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.

Kelley, W D School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	1601 N. 28Th St.	Enrollment	409
	Philadelphia, Pa 19121	Grade Range	'00-08'
Phone/Fax	215-684-5071 / 215-684-5179	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Kelley	Turnaround Model	Turnaround

Building/System FCI Tiers

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

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

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	**28.18%**	**$12,045,221**	**$42,740,118**
Building	28.64 %	$11,827,447	$41,298,632
Grounds	15.11 %	$217,773	$1,441,486

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.54 %	$6,711	$1,234,700
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.31 %	$6,935	$2,247,840
Windows (Shows functionality of exterior windows)	00.00 %	$0	$981,360
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$120,240
Interior Doors (Classroom doors)	17.48 %	$47,308	$270,720
Interior Walls (Paint and Finishes)	00.00 %	$0	$1,416,240
Plumbing Fixtures	16.91 %	$384,422	$2,273,760
Boilers	12.02 %	$161,581	$1,344,240
Chillers/Cooling Towers	63.72 %	$1,123,153	$1,762,560
Radiators/Unit Ventilators/HVAC	121.14 %	$3,749,614	$3,095,280
Heating/Cooling Controls	158.90 %	$1,544,551	$972,000
Electrical Service and Distribution	115.08 %	$803,750	$698,400
Lighting	34.04 %	$850,069	$2,496,960
Communications and Security (Cameras, Pa System and Fire Alarm)	67.61 %	$632,327	$935,280

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

S456001;Kelley, William

Final

Site Assessment Report

January 30, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	72,000
Year Built:	1965
Last Renovation:	
Replacement Value:	$42,740,118
Repair Cost:	$12,045,220.66
Total FCI:	28.18 %
Total RSLI:	68.40 %

Description:

Facility Assessment, December 2015

School District of Philadelphia

William Kelley Elementary School

1601 N. 28th St.

Philadelphia, PA 19121

72,000 SF / 676 Students / LN 04

The Kelley, W. Elementary school building is located at 1601 N. 28th Street in Philadelphia, PA. The three story with partial basement, approximately 72,000 square foot building was originally constructed in 1965. The basement houses mechanical spaces only.

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. Wayne Fuller, Building Engineer, accompanied us on our tour of the school and provided us with detailed

information on the building systems and recent maintenance history.

STRUCTURAL/ EXTERIOR CLOSURE:

The original building typically rests on concrete foundations and concrete bearing walls that are not showing signs of settlement. There are no signs of moisture penetration through basement walls

The main structure consists typically of cast-in-place concrete columns, beams and ribbed concrete slabs (1-way and 2-way). Long spans (gym and auditorium) are supported by concrete encased steel framing. The superstructure is in good condition.

The building envelope is typically face brick masonry with CMU backup with large section of curtain wall windows and translucent panels. In general, masonry is in fair condition. Water penetration through walls has not been reported.

The building windows are extruded aluminum, curtain wall type with base panels that are louvered. All windows are double glazed and generally in fair condition.

The exterior doors are typically hollow metal doors and frames, painted. The doors are generally in fair condition. Roofing system is a built-up system installed approximately in 2000 and in fair condition. No leaks have been reported. No roof access to lower roof over entrance and lobby area. Railing needed due to roof access proximity to roof edge.

INTERIORS:

The building partition wall types include painted CMU and folding wood partitions; operable but not used; generally in good condition. Interior doors are generally solid core wood doors, some glazed, with hollow metal frames and extruded aluminum framed storefront leading from entrance to lobby. Most doors are in fair condition but do not have lever type hardware. The doors leading to exits stairways are hollow metal doors and frames in good condition.

Fittings include toilet accessories and toilet partitions, generally in good condition, installed approximately in 2000, no accessible compartments; chalkboards are mostly original in fair condition. Handrails and ornamental metals are generally in good condition. Built-in cabinets are wood in good condition. Interior identifying signage is typically directly painted on wall or door surfaces generally in poor condition.

The interior wall finishes in the building are generally painted CMU. Main lobby on the ground floor and basement is finished with face brick matching the exterior walls. Interiors were painted in 2005 and are in good condition.

Most ceilings are exposed structural painted concrete with 2x2 suspended acoustical panels installed in corridors, office and auditorium in various conditions. Ceilings in some corridors are damaged and beyond their service life. Ceiling in gymnasium is exposed painted metal structure in good condition.

Flooring is typically a mix of VCT, VAT (mostly in corridors) and painted concrete in toilets, stairways and basement. Most flooring is in fair to good condition.

Stair construction is generally steel with concrete filled steel pan treads cast iron non-slip treads in good condition.

Institutional and Commercial equipment includes: A/V equipment in good condition; gym equipment – basketball backstops in good condition. Other equipment includes kitchen equipment, generally in good condition.

Furnishings include fixed casework in classrooms, and other spaces are generally in good condition; window shades/blinds, generally in good condition; fixed seating in auditorium is in good condition.

CONVEYING SYSTEMS:

The building has 1200 lb traction elevator, original to the building. Cabin size does not conform to ADA requirement and its finishes are old and deteriorating.

MECHANICAL

Plumbing Fixtures

Many of the plumbing fixtures were replaced in the 1980s and are approaching the end of their useful service lives. Fixtures in the restrooms on each floor consist of both floor and wall mounted flush valve water closets, wall hung urinals, and lavatories with both lever and wheel handle faucets. The installation date of the plumbing fixtures is unknown, but they are estimated to be over 30 years old. The plumbing fixtures are approaching the end of their service lives and should be replaced in the next 3-5 years.

Drinking fountains in the corridors are a mixture of wall hung units and floor standing units with integral refrigerated coolers. Many are beyond their service life and should be replaced; most are NOT accessible type.

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

The Kitchen, located adjacent to the Gymnasium/Cafeteria, does not have a sink or exhaust hood; only premade meals are served.

Domestic Water Distribution

A 4" city water service enters the building boiler room from North 28th Street. A reduced pressure backflow preventer is located in the basement boiler room on the front side of the building, where the water service enters the building. The domestic hot and cold water distribution piping is copper piping and sweat fittings. The maintenance staff reports no significant problems with scale build up in the domestic piping and the supply is adequate to the fixtures, however the age of the piping is unknown. The domestic water piping should be inspected and replaced as necessary by a qualified contractor.

One (1) Bradford White gas fired, 75 gallon, vertical hot water heater with circulating pump supplies hot water for domestic use. The water heater was installed in 2015. The unit is located in the boiler room on the basement level. The domestic hot water heater is within its service life and should provide reliable service for the next 10-12 years. A water softener is not installed.

Sanitary Waste

The storm and sanitary sewer piping is a mixture of galvanized piping with threaded fittings and cast iron piping with hub and spigot fittings. Several sections of piping have been replaced with cast iron piping with no-hub fittings.

A sewage ejector pit located in the basement boiler room receives sewage from the basement area. The system has been in use for an unknown amount of time and appears to be in good condition. The pit is sealed. Two (2) 1/2HP Gorman Rupp pumps are located outside the pit and appeared to be in good condition.

The maintenance staff reported mostly minor problems with the sanitary waste piping systems. However, the sewer piping has been in service for over 50 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 mechanical chases in the building and appear to be original. The piping is cast iron with hub and spigot fittings and has been in use beyond its service life. The drain piping should be inspected by a qualified contractor and repaired as necessary.

Energy Supply

An 8" city gas service enters the building in the basement boiler room from North 28th Street. The gas meter is 3" and is located in the boiler room. An Eclipse gas booster pump is installed to ensure adequate gas pressure to the boilers.

The reserve oil supply is stored in a 10,000 gallon underground storage tank (UST) located in the paved play area on the East side of the school. Duplex pumps located in the boiler room circulate oil through the system. Oil is used as a backup fuel and the District receives credit from the gas utility as an interruptible service. The storage tank should be inspected on a regular basis. USTs have an anticipated service life of 20 years. The actual condition of the fuel side is unknown.

Heat Generating Systems

Building heating hot water is generated by three (3) 100HP HB Smith model 350A cast iron sectional boilers, installed in 1996. Each boiler is equipped with a Power Flame burner designed to operate on natural gas or fuel oil. Combustion air makeup is supplied by louvers equipped with

motorized dampers. Burner oil pumps are loose and not driven by the fan motor. The gas train serving the boilers does appear to have code required venting of the regulators and dual solenoid valves with venting of the chamber between. No major issues with the boilers were reported by the Building Engineer. Cast iron boilers have an anticipated service life of 35 years or more; these units have been in service 20 years. The District should provide reliable service for the next 10 to 15 years.

Distribution Systems

Building heating hot water piping is black steel with threaded fittings, smaller branch piping is copper piping with sweat fittings. Three (3) expansion tanks are installed on the hot water piping, one (1) for each boiler. The heating hot water distribution piping has been in use for an unknown amount of time and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes. The District should hire a qualified contractor to examine the heating hot water distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

A two pipe distribution system supplies building heating water to the unit ventilators, fin tube radiators, and heating and ventilation (HV) units. Two (2) 7.5HP base mounted, end suction heating water supply pumps circulate building heating hot water. A small circulating pump serving the HV unit for the Auditorium and Gymnasium/Cafeteria is installed. The pumps are in poor condition, well beyond their service lives, and should be replaced. All piping was covered with insulation.

Unit ventilators and fin tube radiators provide heating for classrooms, offices, and indirectly to the hallways. The unit ventilators and fin tube radiators are original to the building and well beyond their service lives. Outdoor air for the building is supposed to be provided by wall openings in the unit ventilators. The Building Engineer reported that the fin tube radiators heat the building sufficiently and the unit ventilators are only used on very cold days; this does not provide sufficient outdoor air ventilation. The existing unit ventilators should be removed and new units installed with hot and chilled water coils and integral heat exchangers to introduce sufficient outdoor air to the building. Ventilation is provided to the Auditorium and Gymnasium/Cafeteria by one (1) heating and ventilation unit located in the basement boiler room. Ventilation is provided to the administration offices by one (1) heating and ventilation unit located in the basement boiler room. The existing HV units are beyond their service lives and should be replaced. Ventilation should be provided for the Gymnasium/Cafeteria by a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings. Similar units should be installed for the administration offices. Ventilation should be provided for the Auditorium by installing a constant volume air handling unit with distribution ductwork and registers. These units would be equipped with hot water heating coils and chilled water cooling coils.

Exhaust for the restrooms, art lab, and science lab is provided by four (4) roof mounted exhaust fans. One (1) exhaust fan serves the girls' restrooms, one (1) serves the boys' restrooms, and the other two (2) serve the science and art labs. The existing roof mounted exhaust fans are operational according to the Building Engineer but are in poor condition and should be replaced. Nine (9) roof mounted power ventilators provide relief air for the corridors, are in poor condition, and should be replaced.

Terminal & Package Units

Several of the classrooms in the school building have window air conditioning units that have an anticipated service life of only 10 years. Installing a 200 ton air-cooled chiller, with pumps located in a mechanical room, and chilled water distribution piping would supply more reliable air conditioning for the building with a much longer service life.

