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.

Wagner Middle School

Governance	DISTRICT	Report Type	Middle
Address	1701 Chelten Ave.	Enrollment	524
	Philadelphia, Pa 19126	Grade Range	'06-08'
Phone/Fax	215-276-5252 / 215-276-5849	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Wagner	Turnaround Model	N/A

Building/System FCI Tiers

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

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

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	**31.72%**	**$15,731,894**	**$49,593,224**
Building	32.18 %	$15,638,985	$48,603,482
Grounds	09.39 %	$92,909	$989,742

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	11.46 %	$321,244	$2,803,216
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$3,571,966
Windows (Shows functionality of exterior windows)	00.00 %	$0	$1,746,005
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$118,304
Interior Doors (Classroom doors)	17.10 %	$48,978	$286,377
Interior Walls (Paint and Finishes)	00.00 %	$0	$1,292,370
Plumbing Fixtures	00.00 %	$0	$1,103,083
Boilers	00.00 %	$0	$1,523,267
Chillers/Cooling Towers	65.60 %	$1,310,290	$1,997,299
Radiators/Unit Ventilators/HVAC	214.20 %	$7,512,924	$3,507,511
Heating/Cooling Controls	00.00 %	$0	$1,101,452
Electrical Service and Distribution	100.69 %	$796,885	$791,413
Lighting	39.99 %	$1,131,415	$2,829,507
Communications and Security (Cameras, Pa System and Fire Alarm)	21.92 %	$232,280	$1,059,841

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

S713001;Wagner

Final

Site Assessment Report

January 31, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	81,589
Year Built:	1928
Last Renovation:	
Replacement Value:	$49,593,224
Repair Cost:	$15,731,894.24
Total FCI:	31.72 %
Total RSLI:	68.65 %

Description:

Facility Assessment
September 2015

School District of Philadelphia
Wagner Middle Secondary School
1701 W Chelten Ave
Philadelphia, PA 19141

81,589 SF / 1008 Students / LN 04

GENERAL

The Wagner Middle School building is located at 1701 W Chelten Ave in Philadelphia, PA. The 3 story, 81,589 square foot building was originally constructed in 1928. The building has a basement partially above ground and penthouses on the roof. Portion of the 4th floor is an open terrace enclosed with a wire mesh structure and serves as an outdoor gym. A major renovation was performed in 2000 and 2015 consisting of toilets for ADA accessibility, façade renovations and new built up roofing.

The Facility Area Coordinator was not able to accompany the Parsons assessment team on this site visit. Mr. Randy Bushnell, the 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 building typically rests on concrete foundations and bearing walls that are not showing signs of settlement or water penetration. Foundation walls do not show signs of deterioration. The mold build-up is not evident in mechanical spaces. The basement slab does not show signs of heaving.

The main structure consists typically of cast-in-place concrete columns, beams and one-way concrete slabs. Long slab spans are supported with steel truss girders. The floor slabs and superstructure are generally in good condition.

The roof structure is typically similar to floor construction. The outdoor gym on the 4th floor is enclosed with wire mesh netting supported by pipe framing. The structure is deteriorating and rusty.

The building envelope is typically masonry with face brick with decorative stone friezes and quoining. Main entrance is accentuated with stone columns. In general, masonry is in good condition; masonry restoration (tuck pointing) was performed in 2014.

The original building windows were retrofitted in 2000 with extruded aluminum double hung windows single glazed with acrylic glazing; original wood frames are left in place. Basement and first floor windows are fitted with galvanized steel security screens. All windows are generally in good condition.

Roofing is typically built-up and was being replaced at the time of the assessment -2015. The old roofing and flashing was in poor condition with deterioration of the built-up system including water ponding and soft spots; leaks had been reported. The outdoor gym terrace is covered with built up roofing.

Exterior doors are typically hollow metal in fair condition, weather-stripping is installed.

INTERIORS:

Partition wall types include plastered ceramic hollow blocks and painted CMU. Corridors and stairways have marble wainscot.

The interior wall finishes are generally painted plaster or CMU and some painted brick. Walls in toilets are covered with ceramic tile. Generally, paint is in fair condition with some deterioration in auditorium, stairways and other spaces.

Most ceilings are painted plaster in auditorium, gym and restrooms; some water damage has been observed. 2x4 suspended acoustical panels are installed in corridors, classrooms and library; offices have 1x1 perforated ACT with concealed grid in poor condition and deteriorating.

Flooring in corridors is sealed concrete. Flooring in classrooms, and auditorium and gym is generally hardwood, (30% requires refinishing). Some classrooms have VCT installed in mid 1990's; approximately 20% is in poor condition. Floor in toilets is typically ceramic tile installed in 2000. Office spaces floor is VAT. Main entrance hallway floor has a combination of terrazzo and marble finish in good condition. Carpet in the library is in poor condition and needs replacement.

Interior doors are generally rail and stile wood doors, most glazed, in wood frames with transoms and solid core in hollow metal frames. Doors are typically in good condition. Most doors are fitted with door knobs and are not ADA compliant.

Fittings include a mixture of original and newer aluminum framed chalk boards, generally in fair condition. Toilet partitions and accessories in are in very good condition, installed in 2005 and ADA compliant; handrails, generally in good condition. Interior identifying signage is typically directly painted on wall or door surfaces generally in poor condition.

Stair construction is generally concrete with terrazzo treads and stringers, in good condition.

Furnishings include fixed casework in classrooms, corridors and library, generally in good condition; window shades/blinds, generally in good condition; fixed auditorium seating is original, generally in fair condition. Lockers are built-in along corridor walls and in good condition.

