

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.

Jackson School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	1213 S. 12Th St. Philadelphia, Pa 19147	Enrollment	567
Phone/Fax	215-952-6223 / 215-952-6488	Grade Range	'00-08'
Website	Www.Philasd.Org/Schools/Jackson	Admissions Category	Neighborhood
		Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = $\frac{\text{Cost of Assessed Deficiencies}}{\text{Replacement Value}}$				
< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
Buildings				
Minimal Current Capital Funding Required	Refurbish Systems in building	Replace Systems in building.	Building should be considered for major renovation.	Building should be considered for closing/replacement.
Systems				
Perform routine maintenance on system	System requires minor repairs	System should be studied to determine repair vs. replacement.	System is nearing end of its life expectancy and should be considered for replacement	System should be replaced as part of the Capital Program

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	29.06%	\$7,401,297	\$25,472,181
Building	29.09 %	\$7,342,115	\$25,243,350
Grounds	25.86 %	\$59,182	\$228,831

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	91.13 %	\$562,875	\$617,652
Exterior Walls (Shows condition of the structural condition of the exterior facade)	03.01 %	\$56,136	\$1,866,440
Windows (Shows functionality of exterior windows)	119.56 %	\$1,089,446	\$911,180
Exterior Doors (Shows condition of exterior doors)	08.56 %	\$6,258	\$73,080
Interior Doors (Classroom doors)	58.30 %	\$101,447	\$174,000
Interior Walls (Paint and Finishes)	13.26 %	\$110,520	\$833,460
Plumbing Fixtures	07.81 %	\$54,230	\$694,260
Boilers	00.00 %	\$0	\$959,320
Chillers/Cooling Towers	69.12 %	\$869,541	\$1,258,020
Radiators/Unit Ventilators/HVAC	26.17 %	\$577,828	\$2,208,060
Heating/Cooling Controls	129.26 %	\$895,868	\$693,100
Electrical Service and Distribution	114.40 %	\$517,554	\$452,400
Lighting	41.90 %	\$678,443	\$1,619,360
Communications and Security (Cameras, Pa System and Fire Alarm)	34.42 %	\$208,831	\$606,680

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
S251001; Jackson
Final
Site Assessment Report

January 31, 2017



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Site Executive Summary

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

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

Following are the cost model's system details for this facility. The Replacement Value is the amount needed to replace the property of the same present value. The Current Repair Amount, also known as Condition Needs, represents the budgeted contractor installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging the work. Facility Condition Index (FCI) is an industry-standard measurement calculated as the ratio of the repair costs to correct a facility's deficiencies to the facility's Current Replacement Value. Condition Index (CI) for a system is calculated as the sum of 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:	\$25,472,181
Repair Cost:	\$7,401,296.78
Total FCI:	29.06 %
Total RSLI:	54.86 %



Description:

Facility Assessment

July 21th, 2015

School District of Philadelphia

Jackson Elementary School

1213 S 12th Street

Philadelphia, PA 19147

58,000 SF / 517 Students / LN 01

GENERAL

Site Assessment Report - S251001;Jackson

Building Engineer, accompanied us on our tour of the school and provided us with detailed information on the building systems and maintenance history.

The 4 story, 58,000 square foot building was originally constructed in 1925. The building has a one level basement.

ARCHITECTURAL/STRUCTURAL SYSTEMS

The building typically rests on concrete foundations and bearing walls that are not showing signs of settlement or damage. The main structure consists typically of cast-in-place concrete columns, beams and concrete, one way ribbed slab. The roof structure consists of concrete one-way slab supported by the main structural frame. Roofing is built up application in poor condition with multiple patches and nearing the end of service life. The building envelope is typically masonry with face brick. Elevations are enhanced with decorative stonework around entrances and windows. In general, masonry is in good condition. Fire tower landings have metal grates in exterior openings that are rusted and failing. All elevations are face brick. The rooftop area outside of the kindergarten classes has a failing metal fence attached to the building structure that is in need or replacement. The original windows were replaced in early 1990s with extruded aluminum, double hung windows, Lexan Plexiglas with insect/security screens. All windows are generally in poor condition with heavy hazing. Exterior doors are typically hollow metal in good condition. Public access doors and service doors have concrete stoops and stairs. The building is not accessible per ADA requirements due to first floor- grade separation with no ramps or lifts.

Partition wall types include: plastered ceramic hollow blocks, and painted CMU and brick. Interior doors are generally rail and stile wood doors and solid core doors with lites; some glazed with matching wood frame transom and lites, some doors have damaged casings. Doors leading to exit stairways are hollow metal doors and frames in good condition. Interior doors do not have lever type handles. Fittings include: toilet accessories in good condition; composite plastic toilet partitions, generally in good condition; 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 generally in good condition. Stair construction is generally concrete with cast iron nosing in good condition and marble stairway in front entrance in very good condition. Main stair railings are cast iron balusters with wood handrail in fair condition, not code compliant.

The interior wall finishes are generally painted plaster or brick with glazed brick or tile wainscot in toilets in good condition with a few areas of plaster deterioration. Major damage due to water intrusion has occurred to storage room on the north side of the gym and has not been addressed; continued neglect of this area may cause structural damage in the near future. Main entrance stairway and kinder toilets have marble wainscot in very good condition. Flooring includes: hardwood in classrooms in good condition; patterned and bare concrete in corridors, toilets, stairs and basement areas in good condition; vinyl in gym/auditorium, some classrooms, offices and kitchen in good condition; carpet tiles in computer room in very good condition; and terrazzo and marble in main entrance in very good condition. Wood base is typically in fair-good condition. Most ceilings suspended acoustic tile in good condition with painted plaster or structural concrete in stairways, toilets, gym, kitchen, and basement service areas in good condition with new paint needed in boiler room.

The building has no elevators.

Institutional and Commercial equipment includes: stage equipment built into gym area in good condition. Other equipment includes kitchen equipment (heat and serve only), generally in good condition.

Fixed furnishings include: fixed casework in classrooms, corridors and library, generally in fair to good condition; window shades/blinds, generally in good condition.

MECHANICAL SYSTEMS

Building plumbing fixtures are a mixture of original and replacement. Restroom fixtures on each floor consist of wall hung and floor mounted flush valve water closets, wall hung flush valve urinals, and wall hung lavatories. Some classrooms have lavatories or sinks. Some faucets and flush valves need repair, and with these repairs the fixtures should provide reliable service for the next 5-10 years.

Life skills room has a two basin, rim mounted, stainless steel kitchen sink, and washing machine connection. The first floor pre-K room includes a prep kitchen with a two basin stainless steel cook sink and a lavatory. The main kitchen next to the gym has a two basin cook sink also. Neither have chemical sanitation systems. Kitchen sinks are in good condition and should be serviceable for 10-15 years.

A service sinks are located in the corridors on each floor. These are enameled cast iron, floor mounted, single basin sinks. They have replacement faucets with vacuum breakers. They all appear is good condition with no signs of leakage and should last another 5-10 years without replacement.

Drinking fountains in the corridors are mostly wall hung, non-accessible, with integral refrigerated coolers. They have exceeded their service life and should be replaced with accessible fountains.

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A 4" city water service enters the building in the boiler room along 12th Street. There is a duplex booster pump with expansion tank. The pump controller was not operating properly, and one pump was running constantly at full speed and this resulted in the surrounding pipe being too hot to touch. This must be repaired. The domestic hot and cold water distribution piping is copper piping and soldered connections. The engineer and housekeeping staff reported no significant problems with domestic piping and the supply is adequate to the fixtures.

A 75 gallon vertical tank type, gas-fired water heater installed in 2002 supplies hot water for domestic use. The water heater is within its service life and should provide reliable service for the next 5-10 years.

The sanitary sewer piping is threaded galvanized steel pipe and mostly original. There is no sewage ejector. The rain water drain pipes are threaded galvanized steel as well with cast iron with banded couplings for repairs in some areas. Due to age and known recent failures, the district should hire a qualified contractor to examine the rain water discharge piping using video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

The building was originally designed for steam heat radiators and hot air ducts to heat class rooms, and still operates in this manner.

Steam is generated by 2 Smith, model 350 mills, 13 section, cast iron boilers, 2,602 MBH (78 HP) capacity boilers fired by Power Flame burners using gas only. They were installed in 2003 and are both operational. They have should serve another 15-20 years. Combustion air makeup is supplied by louvers equipped with automatic control. Building condensate is collected in a sump in the boiler room and transferred by two pumps to the boiler feedwater tank with three feed pumps. The makeup water connection has a double backflow preventer. The gas service enters the building in the boiler room and includes a booster. Gas service enters the building through a 4" line in the basement next to the boiler room at the corner near 12th St. and Latona St. There is a gas booster.

The building does not have any central cooling systems. A 145 ton total capacity cooling system should be installed to provide cooling to the entire building and replace approximately 20 aged, inefficient window unit air conditioners.

Steam and condensate piping is steel with welded and threaded fittings. Steam mains from the basement level run up through the building to the radiators and also to two air handlers in the basement fan room. The piping appears to be original to the building. The steam and condensate piping should be replaced due to age and visible rust. Steam traps and manual thermostats were replaced in 2013.

Forced air is supplied to multiple parts of the building from 2 air handlers in the basement. These are partially original to the building, and were rebuilt in 2010. Estimated capacity is 48,000 cfm. They included primary and secondary steam heat sections with new finned tube steam coils and new traps. The air washers are inoperable. Intake filter sections have been replaced with disposable filter holders. The blowers have been replaced including 10 HP motors, scroll housings, and flex connections. House air return dampers and outside air intake dampers have been replaced. With these recent repairs, both air handlers should have 20 years service remaining. Cooling coils and humidification should be added as part of the chiller installation. Heated air is delivered through uninsulated sheet metal ducts to built-in structural clay tile ducts and various plenums and then to class rooms and other large spaces. Room discharge air is conducted through similar ducts and plenums to the attic where it either returns to the air handlers or is discharged through multiple gravity vent hoods on the roof. Air from the attic plenum returns to the basement crawlspace plenum and then through a rolltop door to the fan room. The metal ducts should be insulated as part of the cooling system installation.

Cast iron radiators supply heat for the entire building. They are original to the building and have new manually controlled steam valves. The radiators are well beyond their service life and should be replaced with finned tube unit heaters with electronic controls.

The kitchens do not have gas burning appliances and do not require vent systems.

Radiators had thermostats replaced in 2013 with manual thermostats. These should be upgraded to DDC when the radiators are replaced with finned tube units. The basement air handlers have had controls upgraded during their recent rebuild. Duct upgrades should include automatic dampers when the building cooling system is installed, as part of a total building automation system (BAS) with modern DDC modules to improve reliability and energy efficiency. An interface should be provided with the preferred system in use throughout the District.

The school building does not have stand pipes nor does it have an automatic sprinkler system. A sprinkler system should be installed to improve life safety. An outdoor, engine driven, packaged fire pump should be installed if required based on the available city water.