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.

A kitchen hood is not installed in this building.

Controls & Instrumentation

The original pneumatic systems still provide basic control functions. Pneumatic room thermostats are intended to control the temperature of each space, most of the thermostats still function. The unit ventilators are controlled at the breaker panel and are either "on" or "off", there is no fan modulation. Pneumatic control air is supplied by one (1) duplex Johnson Controls air compressor and Hankison air dryer located in the boiler room. The pneumatic systems are beyond their service life and require too much attention from the maintenance staff. These controls should be converted to DDC.

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

Sprinklers

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

The building is not equipped with fire stand pipe.

ELECTRICAL:

Site electrical service - The primary power is at 2.4KV from the power poles. The primary power is brought into the school underground and to the electrical room, feeding a 500 KVA pad-mounted dry-type transformer. The secondary power feeds an old 1600A, 120V/240V, 2 phase switchboard. The PECO meter (PECO 515 MUC 42216) is also located inside the new electrical room (basement). The switchboard is barely functioning. It was built in 1965 and has reached the end of its useful service life.

Distribution system - The electrical distribution is accomplished by using the main switchboard (located in the electrical room) and feeding several 120V lighting and receptacle panels throughout the building. These panels are old, were installed in 1965, 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).

Lighting - Interior building is illuminated by various types of fixtures. They include fluorescent lighting (mostly T-12 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. About 20% of the school lighting has been upgraded, however the majority of the building (80%) lacks adequate illumination level. The majority of interior lighting fixtures (80%) are in poor condition and have reached the end of their useful service life.

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 an old video surveillance system. There are cameras are installed at exit doors, corridors, exterior, and other critical areas. However school would like to have new video surveillance system with 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. School needs an Emergency generator for all the critical loads and elevator loads.

Emergency lighting and exit lights - there are sufficient number of emergency lights/exit lights in the corridors and other exit ways. The exit/emergency lights have recently been upgraded (2006).

Lightning Protection System - There are several lightning protection rods installed on the roof. The rods are 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 updated lighting and controller. Also, the auditorium has updated sound system.

Elevators – This school has a fairly new elevator (traction 5 HP).

GROUNDS (SITE):

There is no parking lot at the site; staff parking is located on a separate lot across Marston Street. Play yard in asphalt paving in fair condition with newly added turf area, play structure, and fall protection all in good condition. Perimeter fencing is aluminum fence in good condition. The building is accessible via ramp on northeast side. There is no landscaping on site.

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:

Generally, the building has accessible routes per ADA requirements; however, floors other than the ground floor are not accessible due to non-compliant elevator cabin. Toilets are not equipped with accessible fixtures and accessories, such as grab bars, and accessible partitions. Most of the doors in the building do not have ADA required door handles.

RECOMMENDATIONS:

- Install caged ladder to access lower roof over entry/lobby area
- Install safety railing at roof access hatch near roof edge
- Replace interior doors hardware with lever type handles for accessibility
- Replace non-ADA compliant toilet partitions; reconfigure remaining toilet partitions
- Install new signage throughout
- Replace suspended acoustic ceiling system – 25% of suspended ceiling damaged
- Replace existing elevator with an ADA compliant 2500 lb elevator serving all floors

- Replace thirty five (35) water closets, in use beyond their service life, in the restrooms with new code compliant fixtures.
- Replace eighteen (18) urinals, in use beyond their service life, in the restrooms with new low flow fixtures.
- Replace four (4) wall hung drinking fountains and integral refrigerated coolers in the corridors. These units are beyond their service life and most are NOT accessible type.
- Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use beyond its service life, 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.
- Hire a qualified contractor to examine the distribution piping, in service for over 50 years, and replace any damaged piping and to further quantify the extent of potential failures.
- Replace two (2) 7.5HP end-suction hot water supply pumps in the boiler room which are beyond their service lives and in poor condition.
- Remove the existing unit ventilators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.
- Remove the existing heating and ventilation unit, which is beyond its service life, and provide ventilation for the Gymnasium/Cafeteria by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings.
- Provide ventilation for the Auditorium by installing a fan coil air handling unit installed in the basement boiler room with outdoor air ducted to the unit from existing louvers.
- Remove the existing heating and ventilation unit, which is beyond its service life, and provide ventilation for the administration offices by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from the existing louvers.
- Remove the window air conditioning units and install a 200 ton air-cooled chiller with chilled water distribution piping and pumps located in a mechanical room to supply more reliable air conditioning for the building with a much longer service life.

- Replace four (4) roof mounted exhaust fans serving the restrooms, science lab, and art lab which are in poor condition.
- Replace nine (9) roof mounted power ventilators allowing relief air to escape from the building which are in poor condition.
- Replace the existing controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency. Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.
- Install a new and upgraded electrical service for this school to handle existing loads plus any additional mechanical loads.
- Install new 120V lighting and receptacle panels throughout the building (total of 10)
- Install new lighting system for 80% of the building.
- Install new receptacles for the building
- Install new clock system
- Install new video surveillance system.
- Install new automated/addressable FA system.
- Install a new Emergency generator.
- Install new exit lights and emergency lights.
- 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:	S456001		

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.

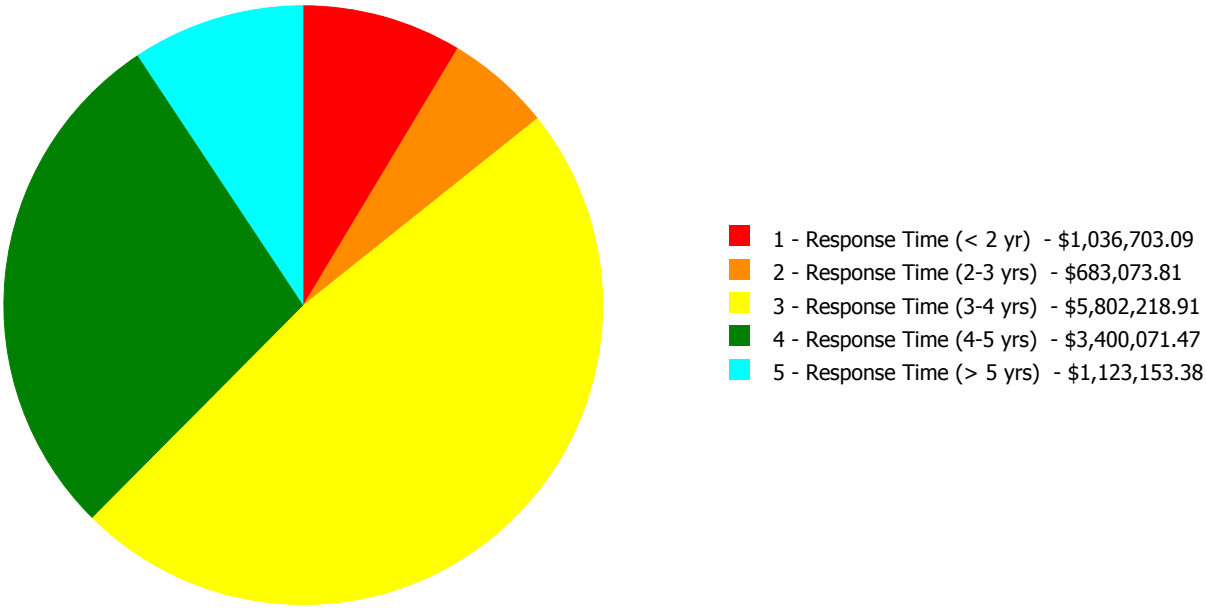
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	50.00 %	0.00 %	$0.00
A20 - Basement Construction	50.00 %	0.00 %	$0.00
B10 - Superstructure	50.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	56.97 %	0.21 %	$6,934.61
B30 - Roofing	25.00 %	0.54 %	$6,710.94
C10 - Interior Construction	48.14 %	5.15 %	$84,627.08
C20 - Stairs	50.00 %	0.00 %	$0.00
C30 - Interior Finishes	41.05 %	1.54 %	$54,296.75
D10 - Conveying	25.00 %	8.08 %	$39,791.67
D20 - Plumbing	106.12 %	48.55 %	$1,421,764.87
D30 - HVAC	93.22 %	82.14 %	$6,578,899.26
D40 - Fire Protection	105.71 %	158.77 %	$1,029,992.15
D50 - Electrical	110.11 %	61.54 %	$2,604,430.04
E10 - Equipment	57.14 %	0.00 %	$0.00
E20 - Furnishings	62.50 %	0.00 %	$0.00
G20 - Site Improvements	60.06 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	66.66 %	$217,773.29
Totals:	**68.40 %**	**28.18 %**	**$12,045,220.66**

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)
B456001;Kelley, William	72,000	28.64	$1,036,703.09	$683,073.81	$5,632,400.25	$3,352,116.84	$1,123,153.38
G456001;Grounds	75,100	15.11	$0.00	$0.00	$169,818.66	$47,954.63	$0.00
Total:		**28.18**	**$1,036,703.09**	**$683,073.81**	**$5,802,218.91**	**$3,400,071.47**	**$1,123,153.38**

Deficiencies By Priority



Budget Estimate Total: $12,045,220.66

Executive Summary

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

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

Function:	Elementary School
Gross Area (SF):	72,000
Year Built:	1965
Last Renovation:	
Replacement Value:	$41,298,632
Repair Cost:	$11,827,447.37
Total FCI:	28.64 %
Total RSLI:	68.32 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B456001
Sewage Ejector:	Yes	Status:	Accepted by SDP
Site ID:	S456001		

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	50.00 %	0.00 %	$0.00
A20 - Basement Construction	50.00 %	0.00 %	$0.00
B10 - Superstructure	50.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	56.97 %	0.21 %	$6,934.61
B30 - Roofing	25.00 %	0.54 %	$6,710.94
C10 - Interior Construction	48.14 %	5.15 %	$84,627.08
C20 - Stairs	50.00 %	0.00 %	$0.00
C30 - Interior Finishes	41.05 %	1.54 %	$54,296.75
D10 - Conveying	25.00 %	8.08 %	$39,791.67
D20 - Plumbing	106.12 %	48.55 %	$1,421,764.87
D30 - HVAC	93.22 %	82.14 %	$6,578,899.26
D40 - Fire Protection	105.71 %	158.77 %	$1,029,992.15
D50 - Electrical	110.11 %	61.54 %	$2,604,430.04
E10 - Equipment	57.14 %	0.00 %	$0.00
E20 - Furnishings	62.50 %	0.00 %	$0.00
Totals:	**68.32 %**	**28.64 %**	**$11,827,447.37**

