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.

Parkway Northwest (Hill-Freedman) School

Governance	DISTRICT	Report Type	High
Address	6200 Crittenden St.	Enrollment	249
	Philadelphia, Pa 19138	Grade Range	09-12'
Phone/Fax	215-400-3390/215-400-3391	Admissions Category	Special Admit
Website	Www.philasd.org/schools/parkwaynw/	Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = Cost of Assessed Deficiencies / Replacement Value

< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
Buildings				
Minimal Current Capital Funding Required	Refurbish Systems in building	Replace Systems in building.	Building should be considered for major renovation.	Building should be considered for closing/replacement.
Systems				
Perform routine maintenance on system	System requires minor repairs	System should be studied to determine repair vs. replacement.	System is nearing end of its life expectancy and should be considered for replacement	System should be replaced as part of the Capital Program

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	**35.51%**	**$9,617,054**	**$27,083,742**
Building	41.91 %	$9,498,566	$22,661,660
Grounds	02.68 %	$118,488	$4,422,082

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$1,183,762
Exterior Walls (Shows condition of the structural condition of the exterior facade)	03.33 %	$68,413	$2,055,865
Windows (Shows functionality of exterior windows)	40.17 %	$403,692	$1,004,923
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$68,091
Interior Doors (Classroom doors)	115.77 %	$190,823	$164,826
Interior Walls (Paint and Finishes)	00.00 %	$0	$923,684
Plumbing Fixtures	37.91 %	$240,675	$634,886
Boilers	00.00 %	$0	$0
Chillers/Cooling Towers	00.00 %	$0	$0
Radiators/Unit Ventilators/HVAC	251.67 %	$5,080,681	$2,018,767
Heating/Cooling Controls	158.90 %	$1,007,368	$633,947
Electrical Service and Distribution	158.26 %	$720,896	$455,502
Lighting	13.14 %	$213,994	$1,628,538
Communications and Security (Cameras, Pa System and Fire Alarm)	81.59 %	$497,680	$609,997

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

S646001;Hill / Freedman and Lewis

Final

Site Assessment Report

January 31, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	46,959
Year Built:	1980
Last Renovation:	
Replacement Value:	$27,083,742
Repair Cost:	$9,617,054.10
Total FCI:	35.51 %
Total RSLI:	70.21 %

Description:

Facility Assessment, December 2015

School District of Philadelphia

Hill/Freedman School

6200 Crittenden Street

Philadelphia, PA 19138

46,959 SF / 216 Students / LN 06

The Hill/Freedman school building is located at 6200 Crittenden St. in Philadelphia, PA. The two story 46,959 square foot building was originally constructed in 1977.

The Facility Area Coordinator did not accompany the Parsons assessment team to the site and was unable to provide input on current problems and planned renovation projects. Mr. Gerald Sweeny, the Building Engineer, accompanied us on our tour of the school and provided us with

information on the building systems and recent maintenance history.

ARCHITECTURAL/STRUCTURAL SYSTEMS

The building typically rests on concrete foundations and bearing walls that are not showing signs of settlement damage. The main structure typically consists of cast-in-place concrete columns, beams, and one way ribbed slab. The main roof structure consists of concrete one-way slab supported by main structural frame. Main roofing is built up application in good condition. The building envelope is typically masonry and concrete with face brick in good condition in need of cleaning. The windows are extruded aluminum, double hung, single-pane windows with insect/security screens. All windows are in poor condition and beyond service life. Exterior doors are hollow metal in fair condition. The building is accessible per ADA requirements from public sidewalks.

Partition walls are painted CMU block in good condition. Interior doors are generally hollow metal frame with solid core wood doors with lites that are beyond service life. Doors leading to exit stairways are hollow metal frame and doors in good condition. Most interior doors do not have lever type handles. Fittings include: toilet accessories in fair condition; hollow metal toilet partitions in fair to poor condition; and handrails and ornamental metals, generally in good condition. Toilet partitions and accessories are generally not ADA accessible. Interior identifying signage is directly painted on wall or door surfaces and plastic panels with brail in fair condition. Stair construction is generally concrete in steel with cast iron nosing in good condition. Utility stairs are metal in good condition. Stair railings are floor and wall mounted metal railing in fair condition.

The interior wall finishes include: painted CMU throughout in good condition. Flooring finishes include bare concrete in stairways, storage, and service areas in good condition; tile in toilets in good condition; and vinyl in all other areas in fair to good condition. Ceiling finishes include suspended acoustic tile system in corridors and offices in fair condition and painted exposed ceiling in all other areas in good condition.

The building has one elevator serving both floors.

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

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

MECHANICAL

Plumbing Fixtures

Many of the original plumbing fixtures remain in service. Fixtures in the restrooms on each floor consist of both floor and wall mounted flush valve water closets, wall hung urinals and lavatories with wheel handle faucets. Many of the units are beyond their useful service lives, and should be replaced.

Drinking fountains consist of stainless steel wall hung fixtures with integral refrigerated coolers. Several fixtures were damaged and inoperable at the time of the site visit. The three (3) damaged fixtures should be replaced; most are accessible type.

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

The Kitchen has one (1) sink; a three-compartment stainless steel sink with lever operated faucets and a grease trap. Chemicals are injected manually into the sanitizing basins.

Domestic Water Distribution

A 4” city water service enters the building in a storage room adjacent to the stage in the Cafeteria/Auditorium; the 4” meter and valves are located in the same room. A pressure regulating valve is installed but a backflow preventer in not. The maintenance staff reports no significant problems with scale build up in the domestic piping and the supply is adequate to the fixtures, but the piping in the building is over 35 years old and should be inspected and replaced by a qualified contractor.

One (1) Bradford White electric, 80 gallon, vertical hot water heater with circulating pump supplies hot water for domestic use. The unit is located in a mechanical room on the first floor level. An abandoned hot water storage tank is still present in the mechanical room from the previous domestic hot water heater. The hot water heater is equipped with a T&P relief valve. The unit was installed in 2013. The domestic hot water heater is within its service life and should provide reliable service for the next 8-10 years.

Sanitary Waste

The original sanitary sewer piping could not be verified as it was all located in chases that were not accessible during the site visit. It is assumed that the piping is galvanized with threaded fittings.

This school does not have a sewage ejector or sump pump.

The maintenance staff reported mostly minor problems with the sanitary waste piping systems. However, the sewer piping has been in service over 35 years and will require more frequent attention from the maintenance staff as time passes. The District should hire a qualified contractor to examine the sanitary waste piping using video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

Rain Water Drainage

The rain water drains from the roof are routed through classrooms and mechanical chases in the building and appear to be original. The piping is cast iron with hub and spigot fittings and is at the end of its service life. The drain piping should be inspected by a qualified contractor and repaired as necessary.

Distribution Systems

Conditioned air is provided to the classrooms by Bard QTec self-contained packaged air-air heat pumps located in each classroom. Additionally, two (2) Bard QTec units are installed in the Cafeteria/Auditorium and two (2) units in the Gymnasium. The units are located on exterior walls of each space to allow for outdoor air ventilation. Each unit is equipped with electric heating coils for supplemental heating during very cold weather. According to the Building Engineer the units were installed in 2000. The Building Engineer did not report any issues with the heat pumps. Commercial air-air heat pumps have an anticipated service life of 15 years; these units have been in service 16 years and should be replaced within the next 2-4 years.

Conditioned air is provided to the building by five (5) Edpac air handling units (AHU) with roof mounted fluid cooler units. These units serve the Gymnasium, Atrium, suite 110, and the Cafeteria/Auditorium. Five (5) associated single-fan roof mounted Heatcraft fluid coolers allow for cooling during the cooling season. The Edpac units utilize R-22 refrigerant, which is being phased out of use in the United States. Each unit is equipped with electric heat. The fluid coolers utilize a water/glycol mixture. Each Edpac unit is located in the space that is serves. According to the Building Engineer the units are original to the building. The District should replace the Edpac and associated fluid cooler units, which are well beyond their service lives and in poor condition.

The building is exhausted by a total of ten (10) roof mounted exhaust fans and five (5) gravity ventilators located on two (2) of the four (4) distinct roof levels. For simplicity the roofs will be divided into “upper” and “lower”. A total of nine (9) exhaust fans and five (5) gravity ventilators are located on the upper roof. A total of one (1) exhaust fan is located on the lower roof. The exhaust fans remove air from the restrooms. The gravity ventilators allow relief air to escape from the Atrium. The age of the fans is not known, but they appear to be in good condition. Roof mounted exhaust fans have an anticipated service life of 20 years; these units should be replaced within the next 4-6 years. The gravity ventilators, in good condition, should also be replaced within the next 4-6 years.

Terminal & Package Units

Two (2) packaged through wall air conditioners provide supplemental heating and cooling in the teachers’ lounge and the offices located on the first floor. The units have supplemental electric heating coils and manual controls. Each unit is installed on the floor and ducted through a window frame. The installation date of this units are unknown but they appear to be approaching the end of their service lives. The district should budget to replace these units within the next 5-7 years.

A Mitsubishi split system air conditioning system provides cooling to the LAN room located on the first floor off of the Main Office. The installation date of this unit is unknown; the anticipated service life of a split system air conditioner is 15 years. The district should budget to replace this unit within the next 7-10 years.

The Kitchen does not have any exhaust hoods as only electric warming equipment is installed.

Controls & Instrumentation

Controls for the building consist of a wall mounted thermostat for each Bard and Edpac unit. Each unit has an individual thermostat where the room’s set point is controlled. The Building Engineer manually sets the temperature in each space on the corresponding thermostat. These

controls should be updated with a new DDC system and computer interface to provide more efficient operation.

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

Sprinklers

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

The building is not equipped with fire stand pipe.

ELECTRICAL:

Site electrical service - The primary power is at 13.2KV from the power poles. The primary power is brought into the school underground and feeding a 1500 KVA dry-type transformers. The secondary power feeds a 2000A, 480V/277V, 3 phase switchboard in the same line up. The PECO meter (PECO 02 017458408) is also located inside the new electrical room (basement). The switchboard is relatively old (built in 1980). This electrical service has reached the end of its useful service life.

Distribution system - The electrical distribution is accomplished by using the main 480V/277V switchboard (located in the electrical room) and feeding several 120V (via a small 480V-120V transformer) lighting and receptacle panels throughout the building. These panels are also relatively old, and they have reached the end of their useful service life.

Receptacles - The receptacles in classrooms, computer rooms, libraries, and other areas are not adequate. The walls in classrooms and the computer rooms have insufficient number of receptacles (minimum of 2 on each wall is required). Only about 20% of school has been upgraded with more receptacles, however the majority of the school (80%) lacks enough receptacles.

Lighting - Interior building is illuminated by various types of fixtures. They include fluorescent lighting (mostly T-5 lamps) in majority of the areas, including; classrooms, corridors, offices, Library, cafeteria, Kitchen, etc. Surface or pendant mounted industrial fluorescent fixtures are used in mechanical and electrical rooms. There are upgraded HID lighting fixtures in the Gymnasium. In 2005, the school lighting was upgraded using 277V fixtures. The entire lighting system is in good condition.

Fire alarm - The present Fire Alarm system is old, not automatic/addressable, and is not in compliance with safety codes. There are some manual pulls stations throughout the building. There are also some horn/strobes in the classrooms, corridors, offices and other areas in the school. Overall, the FA system is old and has reached the end of its useful service life.

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

Public address - A separate PA system does not exist. School uses the telephone systems for public announcement. The present System is functioning properly. Each class room is provided with an intercom telephone service. This system allows paging and intercom communication between main office to each classroom, and vice versa between each classroom and main office. Also, the system allows communications between classrooms to other classrooms.

Clock and Program system – There are clocks in each classroom (12-inch round clocks), however the clocks are not controlled properly by the master clock control.

Television System - Television system is not provided for the school. There are smart boards in most of the classrooms capable of connecting to computers and internet.

Security Systems, access control, and video surveillance - The school has a video surveillance system. There are cameras installed at exit doors, corridors, exterior, and other critical areas. However school would like to have more cameras to cover critical areas. The new cameras should be controlled by a Closed Circuit Television system (CCTV).

Emergency Power System – There is no emergency generator in this building.

Emergency lighting and exit lights - there are insufficient number of emergency lights/exit lights in the corridors and other exit ways. The

exit/emergency lights are old and they have reached the end of their useful service life.

Lightning Protection System - There is no lightning protection in this school. The lightning rods are needed to be connected to the ground by using stranded aluminum cables from the roof top all the way to the ground floor.

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

Auditorium – The auditorium general lighting uses decorative light fixtures with adequate lumens. The stage lighting has old fixtures without a proper controller. Also, the auditorium has an old sound system.

The auditorium stage lighting and sound systems are old and they have reached the end of their useful service life.

Elevators – This school has a hydraulic elevator (4000 lbs.).