ELECTRICAL SYSTEMS

A service drop on Latona Street provides the incoming service to this school. The electrical service entrance is located in the basement at the fan room. The fan room houses the utility main disconnect switch, the utility meter 222MU-13342 and 400A, 120/240V distribution section. The

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distribution section consists in a gutter with safety switches. The original floor mounted distribution section is abandoned in place. The existing service has no extra capacity for expansion or new Heating, Ventilation, Air Conditioning (HVAC) system. The electrical service entrance should be upgraded. 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, 225KVA step-down transformer to feed receptacles, lighting fixtures and other smaller loads.

There are 120/240V panel-boards in each floor for lighting and receptacles. These panel-boards and associated wiring have exceeded the end of their useful life and are undersized to absorb additional loads. The entire distribution system needs to be replaced with new 208/120 volt, 3 phase panelboards and new wiring. The raceway is mainly conduits run above the ceiling. There is a 75KVA phase converter 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, approximate 15% of the classrooms have been remodeled and provided with the proper amount of receptacles but 85% of them 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.

Most of the corridors are illuminated with recessed mounted fluorescent fixtures except the basement which is illuminated with surface mounted type. Classrooms are provided with surface mounted fluorescent fixtures with the exception of the remodeled ones that are provided with modern, recessed, up/down fluorescent lighting fixtures. The boys and girls rooms are illuminated with surface mounted fixtures. The cafeteria is illuminated with surface mounted strip fluorescent fixtures. Approximate 85% of the lighting fixtures are provided with T-12 lamps. Provide lighting fixtures with T-8 lamps.

Fire Alarm System- A tap ahead of the main disconnect switch serves the fire alarm control panel (FACP).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. Fire alarm system is tested every day in the morning. Provide a new fire alarm system.

The present telephone system is adequate.

Public Address/Intercom/Paging- An independent and separate PA system does not exist. School uses the telephone systems for public announcement. This system is working adequately for most part. The obsolete, non-functional devices should be removed from all rooms.

The present clocks is old and manufactured by Simplex, Time Control Center. Parts for this system are not available or are very expensive. A new clock system should be provided with battery operated and wireless. The present bell system is working.

There is not television system.

The security system consists of CCTV cameras at corridors and building exterior and motion sensors at first floor. The location of the video surveillance monitor is located at the nurse office.

The emergency power system consists of a gas powered generator, manufactured by Onan rated 12.5KW 120/240V. The present emergency power system serves the corridor, exit signs, gymnasium, stair ways boiler room and fire tower. The gas powered generator looks approximately 10 years old and is tested once a week. It should be replaced in the next 5 years.

There is adequate UPS in the IT room.

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

Lightning Protection System- The chimney is provided with air terminals. A study should be conducted to determine if the existing lightning system provide the proper protection to the school building.

Theatrical Lighting and dimming control- There is a stage in the gymnasium. The stage is provided with portable/permanent theatrical lighting.

The auditorium/gymnasium sound system is provided by Bogen equipment.

GROUNDS SYSTEMS

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The site surrounds the building on all four sides which is set back from the street. Yard area on east side is concrete paving in good condition with no parking. Metal fence surrounding yard area of site is in good condition. Outdoor basketball court, play structure and fall protection are new and in good condition.

Accessibility: the building does not have accessible entrance, and accessible routes. None of the toilets are equipped with accessible fixtures, partitions and accessories, such as grab bars and accessible partitions. None of the doors in the building have ADA required door handles.

Site Lighting- The school perimeter is illuminated from wall mounted fixtures. It is adequate.

Site Video Surveillance- There are (3) CCTV cameras on the building exterior. It is adequate.

Site Paging- There are wall mounted loud speaker facing the parking lot/playground area. It is adequate.

RECOMMENDATIONS

- [Replace roof – beyond service life and beginning to fail](#)
- Repair stonework on fire tower and replace metal grating – rusted and failing
- Repair stonework on kinder rooftop area and replace fencing – rusted and failing
- Replace Plexiglas windows – hazed
- Provide ADA compliant exterior door hardware at one entrance
- Repair or replace damaged doors and frames
- Provide ADA lever handle lock/latchsets on interior doors
- Provide new toilet partitions and toilet accessories including grab bars for accessibility
- Replace railing in stairways with code compliant
- Repair and repaint interior plaster walls (10% of wall surface)
- Repair damage in storage near gym
- Strip and paint boiler room
- Install elevator for accessibility (location TBD)
- Provide ADA compliant ramp at one entrance (location TBD)

- Repair inoperative plumbing fixtures throughout the building.
- Replace the aged drinking fountains throughout school with chilled, accessible models.
- Repair domestic water booster pump controller to stop pump from continuously running at full power.
- Repair constant draft damper on water heater exhaust duct.
- Replace the original copper domestic water piping to eliminate joints made with lead solder.
- Hire a qualified contractor to perform a detailed examination of the sanitary waste and rain water drainage piping using visual inspection and video cameras to determine areas in need of repair or replacement due to age and recent known failures.
- Replace steam and condensate piping due to age and rust.
- Remove aged and inefficient window unit air conditioners, and install 145 ton total capacity cooling system including rooftop chillers, cooling coils in basement air handlers, and insulation for metal ducts.
- Replace the existing radiators with finned coil units.
- Upgrade the manual controls for the HVAC systems with modern DDC modules, valves, and actuators to improve reliability and energy efficiency. Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A packaged, outdoor, engine driven fire pump may be required depending on the available city water pressure.
- 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 (9) 208/120V
- Install minimum two receptacles in each wall of class rooms and other purpose rooms. Approximate 432 receptacles.
- Approximate 85% of the lighting fixtures are provided with T-12 lamps. Provide lighting fixtures with T-8 lamps. Approximate 633 fixtures.
- Provide a new fire alarm system Replace old fire alarm system with addressable type with audio/visual devices in the entire school. Approximate 77 devices.
- Provide a new clock system, wireless battery operated. Approximate 40 clocks
- Prepare a study to determine if existing lightning protection system provide the proper coverage to the school building.

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Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S251001		

Site Condition Summary

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

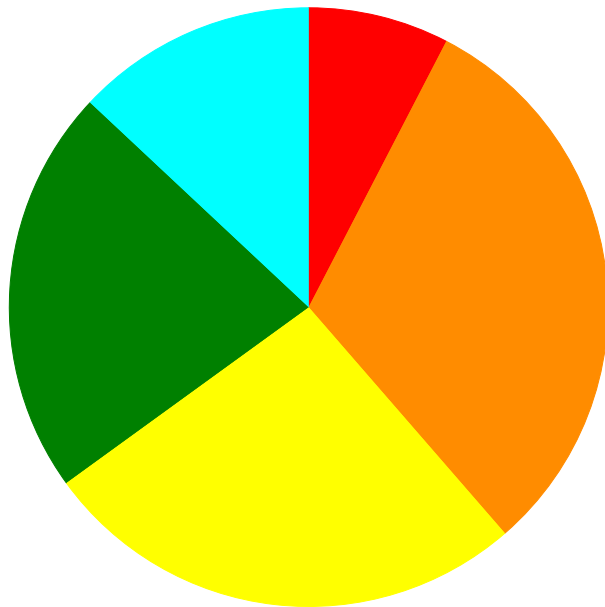
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	37.00 %	0.00 %	\$0.00
A20 - Basement Construction	37.00 %	0.00 %	\$0.00
B10 - Superstructure	37.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	38.04 %	40.41 %	\$1,151,839.59
B30 - Roofing	109.98 %	91.13 %	\$562,874.55
C10 - Interior Construction	31.97 %	9.23 %	\$112,357.67
C20 - Stairs	37.00 %	26.21 %	\$18,239.89
C30 - Interior Finishes	50.43 %	4.30 %	\$110,519.93
D10 - Conveying	0.00 %	302.48 %	\$594,735.94
D20 - Plumbing	26.94 %	28.07 %	\$294,510.36
D30 - HVAC	65.38 %	41.00 %	\$2,343,237.28
D40 - Fire Protection	92.52 %	176.39 %	\$729,451.49
D50 - Electrical	107.94 %	51.90 %	\$1,424,348.22
E10 - Equipment	52.81 %	0.00 %	\$0.00
E20 - Furnishings	40.00 %	0.00 %	\$0.00
G20 - Site Improvements	63.49 %	36.27 %	\$59,181.86
G40 - Site Electrical Utilities	0.00 %	0.00 %	\$0.00
Totals:	54.86 %	29.06 %	\$7,401,296.78

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)
B251001;Jackson	58,000	29.09	\$562,874.55	\$2,236,448.25	\$1,953,527.01	\$1,625,319.75	\$963,945.36
G251001;Grounds	11,300	25.86	\$0.00	\$59,181.86	\$0.00	\$0.00	\$0.00
Total:		29.06	\$562,874.55	\$2,295,630.11	\$1,953,527.01	\$1,625,319.75	\$963,945.36

Deficiencies By Priority



- 1 - Response Time (< 2 yr) - \$562,874.55
- 2 - Response Time (2-3 yrs) - \$2,295,630.11
- 3 - Response Time (3-4 yrs) - \$1,953,527.01
- 4 - Response Time (4-5 yrs) - \$1,625,319.75
- 5 - Response Time (> 5 yrs) - \$963,945.36

Budget Estimate Total: \$7,401,296.78

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):	58,000
Year Built:	1925
Last Renovation:	
Replacement Value:	\$25,243,350
Repair Cost:	\$7,342,114.92
Total FCI:	29.09 %
Total RSLI:	54.95 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B251001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S251001		

Condition Summary

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

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	37.00 %	0.00 %	\$0.00
A20 - Basement Construction	37.00 %	0.00 %	\$0.00
B10 - Superstructure	37.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	38.04 %	40.41 %	\$1,151,839.59
B30 - Roofing	109.98 %	91.13 %	\$562,874.55
C10 - Interior Construction	31.97 %	9.23 %	\$112,357.67
C20 - Stairs	37.00 %	26.21 %	\$18,239.89
C30 - Interior Finishes	50.43 %	4.30 %	\$110,519.93
D10 - Conveying	0.00 %	302.48 %	\$594,735.94
D20 - Plumbing	26.94 %	28.07 %	\$294,510.36
D30 - HVAC	65.38 %	41.00 %	\$2,343,237.28
D40 - Fire Protection	92.52 %	176.39 %	\$729,451.49
D50 - Electrical	107.94 %	51.90 %	\$1,424,348.22
E10 - Equipment	52.81 %	0.00 %	\$0.00
E20 - Furnishings	40.00 %	0.00 %	\$0.00
Totals:	54.95 %	29.09 %	\$7,342,114.92