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	$24.32	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$1,751,040
A1030	Slab on Grade	$15.51	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$1,116,720
A2010	Basement Excavation	$13.07	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$941,040
A2020	Basement Walls	$23.02	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$1,657,440
B1010	Floor Construction	$92.20	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$6,638,400
B1020	Roof Construction	$24.11	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$1,735,920
B2010	Exterior Walls	$31.22	S.F.	72,000	100	1965	2065		50.00 %	0.31 %	50		$6,934.61	$2,247,840
B2020	Exterior Windows	$13.63	S.F.	72,000	40	2005	2045		75.00 %	0.00 %	30			$981,360
B2030	Exterior Doors	$1.67	S.F.	72,000	25	2000	2025		40.00 %	0.00 %	10			$120,240
B3010105	Built-Up	$37.76	S.F.	31,402	20	2000	2020		25.00 %	0.00 %	5			$1,185,740
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	$0.68	S.F.	72,000	20	2000	2020		25.00 %	13.71 %	5		$6,710.94	$48,960
C1010	Partitions	$14.93	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$1,074,960
C1020	Interior Doors	$3.76	S.F.	72,000	40	1965	2005	2025	25.00 %	17.48 %	10		$47,308.40	$270,720
C1030	Fittings	$4.12	S.F.	72,000	40	2000	2040		62.50 %	12.58 %	25		$37,318.68	$296,640
C2010	Stair Construction	$1.28	S.F.	72,000	100	1965	2065		50.00 %	0.00 %	50			$92,160

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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.	72,000	10	2012	2022		70.00 %	0.00 %	7			$1,416,240
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.		50				0.00 %	0.00 %				$0
C3020413	Vinyl Flooring	$9.68	S.F.	61,200	20	2000	2020		25.00 %	0.00 %	5			$592,416
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	10,800	50	2000	2050		70.00 %	0.00 %	35			$10,476
C3030	Ceiling Finishes	$20.97	S.F.	72,000	25	1995	2020		20.00 %	3.60 %	5		$54,296.75	$1,509,840
D1010	Elevators and Lifts	$6.84	S.F.	72,000	40	1985	2025		25.00 %	8.08 %	10		$39,791.67	$492,480
D2010	Plumbing Fixtures	$31.58	S.F.	72,000	35	1965	2000	2052	105.71 %	16.91 %	37		$384,422.04	$2,273,760
D2020	Domestic Water Distribution	$2.90	S.F.	72,000	25	1965	1990	2042	108.00 %	174.74 %	27		$364,849.90	$208,800
D2030	Sanitary Waste	$2.90	S.F.	72,000	25	1965	1990	2042	108.00 %	169.16 %	27		$353,213.96	$208,800
D2040	Rain Water Drainage	$3.29	S.F.	72,000	30	1965	1995	2047	106.67 %	134.79 %	32		$319,278.97	$236,880
D3020	Heat Generating Systems	$18.67	S.F.	72,000	35	1996	2031		45.71 %	12.02 %	16		$161,580.94	$1,344,240
D3030	Cooling Generating Systems	$24.48	S.F.	72,000	20			2037	110.00 %	63.72 %	22		$1,123,153.38	$1,762,560
D3040	Distribution Systems	$42.99	S.F.	72,000	25	1965	1990	2042	108.00 %	121.14 %	27		$3,749,614.38	$3,095,280
D3050	Terminal & Package Units	$11.60	S.F.	72,000	20	1965	1985	2027	60.00 %	0.00 %	12			$835,200
D3060	Controls & Instrumentation	$13.50	S.F.	72,000	20	1965	1985	2037	110.00 %	158.90 %	22		$1,544,550.56	$972,000
D4010	Sprinklers	$8.02	S.F.	72,000	35			2052	105.71 %	178.37 %	37		$1,029,992.15	$577,440
D4020	Standpipes	$0.99	S.F.	72,000	35			2052	105.71 %	0.00 %	37			$71,280
D5010	Electrical Service/Distribution	$9.70	S.F.	72,000	30	1965	1995	2047	106.67 %	115.08 %	32		$803,749.73	$698,400
D5020	Lighting and Branch Wiring	$34.68	S.F.	72,000	20	1965	1985	2037	110.00 %	34.04 %	22		$850,069.28	$2,496,960
D5030	Communications and Security	$12.99	S.F.	72,000	15	1965	1980	2032	113.33 %	67.61 %	17		$632,327.22	$935,280
D5090	Other Electrical Systems	$1.41	S.F.	72,000	30	1965	1995	2047	106.67 %	313.52 %	32		$318,283.81	$101,520
E1020	Institutional Equipment	$4.82	S.F.	72,000	35	2000	2035		57.14 %	0.00 %	20			$347,040
E1090	Other Equipment	$11.10	S.F.	72,000	35	2000	2035		57.14 %	0.00 %	20			$799,200
E2010	Fixed Furnishings	$2.13	S.F.	72,000	40	2000	2040		62.50 %	0.00 %	25			$153,360
								Total	**68.32 %**	**28.64 %**			**$11,827,447.37**	**$41,298,632**

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: 85% - 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:	**$11,827,447**	**$0**	**$0**	**$0**	**$0**	**$4,255,291**	**$0**	**$1,915,976**	**$0**	**$0**	**$1,305,996**	**$19,304,711**
*** 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	$6,935	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,935**
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	$177,752	**$177,752**
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	$1,512,056	$0	$0	$0	$0	$0	**$1,512,056**
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	$6,711	$0	$0	$0	$0	$62,434	$0	$0	$0	$0	$0	**$69,145**
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**

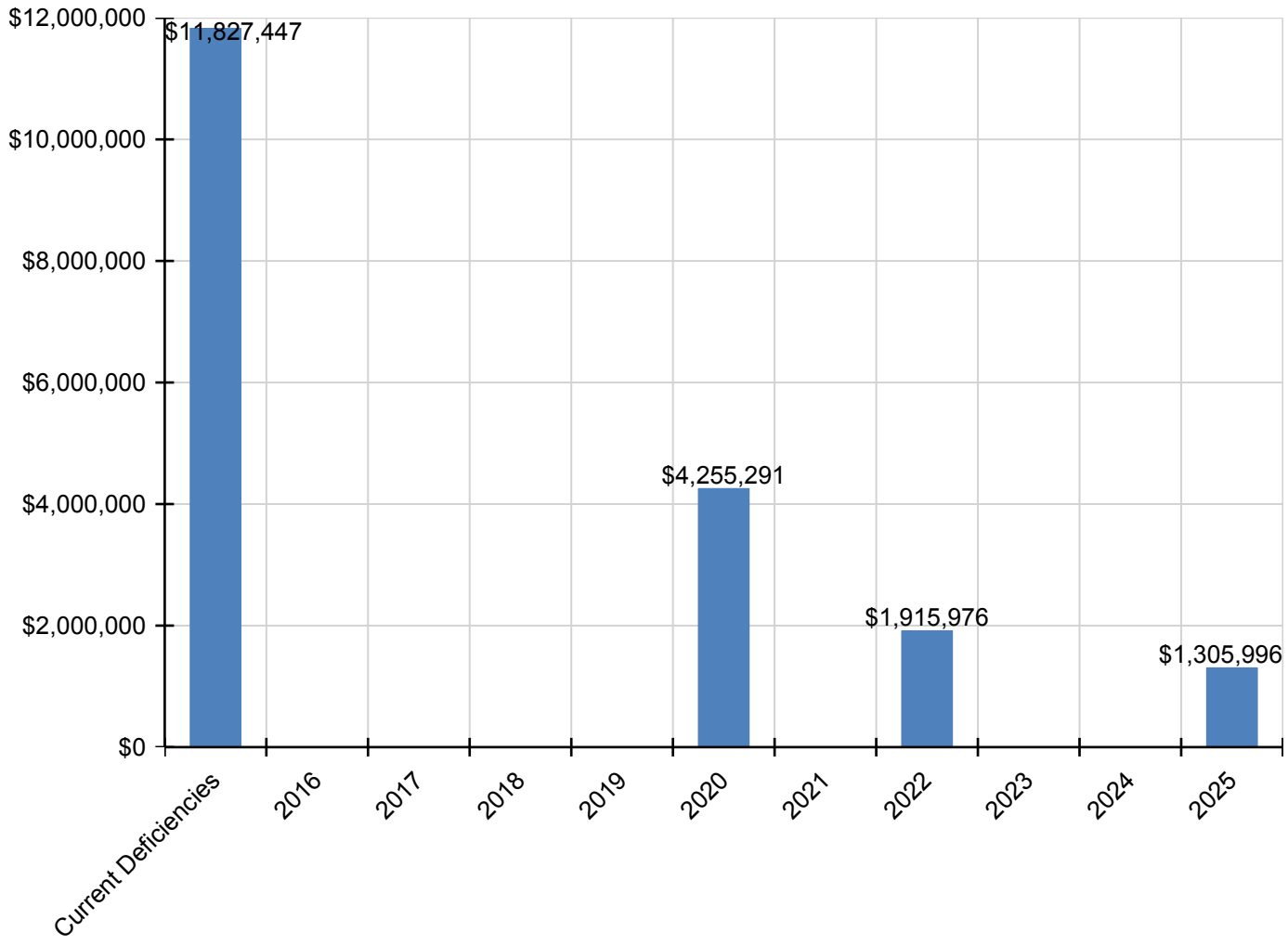
C1020 - Interior Doors	$47,308	$0	$0	$0	$0	$0	$0	$0	$0	$0	$400,208	**$447,516**
C1030 - Fittings	$37,319	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$37,319**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$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	$1,915,976	$0	$0	$0	**$1,915,976**
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	$755,450	$0	$0	$0	$0	$0	**$755,450**
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	$54,297	$0	$0	$0	$0	$1,925,350	$0	$0	$0	$0	$0	**$1,979,647**
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	$39,792	$0	$0	$0	$0	$0	$0	$0	$0	$0	$728,037	**$767,829**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$384,422	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$384,422**
D2020 - Domestic Water Distribution	$364,850	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$364,850**
D2030 - Sanitary Waste	$353,214	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$353,214**
D2040 - Rain Water Drainage	$319,279	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$319,279**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$161,581	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$161,581**
D3030 - Cooling Generating Systems	$1,123,153	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,123,153**
D3040 - Distribution Systems	$3,749,614	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,749,614**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,544,551	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,544,551**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,029,992	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,029,992**
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	$803,750	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$803,750**
D5020 - Lighting and Branch Wiring	$850,069	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$850,069**
D5030 - Communications and Security	$632,327	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$632,327**
D5090 - Other Electrical Systems	$318,284	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$318,284**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

