clay block ducts inside the walls lead from the basement to the classrooms and hallways. Most classrooms have disposable air filters over the duct outlets. The basement metal ducts are uninsulated and should be replaced with the air handler for air-conditioning. Exhaust ducts from the classrooms lead to the attic plenum and then discharge through gravity vents or recirculate to the basement. The gravity vents are damaged and the janitorial assistant stated they leaked when it rained and the wind blew, so they should be replaced.

There is a residential gas range in the basement faculty lunch room without an exhaust hood which violates building code and should be removed. The school cafeteria has a gas burning convection oven with exhaust hood and fire extinguisher system.

Steam and condensate pipe is threaded steel. Its age is unknown, but it is in fair condition with no reported failures. The building engineer said there is no history of steam trap maintenance. Steam traps should be surveyed and repaired as needed.

Radiators are a mix of original cast iron units and a few finned tube replacements. Very few radiators have guards. They are equipped with thermostatic steam traps and manual or pneumatic operated steam flow control valves. They have surpassed their expected lifespan, but they are in fair condition and can be expected to last 10 more years. There was radiator for heating the outside front steps located beside the gym accessible through a small door on the north wall, but the radiator has been removed. A new one should be installed to eliminate icing on the stairs outside.

The building is equipped with pneumatic control valves for the steam radiators. The engineer does not operate the pneumatic control system. The system is obsolete and should be replaced with digital controls when other HVAC upgrades are accomplished. The air compressor for the system is located in the basement boiler room, and the engineer stated it runs but he does not use it.

The building has neither standpipes nor sprinklers. A sprinkler system should be installed for fire protection including a fire pump if city fire water

supply necessitates it.

ELECTRICAL SYSTEMS

A pole mounted transformer and overhead secondary conductors on Dickinson Street serves this school. The electrical room is located in the basement approximate on the NE corner of the building. The electrical room houses the utility main disconnect switch, utility metering 222MU 16554 and Penn Panel & Box Co 600A 120/240V distribution section. Electrical service was upgraded in 2000. The existing service has no extra capacity for expansion or new Heating, Ventilation, Air Conditioning (HVAC) system. The electrical service entrance needs to be upgraded, using the present utility pole. The new service will be 480V/277V, 3 phase power, approximate 1000 Amperes and will be located in the vicinity of the existing electrical service. The new electrical service would feed a 480V Motor Control Center (MCC) and HVAC (Heating, Ventilation and Air Conditioning) equipment, and a 480V 3 phase to 120V/208V 3 phase 225 KVA step-down transformer to feed receptacles, lighting and other smaller loads.

In each floor, there are original 120/240V panel-boards for lighting and receptacles and new ones for window type air conditioning units. The original panel-boards and associated wiring have exceeded the end of their useful life and the new panel-boards are not sized to absorb additional HVAC loads. They need to be replaced. There are (2) 50KVA and (1) 37.5KVA phase converters from 240V to 120/208V which normally feeds newest mechanical equipment. Panel-board's doors at corridors are not locked and represent a potential hazard for students. As a safety issue all panel-boards at corridor or in areas where students are present must be provided with lockable devices.

There number of receptacles in classrooms varies, approximately in 50% 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 are illuminated with recessed mounted fluorescent fixtures. The stairwells are illuminated with pendant mounted fluorescent fixtures. The mechanical rooms are illuminated, surface mounted fluorescent fixtures. Approximately 70% of the fixtures are with T-12 fluorescent lamps. 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.

The present telephone system is adequate.

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 clocks system are old and difficult to find parts and repair. Replace clock system with wireless, battery operated, clock system.

There is not television system.

The school is provided with CCTV security system. CCTV cameras are located in the basement, first and second floor. The third floor is not provided with CCTV cameras. Provide CCTV cameras to the third floor for a complete coverage of the school interior.

The school is not provided with emergency power. As a safety measure provide 60KW, outdoor, diesel generator

There is adequate UPS in the IT room.

There is emergency lighting fixtures at the basement only. Exit signs are located at each exit door and are not provided with battery backup. Connect exit signs and selected lighting fixtures to the school emergency power 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.

GROUNDS SYSTEMS

The site surrounds the building on all four sides which is set back from the street. 1st floor court yard is concrete paving in good condition. Parking for staff vehicles must be in fenced yard area due to security concerns and is concrete paving in fair condition on the east side and is accessible via Dickinson St. Metal fence around courtyard and chain link fence surrounding parking area is in good condition but access gates are needed to secure site. Landscaping is limited to a few mature trees along 7th St.

Accessibility: 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. There were no indication of additional fixtures are needed.

CCTV cameras around the building perimeter and playground are provided.

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

RECOMMENDATIONS

- Restore rooftop gym / play area to useable space
- Install accessible door hardware on at least one entrance door
- Replace interior doors and frames – beyond service life
- Replace toilet partitions – beyond service life
- Install proper ID signage
- Repair and re-grout granite entryway steps and stoops
- Repair and paint interior plaster walls – damaged (10% of plaster wall area)
- Strip and paint basement and gym ceilings – beyond service life
- Replace suspended acoustic tile ceiling system – beyond service life (corridors)
- Install acoustic panels in gym for sound absorption
- Install elevator for accessibility
- Install accessible ramp on at least one entrance

- Install access gates for site security
- Replace failing flush valves, approximately 25%.
- Install 10 new lavatories due to lack of capacity and replace 5 lavatories due to stains.
- Replace 5 drinking fountains with accessible types.
- Replace failing domestic water pressure booster pumps with new packaged system including hydro-pneumatic storage tank.
- Inspect and repair sanitary waste pipe due to age, 57,000 sq. ft.
- Replace 2 boilers due to age and failing system components.
- Replace boiler feed water system due to age and leaks.
- Install 140 ton air-conditioning system for entire building.
- Replace obsolete AHU to restore ventilation and add central cooling.
- Replace rooftop gravity vents due to age and reported leaks.
- Survey and repair steam traps due to steam leaks.
- Replace obsolete pneumatic controls with DDC.
- Install fire protection sprinkler system, including fire pump if needed.
- Provide a new electrical service 480V/277V, 3 phase power, approximate 1000 Amperes and will be located in the vicinity of the existing electrical service.

- Replace the entire distribution system with new panels and new wiring/conduits. Approximate (12) 208/120V panel boards.

- Provide (2)25FT of surface raceways with 24” receptacles on center and two-duplex wall mount receptacles. Approximate 240

- Replace 70% of the existing lighting fixtures with up/down, recessed fluorescent fixtures with T8 lamps. Approximate 530 fixtures

- Replace old fire alarm system with addressable type with audio/visual devices at corridors and classrooms. Approximate 76 devices

- Replace clock and bell system with wireless, battery operated, atomic clock system. Approximate 53

- Provide CCTV cameras to the third floor for a complete coverage of the school interior. Approximate 6 CCTV cameras

- Provide 60KW, outdoor, diesel powered generator.

- Connect exit signs and selected lighting fixtures to the 60KW outdoor emergency power system. Approximate 120

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

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 2 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S258001		

Site Condition Summary

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

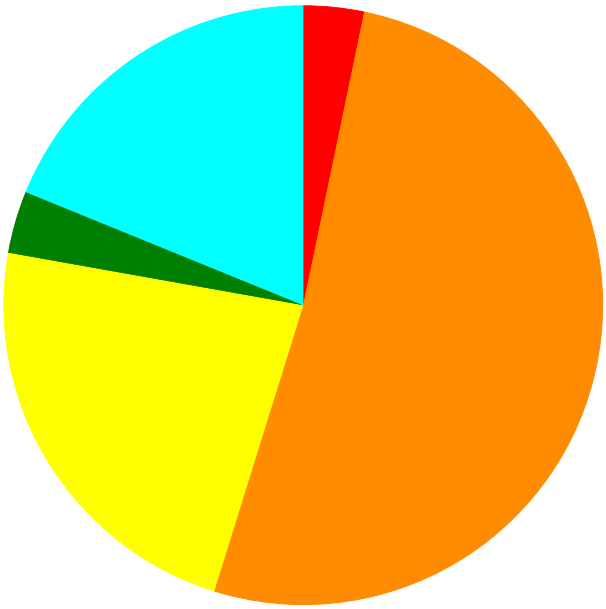
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	33.68 %	$1,707,993.00
B20 - Exterior Enclosure	54.52 %	0.22 %	$6,987.28
B30 - Roofing	50.00 %	0.00 %	$0.00
C10 - Interior Construction	55.37 %	25.15 %	$351,850.93
C20 - Stairs	37.00 %	2.79 %	$2,241.79
C30 - Interior Finishes	84.72 %	7.73 %	$236,424.53
D10 - Conveying	105.71 %	287.82 %	$1,251,764.48
D20 - Plumbing	52.44 %	39.91 %	$464,504.19
D30 - HVAC	80.31 %	52.40 %	$3,322,239.99
D40 - Fire Protection	105.71 %	177.49 %	$815,410.46
D50 - Electrical	110.11 %	63.04 %	$2,112,121.58
E10 - Equipment	73.84 %	0.00 %	$0.00
E20 - Furnishings	32.50 %	0.00 %	$0.00
G20 - Site Improvements	42.35 %	20.21 %	$37,968.20
G40 - Site Electrical Utilities	0.00 %	0.00 %	$0.00
Totals:	**66.80 %**	**35.47 %**	**$10,309,506.43**

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)
B258001;Kirkbride	57,000	35.67	$310,645.24	$5,313,674.43	$2,358,964.41	$346,011.30	$1,942,242.85
G258001;Grounds	13,100	14.38	$25,981.81	$0.00	$11,986.39	$0.00	$0.00
Total:		**35.47**	**$336,627.05**	**$5,313,674.43**	**$2,370,950.80**	**$346,011.30**	**$1,942,242.85**

Deficiencies By Priority



1 - Response Time (< 2 yr) - $336,627.05
2 - Response Time (2-3 yrs) - $5,313,674.43
3 - Response Time (3-4 yrs) - $2,370,950.80
4 - Response Time (4-5 yrs) - $346,011.30
5 - Response Time (> 5 yrs) - $1,942,242.85