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 the system 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	\$15.74	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$912,920
A1030	Slab on Grade	\$6.62	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$383,960
A2010	Basement Excavation	\$5.60	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$324,800
A2020	Basement Walls	\$10.88	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$631,040
B1010	Floor Construction	\$65.82	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$3,817,560
B1020	Roof Construction	\$12.16	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$705,280
B2010	Exterior Walls	\$32.18	S.F.	58,000	100	1925	2025	2052	37.00 %	3.01 %	37		\$56,135.98	\$1,866,440
B2020	Exterior Windows	\$15.71	S.F.	58,000	40	1991	2031		40.00 %	119.56 %	16		\$1,089,445.85	\$911,180
B2030	Exterior Doors	\$1.26	S.F.	58,000	25	2000	2025		40.00 %	8.56 %	10		\$6,257.76	\$73,080
B3010105	Built-Up	\$32.69	S.F.	18,600	20	1995	2015	2037	110.00 %	92.57 %	22		\$562,874.55	\$608,034
B3010140	Shingle & Tile	\$33.54	S.F.	183	25	1995	2020	2042	108.00 %	0.00 %	27			\$6,138
B3020	Roof Openings	\$0.06	S.F.	58,000	20	1995	2015	2037	110.00 %	0.00 %	22			\$3,480
C1010	Partitions	\$15.32	S.F.	58,000	100	1925	2025	2052	37.00 %	0.00 %	37			\$888,560
C1020	Interior Doors	\$3.00	S.F.	58,000	40	1980	2020		12.50 %	58.30 %	5		\$101,447.43	\$174,000
C1030	Fittings	\$2.67	S.F.	58,000	40	1925	1965	2025	25.00 %	7.05 %	10		\$10,910.24	\$154,860
C2010	Stair Construction	\$1.20	S.F.	58,000	100	1925	2025	2052	37.00 %	26.21 %	37		\$18,239.89	\$69,600
C3010230	Paint & Covering	\$13.65	S.F.	58,000	10	2013	2023		80.00 %	13.96 %	8		\$110,519.93	\$791,700
C3010232	Wall Tile	\$0.72	S.F.	58,000	30	2000	2030		50.00 %	0.00 %	15			\$41,760

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System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
C3020411	Carpet	\$6.24	S.F.	2,900	10	2010	2020		50.00 %	0.00 %	5			\$18,096
C3020412	Terrazzo & Tile	\$64.54	S.F.	2,900	50	1925	1975	2025	20.00 %	0.00 %	10			\$187,166
C3020413	Vinyl Flooring	\$8.27	S.F.	17,400	20	2000	2020		25.00 %	0.00 %	5			\$143,898
C3020414	Wood Flooring	\$19.04	S.F.	17,400	25	2000	2025		40.00 %	0.00 %	10			\$331,296
C3020415	Concrete Floor Finishes	\$0.83	S.F.	17,400	50	2000	2050		70.00 %	0.00 %	35			\$14,442
C3030	Ceiling Finishes	\$17.93	S.F.	58,000	25	2000	2025		40.00 %	0.00 %	10			\$1,039,940
D1010	Elevators and Lifts	\$3.39	S.F.	58,000	35				0.00 %	302.48 %			\$594,735.94	\$196,620
D2010	Plumbing Fixtures	\$11.97	S.F.	58,000	35	1925	1960	2025	28.57 %	7.81 %	10		\$54,229.75	\$694,260
D2020	Domestic Water Distribution	\$1.49	S.F.	58,000	25	1925	1950	2025	40.00 %	25.57 %	10		\$22,093.53	\$86,420
D2030	Sanitary Waste	\$2.58	S.F.	58,000	25	1925	1950	2020	20.00 %	145.81 %	5		\$218,187.08	\$149,640
D2040	Rain Water Drainage	\$2.05	S.F.	58,000	30	1925	1955	2020	16.67 %	0.00 %	5			\$118,900
D3020	Heat Generating Systems	\$16.54	S.F.	58,000	35	2003	2038		65.71 %	0.00 %	23			\$959,320
D3030	Cooling Generating Systems	\$21.69	S.F.	58,000	30				0.00 %	69.12 %			\$869,540.98	\$1,258,020
D3040	Distribution Systems	\$38.07	S.F.	58,000	25	2010	2035		80.00 %	26.17 %	20		\$577,828.04	\$2,208,060
D3050	Terminal & Package Units	\$10.28	S.F.	58,000	20	1925	1945	2039	120.00 %	0.00 %	24			\$596,240
D3060	Controls & Instrumentation	\$11.95	S.F.	58,000	20	2013	2033		90.00 %	129.26 %	18		\$895,868.26	\$693,100
D4010	Sprinklers	\$6.24	S.F.	58,000	35			2052	105.71 %	201.55 %	37		\$729,451.49	\$361,920
D4020	Standpipes	\$0.89	S.F.	58,000	35				0.00 %	0.00 %				\$51,620
D5010	Electrical Service/Distribution	\$7.80	S.F.	58,000	30	1925	1955	2047	106.67 %	114.40 %	32		\$517,553.83	\$452,400
D5020	Lighting and Branch Wiring	\$27.92	S.F.	58,000	20	1925	1945	2037	110.00 %	41.90 %	22		\$678,443.28	\$1,619,360
D5030	Communications and Security	\$10.46	S.F.	58,000	15	1925	1940	2032	113.33 %	34.42 %	17		\$208,831.19	\$606,680
D5090	Other Electrical Systems	\$1.14	S.F.	58,000	30	1925	1955	2020	16.67 %	29.52 %	5		\$19,519.92	\$66,120
E1020	Institutional Equipment	\$4.73	S.F.	58,000	35	1995	2030		42.86 %	0.00 %	15			\$274,340
E1090	Other Equipment	\$10.86	S.F.	58,000	35	2000	2035		57.14 %	0.00 %	20			\$629,880
E2010	Fixed Furnishings	\$2.09	S.F.	58,000	40	1991	2031		40.00 %	0.00 %	16			\$121,220
Total									54.95 %	29.09 %			\$7,342,114.92	\$25,243,350

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 & Covering 5% - Wall tile (glazed brick)	
<hr/>	
System: C3020 - Floor Finishes	This system contains no images
Note: 5% - Carpet 5% - Terrazzo & Tile 30% - Vinyl Flooring 30% - Wood Flooring 30% - Concrete Floor Finishes	
<hr/>	
System: D5010 - Electrical Service/Distribution	This system contains no images
Note: 1- 75KVA phase converter 240V -120/208V	

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:	\$7,342,115	\$0	\$0	\$0	\$0	\$855,220	\$0	\$0	\$1,103,192	\$0	\$3,794,850	\$13,095,377
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A1010 - Standard Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2010 - Exterior Walls	\$56,136	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56,136
B2020 - Exterior Windows	\$1,089,446	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,089,446
B2030 - Exterior Doors	\$6,258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$108,035	\$114,293
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	\$562,875	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$562,875
B3010140 - Shingle & Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3020 - Roof Openings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C - Interiors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C10 - Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1010 - Partitions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1020 - Interior Doors	\$101,447	\$0	\$0	\$0	\$0	\$221,885	\$0	\$0	\$0	\$0	\$0	\$323,332
C1030 - Fittings	\$10,910	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$228,931	\$239,841

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C20 - Stairs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C2010 - Stair Construction	\$18,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$18,240
C30 - Interior Finishes	\$0	\$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	\$0
C3010230 - Paint & Covering	\$110,520	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,103,192	\$0	\$0	\$1,213,712
C3010232 - Wall Tile	\$0	\$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	\$0
C3020411 - Carpet	\$0	\$0	\$0	\$0	\$0	\$23,077	\$0	\$0	\$0	\$0	\$0	\$0	\$23,077
C3020412 - Terrazzo & Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$276,690	\$276,690
C3020413 - Vinyl Flooring	\$0	\$0	\$0	\$0	\$0	\$183,499	\$0	\$0	\$0	\$0	\$0	\$0	\$183,499
C3020414 - Wood Flooring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$489,758	\$489,758
C3020415 - Concrete Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3030 - Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,537,352	\$1,537,352
D - Services	\$0	\$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	\$0
D1010 - Elevators and Lifts	\$594,736	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$594,736
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$54,230	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,026,330	\$1,080,560
D2020 - Domestic Water Distribution	\$22,094	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$127,755	\$149,849
D2030 - Sanitary Waste	\$218,187	\$0	\$0	\$0	\$0	\$190,821	\$0	\$0	\$0	\$0	\$0	\$0	\$409,008
D2040 - Rain Water Drainage	\$0	\$0	\$0	\$0	\$0	\$151,621	\$0	\$0	\$0	\$0	\$0	\$0	\$151,621
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3020 - Heat Generating Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3030 - Cooling Generating Systems	\$869,541	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$869,541
D3040 - Distribution Systems	\$577,828	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$577,828
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3060 - Controls & Instrumentation	\$895,868	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$895,868
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$729,451	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$729,451
D4020 - Standpipes	\$0	\$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	\$0
D5010 - Electrical Service/Distribution	\$517,554	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$517,554
D5020 - Lighting and Branch Wiring	\$678,443	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$678,443

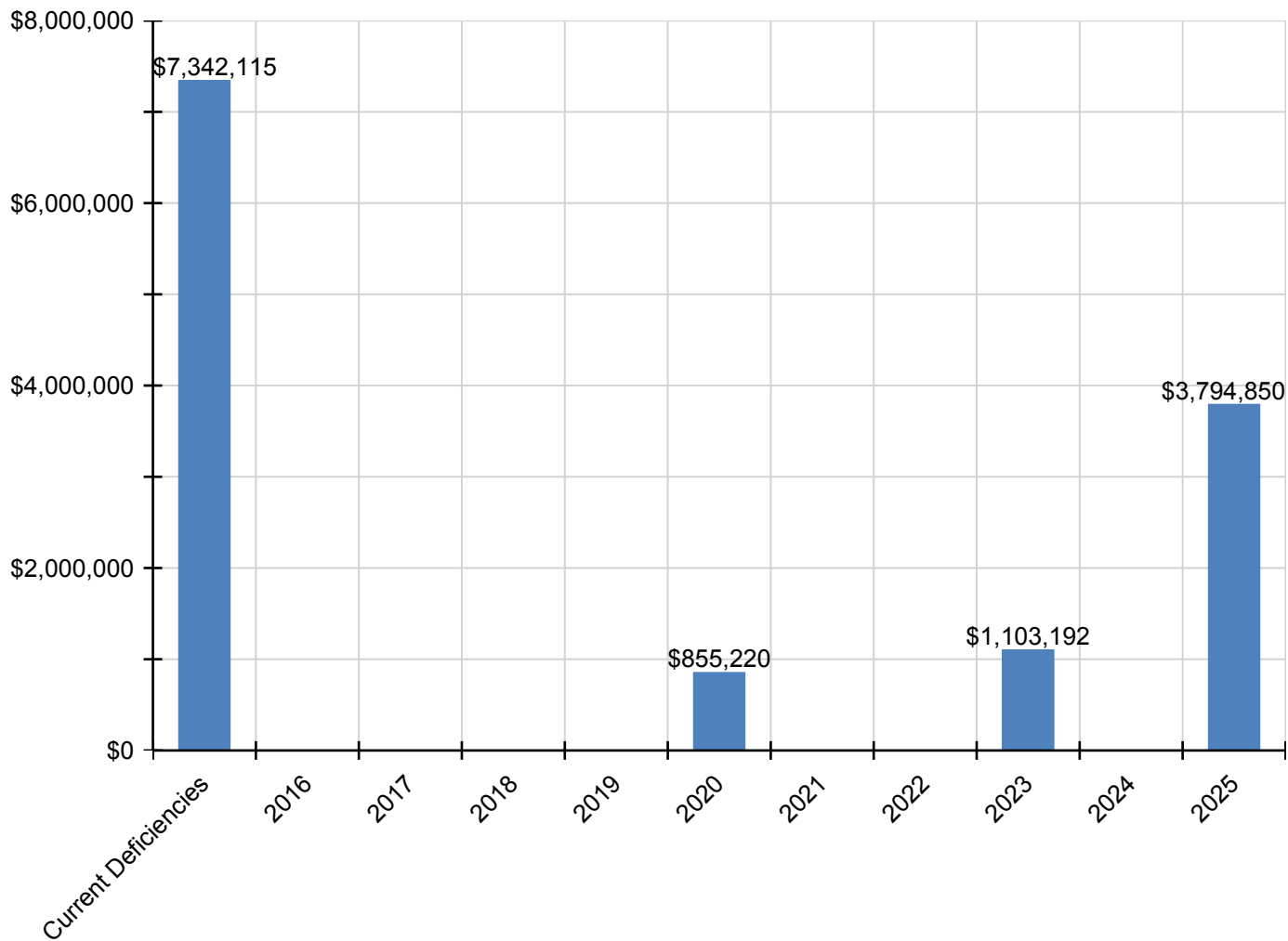
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D5030 - Communications and Security	\$208,831	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$208,831
D5090 - Other Electrical Systems	\$19,520	\$0	\$0	\$0	\$0	\$84,316	\$0	\$0	\$0	\$0	\$0	\$0	\$103,836
E - Equipment & Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E10 - Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1020 - Institutional Equipment	\$0	\$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	\$0
E20 - Furnishings	\$0	\$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	\$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.