Grounds (site):

Roadway on west side of site leads to turn around and is asphalt paving in fair condition. Parking for staff and visitor vehicles on north and east sides is asphalt paving in very good condition with accessible stalls and signage. Concrete play yard and play structure on south side are in good condition. Chain link fence and gates surrounding yard and parking area is in fair condition. Landscaping is extensive and surrounds site with large grass areas and mature trees and bushes in good condition.

Site Lighting - The school has some exterior lighting. However, a few pole-mounted lights are needed to provide adequate lighting for the grounds security and safety of people at night.

Site Paging – The school has some exterior speakers, however a few additional speakers are needed for proper communication with students playing outside.

Accessibility: the building does have accessible entrances and accessible routes on the ground level. Interior ramps allow access to second floor. Some toilets are equipped with accessible fixtures, partitions and accessories, such as grab bars and accessible partitions. Most of the doors in the building do have lever type door handles.

RECOMMENDATIONS:

- Clean exterior brick
- Replace exterior windows – beyond service life
- Replace interior doors and hardware – beyond service life
- Replace toilet partitions - failing
- Replace six (6) urinals, in use beyond their service life, with new low flow fixtures.
- Replace eighteen (18) water closets, in use beyond their service life, with new code compliant fixtures.
- Replace eight (8) lavatories, in use beyond their service life, with new code compliant fixtures.
- Replace three (3) wall hung drinking fountains and integral refrigerated coolers in the corridors. These units were damaged at the time of the site visit and were not operable.
- Replace three (3) service sinks, located in closets off the corridors of each floor, which are beyond their service lives.
- Install a reduced pressure backflow preventer on the incoming 4” domestic water line.
- Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for over 35 years, and replace any damaged piping.
- Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Hire a qualified contractor to perform a detailed examination of the rain water drainage piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Replace twenty-eight (28) Bard QTec air-air heat exchangers in each classroom, four (4) of the units are located in other spaces, which are at the end of their service lives.
- Replace the Edpac AHU and associated fluid cooler serving the Gymnasium which are beyond their service lives.
- Replace the Edpac AHU and associated fluid cooler serving the Atrium which are beyond their service lives.
- Replace the Edpac AHU and associated fluid cooler serving suite 110 which are beyond their service lives.
- Replace the two (2) Edpac AHUs and associated fluid coolers serving the Cafeteria/Auditorium which are beyond their service lives.
- Replace the ten (10) existing roof mounted exhaust fans that are estimated to be approaching the end of their useful service lives.

- Replace the five (5) existing roof mounted gravity ventilators that are estimated to be approaching the end of their useful service lives.
- Replace the existing controls for the HVAC systems with modern DDC modules to improve reliability and energy efficiency. Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.
- Install a new electrical service to replace the old electrical distribution system built in 1980.
- Install new 120V lighting and receptacle panels throughout the building (total of 10)
- Install new receptacles for 80% of the building
- Install new clock system
- Install additional video surveillance system for indoor and outdoor.
- Install new automated/addressable FA system.
- Install a new emergency generator.
- Install new exit lights and emergency lights.
- Install an upgraded auditorium stage lighting, lighting control and sound system.
- Install additional pole-mounted lights for the grounds
- Install additional exterior speakers for the grounds

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 5 / Tm 4
Status:	Accepted by SDP	Team:	Tm 4
Site ID:	S646001		

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.

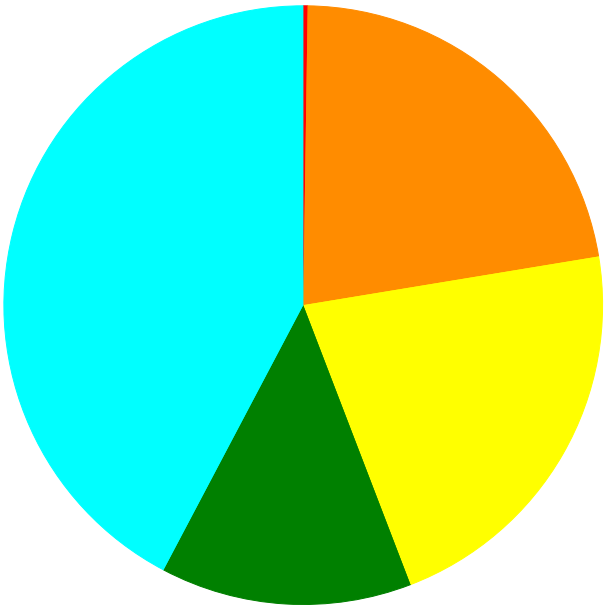
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	65.00 %	0.00 %	$0.00
A20 - Basement Construction	65.00 %	0.00 %	$0.00
B10 - Superstructure	65.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	77.56 %	15.09 %	$472,104.66
B30 - Roofing	50.04 %	0.00 %	$0.00
C10 - Interior Construction	75.81 %	21.90 %	$252,417.19
C20 - Stairs	65.00 %	0.00 %	$0.00
C30 - Interior Finishes	43.13 %	0.00 %	$0.00
D10 - Conveying	105.71 %	0.00 %	$0.00
D20 - Plumbing	63.73 %	102.90 %	$968,350.97
D30 - HVAC	107.85 %	190.40 %	$6,088,049.13
D40 - Fire Protection	14.29 %	0.00 %	$0.00
D50 - Electrical	110.11 %	58.68 %	$1,619,729.02
E10 - Equipment	60.00 %	13.10 %	$97,915.35
E20 - Furnishings	37.50 %	0.00 %	$0.00
G20 - Site Improvements	28.23 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	10.82 %	$118,487.78
Totals:	**70.21 %**	**35.51 %**	**$9,617,054.10**

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)
B616001;Lewis - not assessed	187,000	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
B646001;Hill-Freedman	46,959	41.91	$22,737.57	$2,131,543.88	$1,997,594.68	$1,281,534.20	$4,065,155.99
G646001;Grounds	251,800	2.68	$0.00	$0.00	$95,860.24	$22,627.54	$0.00
Total:		**35.51**	**$22,737.57**	**$2,131,543.88**	**$2,093,454.92**	**$1,304,161.74**	**$4,065,155.99**

Deficiencies By Priority



- 1 - Response Time (< 2 yr) - $22,737.57
- 2 - Response Time (2-3 yrs) - $2,131,543.88
- 3 - Response Time (3-4 yrs) - $2,093,454.92
- 4 - Response Time (4-5 yrs) - $1,304,161.74
- 5 - Response Time (> 5 yrs) - $4,065,155.99

Budget Estimate Total: $9,617,054.10

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:	Middle School
Gross Area (SF):	187,000
Year Built:	1971
Last Renovation:	
Replacement Value:	$0
Repair Cost:	$0.00
Total FCI:	0.00 %
Total RSLI:	0.00 %

Description:

This building was not assessed.

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B616001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S646001		

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	0.00 %	0.00 %	$0.00
A20 - Basement Construction	0.00 %	0.00 %	$0.00
B10 - Superstructure	0.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	0.00 %	0.00 %	$0.00
B30 - Roofing	0.00 %	0.00 %	$0.00
C10 - Interior Construction	0.00 %	0.00 %	$0.00
C20 - Stairs	0.00 %	0.00 %	$0.00
C30 - Interior Finishes	0.00 %	0.00 %	$0.00
D10 - Conveying	0.00 %	0.00 %	$0.00
D20 - Plumbing	0.00 %	0.00 %	$0.00
D30 - HVAC	0.00 %	0.00 %	$0.00
D40 - Fire Protection	0.00 %	0.00 %	$0.00
D50 - Electrical	0.00 %	0.00 %	$0.00
E10 - Equipment	0.00 %	0.00 %	$0.00
E20 - Furnishings	0.00 %	0.00 %	$0.00
Totals:	**0.00 %**	**0.00 %**	**$0.00**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$23.16	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
A1030	Slab on Grade	$5.17	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
A2010	Basement Excavation	$4.36	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
A2020	Basement Walls	$10.05	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
B1010	Floor Construction	$85.94	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
B1020	Roof Construction	$9.26	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
B2010	Exterior Walls	$43.78	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
B2020	Exterior Windows	$21.40	S.F.	0	40				0.00 %	0.00 %				$0
B2030	Exterior Doors	$1.45	S.F.	0	25				0.00 %	0.00 %				$0
B3010105	Built-Up	$37.76	S.F.		20				0.00 %	0.00 %				$0
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	0	30				0.00 %	0.00 %				$0
C1010	Partitions	$17.91	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0
C1020	Interior Doors	$3.51	S.F.	0	40				0.00 %	0.00 %				$0
C1030	Fittings	$3.12	S.F.	0	40				0.00 %	0.00 %				$0
C2010	Stair Construction	$1.41	S.F.	0	100	1971	2071		56.00 %	0.00 %	56			$0

Site Assessment Report - B616001;Lewis - not assessed

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
C3010230	Paint & Covering	$13.21	S.F.	0	10				0.00 %	0.00 %				$0
C3010231	Vinyl Wall Covering	$0.97	S.F.	0	15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.	0	30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$75.52	S.F.		50	1971	2021		12.00 %	0.00 %	6			$0
C3020413	Vinyl Flooring	$9.68	S.F.		20				0.00 %	0.00 %				$0
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.		50	1971	2021		12.00 %	0.00 %	6			$0
C3030	Ceiling Finishes	$20.97	S.F.	0	25				0.00 %	0.00 %				$0
D1010	Elevators and Lifts	$1.53	S.F.	0	35				0.00 %	0.00 %				$0
D2010	Plumbing Fixtures	$13.52	S.F.	0	35				0.00 %	0.00 %				$0
D2020	Domestic Water Distribution	$1.68	S.F.	0	25				0.00 %	0.00 %				$0
D2030	Sanitary Waste	$2.52	S.F.	0	30				0.00 %	0.00 %				$0
D2040	Rain Water Drainage	$2.32	S.F.	0	30				0.00 %	0.00 %				$0
D3020	Heat Generating Systems	$18.67	S.F.	0	35				0.00 %	0.00 %				$0
D3030	Cooling Generating Systems	$24.48	S.F.	0	30				0.00 %	0.00 %				$0
D3040	Distribution Systems	$42.99	S.F.	0	25				0.00 %	0.00 %				$0
D3050	Terminal & Package Units	$11.60	S.F.	0	20				0.00 %	0.00 %				$0
D3060	Controls & Instrumentation	$13.50	S.F.	0	20				0.00 %	0.00 %				$0
D4010	Sprinklers	$7.05	S.F.	0	35				0.00 %	0.00 %				$0
D4020	Standpipes	$1.01	S.F.	0	35				0.00 %	0.00 %				$0
D5010	Electrical Service/Distribution	$9.70	S.F.	0	30				0.00 %	0.00 %				$0
D5020	Lighting and Branch Wiring	$34.68	S.F.	0	20				0.00 %	0.00 %				$0
D5030	Communications and Security	$12.99	S.F.	0	15				0.00 %	0.00 %				$0
D5090	Other Electrical Systems	$1.41	S.F.	0	30				0.00 %	0.00 %				$0
E1020	Institutional Equipment	$4.82	S.F.	0	35				0.00 %	0.00 %				$0
E1090	Other Equipment	$11.10	S.F.	0	35				0.00 %	0.00 %				$0
E2010	Fixed Furnishings	$2.13	S.F.	0	40				0.00 %	0.00 %				$0
								Total	**0.00 %**	**0.00 %**				**$0**

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:	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** A10 - Foundations**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
*** A20 - Basement Construction**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2010 - Basement Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2020 - Basement Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$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**