Budget Estimate Total: $10,309,506.43

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):	57,000
Year Built:	1926
Last Renovation:	
Replacement Value:	$28,799,363
Repair Cost:	$10,271,538.23
Total FCI:	35.67 %
Total RSLI:	67.13 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B258001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S258001		

Condition Summary

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

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	33.68 %	$1,707,993.00
B20 - Exterior Enclosure	54.52 %	0.22 %	$6,987.28
B30 - Roofing	50.00 %	0.00 %	$0.00
C10 - Interior Construction	55.37 %	25.15 %	$351,850.93
C20 - Stairs	37.00 %	2.79 %	$2,241.79
C30 - Interior Finishes	84.72 %	7.73 %	$236,424.53
D10 - Conveying	105.71 %	287.82 %	$1,251,764.48
D20 - Plumbing	52.44 %	39.91 %	$464,504.19
D30 - HVAC	80.31 %	52.40 %	$3,322,239.99
D40 - Fire Protection	105.71 %	177.49 %	$815,410.46
D50 - Electrical	110.11 %	63.04 %	$2,112,121.58
E10 - Equipment	73.84 %	0.00 %	$0.00
E20 - Furnishings	32.50 %	0.00 %	$0.00
Totals:	**67.13 %**	**35.67 %**	**$10,271,538.23**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$18.40	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$1,048,800
A1030	Slab on Grade	$7.73	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$440,610
A2010	Basement Excavation	$6.55	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$373,350
A2020	Basement Walls	$12.70	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$723,900
B1010	Floor Construction	$75.10	S.F.	57,000	100	1925	2025	2052	37.00 %	39.90 %	37		$1,707,993.00	$4,280,700
B1020	Roof Construction	$13.88	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$791,160
B2010	Exterior Walls	$36.91	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$2,103,870
B2020	Exterior Windows	$18.01	S.F.	57,000	40	2011	2051		90.00 %	0.00 %	36			$1,026,570
B2030	Exterior Doors	$1.45	S.F.	57,000	25	2005	2030		60.00 %	8.45 %	15		$6,987.28	$82,650
B3010105	Built-Up	$37.76	S.F.	16,102	20	2005	2025		50.00 %	0.00 %	10			$608,012
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.	57,000	20	2005	2025		50.00 %	0.00 %	10			$3,420
C1010	Partitions	$17.91	S.F.	57,000	100	1925	2025	2052	37.00 %	0.00 %	37			$1,020,870
C1020	Interior Doors	$3.51	S.F.	57,000	40	1975	2015	2057	105.00 %	131.15 %	42		$262,382.29	$200,070
C1030	Fittings	$3.12	S.F.	57,000	40	1975	2015	2057	105.00 %	50.31 %	42		$89,468.64	$177,840
C2010	Stair Construction	$1.41	S.F.	57,000	100	1925	2025	2052	37.00 %	2.79 %	37		$2,241.79	$80,370

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	$15.96	S.F.	57,000	10	2011	2021		60.00 %	8.95 %	6		$81,387.22	$909,720
C3010231	Vinyl Wall Covering	$0.00	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$0.85	S.F.	57,000	30	1988	2018	2028	43.33 %	0.00 %	13			$48,450
C3020411	Carpet	$7.30	S.F.	570	10	2011	2021		60.00 %	0.00 %	6			$4,161
C3020412	Terrazzo & Tile	$75.52	S.F.	570	50	1925	1975	2035	40.00 %	0.00 %	20			$43,046
C3020413	Vinyl Flooring	$9.68	S.F.	1,710	20	2011	2031		80.00 %	0.00 %	16			$16,553
C3020414	Wood Flooring	$22.27	S.F.	37,050	25	2011	2036		84.00 %	0.00 %	21			$825,104
C3020415	Concrete Floor Finishes	$0.97	S.F.	17,100	50	1988	2038		46.00 %	0.00 %	23			$16,587
C3030	Ceiling Finishes	$20.97	S.F.	57,000	25	1988	2013	2042	108.00 %	12.97 %	27		$155,037.31	$1,195,290
D1010	Elevators and Lifts	$7.63	S.F.	57,000	35			2052	105.71 %	287.82 %	37		$1,251,764.48	$434,910
D2010	Plumbing Fixtures	$13.52	S.F.	57,000	35	1926	1961	2030	42.86 %	17.43 %	15		$134,342.52	$770,640
D2020	Domestic Water Distribution	$1.68	S.F.	57,000	25	1926	1951	2030	60.00 %	52.77 %	15		$50,533.86	$95,760
D2030	Sanitary Waste	$2.90	S.F.	57,000	25	1926	1951	2042	108.00 %	169.16 %	27		$279,627.81	$165,300
D2040	Rain Water Drainage	$2.32	S.F.	57,000	30	1926	1956	2025	33.33 %	0.00 %	10			$132,240
D3020	Heat Generating Systems	$18.67	S.F.	57,000	35	1926	1961	2042	77.14 %	71.15 %	27		$757,191.06	$1,064,190
D3030	Cooling Generating Systems	$24.48	S.F.	57,000	30			2052	123.33 %	48.34 %	37		$674,494.53	$1,395,360
D3040	Distribution Systems	$42.99	S.F.	57,000	25	1926	1951	2028	52.00 %	27.25 %	13		$667,785.21	$2,450,430
D3050	Terminal & Package Units	$11.60	S.F.	57,000	20	1926	1946	2028	65.00 %	0.00 %	13			$661,200
D3060	Controls & Instrumentation	$13.50	S.F.	57,000	20	1926	1946	2037	110.00 %	158.90 %	22		$1,222,769.19	$769,500
D4010	Sprinklers	$7.05	S.F.	57,000	35			2052	105.71 %	202.91 %	37		$815,410.46	$401,850
D4020	Standpipes	$1.01	S.F.	57,000	35			2052	105.71 %	0.00 %	37			$57,570
D5010	Electrical Service/Distribution	$9.70	S.F.	57,000	30	2000	2030	2047	106.67 %	161.23 %	32		$891,458.73	$552,900
D5020	Lighting and Branch Wiring	$34.68	S.F.	57,000	20	1926	1946	2037	110.00 %	36.62 %	22		$723,978.14	$1,976,760
D5030	Communications and Security	$12.99	S.F.	57,000	15	1926	1941	2032	113.33 %	48.71 %	17		$360,660.24	$740,430
D5090	Other Electrical Systems	$1.41	S.F.	57,000	30	1926	1956	2047	106.67 %	169.25 %	32		$136,024.47	$80,370
E1020	Institutional Equipment	$4.82	S.F.	57,000	35	1972	2007	2052	105.71 %	0.00 %	37			$274,740
E1090	Other Equipment	$11.10	S.F.	57,000	35	2001	2036		60.00 %	0.00 %	21			$632,700
E2010	Fixed Furnishings	$2.13	S.F.	57,000	40	1988	2028		32.50 %	0.00 %	13			$121,410
								Total	**67.13 %**	**35.67 %**			**$10,271,538.23**	**$28,799,363**

System Notes

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

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

Note: 95% - Paint & Coverings
5% - Wall tile (1% ceramic, 4% glazed brick)

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

Note: 1% - Carpet
1% - Terrazzo & Tile (terrazzo)
3% - Vinyl Flooring (1.5% VAT & VCT)
65% - Wood Flooring
30% - Concrete Floor Finishes

System: D5010 - Electrical Service/Distribution

Note: Phase converters (2) 50KVA and (1)37.5KVA

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:	**$10,271,538**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,200,344**	**$0**	**$0**	**$0**	**$1,099,376**	**$12,571,258**
*** 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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$1,707,993	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,707,993**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$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	$898,829	**$898,829**
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	$5,056	**$5,056**
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**

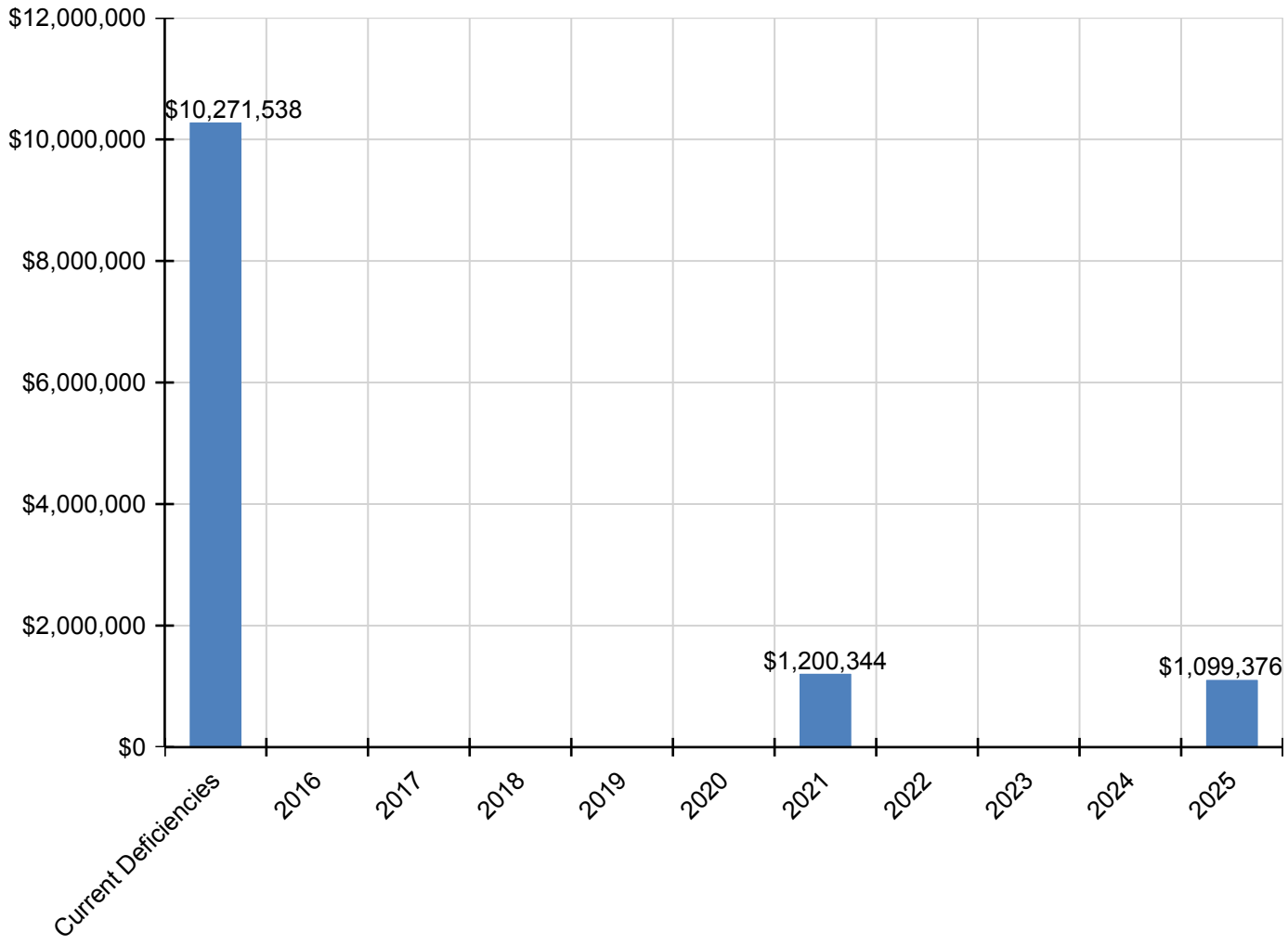
C1020 - Interior Doors	$262,382	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$262,382**
C1030 - Fittings	$89,469	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$89,469**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$2,242	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,242**
C30 - Interior Finishes	$0	$0	$0	$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	$81,387	$0	$0	$0	$0	$0	$1,194,879	$0	$0	$0	$0	**$1,276,266**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$5,465	$0	$0	$0	$0	**$5,465**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$155,037	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$155,037**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$1,251,764	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,251,764**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$134,343	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$134,343**
D2020 - Domestic Water Distribution	$50,534	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$50,534**
D2030 - Sanitary Waste	$279,628	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$279,628**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$195,491	**$195,491**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$757,191	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$757,191**
D3030 - Cooling Generating Systems	$674,495	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$674,495**
D3040 - Distribution Systems	$667,785	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$667,785**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,222,769	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,222,769**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$815,410	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$815,410**
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	$891,459	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$891,459**
D5020 - Lighting and Branch Wiring	$723,978	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$723,978**
D5030 - Communications and Security	$360,660	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$360,660**
D5090 - Other Electrical Systems	$136,024	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$136,024**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