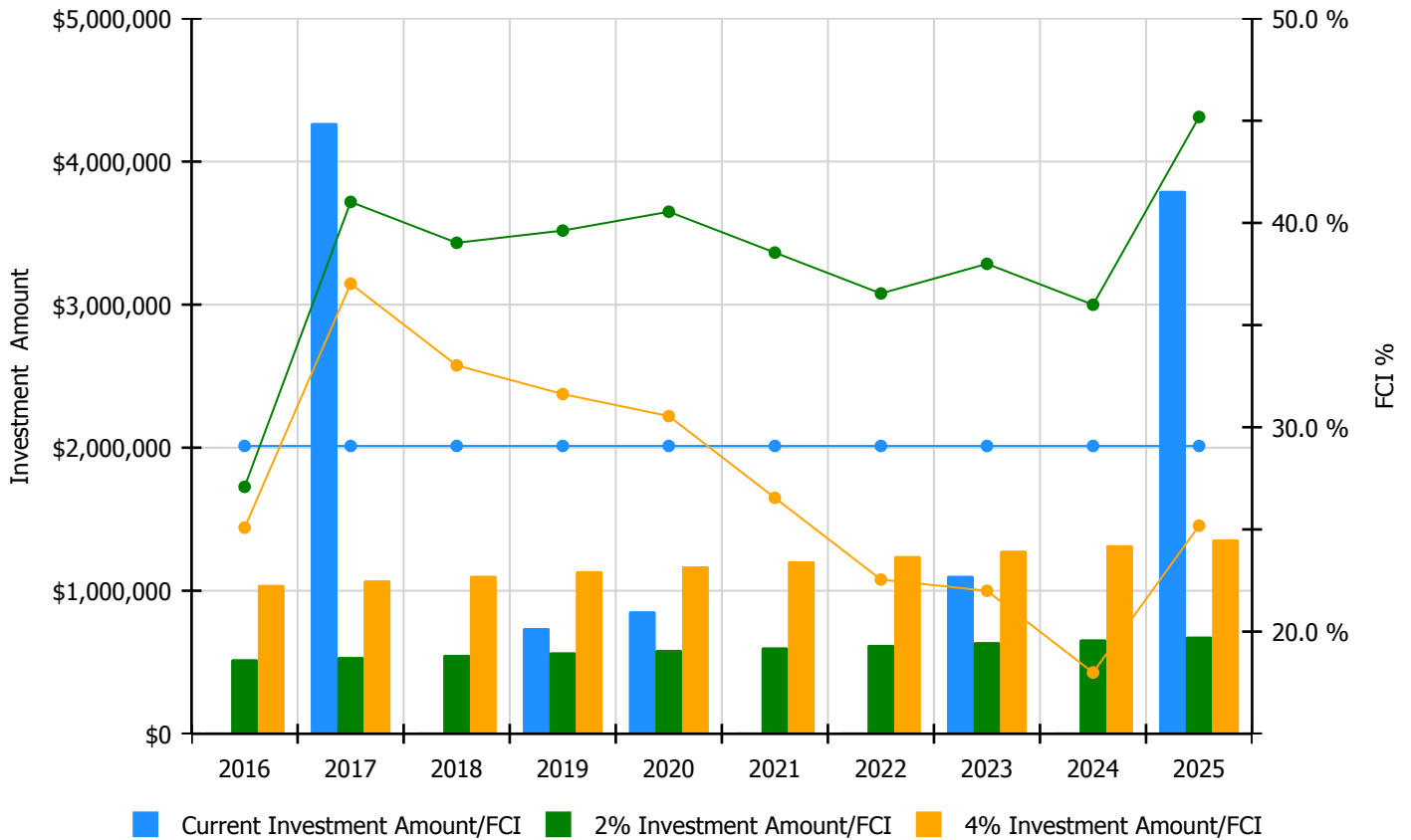


10 Year FCI Forecast by Investment Scenario

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

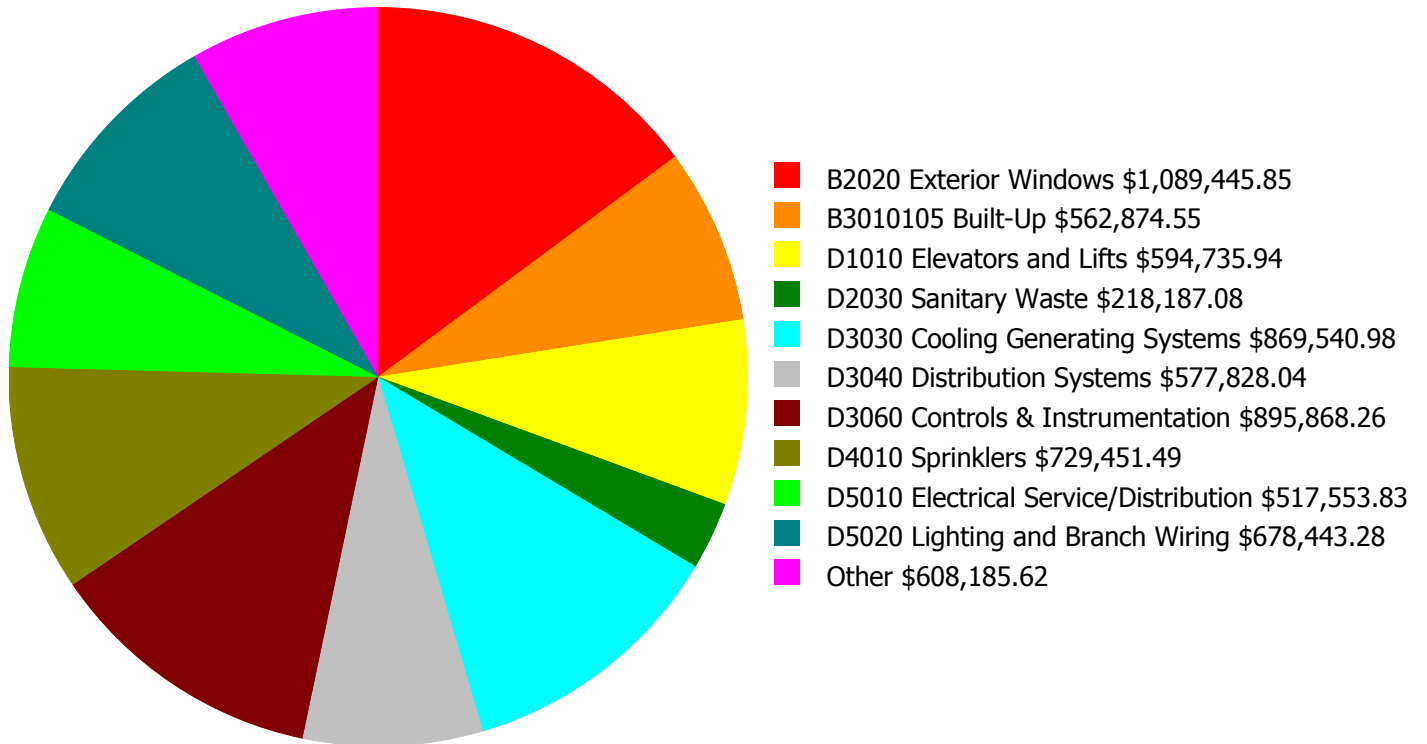
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 29.09%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$520,013.00	27.09 %	\$1,040,026.00	25.09 %
2017	\$4,268,863	\$535,613.00	41.03 %	\$1,071,227.00	37.03 %
2018	\$0	\$551,682.00	39.03 %	\$1,103,364.00	33.03 %
2019	\$738,181	\$568,232.00	39.62 %	\$1,136,465.00	31.62 %
2020	\$855,220	\$585,279.00	40.55 %	\$1,170,558.00	30.55 %
2021	\$0	\$602,838.00	38.55 %	\$1,205,675.00	26.55 %
2022	\$0	\$620,923.00	36.55 %	\$1,241,845.00	22.55 %
2023	\$1,103,192	\$639,550.00	38.00 %	\$1,279,101.00	22.00 %
2024	\$0	\$658,737.00	36.00 %	\$1,317,474.00	18.00 %
2025	\$3,794,850	\$678,499.00	45.18 %	\$1,356,998.00	25.18 %
Total:	\$10,760,306	\$5,961,366.00		\$11,922,733.00	