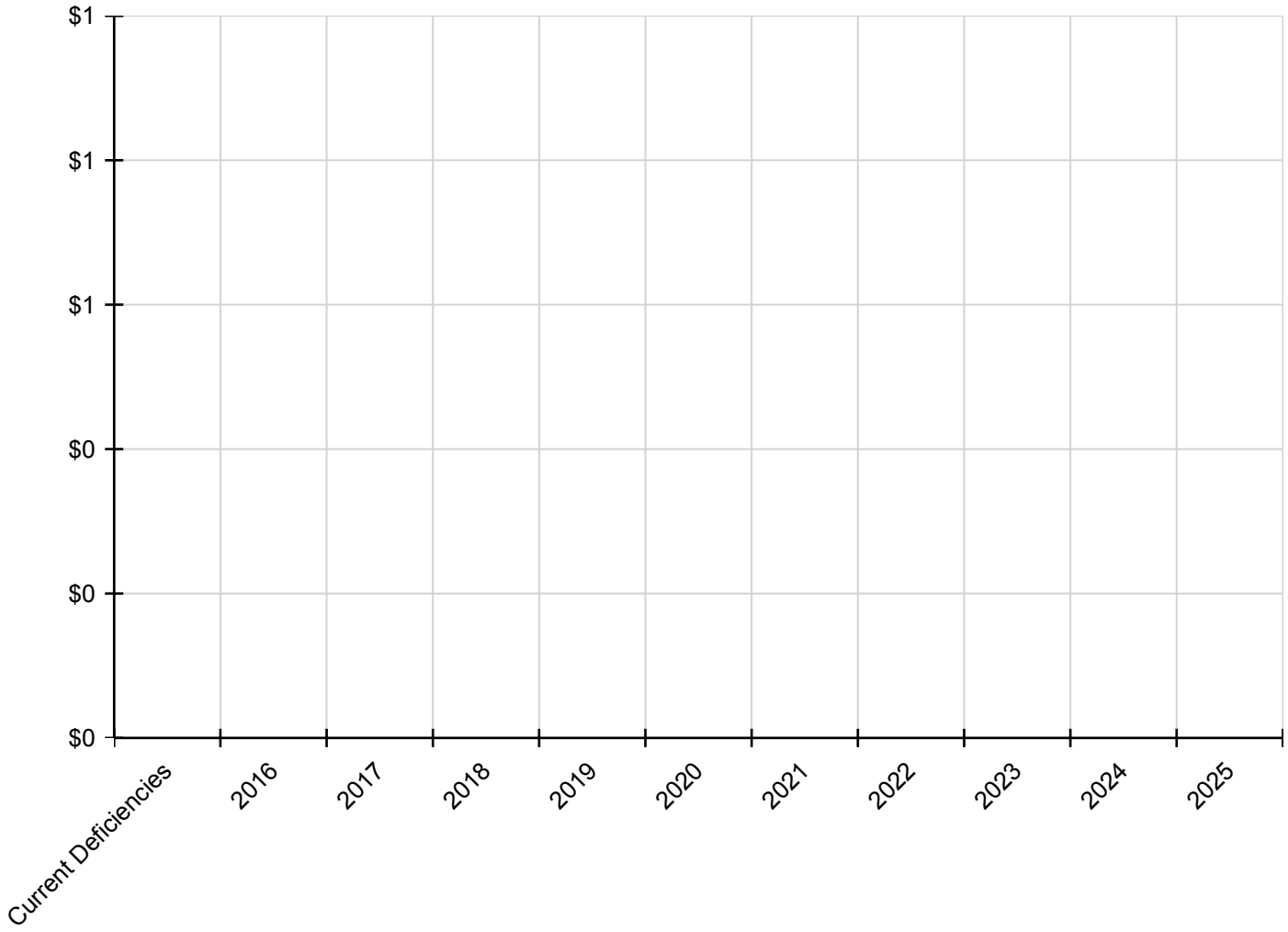
C1020 - Interior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2030 - Sanitary Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5020 - Lighting and Branch Wiring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5030 - Communications and Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

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



10 Year FCI Forecast by Investment Scenario

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

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

No data found for this asset

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.

No data found for this asset

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:

No data found for this asset

Deficiency By Priority Investment Table

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

No data found for this asset

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:

No data found for this asset

Deficiency Details by Priority

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

No data found for this asset

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

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:	Middle School
Gross Area (SF):	46,959
Year Built:	1980
Last Renovation:	
Replacement Value:	$22,661,660
Repair Cost:	$9,498,566.32
Total FCI:	41.91 %
Total RSLI:	74.62 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B646001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S646001		

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	65.00 %	0.00 %	$0.00
A20 - Basement Construction	65.00 %	0.00 %	$0.00
B10 - Superstructure	65.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	77.56 %	15.09 %	$472,104.66
B30 - Roofing	50.04 %	0.00 %	$0.00
C10 - Interior Construction	75.81 %	21.90 %	$252,417.19
C20 - Stairs	65.00 %	0.00 %	$0.00
C30 - Interior Finishes	43.13 %	0.00 %	$0.00
D10 - Conveying	105.71 %	0.00 %	$0.00
D20 - Plumbing	63.73 %	102.90 %	$968,350.97
D30 - HVAC	107.85 %	190.40 %	$6,088,049.13
D40 - Fire Protection	14.29 %	0.00 %	$0.00
D50 - Electrical	110.11 %	58.68 %	$1,619,729.02
E10 - Equipment	60.00 %	13.10 %	$97,915.35
E20 - Furnishings	37.50 %	0.00 %	$0.00
Totals:	**74.62 %**	**41.91 %**	**$9,498,566.32**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$23.16	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$1,087,570
A1030	Slab on Grade	$5.17	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$242,778
A2010	Basement Excavation	$4.36	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$204,741
A2020	Basement Walls	$10.05	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$471,938
B1010	Floor Construction	$85.94	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$4,035,656
B1020	Roof Construction	$9.26	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$434,840
B2010	Exterior Walls	$43.78	S.F.	46,959	100	1980	2080		65.00 %	3.33 %	65		$68,413.14	$2,055,865
B2020	Exterior Windows	$21.40	S.F.	46,959	40	1980	2020	2057	105.00 %	40.17 %	42		$403,691.52	$1,004,923
B2030	Exterior Doors	$1.45	S.F.	46,959	25	2003	2028		52.00 %	0.00 %	13			$68,091
B3010105	Built-Up	$37.76	S.F.	31,275	20	2005	2025		50.00 %	0.00 %	10			$1,180,944
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	46,959	30	2005	2035		66.67 %	0.00 %	20			$2,818
C1010	Partitions	$17.91	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$841,036
C1020	Interior Doors	$3.51	S.F.	46,959	40	1980	2020	2057	105.00 %	115.77 %	42		$190,823.48	$164,826
C1030	Fittings	$3.12	S.F.	46,959	40	1980	2020	2057	105.00 %	42.04 %	42		$61,593.71	$146,512
C2010	Stair Construction	$1.41	S.F.	46,959	100	1980	2080		65.00 %	0.00 %	65			$66,212

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System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
C3010230	Paint & Covering	$19.67	S.F.	46,959	10	2010	2020		50.00 %	0.00 %	5			$923,684
C3010231	Vinyl Wall Covering	$0.00	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$0.00	S.F.		30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$75.52	S.F.	2,348	50	1980	2030		30.00 %	0.00 %	15			$177,321
C3020413	Vinyl Flooring	$9.68	S.F.	37,567	20	2001	2021		30.00 %	0.00 %	6			$363,649
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	7,044	50	1980	2030		30.00 %	0.00 %	15			$6,833
C3030	Ceiling Finishes	$20.97	S.F.	46,959	25	2001	2026		44.00 %	0.00 %	11			$984,730
D1010	Elevators and Lifts	$1.53	S.F.	46,959	35			2052	105.71 %	0.00 %	37			$71,847
D2010	Plumbing Fixtures	$13.52	S.F.	46,959	35	1980	2015	2030	42.86 %	37.91 %	15		$240,675.15	$634,886
D2020	Domestic Water Distribution	$1.68	S.F.	46,959	25	1980	2005	2042	108.00 %	366.42 %	27		$289,070.32	$78,891
D2030	Sanitary Waste	$2.52	S.F.	46,959	30	1980	2010	2047	106.67 %	194.67 %	32		$230,369.12	$118,337
D2040	Rain Water Drainage	$2.32	S.F.	46,959	30	1980	2010	2047	106.67 %	191.14 %	32		$208,236.38	$108,945
D3020	Heat Generating Systems	$18.67	S.F.		35				0.00 %	0.00 %				$0
D3030	Cooling Generating Systems	$24.48	S.F.		20				0.00 %	0.00 %				$0
D3040	Distribution Systems	$42.99	S.F.	46,959	15	2000	2015	2032	113.33 %	251.67 %	17		$5,080,680.96	$2,018,767
D3050	Terminal & Package Units	$11.60	S.F.	46,959	20	1980	2000	2032	85.00 %	0.00 %	17			$544,724
D3060	Controls & Instrumentation	$13.50	S.F.	46,959	20	1980	2000	2037	110.00 %	158.90 %	22		$1,007,368.17	$633,947
D4010	Sprinklers	$7.05	S.F.	46,959	35			2020	14.29 %	0.00 %	5			$331,061
D4020	Standpipes	$1.01	S.F.	46,959	35			2020	14.29 %	0.00 %	5			$47,429
D5010	Electrical Service/Distribution	$9.70	S.F.	46,959	30	1980	2010	2047	106.67 %	158.26 %	32		$720,895.99	$455,502
D5020	Lighting and Branch Wiring	$34.68	S.F.	46,959	20	1980	2000	2037	110.00 %	13.14 %	22		$213,993.94	$1,628,538
D5030	Communications and Security	$12.99	S.F.	46,959	15	1980	1995	2032	113.33 %	81.59 %	17		$497,679.65	$609,997
D5090	Other Electrical Systems	$1.41	S.F.	46,959	30	1980	2010	2047	106.67 %	282.67 %	32		$187,159.44	$66,212
E1020	Institutional Equipment	$4.82	S.F.	46,959	35	2001	2036		60.00 %	43.26 %	21		$97,915.35	$226,342
E1090	Other Equipment	$11.10	S.F.	46,959	35	2001	2036		60.00 %	0.00 %	21			$521,245
E2010	Fixed Furnishings	$2.13	S.F.	46,959	40	1980	2020	2030	37.50 %	0.00 %	15			$100,023
								Total	**74.62 %**	**41.91 %**			**$9,498,566.32**	**$22,661,660**

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: 100% - Paint & covering

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

Note: 5% - Terrazzo & Tile (ceramic)
80% - Vinyl Flooring
15% - Concrete Floor Finishes

Renewal Schedule

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

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$9,498,566**	**$0**	**$0**	**$0**	**$0**	**$1,660,533**	**$477,636**	**$0**	**$0**	**$0**	**$1,745,798**	**$13,382,534**
*** 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	$68,413	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$68,413**
B2020 - Exterior Windows	$403,692	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$403,692**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,745,798	**$1,745,798**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$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**

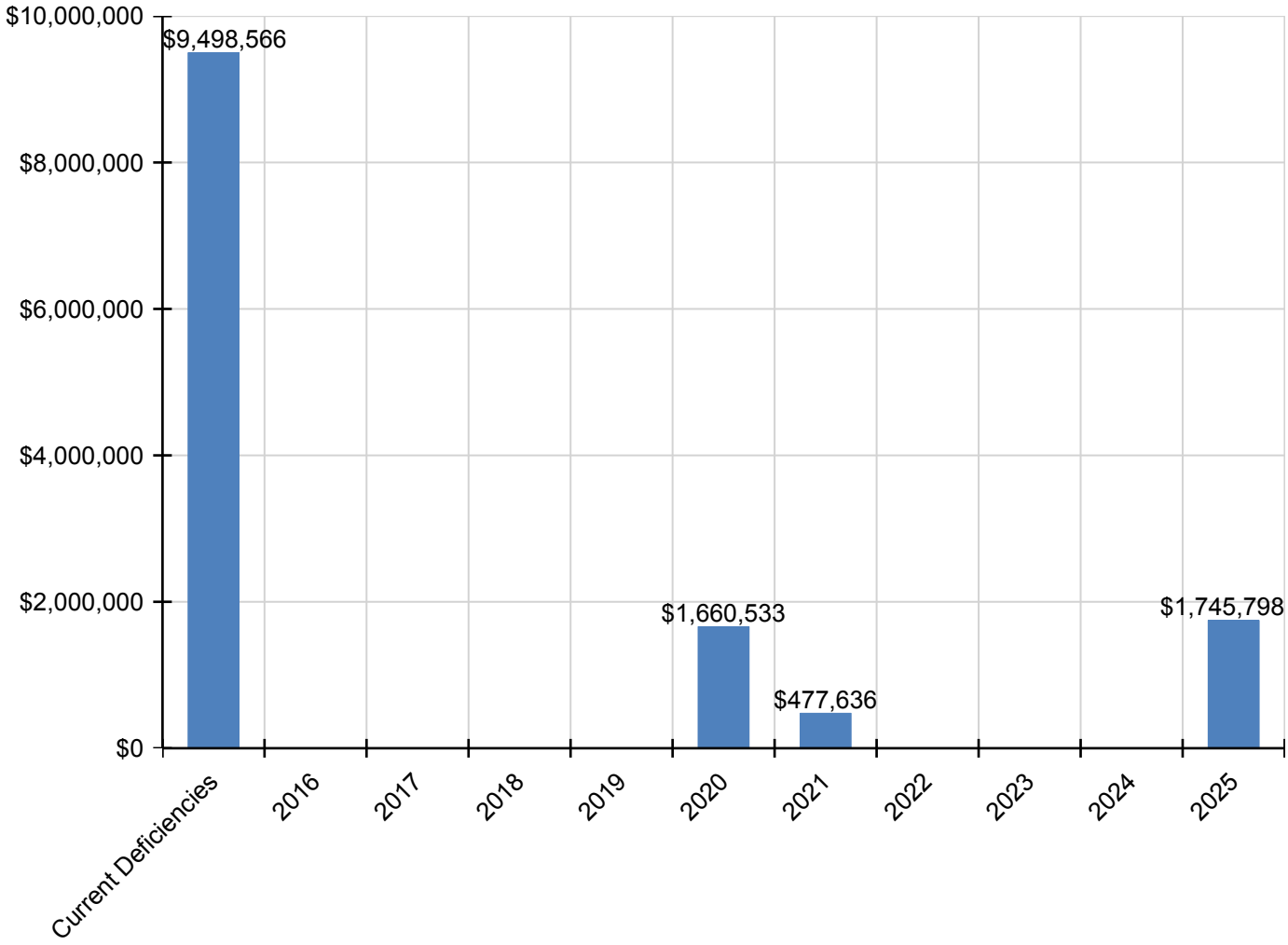
C1020 - Interior Doors	$190,823	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$190,823**
C1030 - Fittings	$61,594	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$61,594**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$1,177,883	$0	$0	$0	$0	$0	**$1,177,883**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$477,636	$0	$0	$0	$0	**$477,636**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$240,675	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$240,675**
D2020 - Domestic Water Distribution	$289,070	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$289,070**
D2030 - Sanitary Waste	$230,369	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$230,369**
D2040 - Rain Water Drainage	$208,236	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$208,236**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$5,080,681	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,080,681**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,007,368	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,007,368**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$0	$0	$0	$0	$0	$422,169	$0	$0	$0	$0	$0	**$422,169**
D4020 - Standpipes	$0	$0	$0	$0	$0	$60,480	$0	$0	$0	$0	$0	**$60,480**