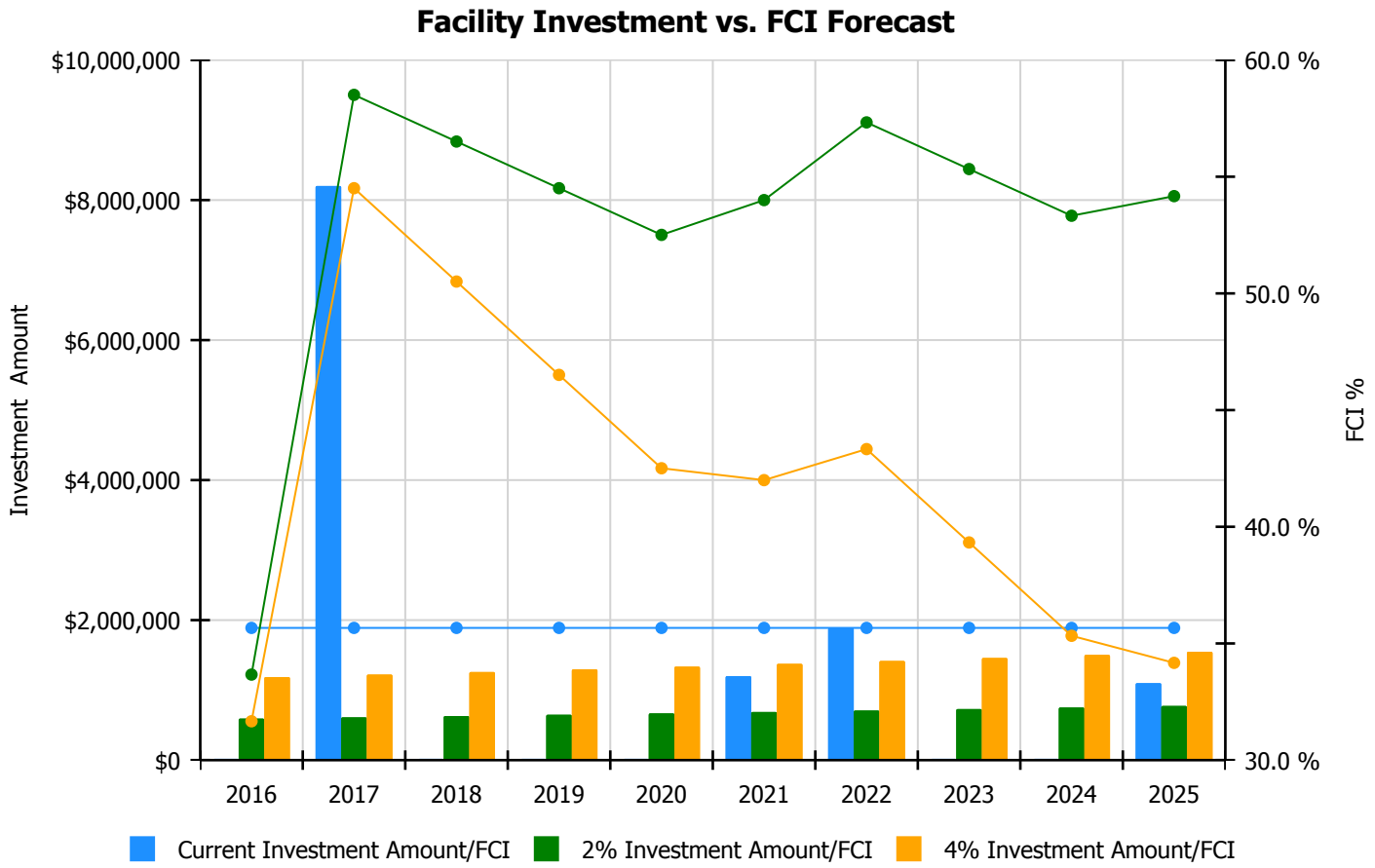
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

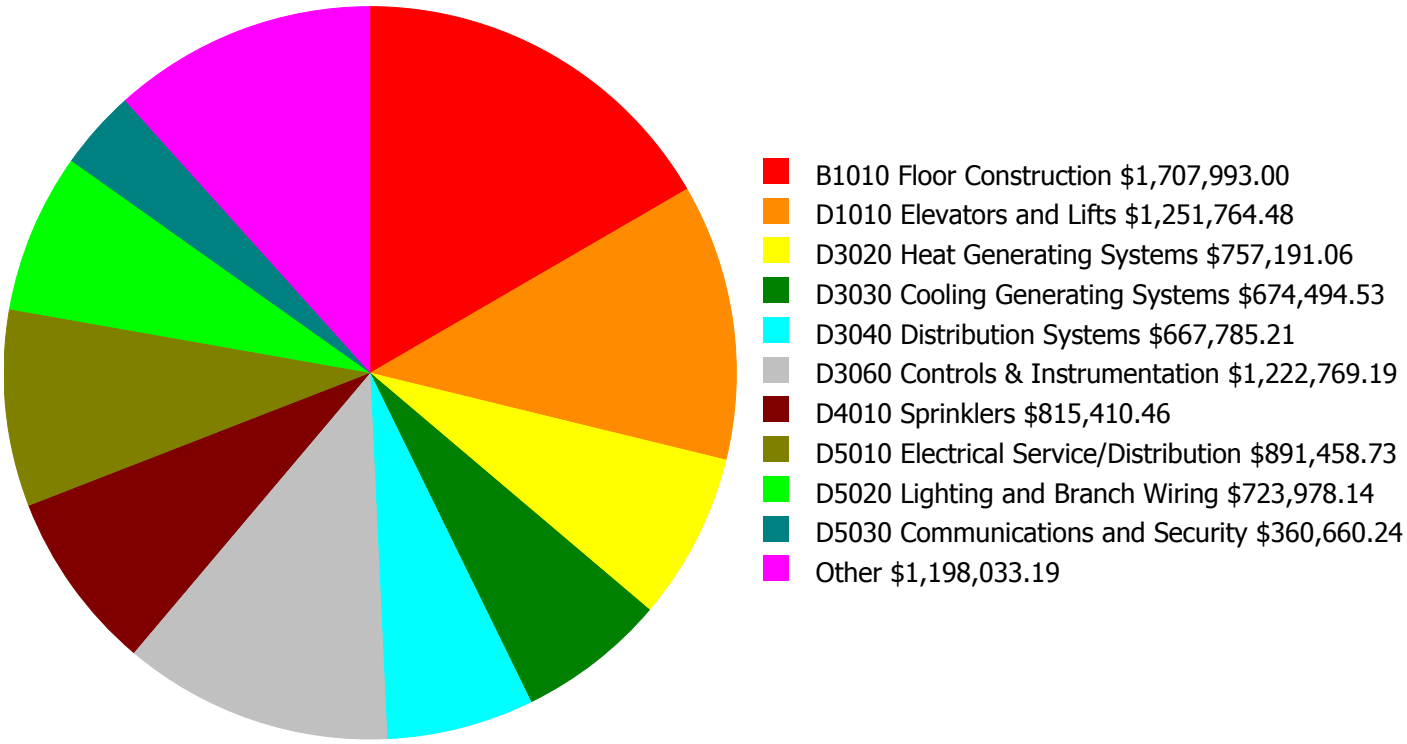
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 35.67%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$593,267.00	33.67 %	$1,186,534.00	31.67 %
2017	$8,201,057	$611,065.00	58.51 %	$1,222,130.00	54.51 %
2018	$0	$629,397.00	56.51 %	$1,258,794.00	50.51 %
2019	$0	$648,279.00	54.51 %	$1,296,557.00	46.51 %
2020	$0	$667,727.00	52.51 %	$1,335,454.00	42.51 %
2021	$1,200,344	$687,759.00	54.00 %	$1,375,518.00	42.00 %
2022	$1,887,728	$708,392.00	57.33 %	$1,416,783.00	43.33 %
2023	$0	$729,643.00	55.33 %	$1,459,287.00	39.33 %
2024	$0	$751,533.00	53.33 %	$1,503,065.00	35.33 %
2025	$1,099,376	$774,079.00	54.17 %	$1,548,157.00	34.17 %
Total:	**$12,388,505**	**$6,801,141.00**		**$13,602,279.00**	