Deficiency Summary by System

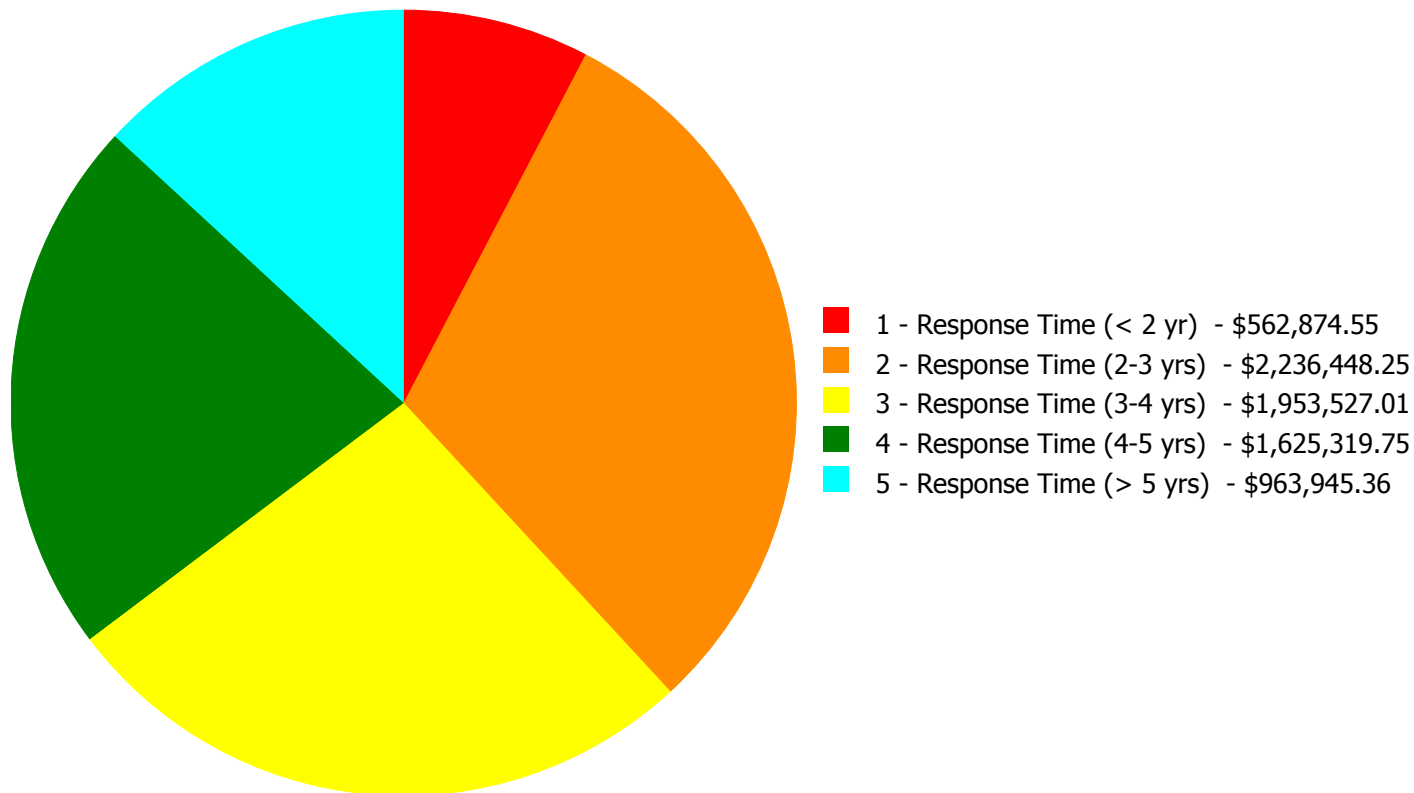
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: \$7,342,114.92

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: \$7,342,114.92

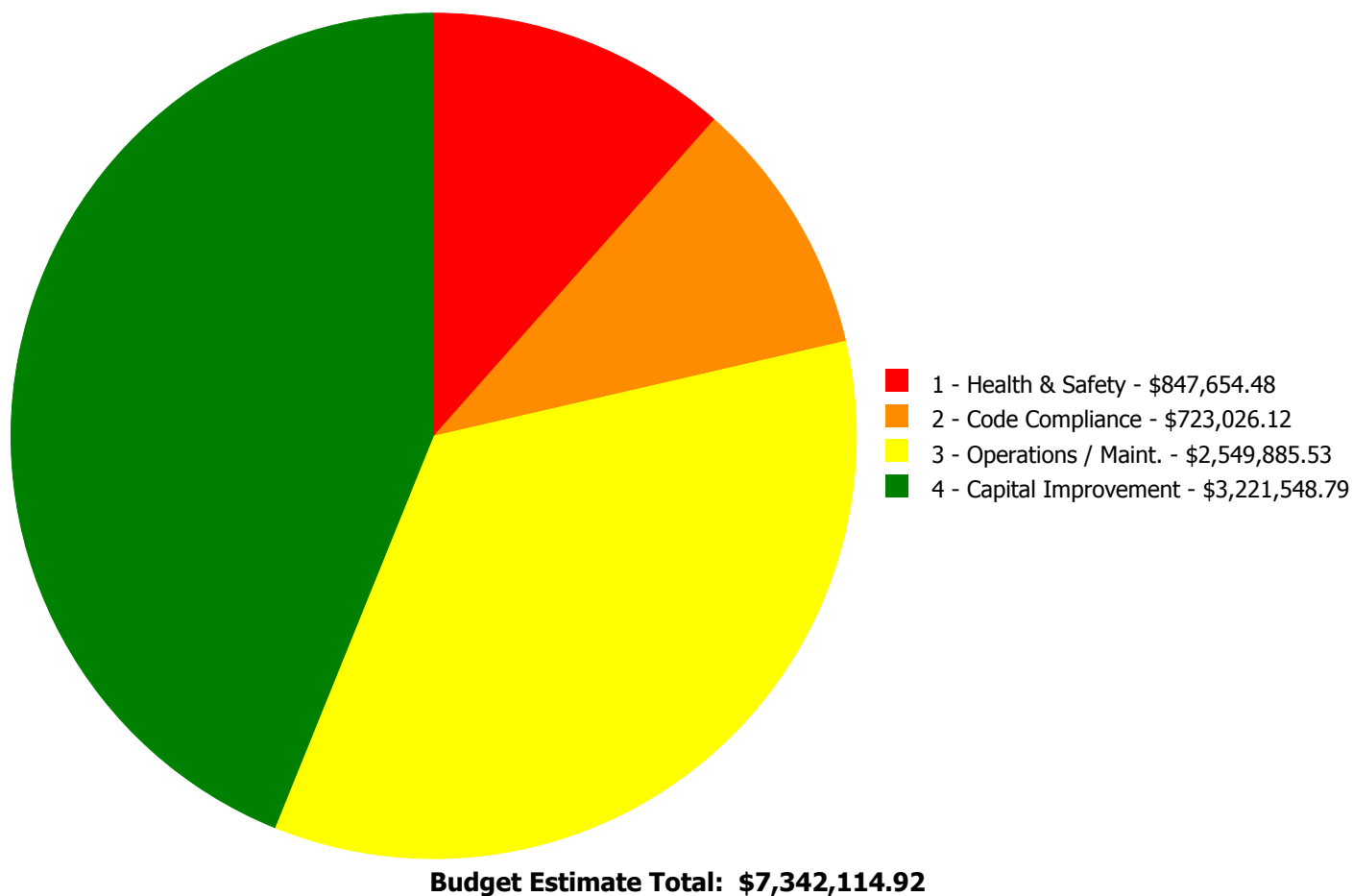
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
B2010	Exterior Walls	\$0.00	\$56,135.98	\$0.00	\$0.00	\$0.00	\$56,135.98
B2020	Exterior Windows	\$0.00	\$0.00	\$1,089,445.85	\$0.00	\$0.00	\$1,089,445.85
B2030	Exterior Doors	\$0.00	\$6,257.76	\$0.00	\$0.00	\$0.00	\$6,257.76
B3010105	Built-Up	\$562,874.55	\$0.00	\$0.00	\$0.00	\$0.00	\$562,874.55
C1020	Interior Doors	\$0.00	\$20,294.52	\$81,152.91	\$0.00	\$0.00	\$101,447.43
C1030	Fittings	\$0.00	\$10,910.24	\$0.00	\$0.00	\$0.00	\$10,910.24
C2010	Stair Construction	\$0.00	\$18,239.89	\$0.00	\$0.00	\$0.00	\$18,239.89
C3010230	Paint & Covering	\$0.00	\$29,202.42	\$81,317.51	\$0.00	\$0.00	\$110,519.93
D1010	Elevators and Lifts	\$0.00	\$594,735.94	\$0.00	\$0.00	\$0.00	\$594,735.94
D2010	Plumbing Fixtures	\$0.00	\$54,229.75	\$0.00	\$0.00	\$0.00	\$54,229.75
D2020	Domestic Water Distribution	\$0.00	\$22,093.53	\$0.00	\$0.00	\$0.00	\$22,093.53
D2030	Sanitary Waste	\$0.00	\$0.00	\$218,187.08	\$0.00	\$0.00	\$218,187.08
D3030	Cooling Generating Systems	\$0.00	\$0.00	\$0.00	\$0.00	\$869,540.98	\$869,540.98
D3040	Distribution Systems	\$0.00	\$0.00	\$483,423.66	\$0.00	\$94,404.38	\$577,828.04
D3060	Controls & Instrumentation	\$0.00	\$0.00	\$0.00	\$895,868.26	\$0.00	\$895,868.26
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$729,451.49	\$0.00	\$729,451.49
D5010	Electrical Service/Distribution	\$0.00	\$517,553.83	\$0.00	\$0.00	\$0.00	\$517,553.83
D5020	Lighting and Branch Wiring	\$0.00	\$678,443.28	\$0.00	\$0.00	\$0.00	\$678,443.28
D5030	Communications and Security	\$0.00	\$208,831.19	\$0.00	\$0.00	\$0.00	\$208,831.19
D5090	Other Electrical Systems	\$0.00	\$19,519.92	\$0.00	\$0.00	\$0.00	\$19,519.92
	Total:	\$562,874.55	\$2,236,448.25	\$1,953,527.01	\$1,625,319.75	\$963,945.36	\$7,342,114.92

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:



Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: B3010105 - Built-Up



Location: Roof

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and Replace Built Up Roof

Qty: 18,600.00

Unit of Measure: S.F.

Estimate: \$562,874.55

Assessor Name: System

Date Created: 09/01/2015

Notes: Replace roof – beyond service life and beginning to fail

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

System: B2010 - Exterior Walls



Location: Fire towers

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 66.00

Unit of Measure: L.F.

Estimate: \$43,649.33

Assessor Name: System

Date Created: 09/01/2015

Notes: •Repair stonework on fire tower and replace metal grating – rusted and failing

System: B2010 - Exterior Walls



Location: Kinder patio

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 115.00

Unit of Measure: L.F.

Estimate: \$12,486.65

Assessor Name: System

Date Created: 09/01/2015

Notes: Repair stonework on kinder rooftop area and replace fencing – rusted and failing

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.