D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$720,896	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$720,896**
D5020 - Lighting and Branch Wiring	$213,994	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$213,994**
D5030 - Communications and Security	$497,680	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$497,680**
D5090 - Other Electrical Systems	$187,159	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$187,159**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$97,915	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$97,915**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

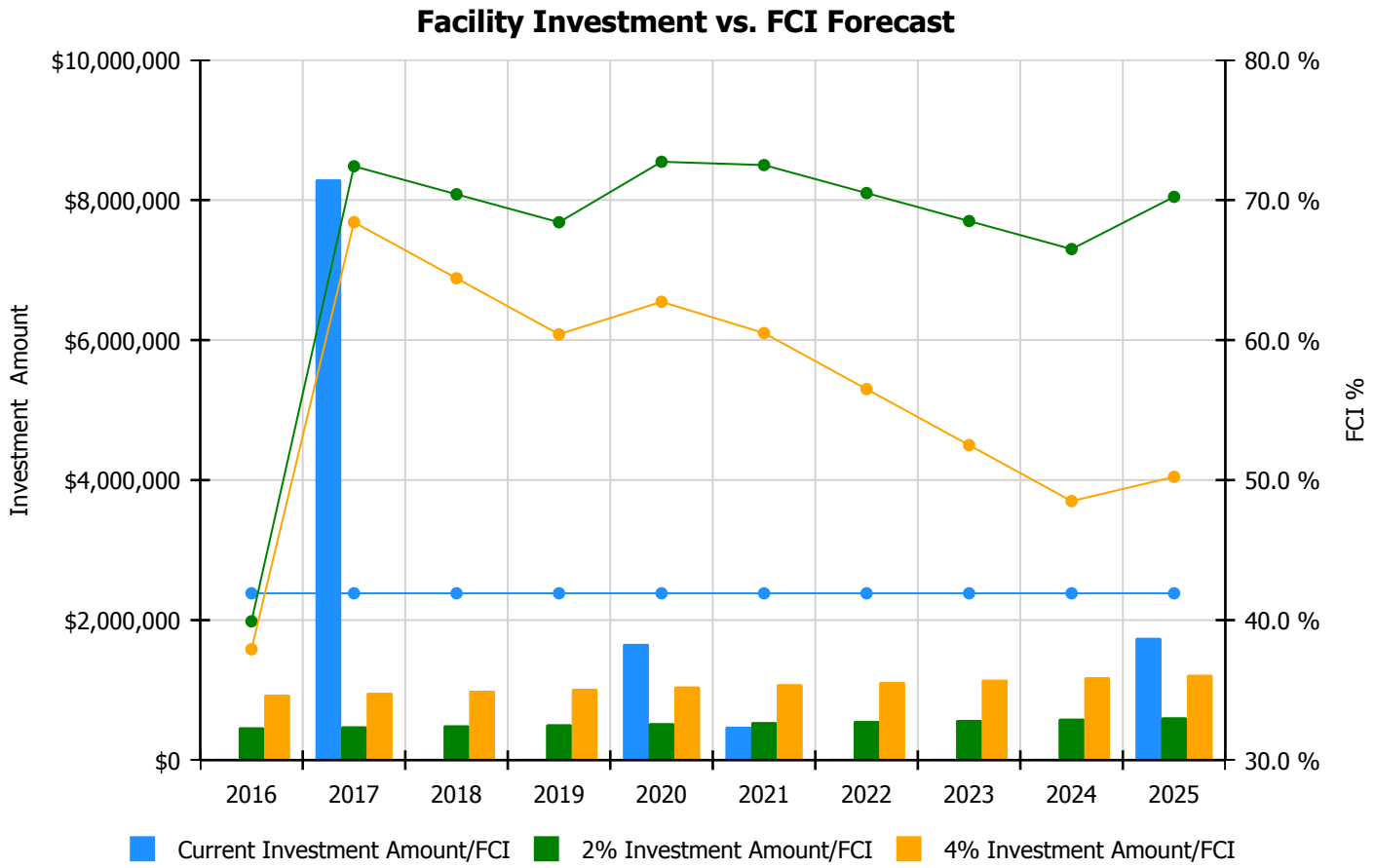
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

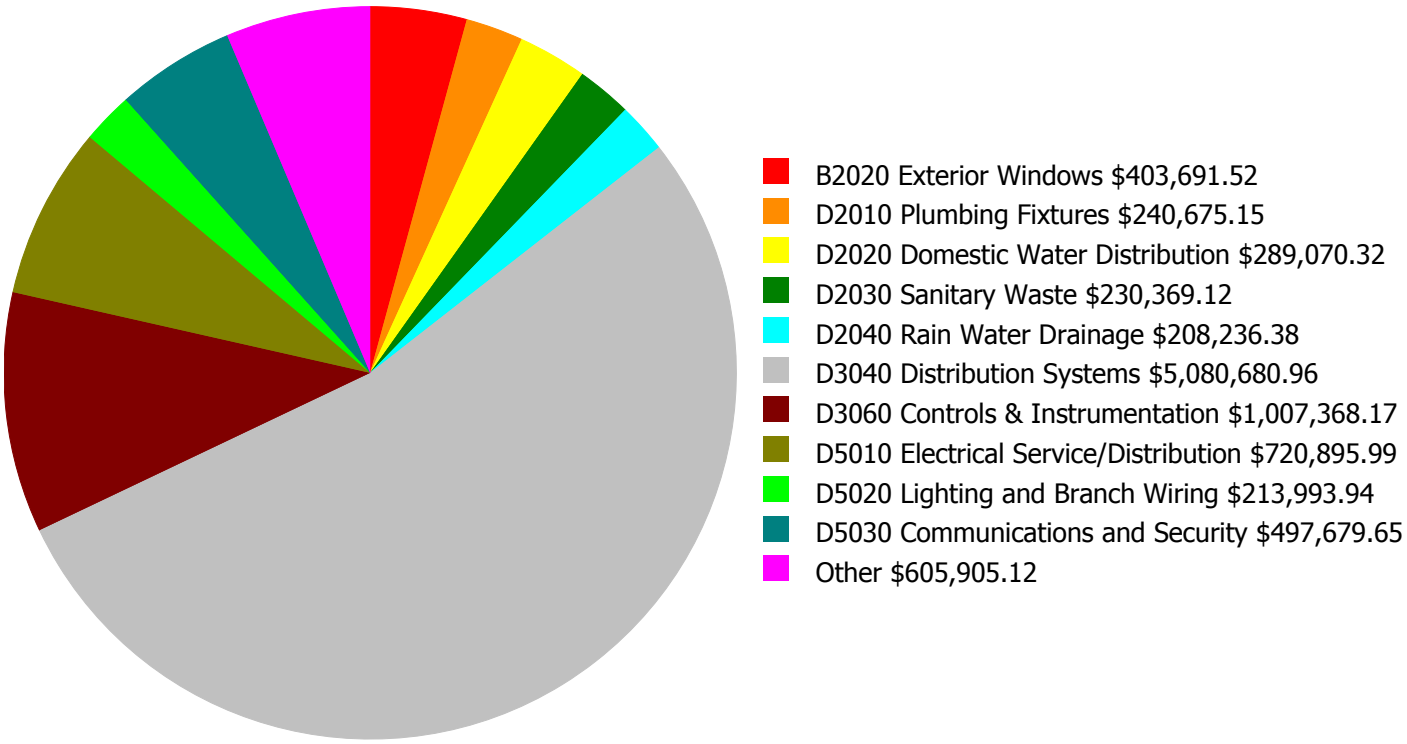
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 41.91%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$466,830.00	39.91 %	$933,660.00	37.91 %
2017	$8,294,082	$480,835.00	72.41 %	$961,670.00	68.41 %
2018	$0	$495,260.00	70.41 %	$990,520.00	64.41 %
2019	$0	$510,118.00	68.41 %	$1,020,236.00	60.41 %
2020	$1,660,533	$525,421.00	72.73 %	$1,050,843.00	62.73 %
2021	$477,636	$541,184.00	72.50 %	$1,082,368.00	60.50 %
2022	$0	$557,420.00	70.50 %	$1,114,839.00	56.50 %
2023	$0	$574,142.00	68.50 %	$1,148,285.00	52.50 %
2024	$0	$591,367.00	66.50 %	$1,182,733.00	48.50 %
2025	$1,745,798	$609,108.00	70.23 %	$1,218,215.00	50.23 %
Total:	**$12,178,050**	**$5,351,685.00**		**$10,703,369.00**	

Deficiency Summary by System

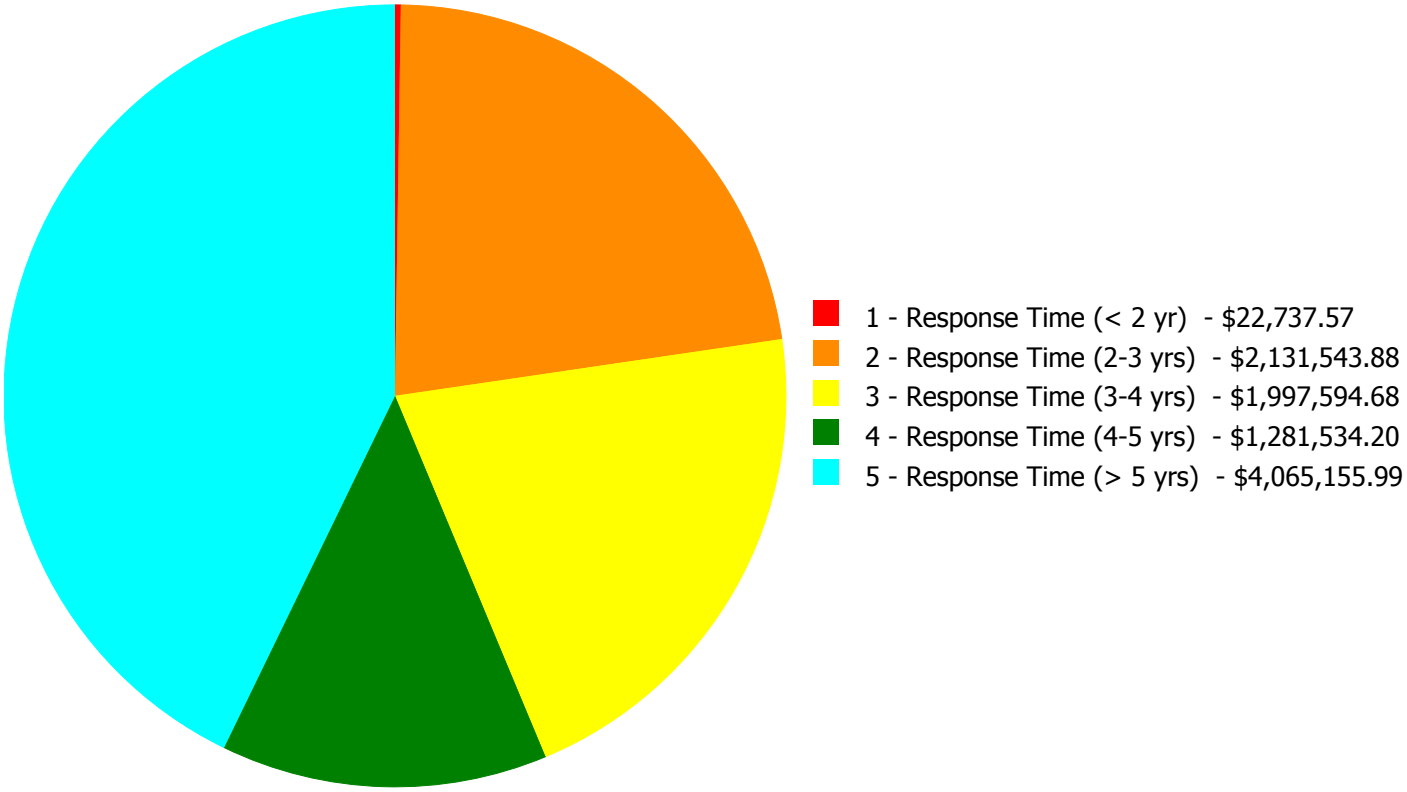
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $9,498,566.32