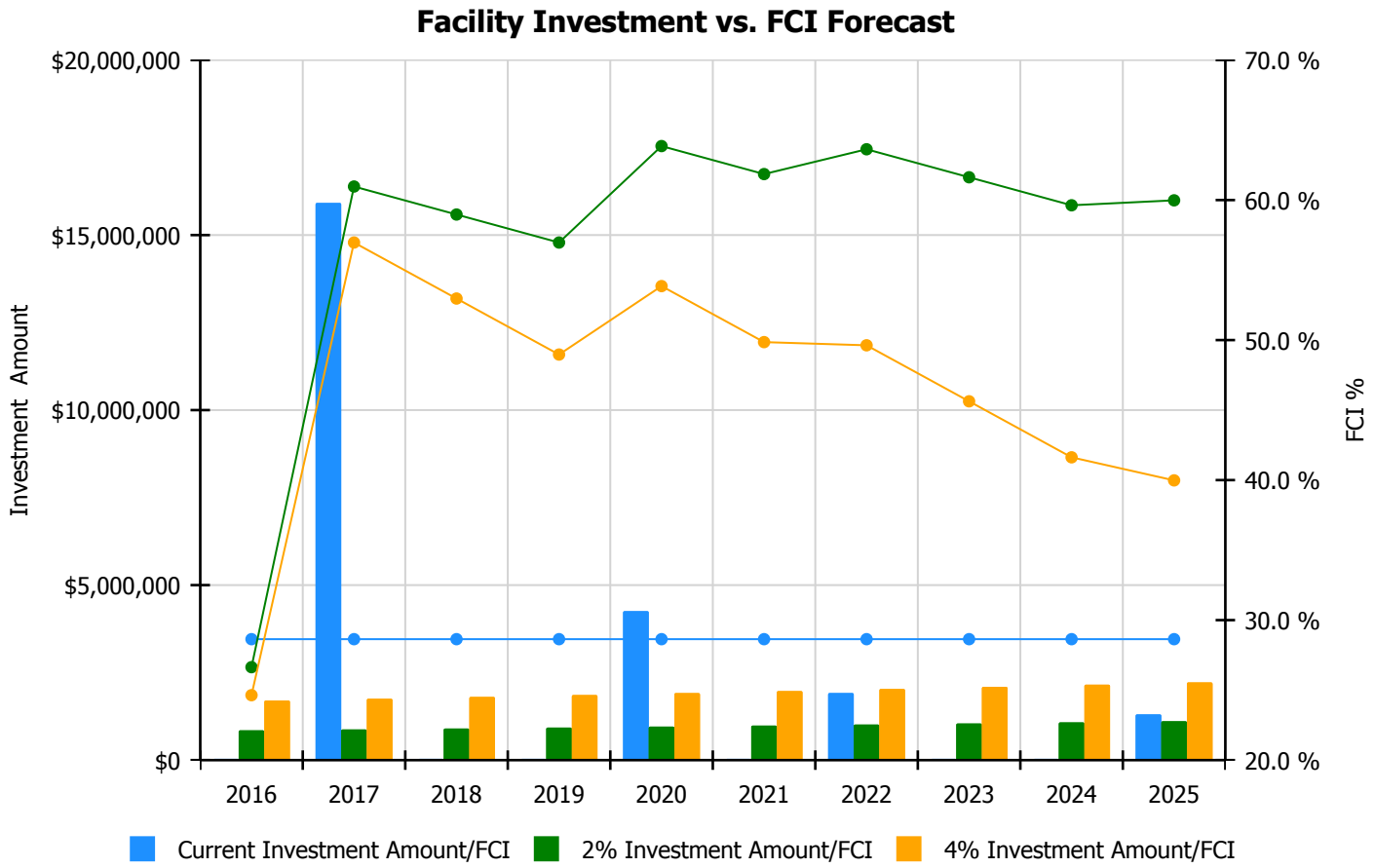
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

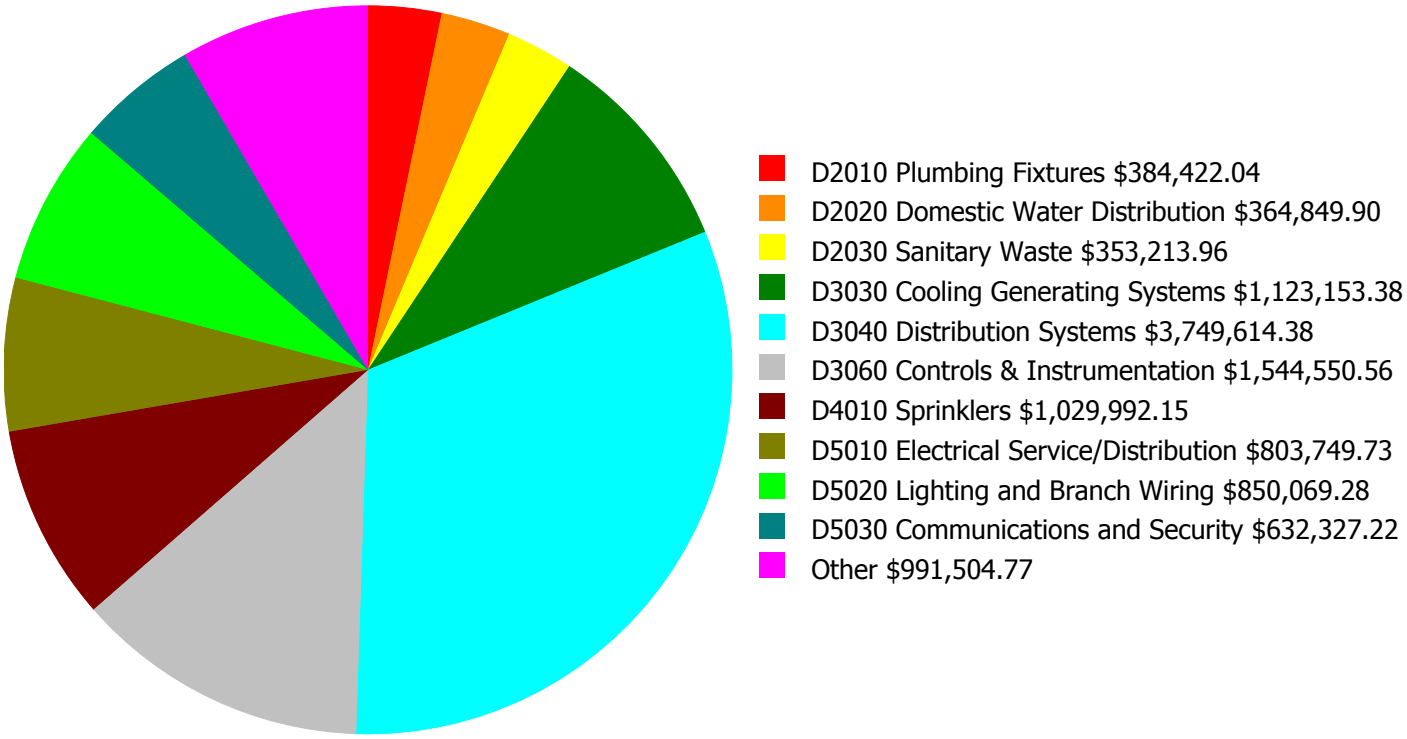
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 28.64%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$850,752.00	26.64 %	$1,701,504.00	24.64 %
2017	$15,916,530	$876,274.00	60.97 %	$1,752,549.00	56.97 %
2018	$0	$902,563.00	58.97 %	$1,805,125.00	52.97 %
2019	$0	$929,639.00	56.97 %	$1,859,279.00	48.97 %
2020	$4,255,291	$957,529.00	63.85 %	$1,915,057.00	53.85 %
2021	$0	$986,255.00	61.85 %	$1,972,509.00	49.85 %
2022	$1,915,976	$1,015,842.00	63.63 %	$2,031,684.00	49.63 %
2023	$0	$1,046,317.00	61.63 %	$2,092,635.00	45.63 %
2024	$0	$1,077,707.00	59.63 %	$2,155,414.00	41.63 %
2025	$1,305,996	$1,110,038.00	59.98 %	$2,220,076.00	39.98 %
Total:	**$23,393,793**	**$9,752,916.00**		**$19,505,832.00**	

Deficiency Summary by System

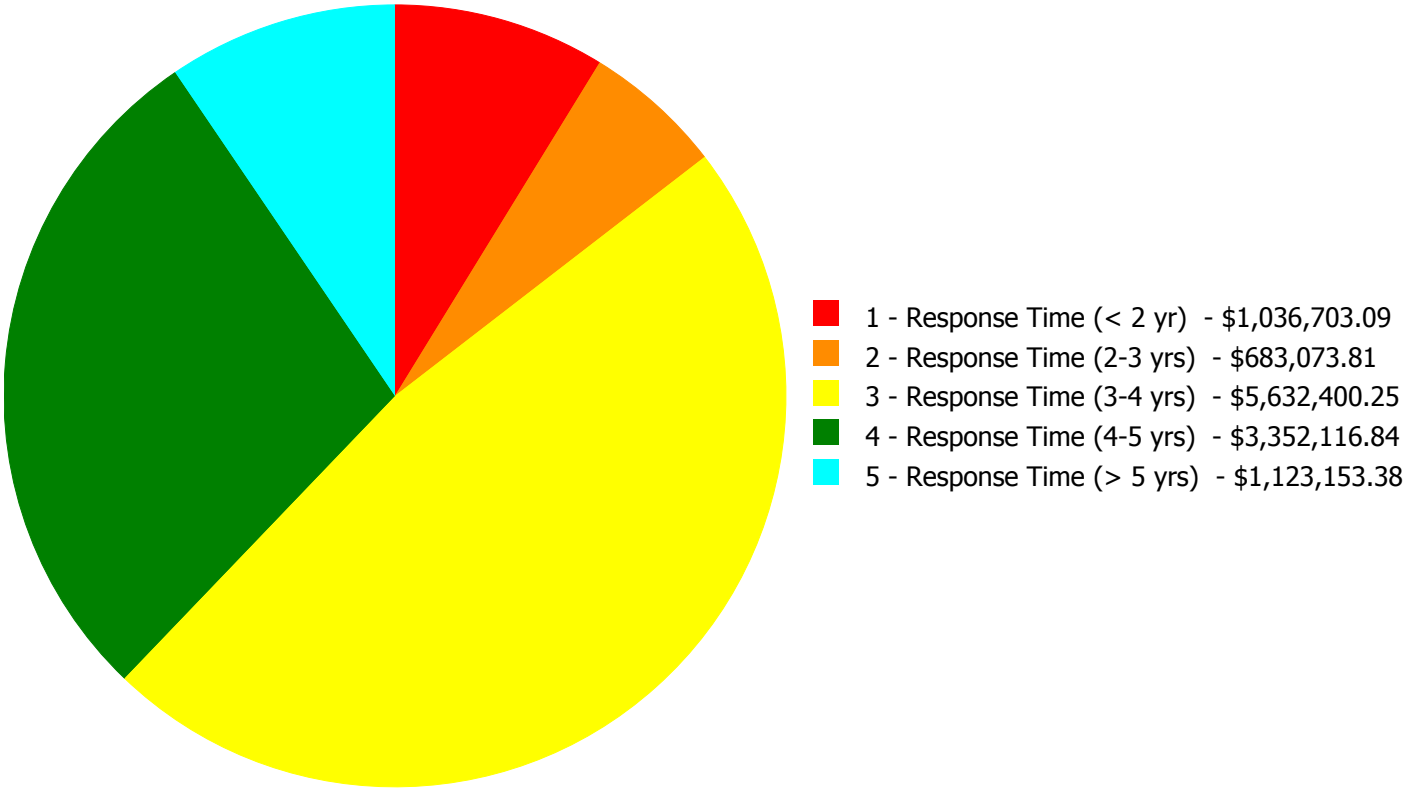
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $11,827,447.37