Deficiency Summary by System

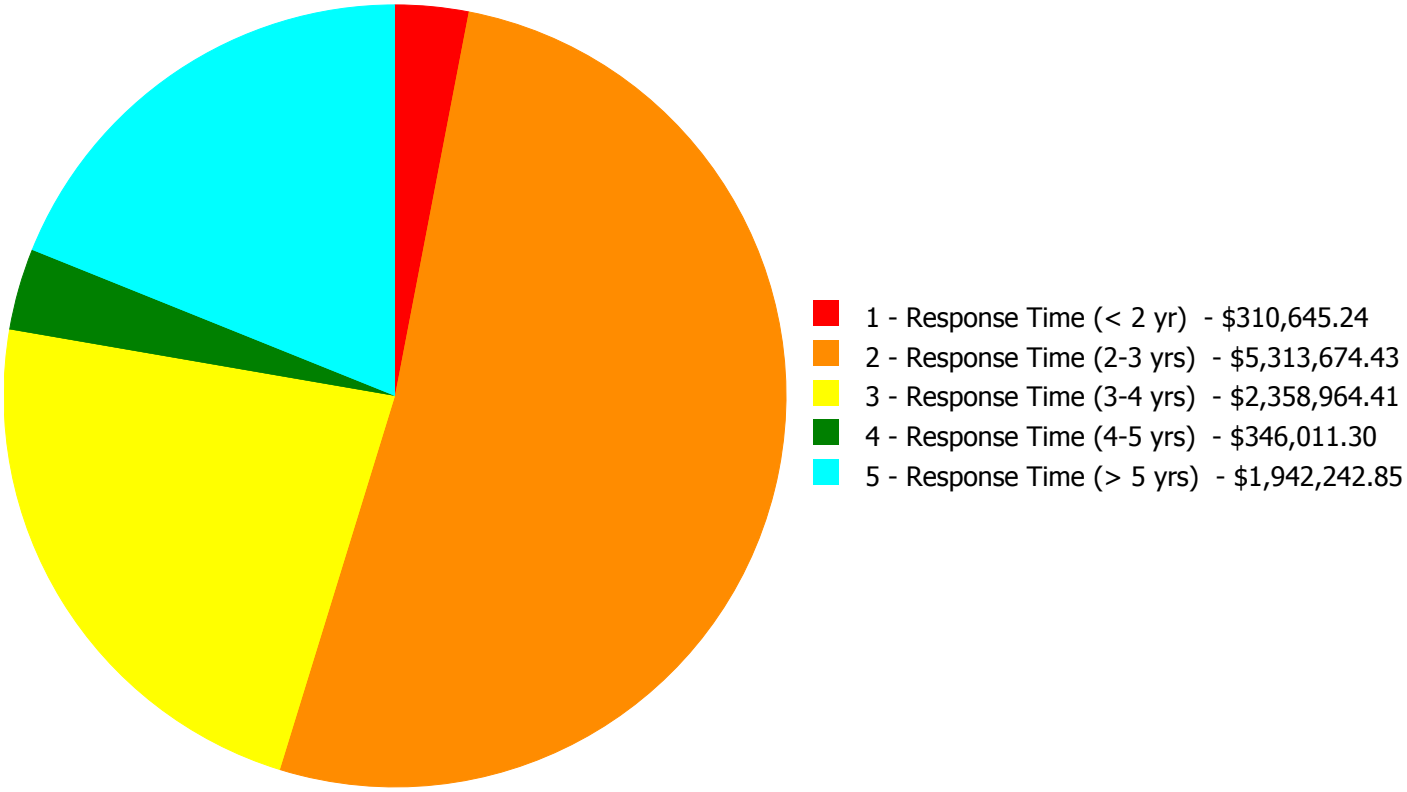
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $10,271,538.23

Deficiency Summary by Priority

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



Budget Estimate Total: $10,271,538.23

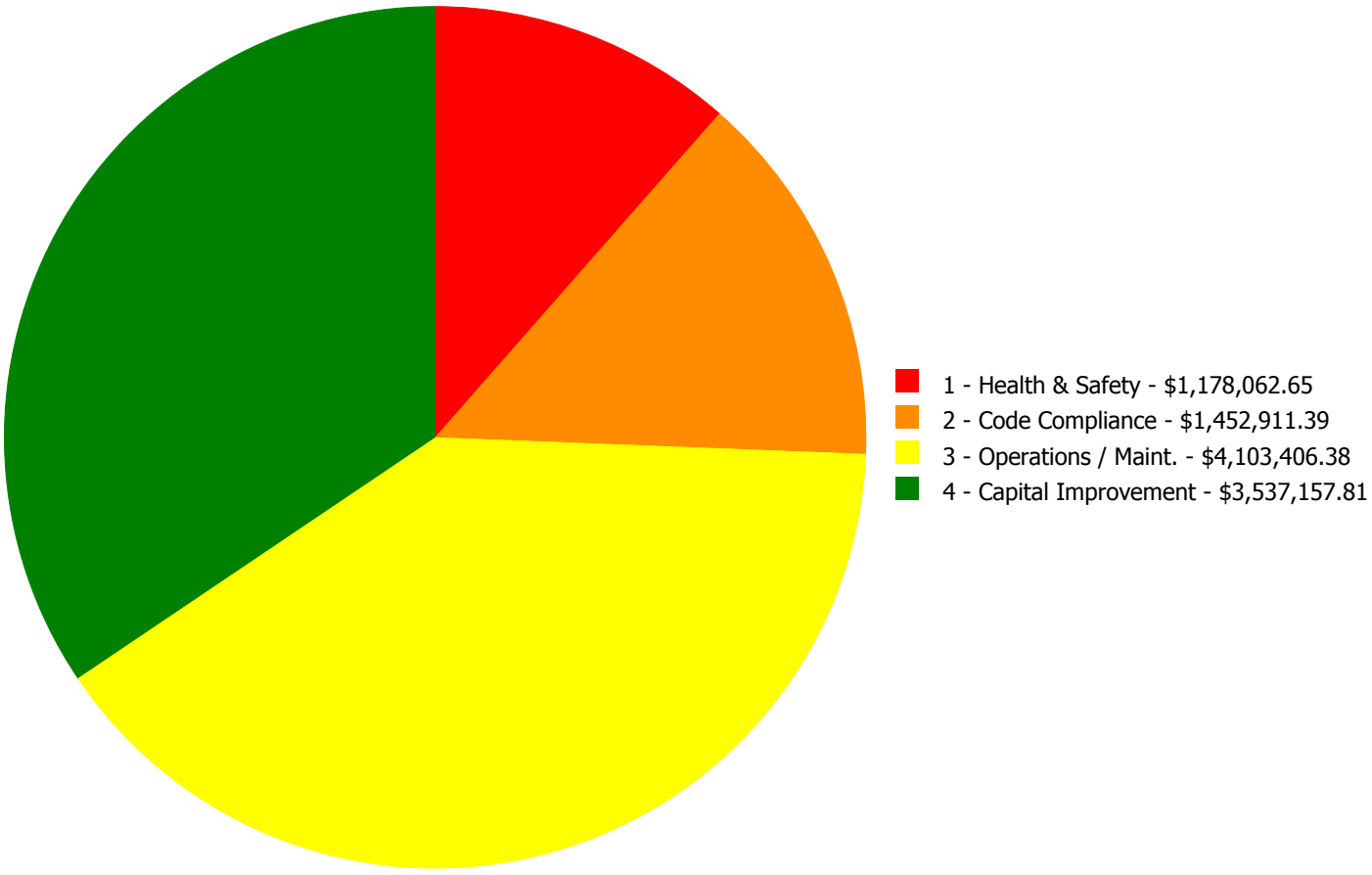
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
B1010	Floor Construction	$0.00	$0.00	$1,707,993.00	$0.00	$0.00	$1,707,993.00
B2030	Exterior Doors	$0.00	$6,987.28	$0.00	$0.00	$0.00	$6,987.28
C1020	Interior Doors	$0.00	$0.00	$0.00	$262,382.29	$0.00	$262,382.29
C1030	Fittings	$0.00	$0.00	$89,468.64	$0.00	$0.00	$89,468.64
C2010	Stair Construction	$0.00	$0.00	$0.00	$2,241.79	$0.00	$2,241.79
C3010230	Paint & Covering	$0.00	$0.00	$0.00	$81,387.22	$0.00	$81,387.22
C3030	Ceiling Finishes	$0.00	$30,449.91	$124,587.40	$0.00	$0.00	$155,037.31
D1010	Elevators and Lifts	$0.00	$1,251,764.48	$0.00	$0.00	$0.00	$1,251,764.48
D2010	Plumbing Fixtures	$13,706.16	$120,636.36	$0.00	$0.00	$0.00	$134,342.52
D2020	Domestic Water Distribution	$0.00	$50,533.86	$0.00	$0.00	$0.00	$50,533.86
D2030	Sanitary Waste	$0.00	$0.00	$279,627.81	$0.00	$0.00	$279,627.81
D3020	Heat Generating Systems	$0.00	$757,191.06	$0.00	$0.00	$0.00	$757,191.06
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$674,494.53	$674,494.53
D3040	Distribution Systems	$187,023.34	$28,424.01	$0.00	$0.00	$452,337.86	$667,785.21
D3060	Controls & Instrumentation	$0.00	$1,222,769.19	$0.00	$0.00	$0.00	$1,222,769.19
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$815,410.46	$815,410.46
D5010	Electrical Service/Distribution	$0.00	$891,458.73	$0.00	$0.00	$0.00	$891,458.73
D5020	Lighting and Branch Wiring	$109,915.74	$456,774.84	$157,287.56	$0.00	$0.00	$723,978.14
D5030	Communications and Security	$0.00	$360,660.24	$0.00	$0.00	$0.00	$360,660.24
D5090	Other Electrical Systems	$0.00	$136,024.47	$0.00	$0.00	$0.00	$136,024.47
	Total:	$310,645.24	$5,313,674.43	$2,358,964.41	$346,011.30	$1,942,242.85	$10,271,538.23