Deficiency Summary by Priority

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



Budget Estimate Total: $9,498,566.32

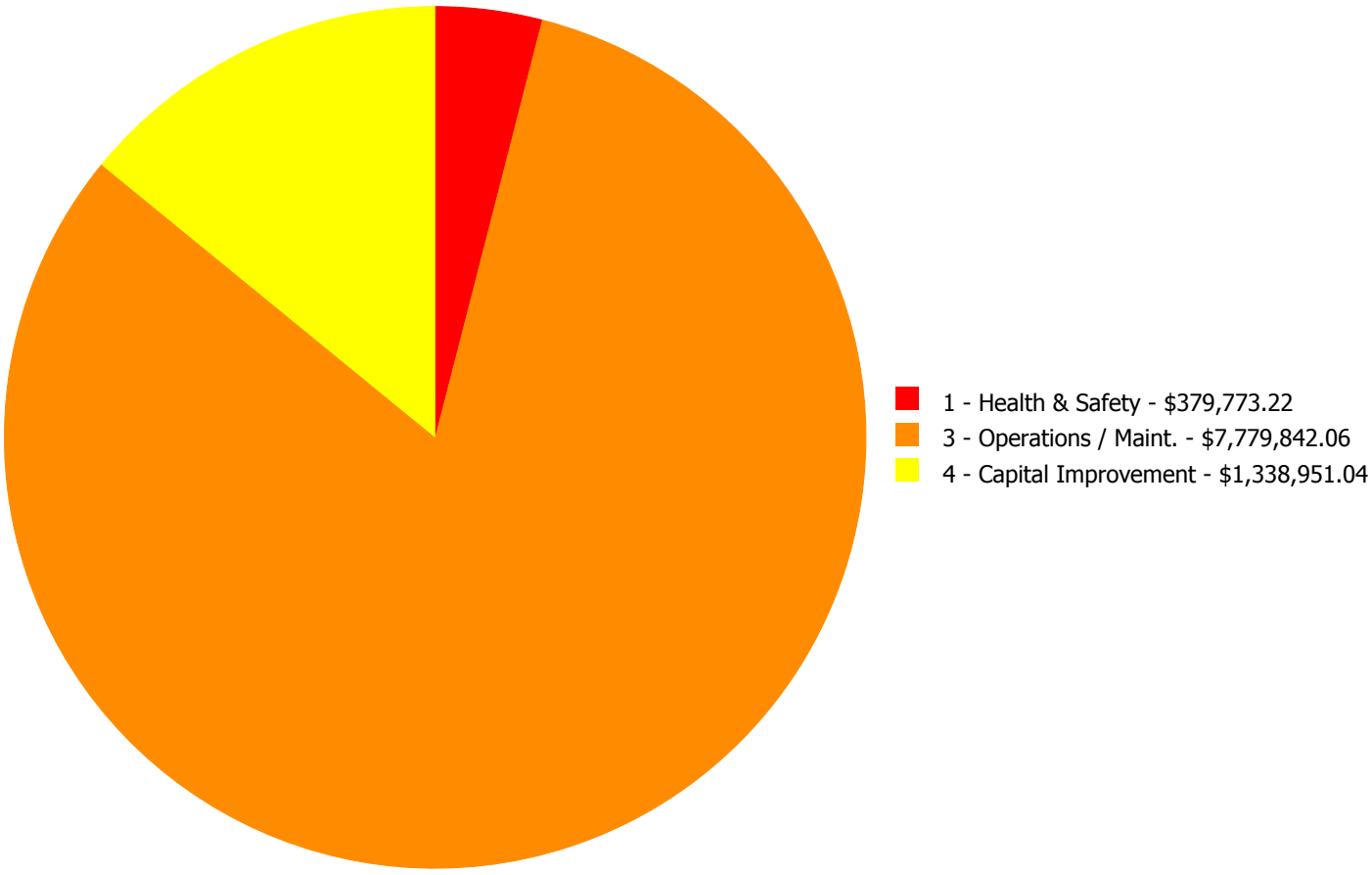
Deficiency By Priority Investment Table

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	$0.00	$68,413.14	$0.00	$0.00	$68,413.14
B2020	Exterior Windows	$0.00	$0.00	$403,691.52	$0.00	$0.00	$403,691.52
C1020	Interior Doors	$0.00	$0.00	$190,823.48	$0.00	$0.00	$190,823.48
C1030	Fittings	$0.00	$0.00	$61,593.71	$0.00	$0.00	$61,593.71
D2010	Plumbing Fixtures	$22,737.57	$0.00	$197,489.30	$20,448.28	$0.00	$240,675.15
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$237,958.07	$51,112.25	$289,070.32
D2030	Sanitary Waste	$0.00	$0.00	$230,369.12	$0.00	$0.00	$230,369.12
D2040	Rain Water Drainage	$0.00	$0.00	$208,236.38	$0.00	$0.00	$208,236.38
D3040	Distribution Systems	$0.00	$712,416.94	$0.00	$354,220.28	$4,014,043.74	$5,080,680.96
D3060	Controls & Instrumentation	$0.00	$1,007,368.17	$0.00	$0.00	$0.00	$1,007,368.17
D5010	Electrical Service/Distribution	$0.00	$411,758.77	$0.00	$309,137.22	$0.00	$720,895.99
D5020	Lighting and Branch Wiring	$0.00	$0.00	$213,993.94	$0.00	$0.00	$213,993.94
D5030	Communications and Security	$0.00	$0.00	$235,824.65	$261,855.00	$0.00	$497,679.65
D5090	Other Electrical Systems	$0.00	$0.00	$187,159.44	$0.00	$0.00	$187,159.44
E1020	Institutional Equipment	$0.00	$0.00	$0.00	$97,915.35	$0.00	$97,915.35
	Total:	$22,737.57	$2,131,543.88	$1,997,594.68	$1,281,534.20	$4,065,155.99	$9,498,566.32

Deficiency Summary by Category

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



Budget Estimate Total: $9,498,566.32

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: D2010 - Plumbing Fixtures

Location: Corridors

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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

Qty: 3.00

Unit of Measure: Ea.

Estimate: $22,737.57

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace three (3) wall hung drinking fountains and integral refrigerated coolers in the corridors. These units were damaged at the time of the site visit and were not operable.

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

System: D3040 - Distribution Systems

Location: Suite 110

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Indoor Air Handling Unit (self-contained, 10T) and fluid cooler

Qty: 10.00

Unit of Measure: TonAC

Estimate: $356,208.47

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the Edpac AHU and associated fluid cooler serving suite 110 which are beyond their service lives.

System: D3040 - Distribution Systems

Location: Cafeteria/Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Indoor Air Handling Unit (self-contained, 10T) and fluid cooler

Qty: 10.00

Unit of Measure: TonAC

Estimate: $356,208.47

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the two (2) Edpac AHUs and associated fluid coolers serving the Cafeteria/Auditorium which are beyond their service lives.

System: D3060 - Controls & Instrumentation

Location: Throughout building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 46,959.00

Unit of Measure: S.F.

Estimate: $1,007,368.17

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the existing controls for the HVAC systems with modern DDC modules 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: D5010 - Electrical Service/Distribution

Location: throughout

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and Replace Panelboard - 400 amp

Qty: 1.00

Unit of Measure: Ea.

Estimate: $411,758.77

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install new 120V lighting and receptacle panels throughout the building (total of 10)

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

System: B2010 - Exterior Walls

Location: Exterior
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Sooty and dirty walls - powerwash
Qty: 62,550.00
Unit of Measure: S.F.
Estimate: $68,413.14
Assessor Name: Craig Anding
Date Created: 02/23/2016

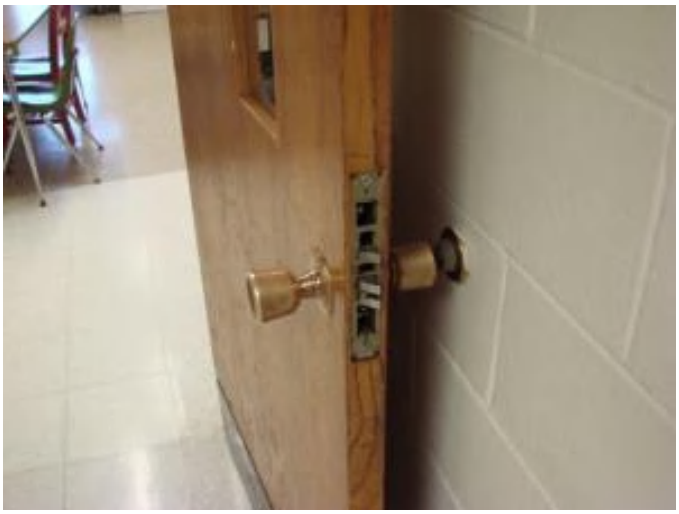
Notes: Clean exterior brick

System: B2020 - Exterior Windows

Location: Throughout
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Remove and replace double slider windows
Qty: 80.00
Unit of Measure: Ea.
Estimate: $403,691.52
Assessor Name: Craig Anding
Date Created: 02/23/2016

Notes: Replace exterior windows – beyond service life

System: C1020 - Interior Doors



Location: Throughout

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 40.00

Unit of Measure: Ea.

Estimate: $190,823.48

Assessor Name: Craig Anding

Date Created: 02/23/2016

Notes: Replace interior doors and hardware – beyond service life

System: C1030 - Fittings

Location: Toilets

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace toilet partitions

Qty: 24.00

Unit of Measure: Ea.

Estimate: $61,593.71

Assessor Name: Craig Anding

Date Created: 02/23/2016

Notes: Replace toilet partitions - failing

System: D2010 - Plumbing Fixtures

Location: Restrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 18.00

Unit of Measure: Ea.

Estimate: $134,318.66

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace eighteen (18) water closets, in use beyond their service life, with new code compliant fixtures.

System: D2010 - Plumbing Fixtures

Location: Restrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 8.00

Unit of Measure: Ea.

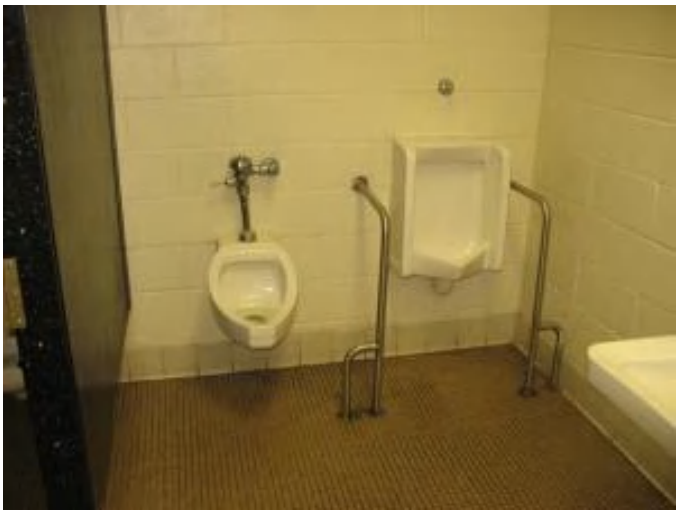
Estimate: $43,256.14

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace eight (8) lavatories, in use beyond their service life, with new code compliant fixtures.

System: D2010 - Plumbing Fixtures



Location: Restrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace wall hung urinals

Qty: 6.00

Unit of Measure: Ea.

Estimate: $19,914.50

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace six (6) urinals, in use beyond their service life, with new low flow fixtures.

System: D2030 - Sanitary Waste

This deficiency has no image.

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 46,959.00

Unit of Measure: S.F.

Estimate: $230,369.12

Assessor Name: Craig Anding

Date Created: 02/17/2016

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

System: D2040 - Rain Water Drainage

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 46,959.00

Unit of Measure: S.F.

Estimate: $208,236.38

Assessor Name: Craig Anding

Date Created: 02/17/2016

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

System: D5020 - Lighting and Branch Wiring

Location: throughout the building

Distress: Inadequate

Category: 4 - Capital Improvement

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

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

Qty: 0.00

Unit of Measure: S.F.

Estimate: $213,993.94

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install new receptacles for 80% of the building
46,959 SF x 80% = 37,569 SF

System: D5030 - Communications and Security

Location: throughout the building
Distress: Health Hazard / Risk
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace fire alarm system
Qty: 1.00
Unit of Measure: S.F.
Estimate: $235,824.65
Assessor Name: Craig Anding
Date Created: 02/22/2016

Notes: Install new automated/addressable FA system.