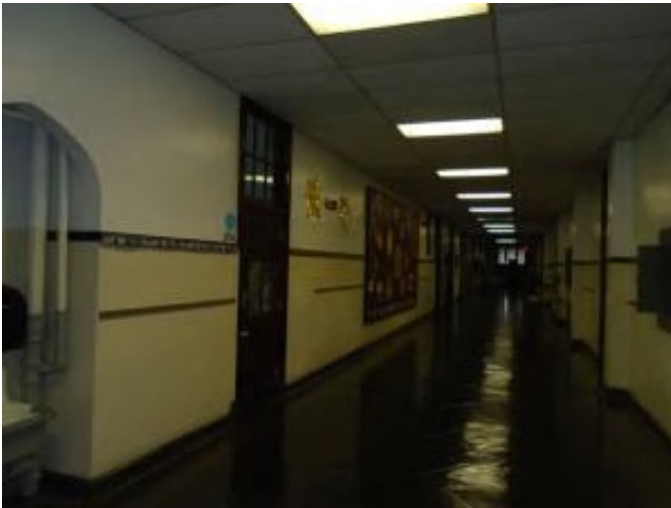
Estimate: \$6,257.76

Assessor Name: System

Date Created: 09/01/2015

Notes: Provide ADA compliant exterior door hardware at one entrance

System: C1020 - Interior Doors



Location: Entire Building

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Replace door knobs with compliant lever type

Qty: 40.00

Unit of Measure: Ea.

Estimate: \$20,294.52

Assessor Name: System

Date Created: 09/01/2015

Notes: Provide ADA lever handle lock/latchsets on interior doors

System: C1030 - Fittings



Location: Toilets

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Remove and replace damaged toilet partitions - handicap units

Qty: 12.00

Unit of Measure: Ea.

Estimate: \$10,910.24

Assessor Name: System

Date Created: 09/01/2015

Notes: Provide new toilet partitions and toilet accessories including grab bars for accessibility

System: C2010 - Stair Construction



Location: Stairs

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 100.00

Unit of Measure: L.F.

Estimate: \$18,239.89

Assessor Name: System

Date Created: 09/01/2015

Notes: Replace railing in stairways with code compliant

System: C3010230 - Paint & Covering



Location: Boiler room
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Repair and repaint all interior walls - SF of wall surface
Qty: 8,000.00
Unit of Measure: S.F.
Estimate: \$29,202.42
Assessor Name: System
Date Created: 09/01/2015

Notes: Strip and paint boiler room

System: D1010 - Elevators and Lifts



Location: TBD
Distress: Accessibility
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Add interior elevator - 4 floors - adjust the electrical run lengths to hook up the elevator
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$594,735.94
Assessor Name: System
Date Created: 09/01/2015

Notes: Install elevator for accessibility (location TBD)

System: D2010 - Plumbing Fixtures



Location: Entire building

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Remove and Replace Water Fountains - without ADA new recessed alcove

Qty: 8.00

Unit of Measure: Ea.

Estimate: \$53,067.85

Assessor Name: System

Date Created: 08/13/2015

Notes: Replace the aged drinking fountains throughout school with chilled, accessible models.

System: D2010 - Plumbing Fixtures



Location: Entire building

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace lavatory faucet

Qty: 5.00

Unit of Measure: Ea.

Estimate: \$1,161.90

Assessor Name: System

Date Created: 08/13/2015

Notes: Repair inoperative plumbing fixtures throughout the building.

System: D2020 - Domestic Water Distribution



Location: Fan Room
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace duplex domestic booster pump set (5 HP)
Qty: 0.50
Unit of Measure: Ea.
Estimate: \$22,093.53
Assessor Name: System
Date Created: 08/13/2015

Notes: Repair domestic water booster pump controller to stop pump from continuously running at full power.

System: D5010 - Electrical Service/Distribution



Location: Entire Building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace Electrical Distribution System (U)
Qty: 9.00
Unit of Measure: Ea.
Estimate: \$278,672.03
Assessor Name: System
Date Created: 08/07/2015

Notes: Replace the entire distribution system with new panels and new wiring/conduits. Approximate (9) 208/120V

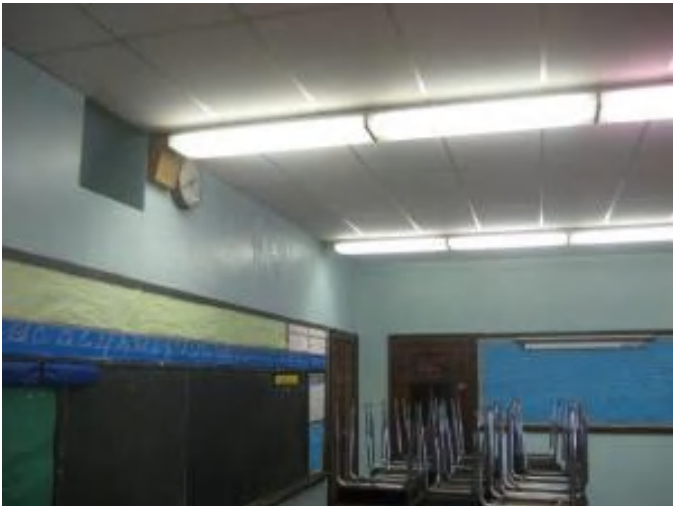
System: D5010 - Electrical Service/Distribution



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: \$238,881.80
Assessor Name: System
Date Created: 08/07/2015

Notes: 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.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace lighting fixtures
Qty: 633.00
Unit of Measure: Ea.
Estimate: \$550,631.38
Assessor Name: System
Date Created: 08/07/2015

Notes: Approximate 85% of the lighting fixtures are provided with T-12 lamps. Provide lighting fixtures with T-8 lamps. Approximate 633 fixtures.

System: D5020 - Lighting and Branch Wiring



Location: Classrooms
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 2 - Response Time (2-3 yrs)
Correction: Add wiring device
Qty: 432.00
Unit of Measure: Ea.
Estimate: \$127,811.90
Assessor Name: System
Date Created: 08/07/2015

Notes: Install minimum two receptacles in each wall of class rooms and other purpose rooms. Approximate 432 receptacles.

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: Add fire alarm device
Qty: 77.00
Unit of Measure: Ea.
Estimate: \$118,202.99
Assessor Name: System
Date Created: 08/07/2015

Notes: Provide a new fire alarm system Replace old fire alarm system with addressable type with audio/visual devices in the entire school. Approximate 77 devices

System: D5030 - Communications and Security



Location: Entire Building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Add/Replace Clock System or Components
Qty: 40.00
Unit of Measure: Ea.
Estimate: \$90,628.20
Assessor Name: System
Date Created: 08/07/2015

Notes: Provide a new clock system, wireless battery operated. Approximate 40 clocks

System: D5090 - Other Electrical Systems



Location: Roof
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Repair Lightning Protection System
Qty: 1.00
Unit of Measure: Job
Estimate: \$19,519.92
Assessor Name: System
Date Created: 08/07/2015

Notes: Prepare a study to determine if existing lightning protection system provide the proper coverage to the school building.

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

System: B2020 - Exterior Windows



Location: Entire Building

Distress: Energy Efficiency

Category: 4 - Capital Improvement

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

Correction: Remove and replace double slider windows

Qty: 250.00

Unit of Measure: Ea.

Estimate: \$1,089,445.85

Assessor Name: System

Date Created: 09/01/2015

Notes: Replace Plexiglas windows – hazed

System: C1020 - Interior Doors



Location: Entire Building

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 20.00

Unit of Measure: Ea.

Estimate: \$81,152.91

Assessor Name: System

Date Created: 09/01/2015

Notes: Repair or replace damaged doors and frames

System: C3010230 - Paint & Covering



Location: Throughout

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 11,600.00

Unit of Measure: S.F.

Estimate: \$81,317.51

Assessor Name: System

Date Created: 09/01/2015

Notes: Repair and repaint interior plaster walls (10% of wall surface)

System: D2030 - Sanitary Waste



Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Inspect sanitary waste piping and replace damaged sections. (+100KSF)

Qty: 58,000.00

Unit of Measure: S.F.

Estimate: \$218,187.08

Assessor Name: System

Date Created: 08/13/2015

Notes: Hire a qualified contractor to perform a detailed examination of the sanitary waste and rain water drainage piping using visual inspection and video cameras to determine areas in need of repair or replacement due to age and recent known failures.

System: D3040 - Distribution Systems



Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 58,000.00

Unit of Measure: S.F.

Estimate: \$483,423.66

Assessor Name: System

Date Created: 08/13/2015

Notes: Replace steam and condensate piping due to age and rust.

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

System: D3060 - Controls & Instrumentation



Location: Entire building

Distress: Energy Efficiency

Category: 4 - Capital Improvement

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

Correction: Replace pneumatic controls with DDC (150KSF)

Qty: 58,000.00

Unit of Measure: S.F.

Estimate: \$895,868.26

Assessor Name: System

Date Created: 08/13/2015

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

System: D4010 - Sprinklers

This deficiency has no image.

Location: Entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Install a fire protection sprinkler system

Qty: 58,000.00

Unit of Measure: S.F.

Estimate: \$729,451.49

Assessor Name: System

Date Created: 08/13/2015

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

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. (+150KSF)

Qty: 58,000.00

Unit of Measure: S.F.

Estimate: \$869,540.98

Assessor Name: System

Date Created: 08/13/2015

Notes: Remove aged and inefficient window unit air conditioners, and install 145 ton total capacity cooling system including rooftop chillers, cooling coils in basement air handlers, and insulation for metal ducts.

System: D3040 - Distribution Systems



Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace finned tube radiation terminals (per 100 LF)

Qty: 250.00

Unit of Measure: L.F.

Estimate: \$94,404.38

Assessor Name: System

Date Created: 08/13/2015

Notes: Replace the existing radiators with finned coil units.

Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D2020 Domestic Water Distribution	Pump, pressure booster system, 5 HP pump, includes diaphragm tank, control and pressure switch	1.00	Ea.	Basement fan room					25	2000	2025	\$9,625.00	\$10,587.50
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, steam, gross output, 2675 MBH, includes standard controls and insulated jacket, packaged	2.00	Ea.	Basement boiler room					35	2003	2038	\$45,100.00	\$99,220.00
D3040 Distribution Systems	AHU, field fabricated, built up, cool/heat coils, filters, constant volume, 40,000 CFM	2.00	Ea.	Basement fan room					25	2010	2035	\$134,200.00	\$295,240.00
D5010 Electrical Service/Distribution	Switchboards, distribution section, aluminum bus bars, 4 W, 120/208 or 277/480 V, 400 amp, excl breakers	1.00	Ea.	Basement fan room					30	1925	2017	\$2,650.00	\$2,915.00
												Total:	\$407,962.50

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):	11,300
Year Built:	1925
Last Renovation:	
Replacement Value:	\$228,831
Repair Cost:	\$59,181.86
Total FCI:	25.86 %
Total RSLI:	45.27 %



Description:

RECOMMENDATIONS

- Provide ADA compliant ramp at one entrance (location TBD)

Attributes:

General Attributes:

Bldg ID:	S251001	Site ID:	S251001
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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	63.49 %	36.27 %	\$59,181.86
G40 - Site Electrical Utilities	0.00 %	0.00 %	\$0.00
Totals:	45.27 %	25.86 %	\$59,181.86

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 \$
G2020	Parking Lots	\$8.50	S.F.	6,600	30	2000	2030		50.00 %	0.00 %	15			\$56,100
G2030	Pedestrian Paving	\$12.30	S.F.	4,700	40	2000	2040		62.50 %	102.37 %	25		\$59,181.86	\$57,810
G2040	Site Development	\$4.36	S.F.	11,300	25	2010	2035		80.00 %	0.00 %	20			\$49,268
G2050	Landscaping & Irrigation	\$4.36	S.F.		15	2010	2025		66.67 %	0.00 %	10			\$0
G4020	Site Lighting	\$4.84	S.F.	11,300	30				0.00 %	0.00 %				\$54,692
G4030	Site Communications & Security	\$0.97	S.F.	11,300	30				0.00 %	0.00 %				\$10,961
Total									45.27 %	25.86 %			\$59,181.86	\$228,831

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.