Deficiency Summary by Category

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



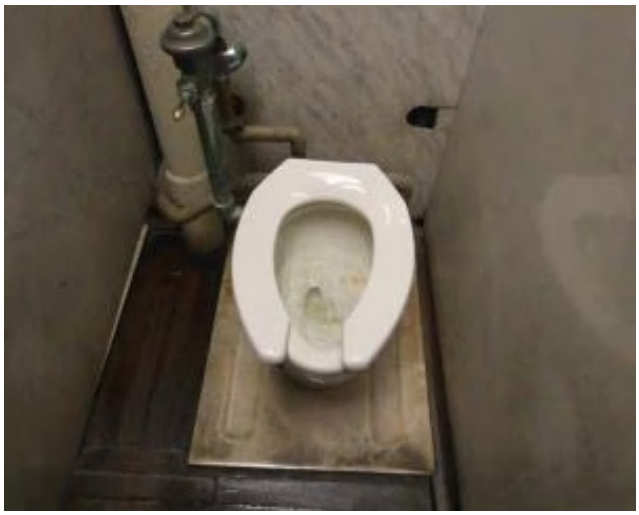
Budget Estimate Total: $10,271,538.23

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: D2010 - Plumbing Fixtures



Location: Toilet room

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace flush valves (enter qty of WC or Urinals in estimate)

Qty: 20.00

Unit of Measure: Ea.

Estimate: $13,706.16

Assessor Name: System

Date Created: 11/30/2015

Notes: Replace failing flush valves.

System: D3040 - Distribution Systems

Location: Entire building

Distress: Maintenance Required

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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

Qty: 57,000.00

Unit of Measure: S.F.

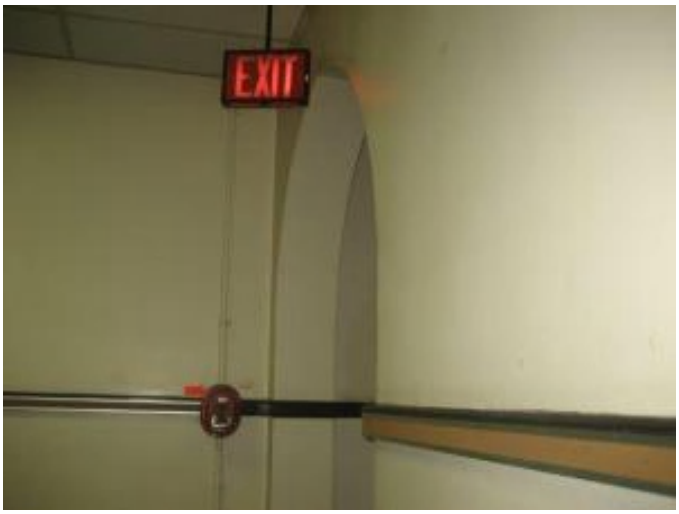
Estimate: $187,023.34

Assessor Name: System

Date Created: 11/30/2015

Notes: Survey and repair steam traps due to steam leaks.

System: D5020 - Lighting and Branch Wiring



Location: corridors and stariways

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Replace lighting fixtures

Qty: 120.00

Unit of Measure: Ea.

Estimate: $109,915.74

Assessor Name: System

Date Created: 10/14/2015

Notes: Connect exit signs and selected lighting fixtures to the 60KW outdoor emergency power system. Approximate 120

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

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: 10/23/2015

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

---

System: C3030 - Ceiling Finishes

This deficiency has no image.

Location: Gym

Distress: Inadequate

Category: 4 - Capital Improvement

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

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

Qty: 3,590.00

Unit of Measure: S.F.

Estimate: $30,449.91

Assessor Name: System

Date Created: 10/23/2015

Notes: Install acoustic panels in gym for sound absorption

System: D1010 - Elevators and Lifts

Location: TBD

Distress: Accessibility

Category: 2 - Code Compliance

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,251,764.48

Assessor Name: System

Date Created: 10/23/2015

Notes: Install elevator for accessibility

System: D2010 - Plumbing Fixtures

Location: Hallways

Distress: Accessibility

Category: 2 - Code Compliance

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

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

Qty: 4.00

Unit of Measure: Ea.

Estimate: $62,771.59

Assessor Name: System

Date Created: 11/30/2015

Notes: Replace drinking fountains with accessible types.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Remove and replace or replace lavatory - quantify accessible if required

Qty: 15.00

Unit of Measure: Ea.

Estimate: $57,864.77

Assessor Name: System

Date Created: 11/30/2015

Notes: Install 10 new lavatories due to lack of capacity and replace 5 lavatories due to stains.

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace duplex domestic booster pump set (5 HP)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $50,533.86

Assessor Name: System

Date Created: 11/30/2015

Notes: Replace failing domestic water pressure booster pumps with new packaged system including hydro-pneumatic storage tank.

System: D3020 - Heat Generating Systems

Location: Boiler room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace boiler, cast iron sectional (100 HP)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $655,796.89

Assessor Name: System

Date Created: 11/30/2015

Notes: Replace 2 boilers due to age and failing system components.

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: $101,394.17

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace feed water tank and pumps due to age and leaks.

System: D3040 - Distribution Systems

Location: Roof top

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace rooftop gravity ventilator units - select the proper type and size

Qty: 12.00

Unit of Measure: Ea.

Estimate: $28,424.01

Assessor Name: System

Date Created: 11/30/2015

Notes: Replace rooftop gravity vents due to age and reported leaks.

System: D3060 - Controls & Instrumentation

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 57,000.00

Unit of Measure: S.F.

Estimate: $1,222,769.19

Assessor Name: System

Date Created: 11/30/2015

Notes: Replace obsolete pneumatic controls with DDC.

System: D5010 - Electrical Service/Distribution

Location: Corridors

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Panelboard

Qty: 12.00

Unit of Measure: Ea.

Estimate: $539,706.19

Assessor Name: System

Date Created: 10/14/2015

Notes: Replace the entire distribution system with new panels and new wiring/conduits. Approximate (12) 208/120V panel boards.

System: D5010 - Electrical Service/Distribution

Location: Basement electrical room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: $351,752.54

Assessor Name: System

Date Created: 10/14/2015

Notes: Provide a new electrical service 480V/277V, 3 phase power, approximate 1000 Amperes and will be located in the vicinity of the existing electrical service.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add Lighting Fixtures

Qty: 530.00

Unit of Measure: Ea.

Estimate: $456,774.84

Assessor Name: System

Date Created: 10/14/2015

Notes: Replace 70% of the existing lighting fixtures with up/down, recessed fluorescent fixtures with T8 lamps. Approximate 530 fixtures

System: D5030 - Communications and Security

Location: Entire Building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Replace fire alarm system

Qty: 76.00

Unit of Measure: S.F.

Estimate: $198,770.30

Assessor Name: System

Date Created: 10/14/2015

Notes: Replace old fire alarm system with addressable type with audio/visual devices at corridors and classrooms. Approximate 76 devices

System: D5030 - Communications and Security

Location: Entire Building

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Clock System or Components

Qty: 53.00

Unit of Measure: Ea.

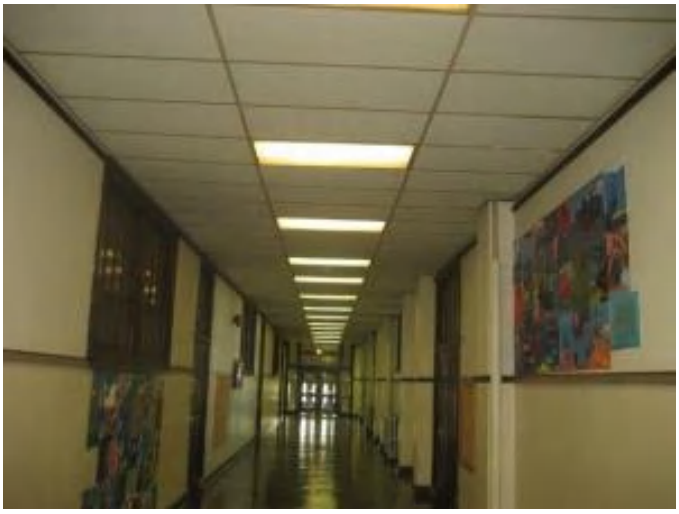
Estimate: $112,560.22

Assessor Name: System

Date Created: 10/14/2015

Notes: Replace clock and bell system with wireless, battery operated, atomic clock system. Approximate 53

System: D5030 - Communications and Security



Location: Third Floor corridor

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add/Replace Video Surveillance System

Qty: 6.00

Unit of Measure: Ea.

Estimate: $49,329.72

Assessor Name: System

Date Created: 10/14/2015

Notes: Provide CCTV cameras to the third floor for a complete coverage of the school interior. Approximate 6 CCTV cameras

System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: outdoor
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 2 - Response Time (2-3 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $114,552.17
Assessor Name: System
Date Created: 10/14/2015

Notes: Provide 60KW, outdoor, diesel powered generator.

System: D5090 - Other Electrical Systems

Location: Roof
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Provide Lightning Protection System
Qty: 1.00
Unit of Measure: LS
Estimate: $21,472.30
Assessor Name: System
Date Created: 10/14/2015

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

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

System: B1010 - Floor Construction

Location: Rooftop

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Rehabilitate abandoned portion of building - all systems

Qty: 2,800.00

Unit of Measure: S.F.