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: $11,827,447.37

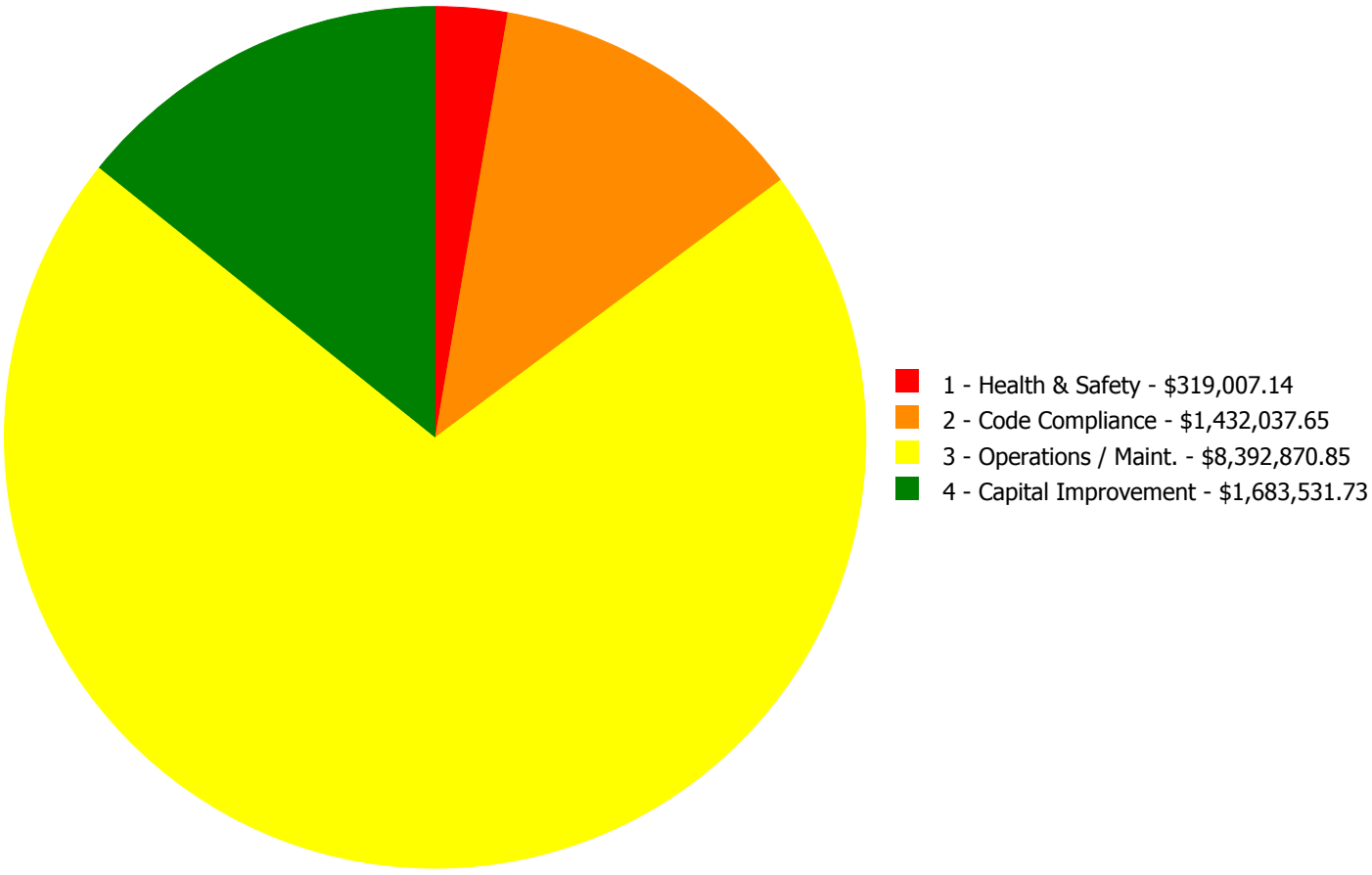
Deficiency By Priority Investment Table

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	$6,934.61	$0.00	$0.00	$6,934.61
B3020	Roof Openings	$6,710.94	$0.00	$0.00	$0.00	$0.00	$6,710.94
C1020	Interior Doors	$0.00	$0.00	$47,308.40	$0.00	$0.00	$47,308.40
C1030	Fittings	$0.00	$15,645.68	$0.00	$21,673.00	$0.00	$37,318.68
C3030	Ceiling Finishes	$0.00	$54,296.75	$0.00	$0.00	$0.00	$54,296.75
D1010	Elevators and Lifts	$0.00	$39,791.67	$0.00	$0.00	$0.00	$39,791.67
D2010	Plumbing Fixtures	$0.00	$0.00	$384,422.04	$0.00	$0.00	$384,422.04
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$364,849.90	$0.00	$364,849.90
D2030	Sanitary Waste	$0.00	$0.00	$353,213.96	$0.00	$0.00	$353,213.96
D2040	Rain Water Drainage	$0.00	$0.00	$319,278.97	$0.00	$0.00	$319,278.97
D3020	Heat Generating Systems	$0.00	$161,580.94	$0.00	$0.00	$0.00	$161,580.94
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,123,153.38	$1,123,153.38
D3040	Distribution Systems	$0.00	$0.00	$3,040,816.65	$708,797.73	$0.00	$3,749,614.38
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$1,544,550.56	$0.00	$1,544,550.56
D4010	Sprinklers	$1,029,992.15	$0.00	$0.00	$0.00	$0.00	$1,029,992.15
D5010	Electrical Service/Distribution	$0.00	$411,758.77	$0.00	$391,990.96	$0.00	$803,749.73
D5020	Lighting and Branch Wiring	$0.00	$0.00	$850,069.28	$0.00	$0.00	$850,069.28
D5030	Communications and Security	$0.00	$0.00	$312,072.53	$320,254.69	$0.00	$632,327.22
D5090	Other Electrical Systems	$0.00	$0.00	$318,283.81	$0.00	$0.00	$318,283.81
	Total:	$1,036,703.09	$683,073.81	$5,632,400.25	$3,352,116.84	$1,123,153.38	$11,827,447.37

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: $11,827,447.37

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: B3020 - Roof Openings

Location: Roof access

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install safety guard rails at roof perimeter (OSHA required if roof hatch is 10' from roof edge).

Qty: 10.00

Unit of Measure: L.F.

Estimate: $6,710.94

Assessor Name: System

Date Created: 02/12/2016

Notes: Install safety railing at roof access hatch near roof edge

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System: D4010 - Sprinklers

Location: Throughout building

Distress: Life Safety / NFPA / PFD

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install a fire protection sprinkler system

Qty: 72,000.00

Unit of Measure: S.F.

Estimate: $1,029,992.15

Assessor Name: System

Date Created: 02/02/2016

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

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

System: C1030 - Fittings

Location: Toilets

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Remove and replace damaged toilet paritions - handicap units

Qty: 16.00

Unit of Measure: Ea.

Estimate: $15,645.68

Assessor Name: System

Date Created: 02/12/2016

Notes: Replace non-ADA compliant toilet partitions; reconfigure remaining toilet partitions

System: C3030 - Ceiling Finishes

Location: B456001;Kelley, William

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 3,600.00

Unit of Measure: S.F.

Estimate: $54,296.75

Assessor Name: System

Date Created: 02/12/2016

Notes: Replace suspended acoustic ceiling system – 25% of suspended ceiling damaged

System: D1010 - Elevators and Lifts

Location: Elevator

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Modernize or upgrade the elevator cab or to comply with ADA - exact scope of work estimate not available - total cost is sufficient

Qty: 1.00

Unit of Measure: Ea.

Estimate: $39,791.67

Assessor Name: System

Date Created: 02/12/2016

Notes: Replace existing elevator with an ADA compliant 2500 lb elevator serving all floors

System: D3020 - Heat Generating Systems

Location: Boiler room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace pump, base-mounted, end suction HHW (4" size, 7-1/2 HP, to 350 GPM)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $161,580.94

Assessor Name: System

Date Created: 02/02/2016

Notes: Replace two (2) 7.5HP end-suction hot water supply pumps in the boiler room which are beyond their service lives and in poor condition.

System: D5010 - Electrical Service/Distribution

Location: throughout the building

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: System

Date Created: 02/12/2016

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: Lobby roof
Distress: Health Hazard / Risk
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add fixed ladders to wall
Qty: 25.00
Unit of Measure: V.L.F.
Estimate: $6,934.61
Assessor Name: System
Date Created: 02/12/2016

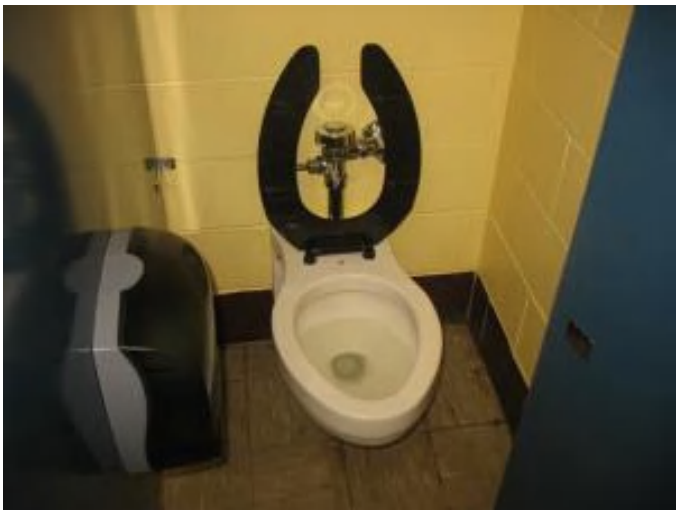
Notes: Install caged ladder to access lower roof over entry/lobby area

System: C1020 - Interior Doors

Location: Throughout
Distress: Accessibility
Category: 2 - Code Compliance
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace door knobs with compliant lever type
Qty: 85.00
Unit of Measure: Ea.
Estimate: $47,308.40
Assessor Name: System
Date Created: 02/12/2016

Notes: Replace interior doors hardware with lever type handles for accessibility

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: 35.00

Unit of Measure: Ea.