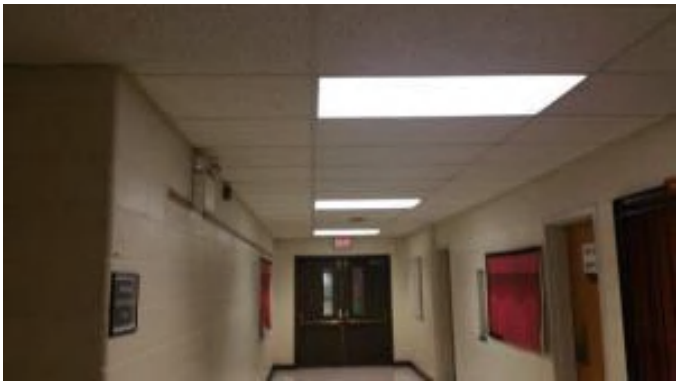
System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: electrical room
Distress: Health Hazard / Risk
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $143,948.57
Assessor Name: Craig Anding
Date Created: 02/22/2016

Notes: Install a new emergency generator.
Note: There is no picture attached, since school presently has no emergency generator.

System: D5090 - Other Electrical Systems



Location: throughout the building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Emergency/Exit Lighting

Qty: 1.00

Unit of Measure: Ea.

Estimate: $43,210.87

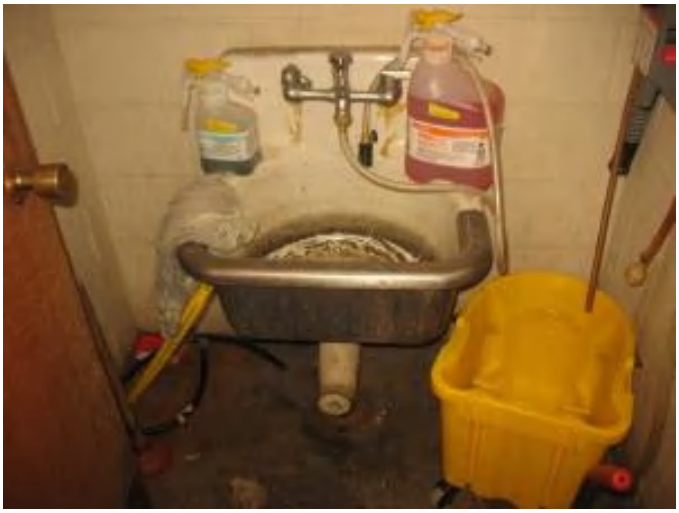
Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install additional new exit lights and emergency lights.

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

System: D2010 - Plumbing Fixtures



Location: Corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 3.00

Unit of Measure: Ea.

Estimate: $20,448.28

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace three (3) service sinks, located in closets off the corridors of each floor, which are beyond their service lives.

System: D2020 - Domestic Water Distribution

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water piping (75 KSF)

Qty: 46,959.00

Unit of Measure: S.F.

Estimate: $237,958.07

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for over 35 years, and replace any damaged piping.

System: D3040 - Distribution Systems

Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace utility set exhaust fan (5 HP)

Qty: 10.00

Unit of Measure: Ea.

Estimate: $344,589.14

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the ten (10) existing roof mounted exhaust fans that are estimated to be approaching the end of their useful service lives.

System: D3040 - Distribution Systems

Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 5.00

Unit of Measure: Ea.

Estimate: $9,631.14

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the five(5) existing roof mounted gravity ventilators that are estimated to be approaching the end of their useful service lives.

System: D5010 - Electrical Service/Distribution

Location: electrical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Service Transformer, Add Switchboard

Qty: 0.00

Unit of Measure: Ea.

Estimate: $309,137.22

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install a new electrical service to replace the old electrical distribution system built in 1980.

System: D5030 - Communications and Security

Location: throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace clock/program system

Qty: 0.00

Unit of Measure: Ea.

Estimate: $238,589.19

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install new clock system

System: D5030 - Communications and Security

Location: throughout the building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add/Replace Video Surveillance System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $23,265.81

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install additional video surveillance system for indoor and outdoor.

System: E1020 - Institutional Equipment

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Stage Theatrical Lighting System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $97,915.35

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install an upgraded auditorium stage lighting, lighting control and sound system.

Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Storage room

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Provide 4" reduced pressure back flow preventer

Qty: 1.00

Unit of Measure: Ea.

Estimate: $51,112.25

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Install a reduced pressure backflow preventer on the incoming 4” domestic water line.

System: D3040 - Distribution Systems

Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace classroom FC units and HP condensing units (20 clsrms)

Qty: 28.00

Unit of Measure: Room

Estimate: $3,026,795.45

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace twenty-eight (28) Bard QTec air-air heat exchangers in each classroom, four (4) of the units are located in other spaces, which are at the end of their service lives.

System: D3040 - Distribution Systems

Location: Atrium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace Indoor Air Handling Unit (self-contained, 10T) and fluid cooler

Qty: 10.00

Unit of Measure: TonAC

Estimate: $710,478.17

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the Edpac AHU and associated fluid cooler serving the Atrium which are beyond their service lives.

System: D3040 - Distribution Systems

Location: Gymnasium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace Indoor Air Handling Unit (self-contained, 10T) and fluid cooler

Qty: 10.00

Unit of Measure: TonAC

Estimate: $276,770.12

Assessor Name: Craig Anding

Date Created: 02/17/2016

Notes: Replace the Edpac AHU and associated fluid cooler serving the Gymnasium which are beyond their service lives.

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
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 300 kVA & below, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	1.00	Ea.	electrical room					30	1980	2010	$42,600.60	$46,860.66
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NEHB, 277/480 V, 600 A, 1 stories, 25' horizontal	1.00	Ea.	electrical room					30	1980	2047	$27,075.60	$29,783.16
D5010 Electrical Service/Distribution	Panelboards, 3 pole 4 wire, main circuit breaker, 120/208 V, 400 amp	8.00	Ea.	throughout the building					30	1980	2047	$4,626.45	$40,712.76
												Total:	**$117,356.58**

Executive Summary

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

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

Function:	
Gross Area (SF):	251,800
Year Built:	1980
Last Renovation:	
Replacement Value:	$4,422,082
Repair Cost:	$118,487.78
Total FCI:	2.68 %
Total RSLI:	47.66 %

Description:

Attributes:

General Attributes:

Bldg ID:	S646001	Site ID:	S646001

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	28.23 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	10.82 %	$118,487.78
Totals:	**47.66 %**	**2.68 %**	**$118,487.78**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30	1995	2025		33.33 %	0.00 %	10			$0
G2020	Parking Lots	$7.65	S.F.		30	2010	2040		83.33 %	0.00 %	25			$0
G2030	Pedestrian Paving	$11.52	S.F.	165,000	40	1980	2020		12.50 %	0.00 %	5			$1,900,800
G2040	Site Development	$4.36	S.F.	251,800	25	1980	2005	2025	40.00 %	0.00 %	10			$1,097,848
G2050	Landscaping & Irrigation	$3.78	S.F.	86,800	15	2012	2027		80.00 %	0.00 %	12			$328,104
G4020	Site Lighting	$3.58	S.F.	251,800	30	1980	2010	2047	106.67 %	10.63 %	32		$95,860.24	$901,444
G4030	Site Communications & Security	$0.77	S.F.	251,800	30	1980	2010	2047	106.67 %	11.67 %	32		$22,627.54	$193,886
								Total	**47.66 %**	**2.68 %**			**$118,487.78**	**$4,422,082**

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.

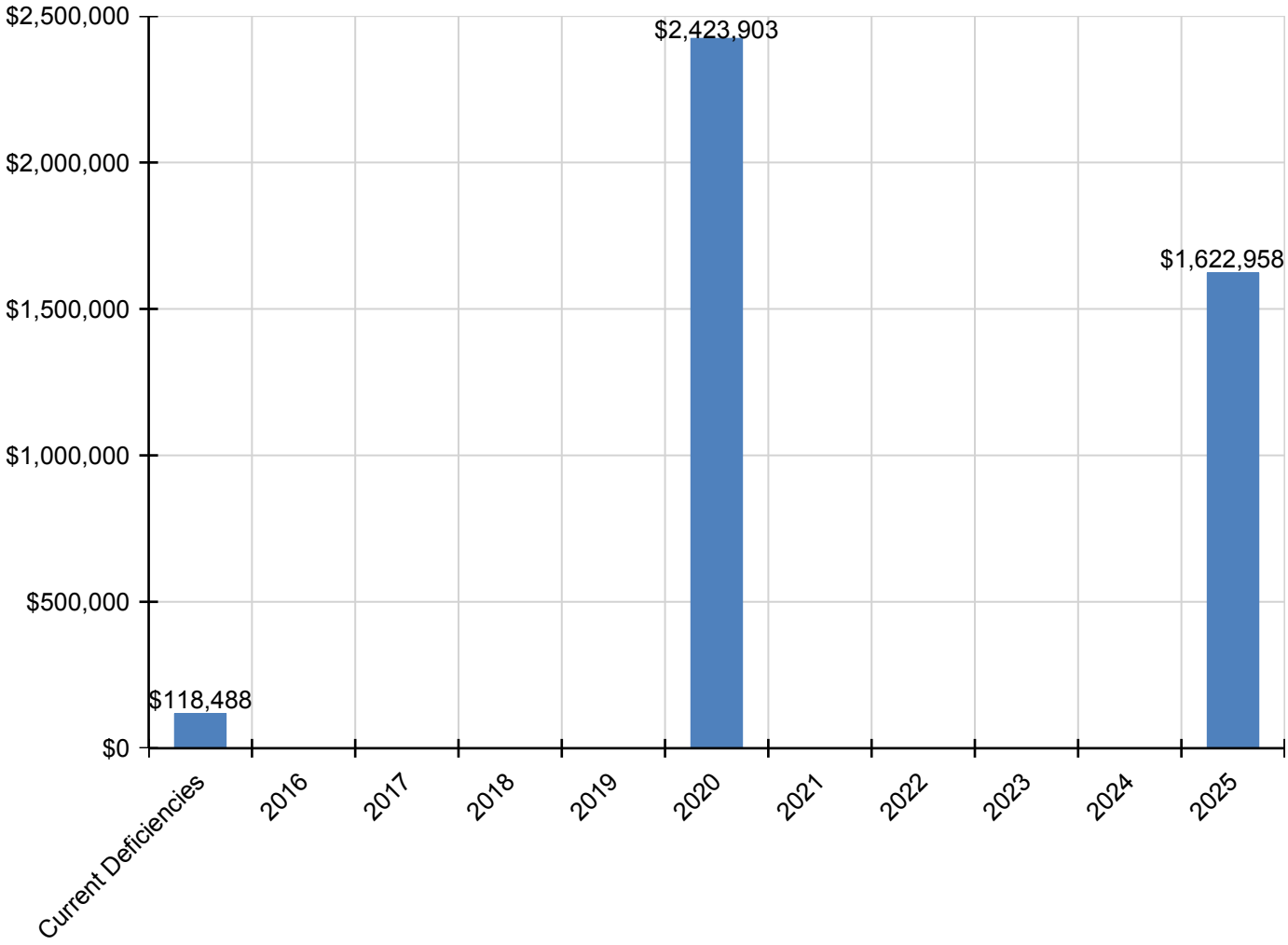
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$118,488**	**$0**	**$0**	**$0**	**$0**	**$2,423,903**	**$0**	**$0**	**$0**	**$0**	**$1,622,958**	**$4,165,349**
G - Building Sitework	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G20 - Site Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2010 - Roadways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2020 - Parking Lots	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$2,423,903	$0	$0	$0	$0	$0	**$2,423,903**
G2040 - Site Development	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,622,958	**$1,622,958**
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	$95,860	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$95,860**
G4030 - Site Communications & Security	$22,628	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$22,628**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