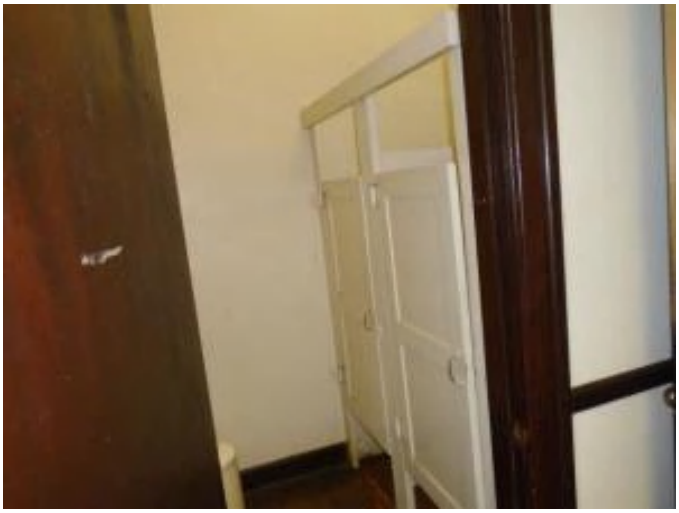
Estimate: $1,707,993.00

Assessor Name: System

Date Created: 10/23/2015

Notes: Restore rooftop gym / play area to useable space

System: C1030 - Fittings



Location: Toilets

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace toilet partitions

Qty: 28.00

Unit of Measure: Ea.

Estimate: $71,859.33

Assessor Name: System

Date Created: 10/23/2015

Notes: Replace toilet partitions – beyond service life

System: C1030 - Fittings

Location: Throughout

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace missing or damaged signage - insert the number of rooms

Qty: 65.00

Unit of Measure: Ea.

Estimate: $17,609.31

Assessor Name: System

Date Created: 10/23/2015

Notes: Install proper ID signage

System: C3030 - Ceiling Finishes

Location: Corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 5,880.00

Unit of Measure: S.F.

Estimate: $88,684.69

Assessor Name: System

Date Created: 10/23/2015

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

System: C3030 - Ceiling Finishes

Location: Basement, gym

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Re-paint ceilings - SF of ceilings

Qty: 7,500.00

Unit of Measure: S.F.

Estimate: $35,902.71

Assessor Name: System

Date Created: 10/23/2015

Notes: Strip and paint basement and gym ceilings – beyond service life

System: D2030 - Sanitary Waste

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 57,000.00

Unit of Measure: S.F.

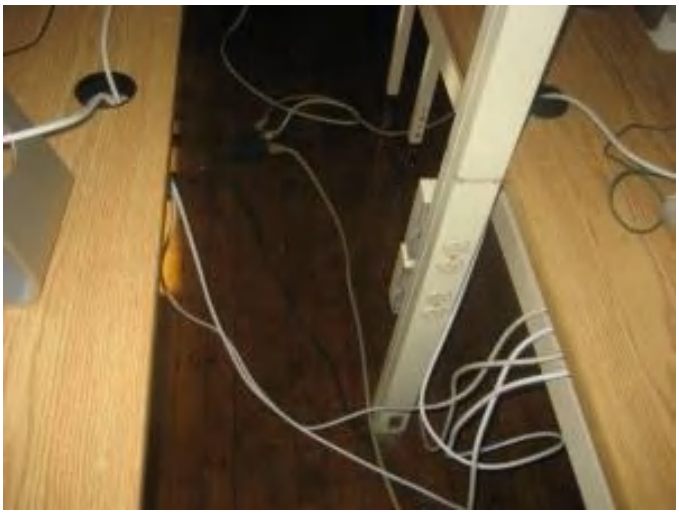
Estimate: $279,627.81

Assessor Name: System

Date Created: 11/30/2015

Notes: Inspect and repair sanitary waste pipe due to age, reports of problems, and slow drains.

System: D5020 - Lighting and Branch Wiring



Location: Classrooms

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add wiring device

Qty: 240.00

Unit of Measure: Ea.

Estimate: $157,287.56

Assessor Name: System

Date Created: 10/14/2015

Notes: Provide (2)25FT of surface raceways with 24” receptacles on center and two-duplex wall mount receptacles. Approximate 240

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

System: C1020 - Interior Doors

Location: Throughout

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 55.00

Unit of Measure: Ea.

Estimate: $262,382.29

Assessor Name: System

Date Created: 10/23/2015

Notes: Replace interior doors and frames – beyond service life

System: C2010 - Stair Construction

Location: Entrances

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 150.00

Unit of Measure: L.F.

Estimate: $2,241.79

Assessor Name: System

Date Created: 10/23/2015

Notes: Repair and re-grout granite entryway steps and stoops

System: C3010230 - Paint & Covering

Location: Various

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 9,500.00

Unit of Measure: S.F.

Estimate: $81,387.22

Assessor Name: System

Date Created: 10/23/2015

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

Priority 5 - Response Time (> 5 yrs):

System: D3030 - Cooling Generating Systems

Location: Entire building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 42,000.00

Unit of Measure: S.F.

Estimate: $674,494.53

Assessor Name: System

Date Created: 11/30/2015

Notes: Install 140 ton air-conditioning system for entire building.

System: D3040 - Distribution Systems

Location: Basement

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 200.00

Unit of Measure: Seat

Estimate: $452,337.86

Assessor Name: System

Date Created: 01/21/2016

Notes: Replace obsolete AHU to restore ventilation and add central cooling.

System: D4010 - Sprinklers

This deficiency has no image.

Location:	Entire building
Distress:	Life Safety / NFPA / PFD
Category:	1 - Health & Safety
Priority:	5 - Response Time (> 5 yrs)
Correction:	Install a fire protection sprinkler system
Qty:	57,000.00
Unit of Measure:	S.F.
Estimate:	$815,410.46
Assessor Name:	System
Date Created:	11/30/2015

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:

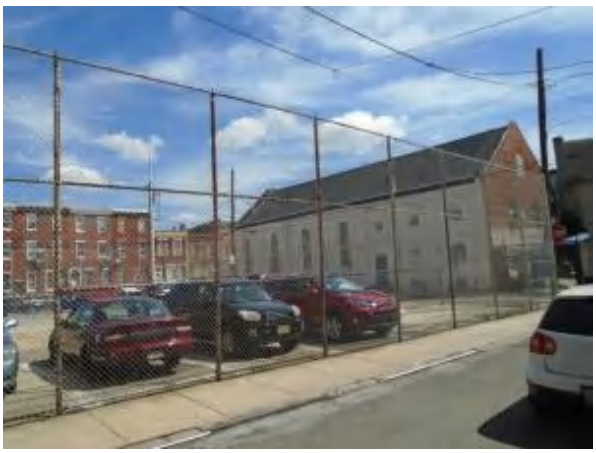
Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 2000 MBH, includes standard controls and insulated jacket, packaged	1.00	Ea.	Boiler room					35	1977	2052	$38,201.40	$42,021.54
D3040 Distribution Systems	AHU, field fabricated, built up, cool/heat coils, filters, constant volume, 40,000 CFM	1.00	Ea.	Basement					25	1926	2042	$151,511.80	$166,662.98
D5010 Electrical Service/Distribution	Panelboards, 3 pole 3 wire, main lugs, 240 V, 400 amp, no main breaker	1.00	Ea.	Basement electrical room	Penn Panel & Box Co	Distribution section			30	2000	2030	$2,297.70	$2,527.47
												Total:	**$211,211.99**

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):	13,100
Year Built:	1926
Last Renovation:	
Replacement Value:	$263,957
Repair Cost:	$37,968.20
Total FCI:	14.38 %
Total RSLI:	30.14 %



Description:

Attributes:

General Attributes:

Bldg ID:	S258001	Site ID:	S258001

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	42.35 %	20.21 %	$37,968.20
G40 - Site Electrical Utilities	0.00 %	0.00 %	$0.00
Totals:	**30.14 %**	**14.38 %**	**$37,968.20**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$8.50	S.F.	8,000	30	1988	2018	2028	43.33 %	0.00 %	13			$68,000
G2030	Pedestrian Paving	$12.30	S.F.	5,100	40	1988	2028		32.50 %	41.42 %	13		$25,981.81	$62,730
G2040	Site Development	$4.36	S.F.	13,100	25	1988	2013	2028	52.00 %	20.99 %	13		$11,986.39	$57,116
G2050	Landscaping & Irrigation	$4.36	S.F.		15	1972	1987	2037	146.67 %	0.00 %	22			$0
G4020	Site Lighting	$4.84	S.F.	13,100	30				0.00 %	0.00 %				$63,404
G4030	Site Communications & Security	$0.97	S.F.	13,100	30				0.00 %	0.00 %				$12,707
								Total	**30.14 %**	**14.38 %**			**$37,968.20**	**$263,957**

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.