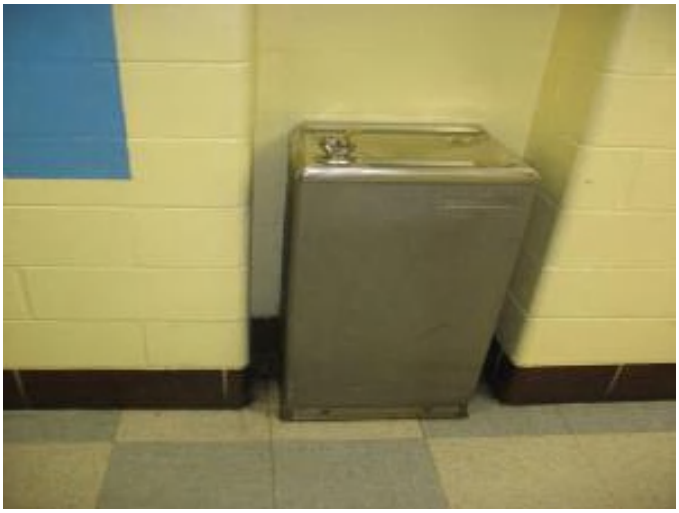
Estimate: $261,408.72

Assessor Name: System

Date Created: 02/02/2016

Notes: Replace thirty five (35) water closets, in use beyond their service life, in the restrooms with new code compliant fixtures.

System: D2010 - Plumbing Fixtures



Location: Corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 4.00

Unit of Measure: Ea.

Estimate: $62,771.59

Assessor Name: System

Date Created: 02/02/2016

Notes: Replace four (4) wall hung drinking fountains and integral refrigerated coolers in the corridors. These units are beyond their service life and most are NOT accessible type.

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: 18.00

Unit of Measure: Ea.

Estimate: $60,241.73

Assessor Name: System

Date Created: 02/02/2016

Notes: Replace eighteen (18) urinals, in use beyond their service life, in the restrooms with new low flow fixtures.

System: D2030 - Sanitary Waste

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 72,000.00

Unit of Measure: S.F.

Estimate: $353,213.96

Assessor Name: System

Date Created: 02/02/2016

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: 72,000.00

Unit of Measure: S.F.

Estimate: $319,278.97

Assessor Name: System

Date Created: 02/02/2016

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: D3040 - Distribution Systems

Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace classroom unit ventilator (htg/clg coils, 5 tons, 2,000 CFM)

Qty: 34.00

Unit of Measure: Ea.

Estimate: $1,695,874.87

Assessor Name: System

Date Created: 02/02/2016

Notes: Remove the existing unit ventilators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.

System: D3040 - Distribution Systems

Location: Gymnasium/Cafeteria

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Install HVAC unit for Gymnasium (single station).

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $362,060.10

Assessor Name: System

Date Created: 02/02/2016

Notes: Remove the existing heating and ventilation unit, which is beyond its service life, and provide ventilation for the Gymnasium/Cafeteria by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings.

System: D3040 - Distribution Systems

Location: Auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 676.00

Unit of Measure: Student

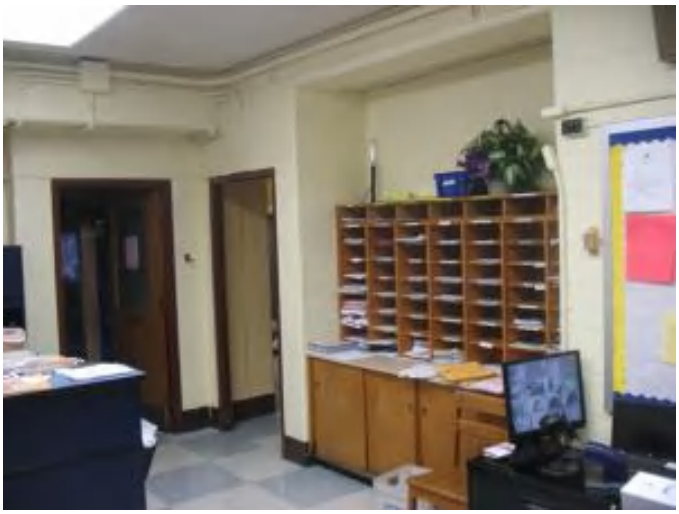
Estimate: $292,588.81

Assessor Name: System

Date Created: 02/02/2016

Notes: Provide ventilation for the Auditorium by installing a fan coil air handling unit installed in the basement boiler room with outdoor air ducted to the unit from existing louvers.

System: D3040 - Distribution Systems



Location: Administration offices

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 676.00

Unit of Measure: Student

Estimate: $292,588.81

Assessor Name: System

Date Created: 02/02/2016

Notes: Remove the existing heating and ventilation unit, which is beyond its service life, and provide ventilation for the administration offices by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from the existing louvers.

System: D3040 - Distribution Systems

Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 9.00

Unit of Measure: Ea.

Estimate: $245,355.03

Assessor Name: System

Date Created: 02/02/2016

Notes: Replace nine (9) roof mounted power ventilators allowing relief air to escape from the building which are in poor condition.

System: D3040 - Distribution Systems

Location: Roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace utility set exhaust fan (5 HP)

Qty: 4.00

Unit of Measure: Ea.

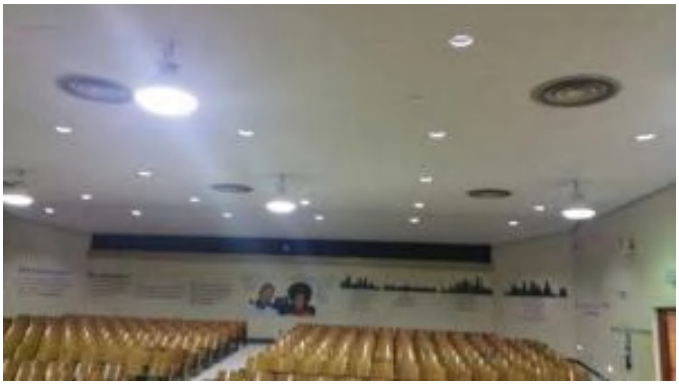
Estimate: $152,349.03

Assessor Name: System

Date Created: 02/02/2016

Notes: Replace four (4) roof mounted exhaust fans serving the restrooms, science lab, and art lab which are in poor condition.

System: D5020 - Lighting and Branch Wiring



Location: throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Lighting Fixtures (SF)

Qty: 0.00

Unit of Measure: S.F.

Estimate: $517,820.10

Assessor Name: System

Date Created: 02/12/2016

Notes: Install new lighting system for 80% of the building.
74,000 SF x 80% = 59,200 SF

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: $332,249.18

Assessor Name: System

Date Created: 02/12/2016

Notes: Install new receptacles for the building (80% of the building)
74,000 x 80% = 59,200 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: $312,072.53

Assessor Name: System

Date Created: 02/12/2016

Notes: Install new automated/addressable FA system.

System: D5090 - Other Electrical Systems

Location: throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Emergency/Exit Lighting
Qty: 1.00
Unit of Measure: Ea.
Estimate: $193,493.14
Assessor Name: System
Date Created: 02/12/2016

Notes: Install new exit lights and emergency lights.

System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: electrical room
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $124,790.67
Assessor Name: System
Date Created: 02/12/2016

Notes: Install a new Emergency generator.
Note: There is no picture attached since school presently does not have an emergency generator.

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

System: C1030 - Fittings

Location: Throughout

Distress: Inadequate

Category: 4 - Capital Improvement

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

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

Qty: 80.00

Unit of Measure: Ea.

Estimate: $21,673.00

Assessor Name: System

Date Created: 02/12/2016

Notes: Install new signage throughout

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: 72,000.00

Unit of Measure: S.F.

Estimate: $364,849.90

Assessor Name: System

Date Created: 02/02/2016

Notes: Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use beyond its service life, and replace any damaged piping.

System: D3040 - Distribution Systems

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace hydronic heating piping (75KSF)

Qty: 72,000.00

Unit of Measure: S.F.

Estimate: $708,797.73

Assessor Name: System

Date Created: 02/02/2016

Notes: Hire a qualified contractor to examine the distribution piping, in service for over 50 years, and replace any damaged piping and to further quantify the extent of potential failures.

System: D3060 - Controls & Instrumentation

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 72,000.00

Unit of Measure: S.F.

Estimate: $1,544,550.56

Assessor Name: System

Date Created: 02/02/2016

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

System: 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: $391,990.96

Assessor Name: System

Date Created: 02/12/2016

Notes: Install a new and upgraded electrical service for this school to handle existing loads plus any additional mechanical loads.

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: System

Date Created: 02/12/2016

Notes: Install new clock system

System: D5030 - Communications and Security

Location: throughout the building grounds

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: $81,665.50

Assessor Name: System

Date Created: 02/12/2016

Notes: Install new video surveillance system inside the building (10) as well as the exterior of the building (6)

Priority 5 - Response Time (> 5 yrs):

System: D3030 - Cooling Generating Systems

Location: Throughout building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 72,000.00

Unit of Measure: S.F.

Estimate: $1,123,153.38

Assessor Name: System

Date Created: 02/02/2016

Notes: Remove the window air conditioning units and install a 200 ton air-cooled chiller with chilled water distribution piping and pumps located in a mechanical room to supply more reliable air conditioning for the building with a much longer service life.

Equipment Inventory

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

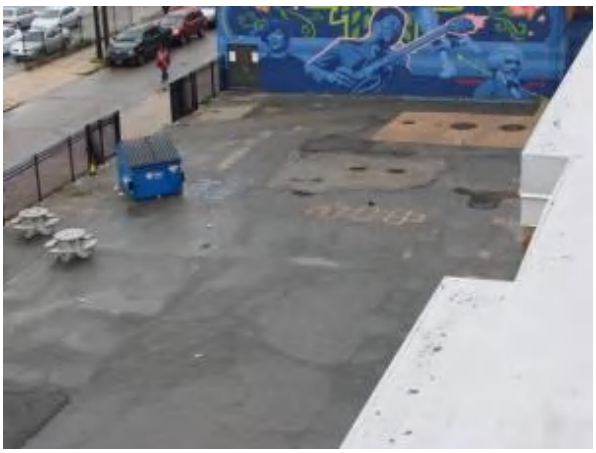
Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D1010 Elevators and Lifts	Hydraulic, passenger elevator, 2500 lb, 5 floors, 100 FPM	1.00	Ea.	building interior					30	1985	2047	$142,170.00	$156,387.00
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	350A-13	MA-96-45		35	1996	2031	$75,956.00	$250,654.80
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	350A-13	MA-96-44		35	1996	2031	$75,956.00	$250,654.80
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	350A-13	MA-96-43		35	1996	2031	$75,956.00	$250,654.80
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 400 kVA & above w/CLF fuses, 4.8 kV, 600 amp, NEMA 1	1.00	Ea.	electrical room					30	1965	1995	$38,502.00	$42,352.20
D5010 Electrical Service/Distribution	Panelboards, 1 phase 3 wire, main lugs, 120/240 V, 225 amp, 24 circuits, NQOD, incl 20 A 1 pole plug-in breakers	4.00	Ea.	throughout the building					30	1965	2047	$2,608.20	$11,476.08
D5010 Electrical Service/Distribution	Panelboards, 1 phase 3 wire, main lugs, 120/240 V, 225 amp, 24 circuits, NQOD, incl 20 A 1 pole plug-in breakers	1.00	Ea.	electrical room					30	1965	1995	$2,608.20	$2,869.02
												Total:	**$965,048.70**

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):	75,100
Year Built:	1965
Last Renovation:	
Replacement Value:	$1,441,486
Repair Cost:	$217,773.29
Total FCI:	15.11 %
Total RSLI:	70.62 %



Description:

Attributes:

General Attributes:

Bldg ID:	S456001	Site ID:	S456001

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	60.06 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	66.66 %	$217,773.29
Totals:	**70.62 %**	**15.11 %**	**$217,773.29**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$7.65	S.F.	19,300	30	1995	2025		33.33 %	0.00 %	10			$147,645
G2030	Pedestrian Paving	$11.52	S.F.	55,400	40	1995	2035		50.00 %	0.00 %	20			$638,208
G2040	Site Development	$4.36	S.F.	75,100	25	2013	2038		92.00 %	0.00 %	23			$327,436
G2050	Landscaping & Irrigation	$3.78	S.F.	400	15				0.00 %	0.00 %				$1,512
G4020	Site Lighting	$3.58	S.F.	75,100	30	1965	1995	2047	106.67 %	63.16 %	32		$169,818.66	$268,858
G4030	Site Communications & Security	$0.77	S.F.	75,100	30	1965	1995	2047	106.67 %	82.93 %	32		$47,954.63	$57,827
								Total	**70.62 %**	**15.11 %**			**$217,773.29**	**$1,441,486**

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.