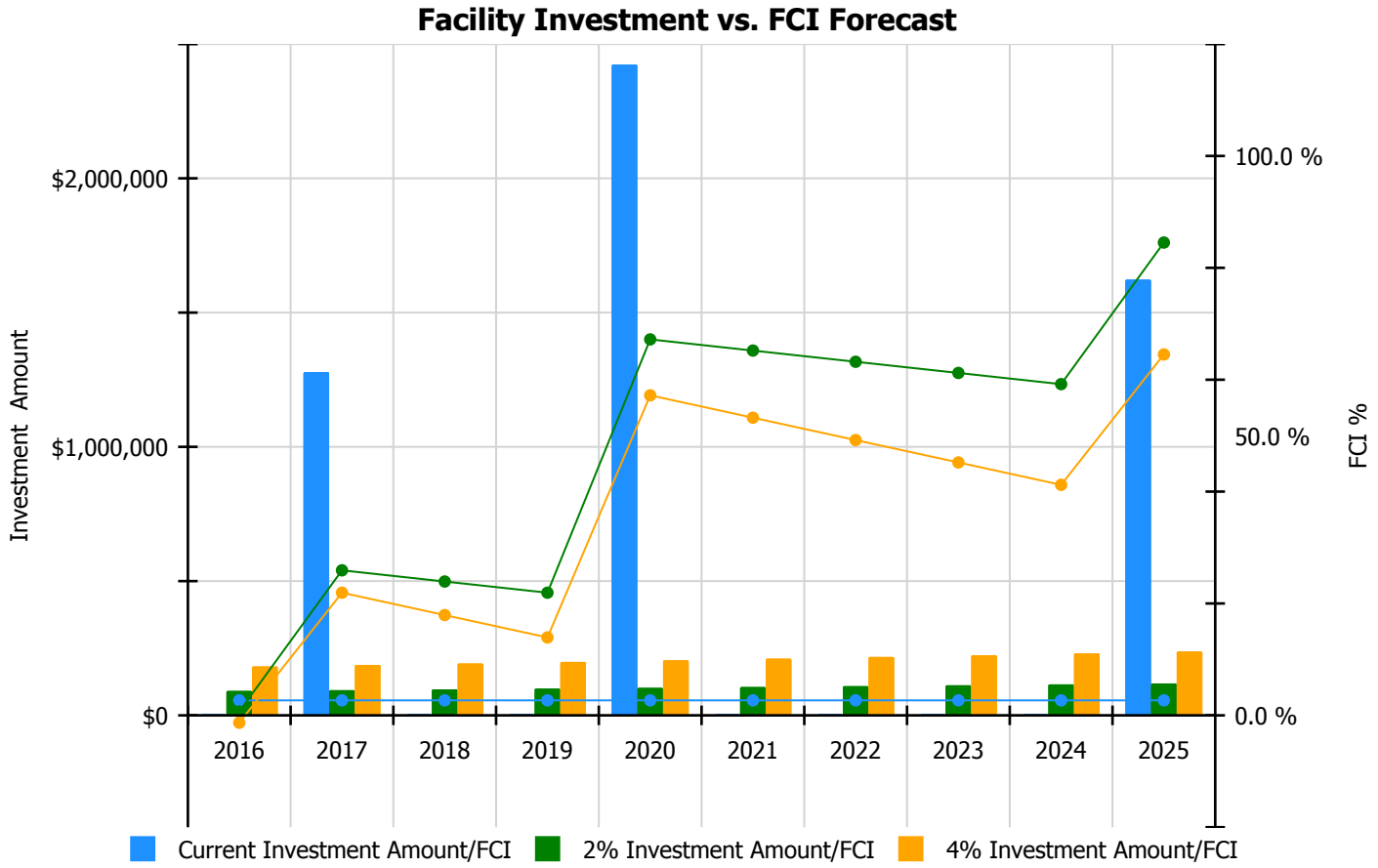
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

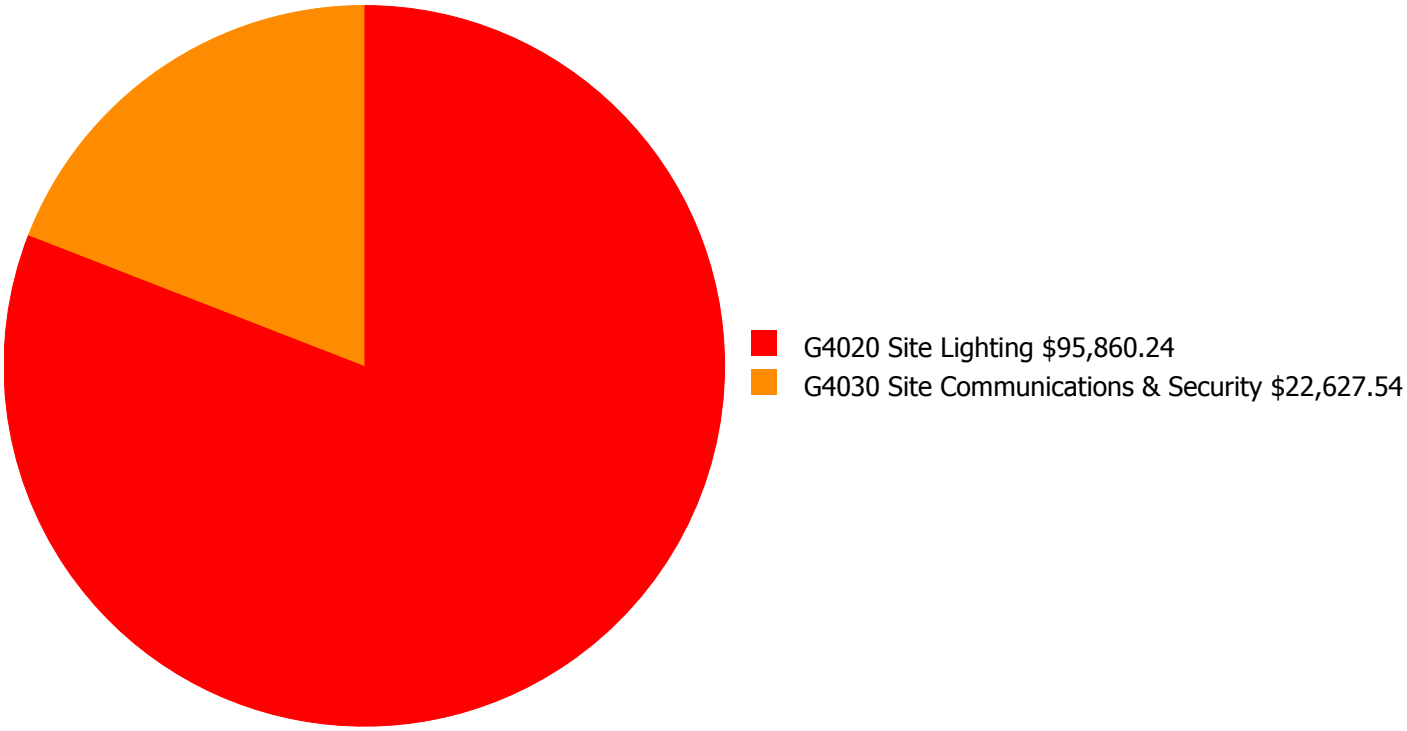
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 2.68%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$91,095.00	0.68 %	$182,190.00	-1.32 %
2017	$1,278,239	$93,828.00	25.93 %	$187,655.00	21.93 %
2018	$0	$96,643.00	23.93 %	$193,285.00	17.93 %
2019	$0	$99,542.00	21.93 %	$199,084.00	13.93 %
2020	$2,423,903	$102,528.00	67.21 %	$205,056.00	57.21 %
2021	$0	$105,604.00	65.21 %	$211,208.00	53.21 %
2022	$0	$108,772.00	63.21 %	$217,544.00	49.21 %
2023	$0	$112,035.00	61.21 %	$224,070.00	45.21 %
2024	$0	$115,396.00	59.21 %	$230,793.00	41.21 %
2025	$1,622,958	$118,858.00	84.52 %	$237,716.00	64.52 %
Total:	**$5,325,100**	**$1,044,301.00**		**$2,088,601.00**	

Deficiency Summary by System

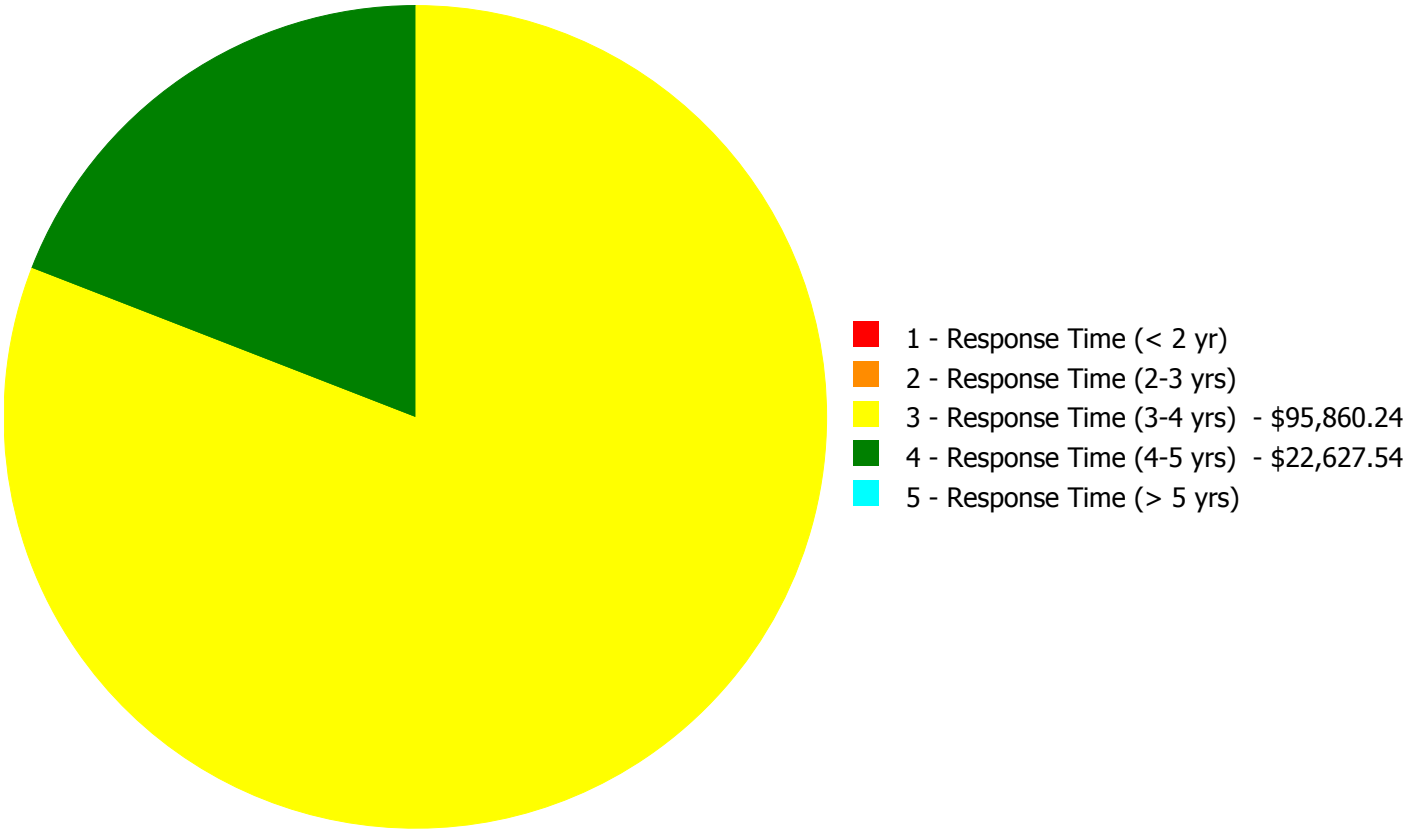
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $118,487.78

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: $118,487.78

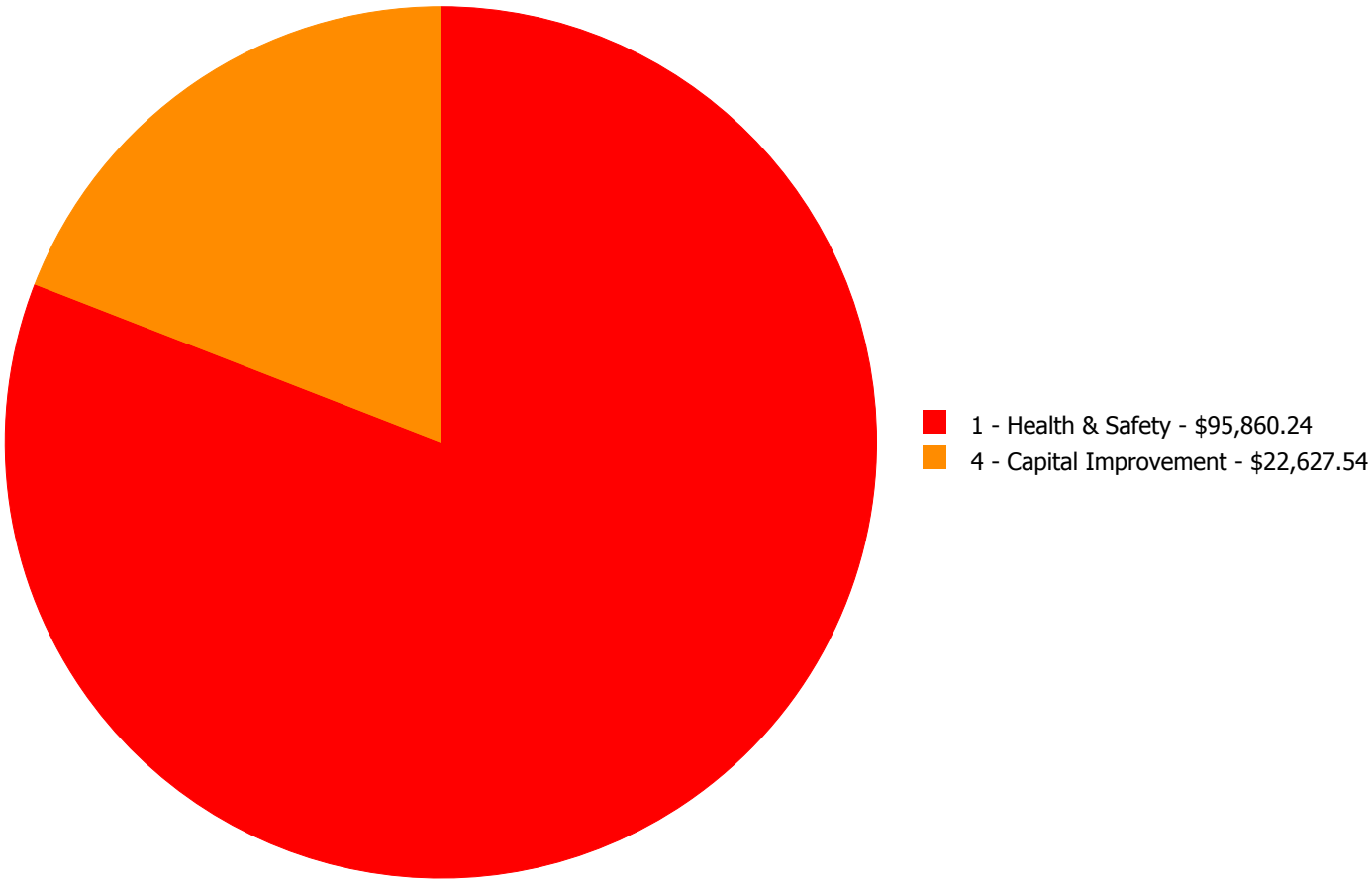
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G4020	Site Lighting	$0.00	$0.00	$95,860.24	$0.00	$0.00	$95,860.24
G4030	Site Communications & Security	$0.00	$0.00	$0.00	$22,627.54	$0.00	$22,627.54
	Total:	$0.00	$0.00	$95,860.24	$22,627.54	$0.00	$118,487.78