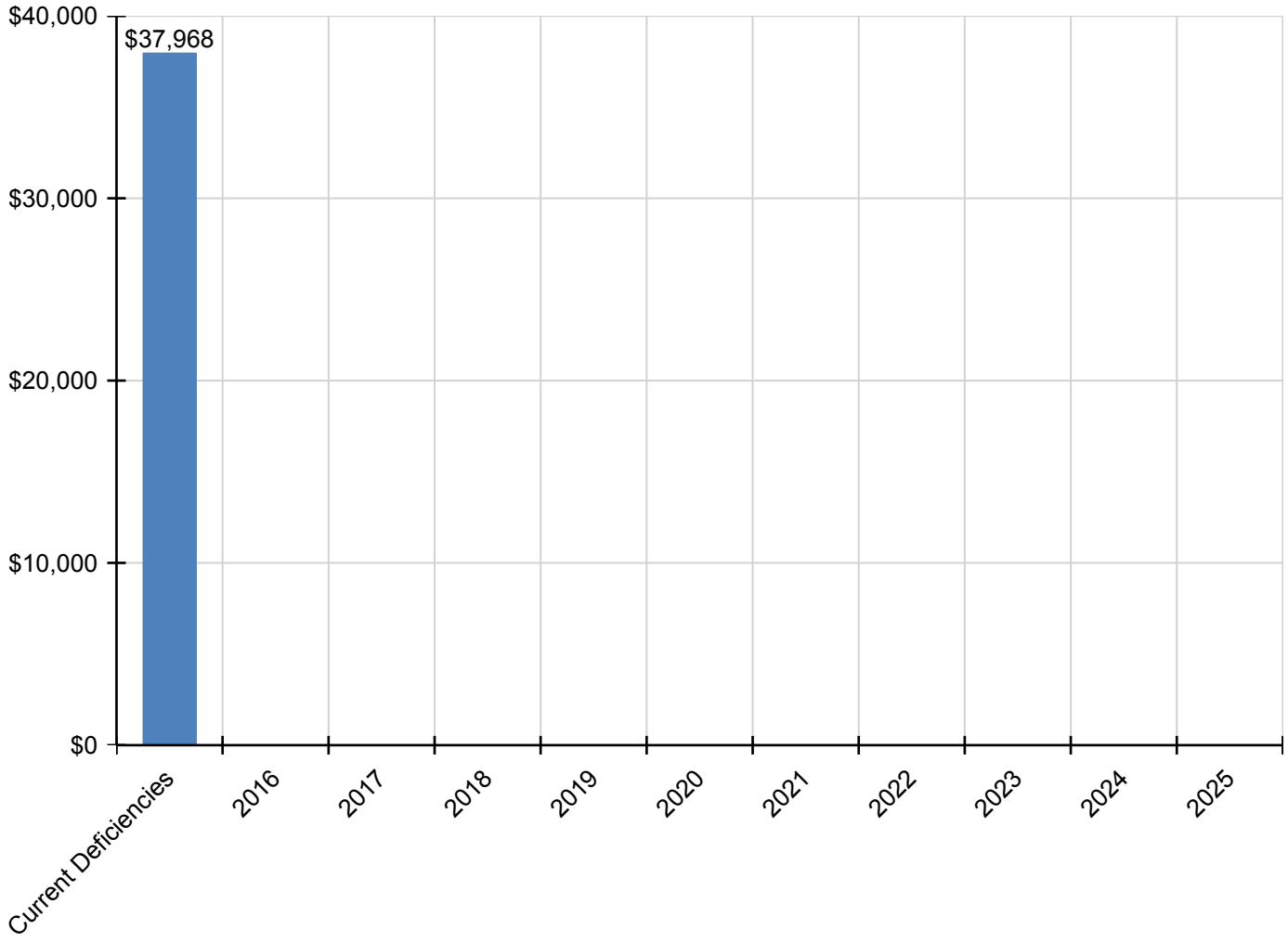
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$37,968**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$37,968**
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	$25,982	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$25,982**
G2040 - Site Development	$11,986	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$11,986**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

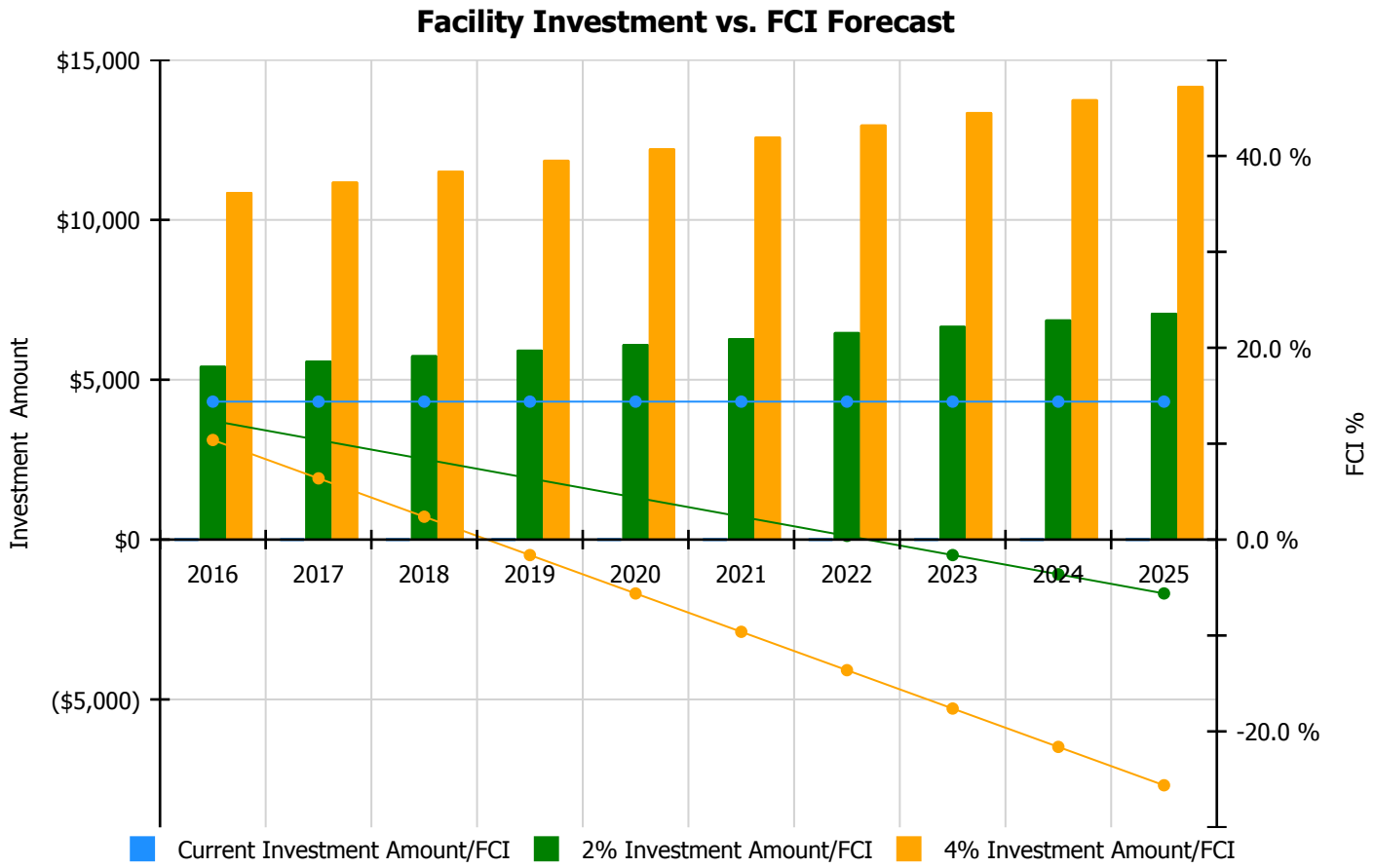
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

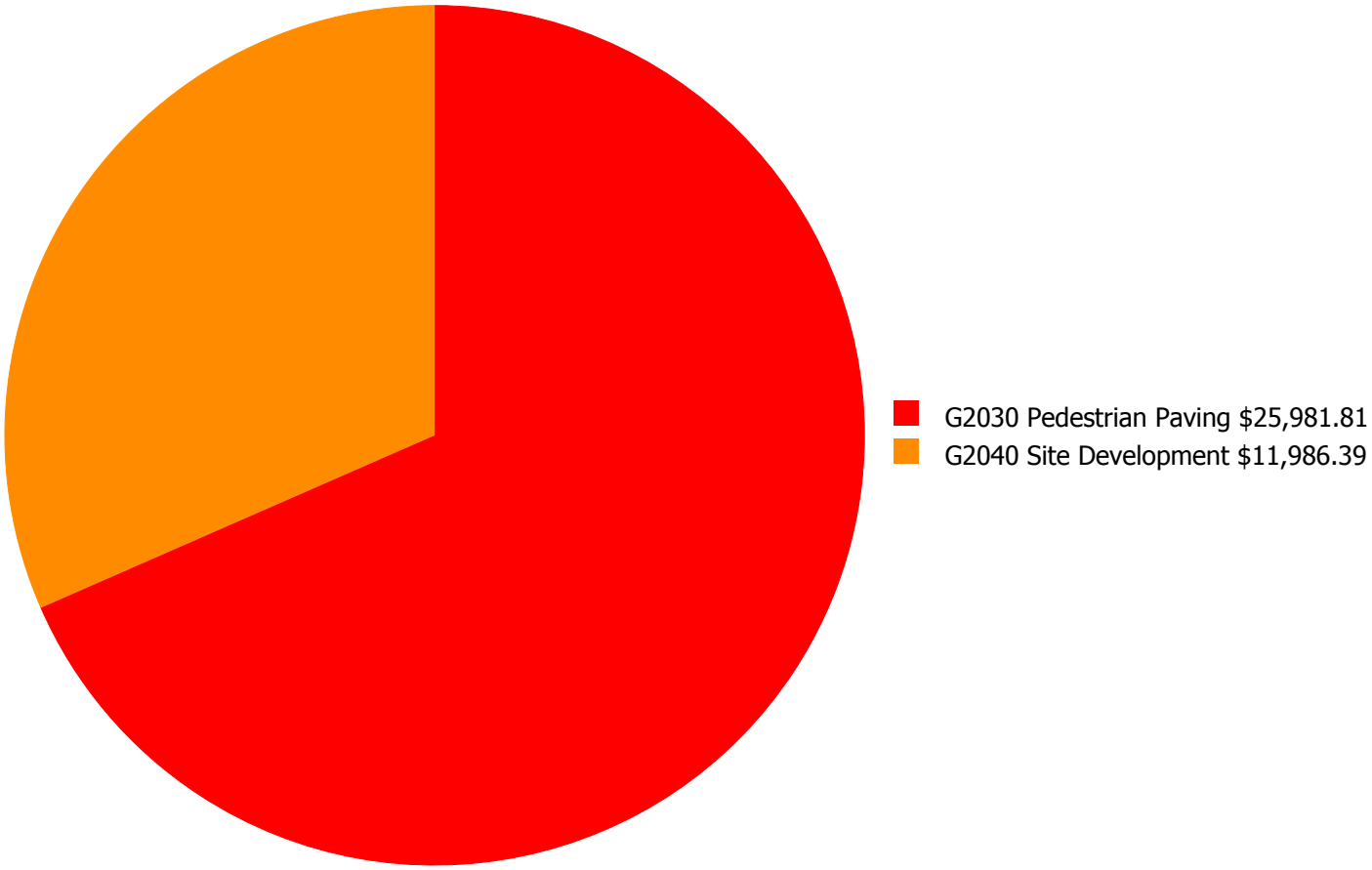
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 14.38%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$5,438.00	12.38 %	$10,875.00	10.38 %
2017	$0	$5,601.00	10.38 %	$11,201.00	6.38 %
2018	$0	$5,769.00	8.38 %	$11,537.00	2.38 %
2019	$0	$5,942.00	6.38 %	$11,883.00	-1.62 %
2020	$0	$6,120.00	4.38 %	$12,240.00	-5.62 %
2021	$0	$6,304.00	2.38 %	$12,607.00	-9.62 %
2022	$0	$6,493.00	0.38 %	$12,985.00	-13.62 %
2023	$0	$6,687.00	-1.62 %	$13,375.00	-17.62 %
2024	$0	$6,888.00	-3.62 %	$13,776.00	-21.62 %
2025	$0	$7,095.00	-5.62 %	$14,189.00	-25.62 %
Total:	**$0**	**$62,337.00**		**$124,668.00**	