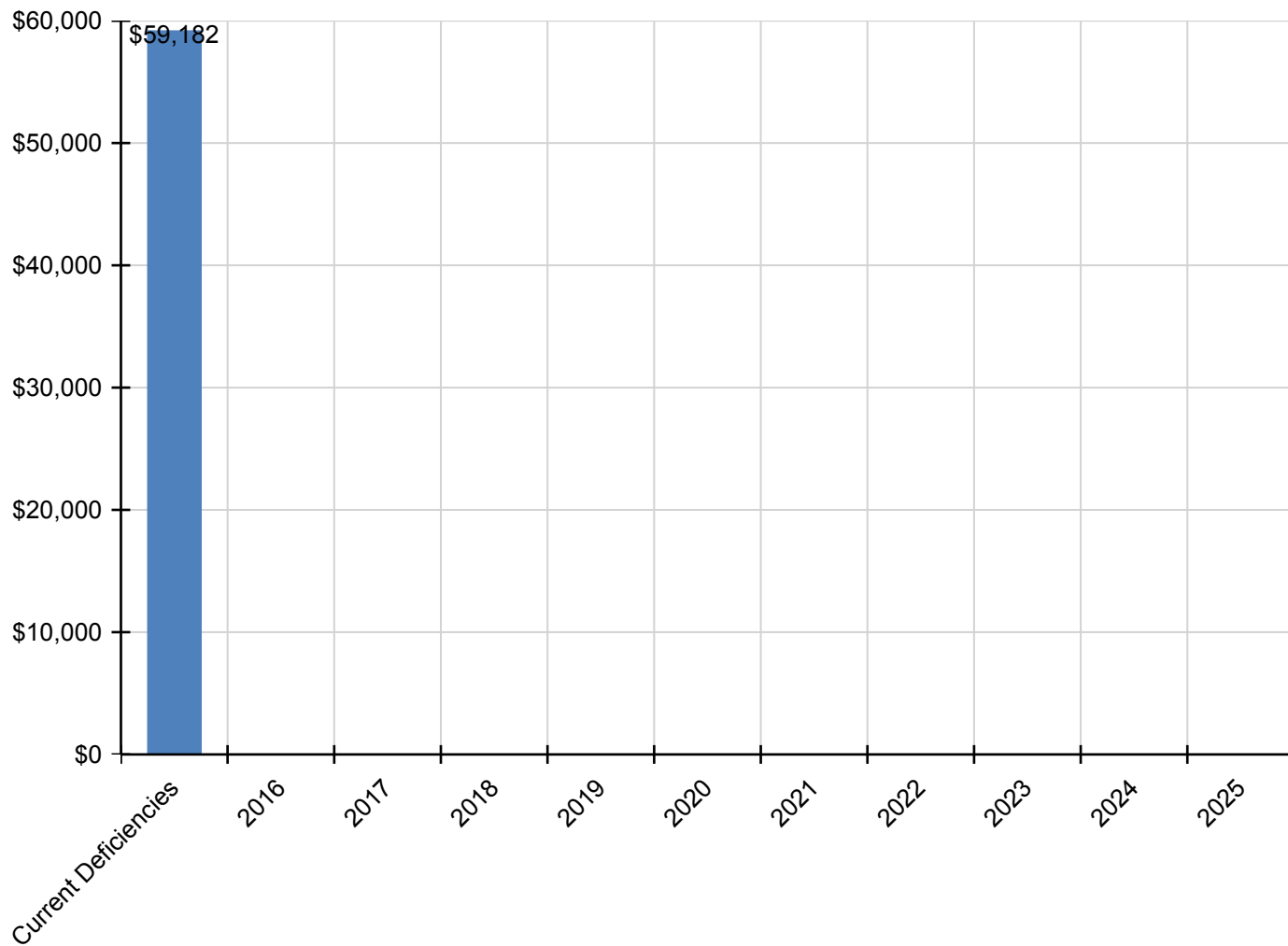
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$59,182	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$59,182
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
G2020 - Parking Lots	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2030 - Pedestrian Paving	\$59,182	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$59,182
G2040 - Site Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2050 - Landscaping & Irrigation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G40 - Site Electrical Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4020 - Site Lighting	\$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.