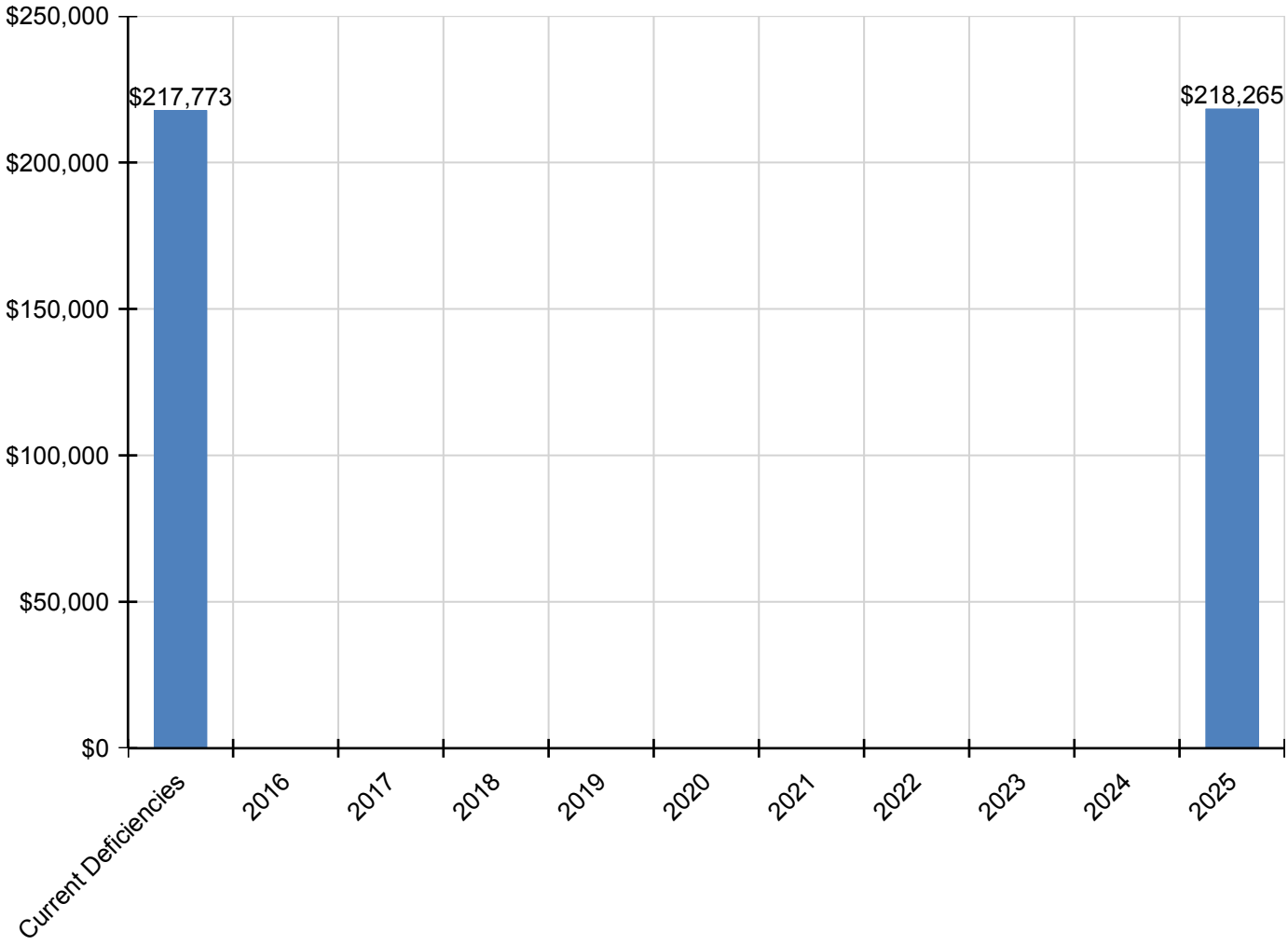
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$217,773**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$218,265**	**$436,039**
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	$218,265	**$218,265**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040 - Site Development	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$169,819	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$169,819**
G4030 - Site Communications & Security	$47,955	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$47,955**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

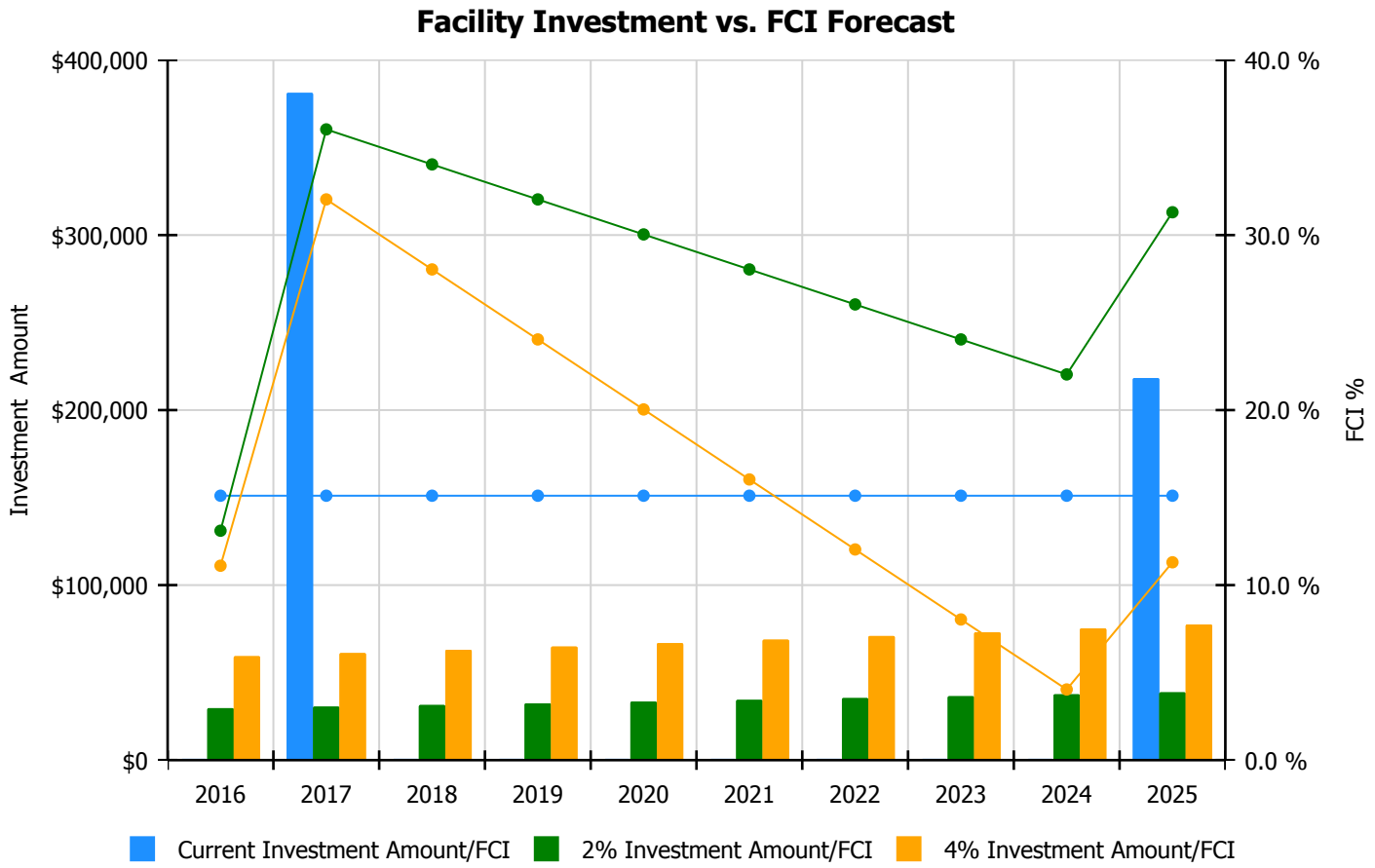
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