Deficiency Summary by System

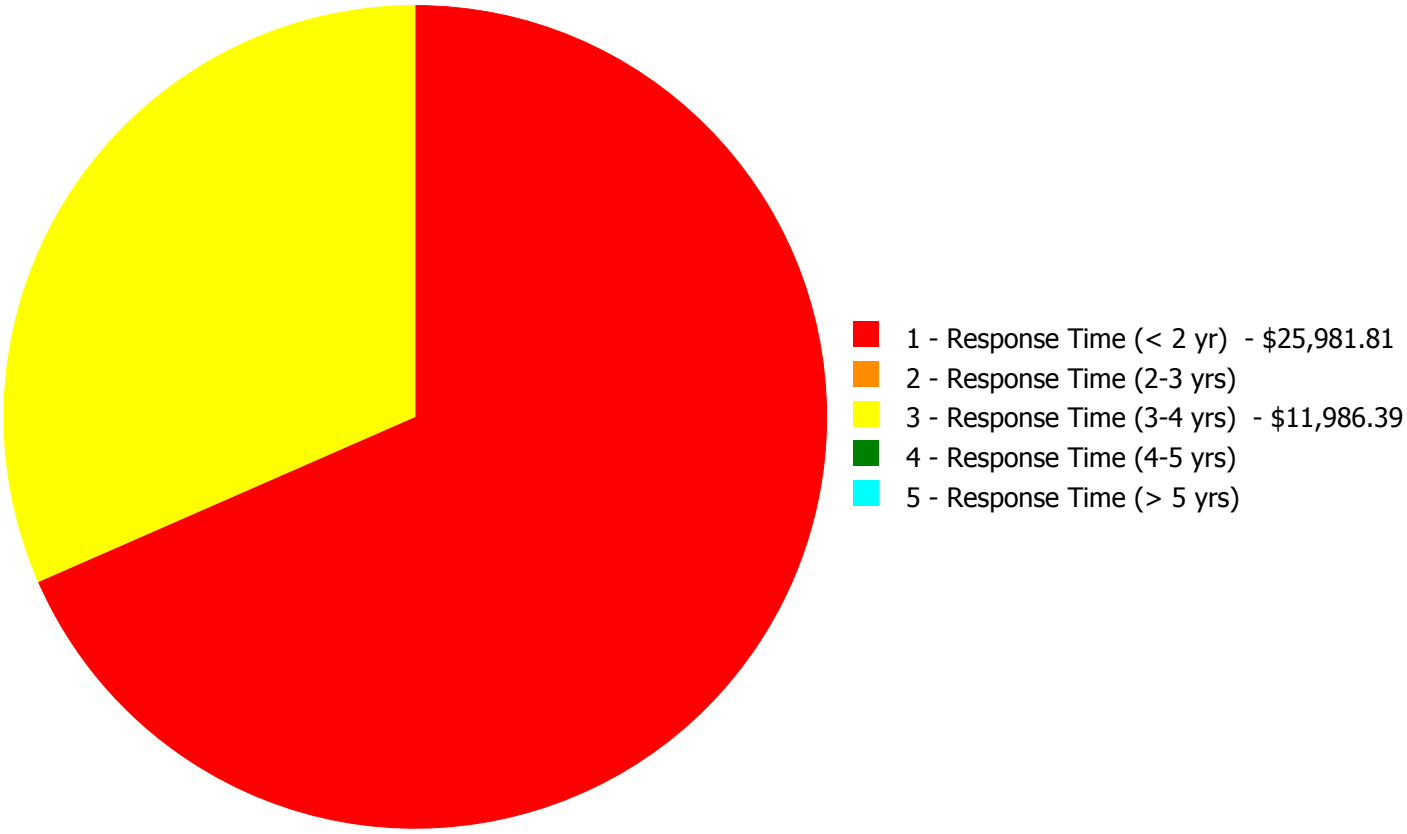
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $37,968.20

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: $37,968.20

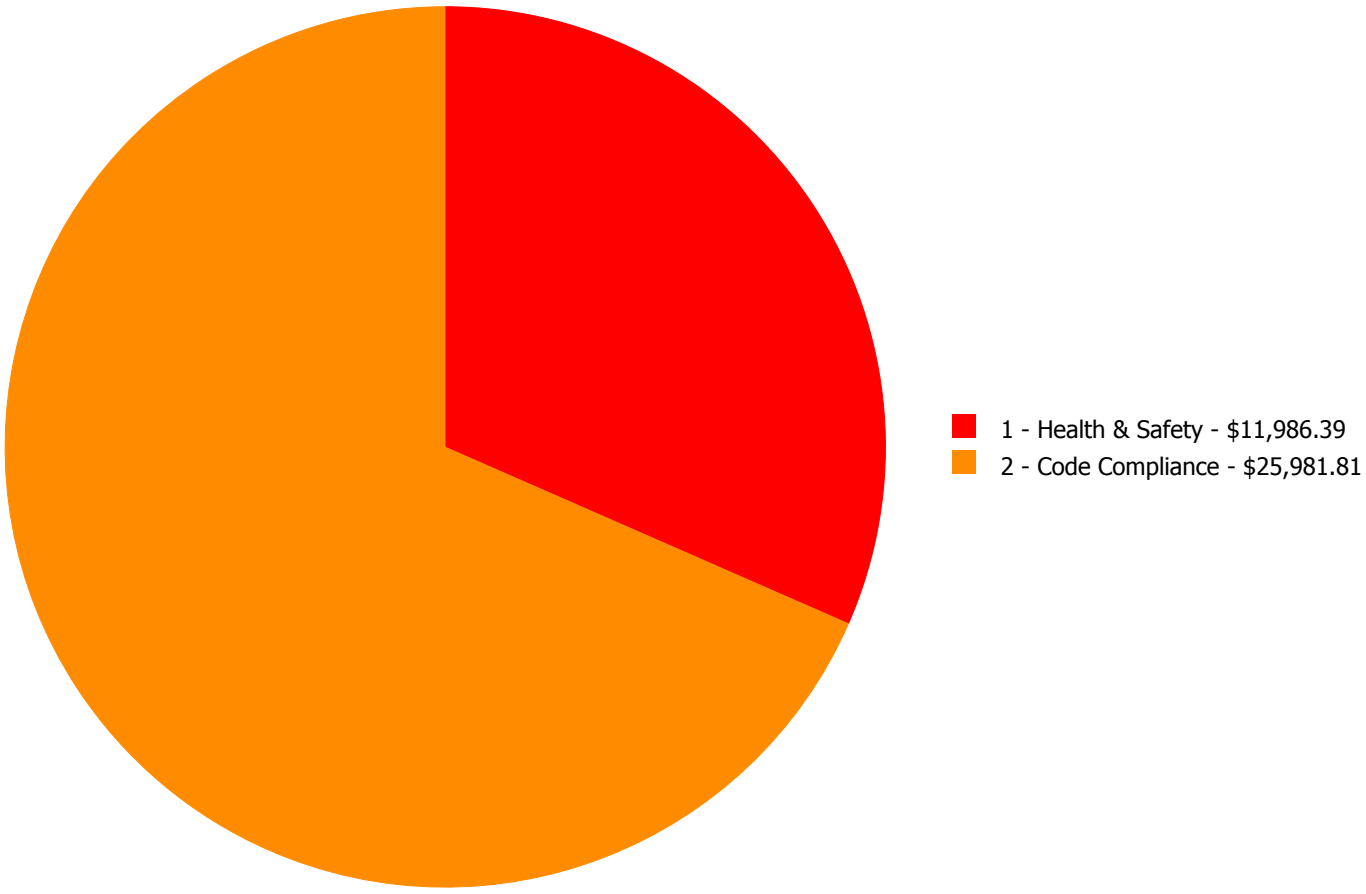
Deficiency By Priority Investment Table

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	$0.00	$0.00	$0.00	$25,981.81
G2040	Site Development	$0.00	$0.00	$11,986.39	$0.00	$0.00	$11,986.39
	Total:	$25,981.81	$0.00	$11,986.39	$0.00	$0.00	$37,968.20

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: $37,968.20

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

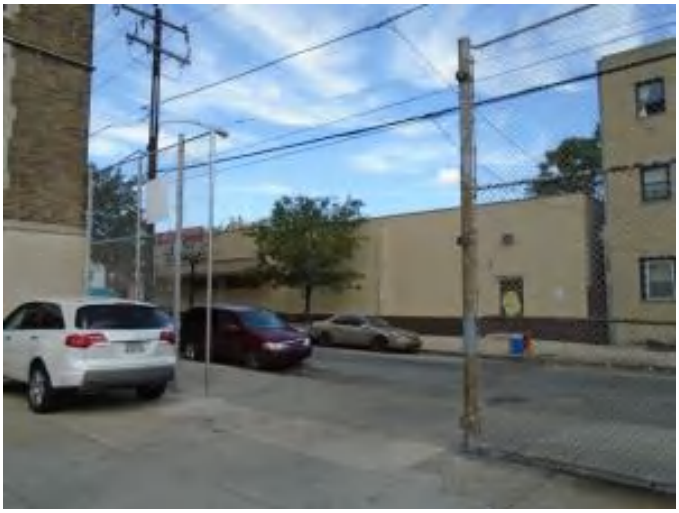
Assessor Name: Ben Nixon

Date Created: 10/23/2015

Notes: Install accessible ramp on at least one entrance

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

System: G2040 - Site Development



Location: Site

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Remove and replace chain link gate - 8' high

Qty: 2.00

Unit of Measure: Ea.

Estimate: $11,986.39

Assessor Name: Ben Nixon

Date Created: 10/23/2015

Notes: Install access gates for site security

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