Deficiency Summary by Category

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



Budget Estimate Total: $118,487.78

Deficiency Details by Priority

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

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

System: G4020 - Site Lighting

Location: grounds

Distress: Security Issue

Category: 1 - Health & Safety

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $95,860.24

Assessor Name: Craig Anding

Date Created: 02/22/2016

Notes: Install additional pole-mounted lights for the grounds

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

System: G4030 - Site Communications & Security

Location: grounds

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add Site Paging System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $22,627.54

Assessor Name: Matt Mahaffey

Date Created: 02/22/2016

Notes: Install additional exterior speakers for the grounds

Equipment Inventory

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

No data found for this asset

Glossary

ABMA	American Boiler Manufacturers Association http://www.abma.com/
ACEEE	American Council for an Energy-Efficient Economy
ACGIH	American Council of Governmental and Industrial Hygienists
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFTC	After Tax Cash Flow
AGA	American Gas Association
AHU	Air Handling Unit
Amp	Ampere
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASD	Adjustable Speed Drive
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers Inc.
ASME	American Society of Mechanical Engineers
Assessment	Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality.
ATS	After Tax Savings
AW	Annual worth
BACNET	Building Automation Control Network
BAS	Building Automation System
BCR	Benefit Cost Ratio
BEP	Business Energy Professional (AEE)
BF	Ballast Factor
BHP	Boiler Horsepower (boilers)
BHP	Brake Horsepower (motors)
BLCC	Building Life Cycle Cost analysis program (FEMP)
BOCA	Building Officials and Code Administrators
BTCF	Before Tax Cash Flow

BTS	Before Tax Savings
Btu	British thermal unit
Building Addition	An area space or component of a building added to a building after the original building's year built date.
CAA	Clean Air Act
CAAA-90	Clean Air Act Amendments of 1990
CABO	Council of American Building Officials
CAC	Conventional Air Conditioning
CADDET	Center for the Analysis and Dissemination of Demonstrated Energy Technologies
Calculated Next Renewal	The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system.
Capital Renewal	Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection.
CDD	Cooling Degree Days
CDGP	Certified Distributed Generation Professional
CEC	California Energy Commission
CEM	Certified Energy Manager
CEP	Certified Energy Procurement Professional
CFC	Chlorofluorocarbon
CFD	Cash Flow Diagram
CFL	Compact Fluorescent Light
CFM cfm	Cubic Feet per Minute
CHP	Combined Heat and Power (a.k.a. cogeneration)
CHW	Chilled Water
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
COP	Coefficient of Performance
Cp	Heat Capacity of Material
CPUC	California Public Utility Commission
CRI	Color Rendering Index
CRT	Cathode Ray Tube VDT HMI

CTC	Competitive Transition Charge
Cu	Coefficient of Utilization
Current Replacement Value (CRV)	CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.
Cv	Value Coefficient
CWS	Chilled Water System
D d	Distance (usually feet)
DB	Dry Bulb
DCV	Demand Control Ventilation
DD	Degree Day
DDB	Double Declining Balance
DDC	Direct Digital Controls
Deferred maintenance	Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.
Deficiency	A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose.
Delta	Difference
Delta P	Pressure Difference
Delta T	Temperature Difference
DG	Distributed Generation
DOE	Department of Energy
DP	Dew Point
DR	Demand Response
DX	Direct Expansion Air Conditioner
EA	Energy Audit
EBITDA	Earnings before Interest Taxes Depreciation and Amortization
ECI	Energy Cost Index
ECM	Energy Conservation Measure
ECO	Energy Conservation Opportunity
ECPA	Energy Conservation and Production Act
ECR	Energy Conservation Recommendation
ECS	Energy Control System

EER	Energy Efficiency Ratio
EERE	Energy Efficiency and Renewable Energy division of US DOE
EIA	Energy Information Agency
EIS	Energy Information System
EMCS	Energy Management Computer System
EMO	Energy Management Opportunity
EMP	Energy Management Project
EMR	Energy Management Recommendation
EMS	Energy Management System
Energy Utilization Index (EUI)	EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot.
EO	Executive Order
EPA	Environmental Protection Agency
EPACT	Energy Policy Act of 1992
EPCA	Energy Production and Conservation Act of 1975
EPRI	Electric Power Research Institute
EREN	Efficiency and Renewable Energy (Division of USDOE)
ERV	Energy Recovery Ventilator
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
EUI	Energy Use Index
EWG	Exempt Wholesale Generators
Extended Facility Condition Index (EFCI)	EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value.
f	Frequency
F	Fahrenheit
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Condition Assessment (FCA)	FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process.
Facility Condition Index (FCI)	FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

FC	Footcandle
FCA	Fuel Cost Adjustment
FEMIA	Federal Energy Management Improvement Act of 1988
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FESR	Fuel Energy Savings Ratio
FLA	Full Load Amps
FLF	Facility Load Factor (usually monthly)
FLRPM	Full Load Revolutions per Minute
FMS	Facility Management System
FPM fpm	Feet per Minute (velocity)
FSEC	Florida Solar Energy Center
Ft	Foot
GPM gpm	Gallons per Minute
GRI	Gas Research Institute
Gross Square Feet (GSF)	The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall.
GUI	Graphical User Interface
H h	Enthalpy Btu/lb
HCFC	Hydrochlorofluorocarbons
HDD	Heating Degree days
HFC	Hydrofluorocarbons
HHV	Higher Heating Value
HID	High Intensity Discharge (lamp)
HMI	Human Machine Interface
HMMI	Human Man Machine Interface
HO	High Output (lamp)
HP Hp hp	Horsepower
HPS	High Pressure Sodium (lamp)
HR	Humidity Ratio
Hr hr	Hour

HRU	Heat Recovery Unit
HVAC	Heating Ventilation and Air-Conditioning
Hz	Hertz
I	Intensity (lumen output of lamp)
I i	Interest rate or Discount rate
IAQ	Indoor Air Quality
ICA	International Cogeneration Alliance
ICBO	International Conference of Buildings Officials
ICC	International Code Council
ICP	Institutional Conservation Program
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
Install year	The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system?s Current Replacement Value (CRV) was replaced).
IRP	Integrated Resource Planning
IRR	Internal Rate of Return
ISO	Independent System Operator
ITA	Independent Tariff Administrator
k	Kilo multiple of thousands in SI system
K	Kelvins (color temperature of lamp)
K k	Thermal Conductivity of Material
KVA	Kilovolt Ampere
KVAR	Kilovolt Ampere Reactive
kW	kiloWatt
kWh	kiloWatt hour
L	Length (usually feet)
LCC	Life Cycle Costing
LDC	Local Distribution Company
LEED	Leadership in Energy and Environmental Design
LEED EB	LEED for Existing Buildings

LEED NC	LEED for new construction
LF	Load Factor
LHV	Lower Heating Value
Life cycle	The period of time that a building or site system or element can be expected to adequately serve its intended function.
LPS	Low Pressure Sodium (lamp)
Lu	Lumen Output of a Lamp or Fixture
M	Mega multiple of millions in SI system
M&V	Measurement and Verification
MACRS	Modified Accelerated Cost Recovery System
MARR	Minimum Attractive Rate of Return
Mbtu	Thousand Btu
MCF	Thousand Cubic Feet (usually of gas)
MEC	Model Energy Code
Mm	Multiple of Thousands in I/P System
MMBtu	Million Btu
MMCS	Maintenance Management Computer System
MMI	Man Machine Interface
MMS	Maintenance Management System
MSE 2000	Management System for Energy 2000 (ANSI Georgia Tech Univ)
MW	MegaWatt
MWH MWh	MegaWatt hour
NAAQS	National Ambient Air Quality Standards
NAESCO	National Association of Energy Service Companies
NAIMA	North American Insulation Manufacturers Association
NEA	National Energy Act of 1978
NECPA	National Energy Conservation Policy Act
NEMA	National Electrical Manufacturer's Association
NERC	North American Electric Reliability Council
Next Renewal	The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor?s visual inspection.

NFPA	National Fire Protection Association
NGPA	National Gas Policy Act of 1978
NLRPM	No Load Revolutions per Minute (speed)
Nn	Equipment or Project lifetime in economic analysis
NOPR	Notice of Proposed Rule Making from FERC
NOx	Nitrogen Oxide Compounds
NPV	Net present value in economic analysis
NREL	National Renewable Energy Laboratory
NUG	Non-Utility Generator
O&M	Operation and Maintenance
OA	Outside Air
ODP	Ozone Depletion Potential
OPAC	Off-Peak Air Conditioning
P	Present value in economic analysis
PBR	Performance Based Rates
PEA	Preliminary Energy Audit
PF	Power Factor
PID	Proportional plus integral plus derivative (control system)
PM	Portfolio Manager in Energy Star rating system
PM	Preventive Maintenance
PoolCo	Power Pool Company or Organization
POU	Point of Use
PQ	Power Quality
PSC	Public Service Commission
PSIA psia	Pounds per square inch absolute (pressure)
PSIG psig	Pounds per square inch gauge (pressure)
PUC	Public Utility Commission
PUHCA	Public Utilities Holding Company Act of 1935
PURPA	Public Utilities Regulatory Policies of 1978
PV	Photovotaic system

PV	Present Value
PW	Present Worth
PX	Power Exchange
q	Rate of heat flow in Btu per hour
Q	Heat load due to conduction using degree days
QF	Qualifying Facility
R	Electrical resistance
R	Thermal Resistance
RC	Remote controller
RCR	Room Cavity Ratio
RCRA	Resource Conservation and Recovery Act
Remaining Service Life (RSL)	RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date.
Remaining Service Life Index (RSLI)	RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100
REMR	Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition
Renewal Schedule	A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal.
RH	Relative Humidity
RLA	Running Load Amps
RMS	Root Mean Square
RO	Reverse Osmosis
ROI	Return on Investment
RPM	Revolutions Per Minute
RTG	Regional Transmission Group
RTO	Regional Transmission Organization
RTP	Real Time Pricing
SBCCI	Southern Building Code Congress International
SC	Scheduling Coordinator
SC	Shading Coefficient
SCADA	Supervisory Control and Data Acquisition Systems

SEER	Seasonal Energy Efficiency Ratio
SHR	Sensible Heat Ratio
Site	The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility.
Soft Cost	An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses.
SOx	Sulfur Oxide Compounds
SP	Static Pressure
SP SPB	Simple Payback
SPP	Simple Payback Period
SPP	Small Power Producers
STR	Stack Temperature Rise
SV	Specific Volume
System	System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II.
T	Temperature
T	Tubular (lamps)
TAA	Technical Assistance Audit
TCP/IP	Transmission Control Protocol/Internet Protocol
TES	Thermal Energy Storage
THD	Total Harmonic Distortion
TOD	Time of Day
TOU	Time of Use
TQM	Total Quality Management
TransCo	Transmission Company
U	Thermal Conductance
UDC	Utility Distribution Company
UL	Underwriters Laboratories
UNIFORMAT II	The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings.
USGBC	US Green Building Council
v	Specific Volume

V	Volts Voltage
V	Volume
VAV	Variable Air Volume
VDT	Video Display Terminal
VFD	Variable Frequency Drive
VHO	Very High Output
VSD	Variable Speed Drive
W	Watts
W	Width
WB	Wet bulb
WH Wh	Watt Hours
Year built	The year that a building or addition was originally built based on substantial completion or occupancy.
Z	Electrical Impedance