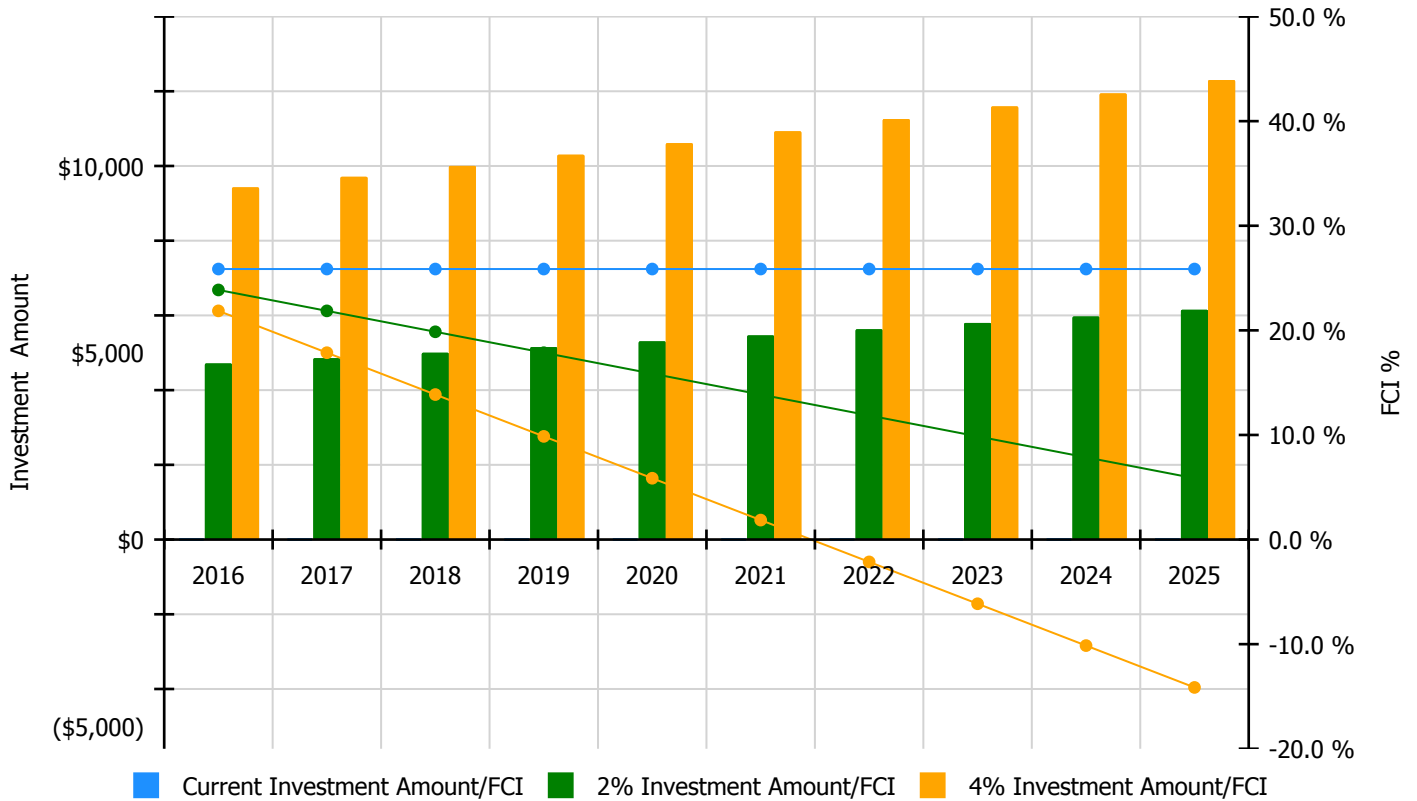


10 Year FCI Forecast by Investment Scenario

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

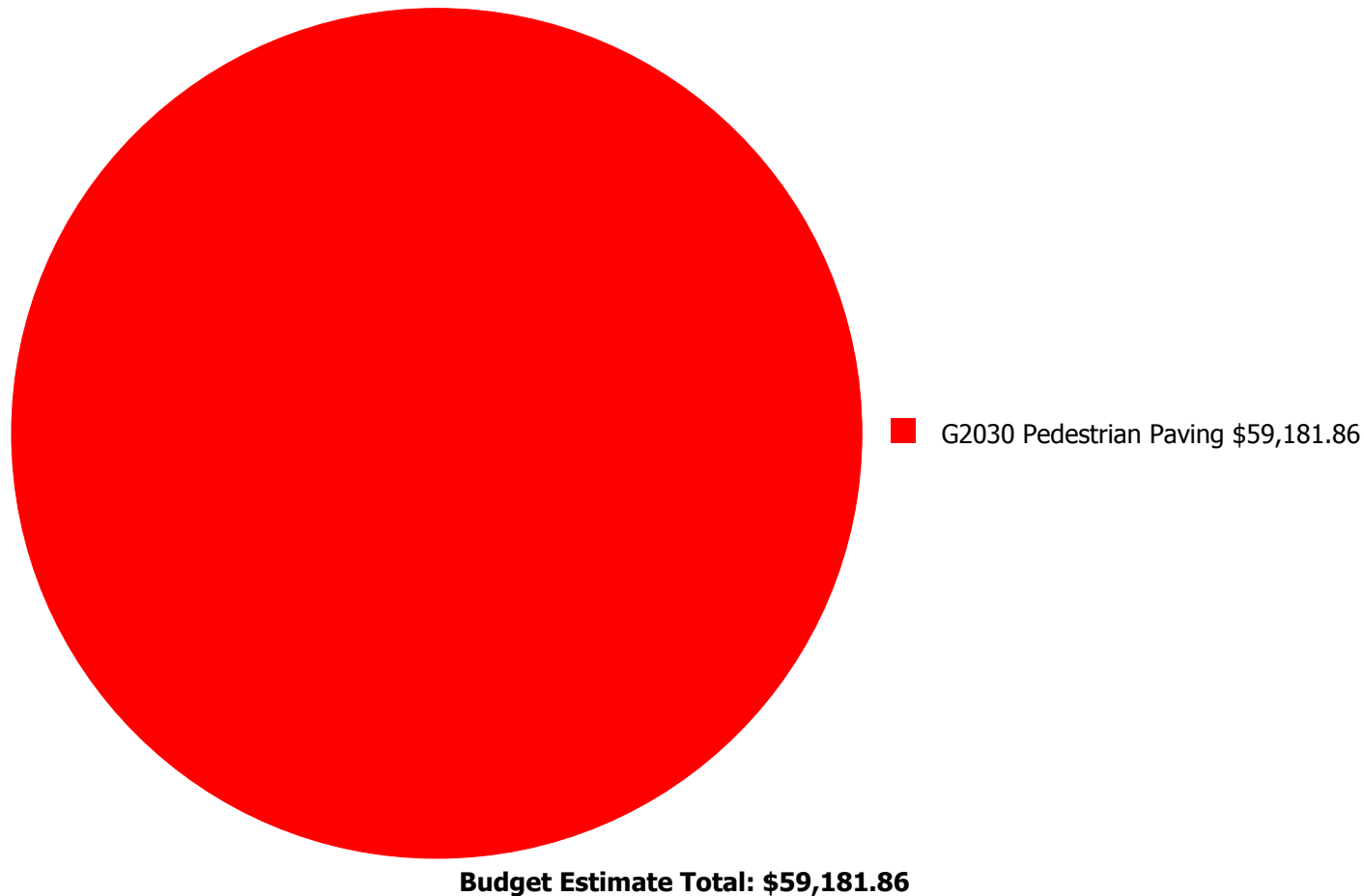
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 25.86%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$4,714.00	23.86 %	\$9,428.00	21.86 %
2017	\$0	\$4,855.00	21.86 %	\$9,711.00	17.86 %
2018	\$0	\$5,001.00	19.86 %	\$10,002.00	13.86 %
2019	\$0	\$5,151.00	17.86 %	\$10,302.00	9.86 %
2020	\$0	\$5,306.00	15.86 %	\$10,611.00	5.86 %
2021	\$0	\$5,465.00	13.86 %	\$10,929.00	1.86 %
2022	\$0	\$5,629.00	11.86 %	\$11,257.00	-2.14 %
2023	\$0	\$5,798.00	9.86 %	\$11,595.00	-6.14 %
2024	\$0	\$5,971.00	7.86 %	\$11,943.00	-10.14 %
2025	\$0	\$6,151.00	5.86 %	\$12,301.00	-14.14 %
Total:	\$0	\$54,041.00		\$108,079.00	

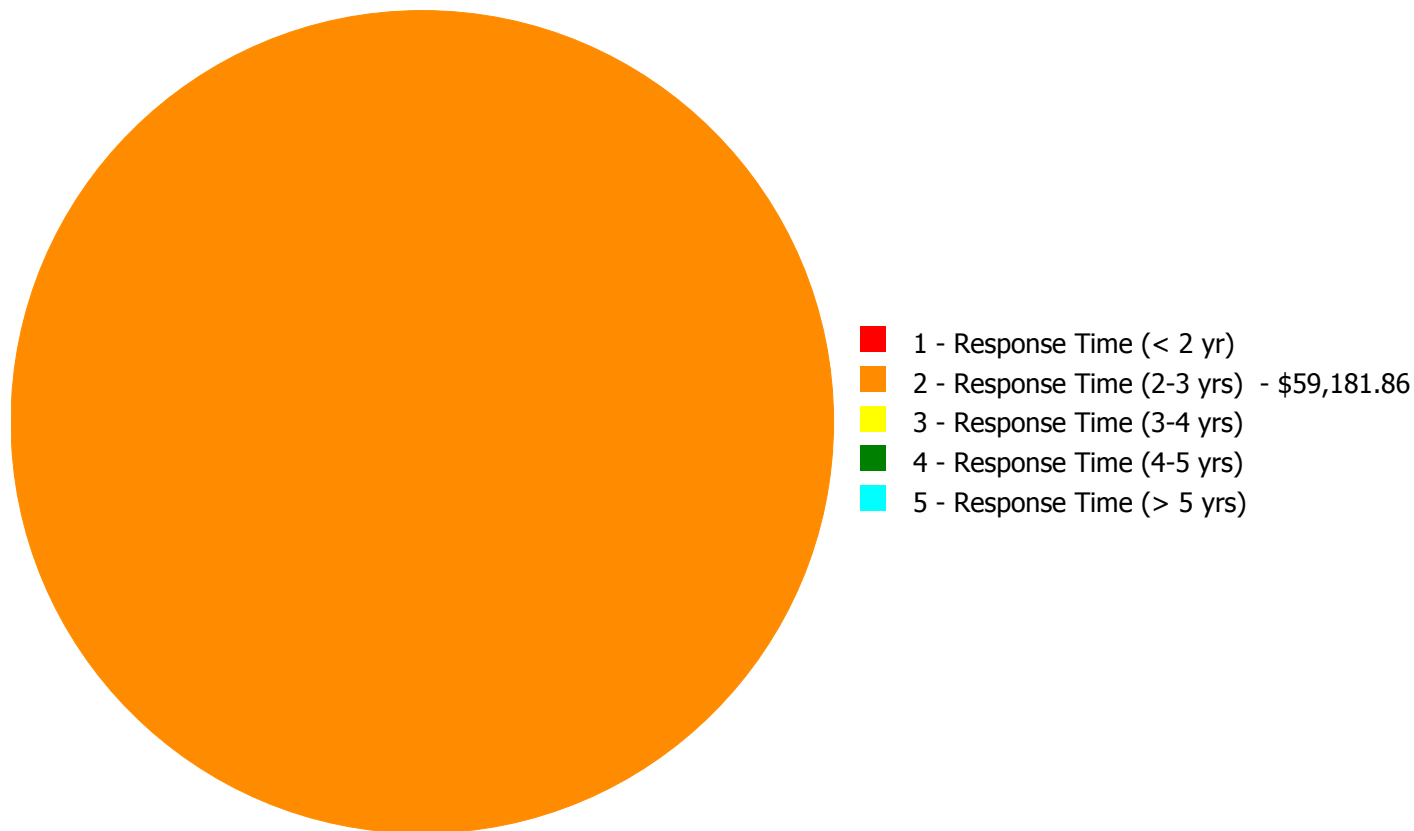
Deficiency Summary by System

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.



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: \$59,181.86

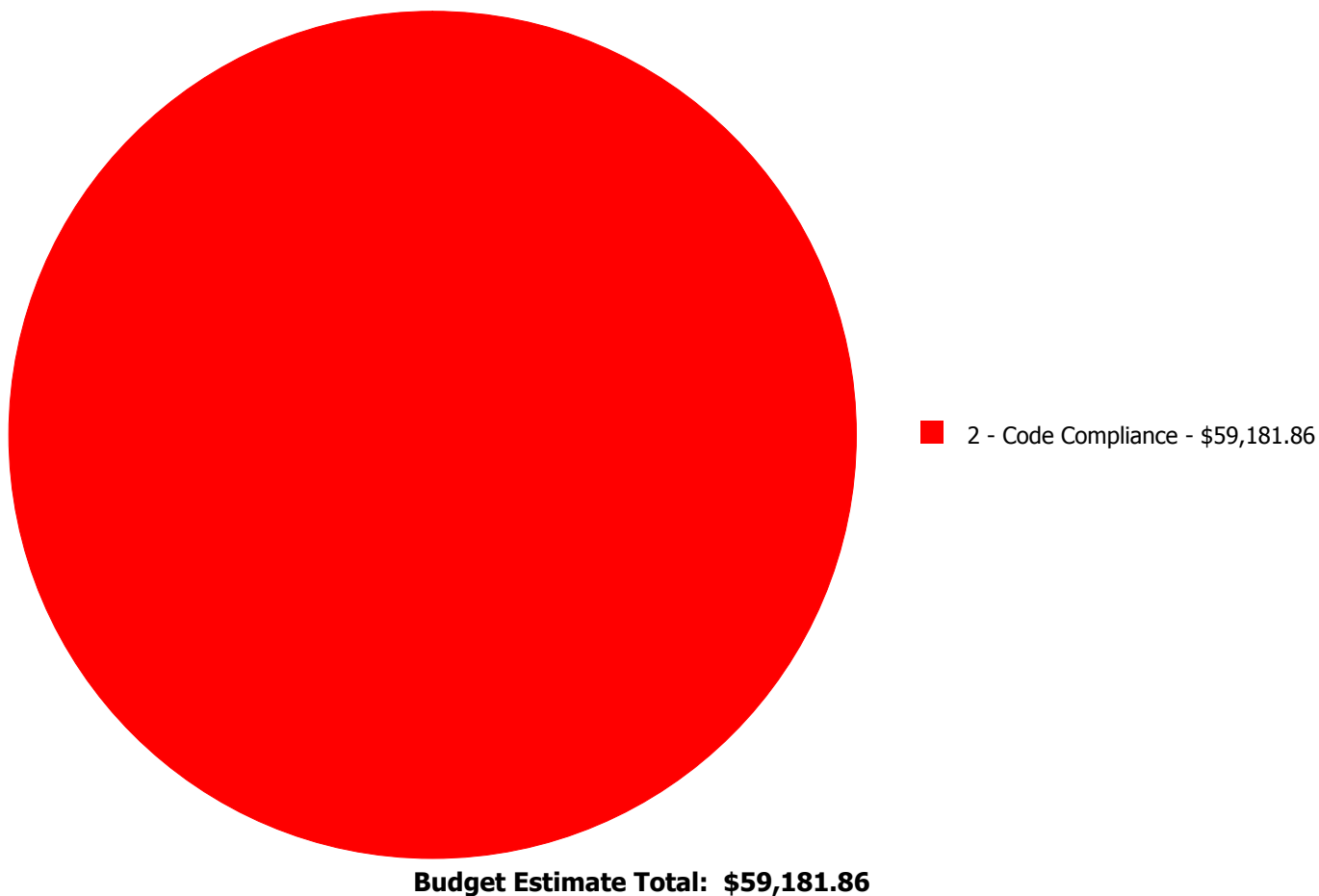
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2030	Pedestrian Paving	\$0.00	\$59,181.86	\$0.00	\$0.00	\$0.00	\$59,181.86
	Total:	\$0.00	\$59,181.86	\$0.00	\$0.00	\$0.00	\$59,181.86

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:



Deficiency Details by Priority

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

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

System: G2030 - Pedestrian Paving



Location: Entrance

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to 84" rise - per LF of ramp - figure 1 LF of ramp per inch of rise

Qty: 25.00

Unit of Measure: L.F.

Estimate: \$59,181.86

Assessor Name: Ben Nixon

Date Created: 09/01/2015

Notes: Provide ADA compliant ramp at one entrance (location TBD)

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

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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

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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

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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.

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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

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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

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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.

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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	Photovoltaic system

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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

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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

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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