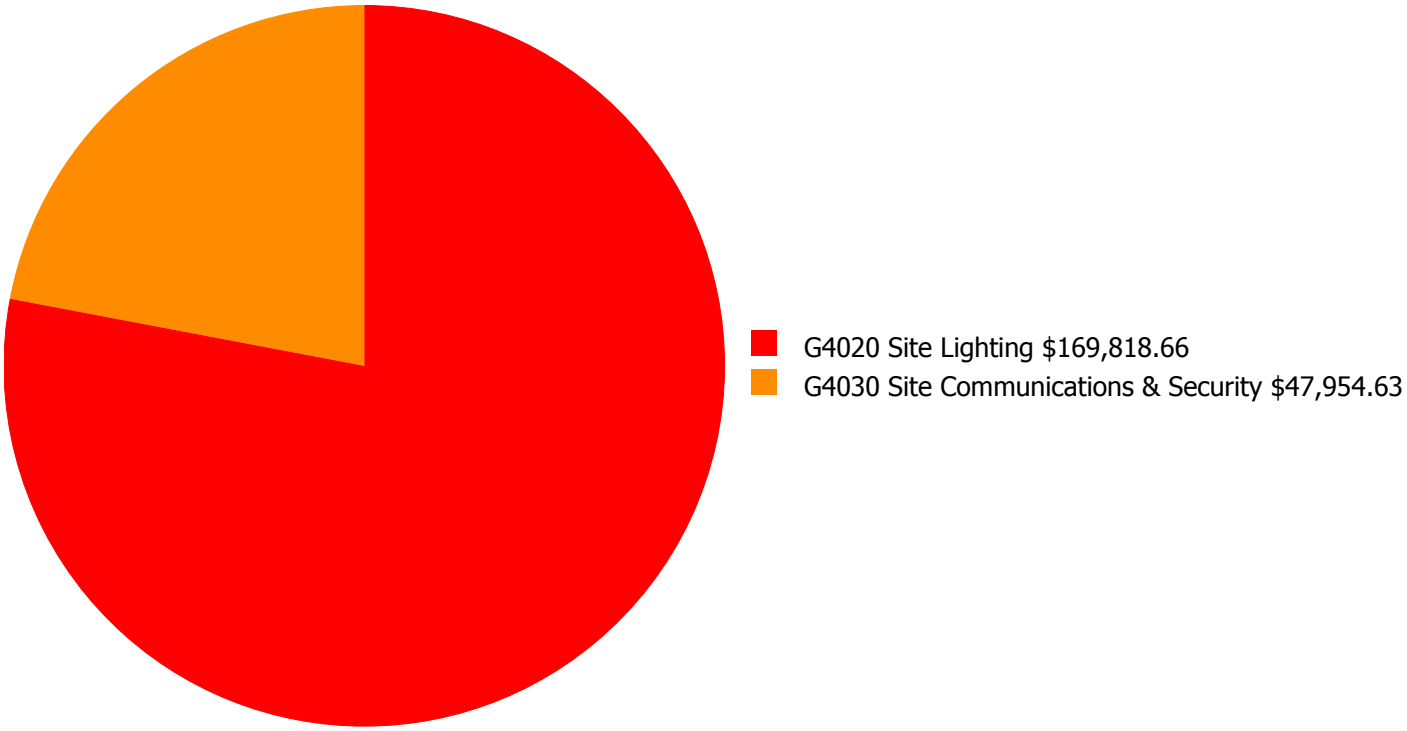
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 15.11%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$29,695.00	13.11 %	$59,389.00	11.11 %
2017	$381,239	$30,585.00	36.04 %	$61,171.00	32.04 %
2018	$0	$31,503.00	34.04 %	$63,006.00	28.04 %
2019	$0	$32,448.00	32.04 %	$64,896.00	24.04 %
2020	$0	$33,422.00	30.04 %	$66,843.00	20.04 %
2021	$0	$34,424.00	28.04 %	$68,848.00	16.04 %
2022	$0	$35,457.00	26.04 %	$70,914.00	12.04 %
2023	$0	$36,521.00	24.04 %	$73,041.00	8.04 %
2024	$0	$37,616.00	22.04 %	$75,232.00	4.04 %
2025	$218,265	$38,745.00	31.30 %	$77,489.00	11.30 %
Total:	**$599,504**	**$340,416.00**		**$680,829.00**	

Deficiency Summary by System

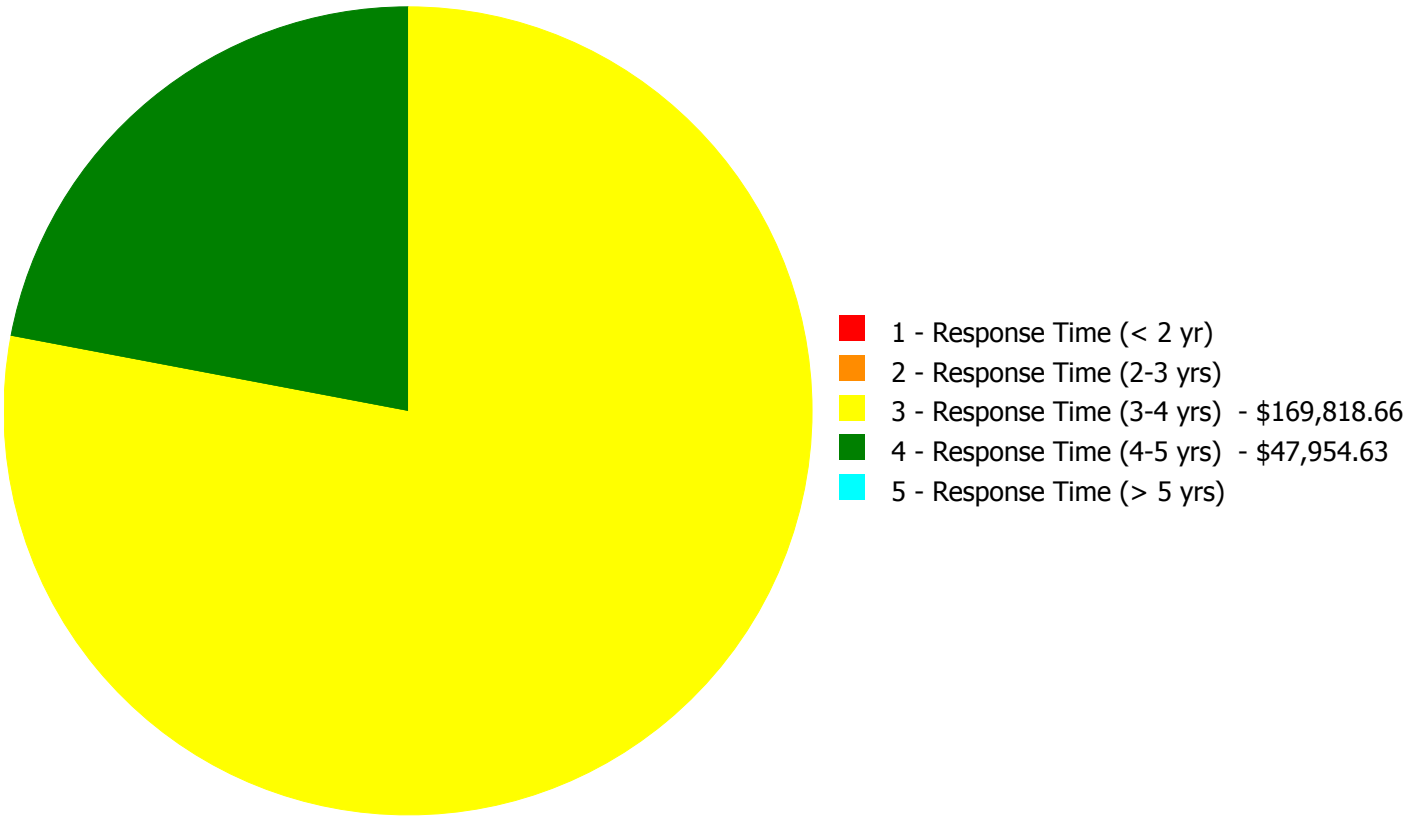
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $217,773.29

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: $217,773.29

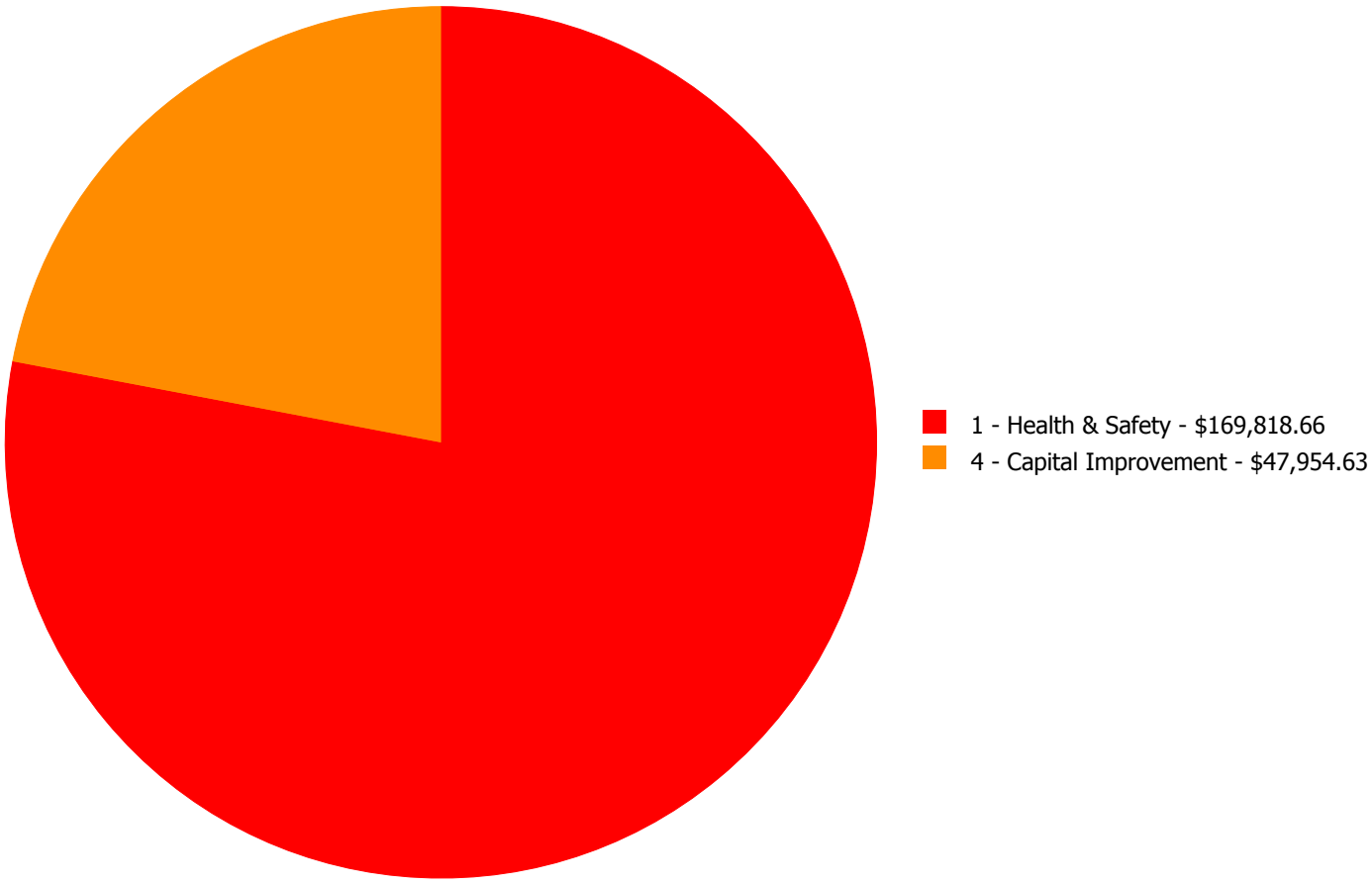
Deficiency By Priority Investment Table

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	$169,818.66	$0.00	$0.00	$169,818.66
G4030	Site Communications & Security	$0.00	$0.00	$0.00	$47,954.63	$0.00	$47,954.63
	Total:	$0.00	$0.00	$169,818.66	$47,954.63	$0.00	$217,773.29

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: $217,773.29

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: $169,818.66

Assessor Name: Craig Anding

Date Created: 02/12/2016

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: $47,954.63

Assessor Name: Iraj Boroumand

Date Created: 02/12/2016

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