CONVEYING SYSTEMS:

The building has no elevators.

MECHANICAL

Plumbing Fixtures

Many of the plumbing fixtures have been replaced within the last decade; the Building Engineer estimated that the fixtures were replaced in 2005. Fixtures in the restrooms on each floor consist of wall mounted push button flush valve water closets, wall hung urinals, and lavatories with wheel handle faucets. The water closets, urinals, and lavatories are in good condition and should provide reliable service for the next 20-25 years.

Drinking fountains in the corridors consist of wall hung fixtures with integral refrigerated coolers, they were installed within the last 5 years according to the Building Engineer. The fixtures are a newer stainless steel units and are 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 has two (2) sinks, both two-compartment stainless steel sinks with lever operated faucets. Integral grease traps are not installed as only precooked meals are served. Chemicals are injected manually into the sanitizing basins.

Domestic Water Distribution

A 6" city water service enters the North side of the building from W. Colonial Street. The 4" meter and valves are located the basement coal/ash room. Duplex reduced pressure backflow preventers are installed in parallel. Duplex base mounted 7.5HP Bell and Gossett domestic water pressure booster pumps were installed on the domestic water line in 2009 to ensure adequate pressure throughout the system. The pump system is in poor condition and has rust damage. The original domestic hot and cold water distribution piping was replaced with 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.

Two (2) Bradford White gas fired, 100 gallon, vertical hot water heaters with a 1/4HP Armstrong circulating pump and expansion tank supply hot water for domestic use. The units are located in the boiler room on the basement level and were installed in 2009. The hot water heaters are equipped with T&P relief valves and expansion tank. These units should provide reliable service for the next 5-7 years. A Marlo water softener is installed downstream of the domestic water heaters.

Sanitary Waste

The original storm and sanitary sewer piping has been replaced with galvanized piping with threaded fittings. Repairs have been made in several places with cast iron piping with no-hub fittings.

A sewage ejector pit located in the basement boiler room receives water from the basement area floor drains. Two (2) Gorman Rupp 80 series self-priming pumps installed in 2009 service the pit, which is not sealed but should be. The district should provide service to the sewage ejector system for the next 5-10 years.

The maintenance staff reported mostly minor problems with the sanitary waste piping systems. However, the sewer piping has been in service for an unknown amount of time 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

Rain water from the roof is routed down through pipe chases in the interior of the building by galvanized piping with threaded fittings, repairs have been made with cast iron piping with no-hub fittings. The drain piping should be inspected by a qualified contractor and repaired as necessary. The Building Engineer reported no major issues with the rain water drainage piping in the addition.

Energy Supply

City gas enters the building via a 2" pipe in the mechanical room in the North East corner of the building. The meter is 2" and located in the in the mechanical room.

The oil supply is stored in a 15,000 gallon storage tank located in the coal/ash room adjacent to the boiler room on the North side of the building. Oil is the only fuel source for the boilers at this time. Duplex skid mounted fuel oil pumps, located in the boiler room, circulate oil through the system. The District should inspect the storage tank on a regular basis.

Heat Generating Systems

Low pressure steam is generated at a maximum of 15 lbs./sq. in., typically 3-5 lbs./sq. in., by three (3) 173HP HB Smith Mills 4500A cast iron sectional boilers installed in 2009; they are located in the boiler room on the basement floor. Each boiler is equipped with a Power Flame burner designed to operate on fuel oil. Combustion air makeup is supplied by louvers equipped with motorized dampers. Induced draft fans with positive draft control are installed on the rear of each boiler. Burner controls provide full modulation with electronic ignition, digital flame sensing and pressure atomization on oil. Burner oil pumps are not driven by the fan motor. Cast iron sectional boilers have an anticipated service life of 35 years or more; these units have been in service approximately 6 years. The District should provide reliable service for the next 25-30 years.

A Shipco boiler feed tank provides treated make up water to the boilers. The unit has four (4) 2HP pumps headered together and mounted on the tank. Duplex inline strainers are installed on the three (3) incoming boiler feed lines. The building engineer reported no steam leaks from the condensate return system which was installed with the boilers in 2009. A chemical treatment system is installed on the condensate return line to reduce corrosion.

Distribution Systems

Steam piping is black steel with welded and flanged fittings. The condensate piping is black steel with threaded fittings. Steam and condensate piping mains from the basement level run up through the building to the radiators on all four (4) floors. The distribution piping has been in use well beyond its service life 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 steam and condensate piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

Two-pipe cast iron radiators and the two (2) house fans provide heating for the building. The radiators and house fans are original to the building and well beyond their service lives. The fans, located in two (2) fan rooms on the North West and North East corners of the first floor, were refurbished in 2009 when the boiler room was redone. Each fan is run by a 20HP motor which are not equipped with the OSHA required belt guards. Mechanical ventilation is provided to the building by the two (2) large paddle wheel house. These fans also provide supplemental heating and run off the building steam loop. Roof mounted gravity ventilators provide passive ventilation. The house fans only run during the heating season, thus the building is without mechanical ventilation much of the year. Provide ventilation for the two (2) Cafeterias by installing two (2) constant volume air handling units with distribution ductwork and registers. Provide ventilation for the two (2) Gymnasiums by installing two (2) constant volume air handling units with distribution ductwork and registers. Install similar units for the administration offices. Provide ventilation for the Auditorium by installing a constant volume air handling unit with distribution ductwork and registers. A new heating system should be installed to meet ventilation requirements and achieve more efficient operation. The new units should be designed for quiet operation and equipped with hot water coils, chilled water coils, and integral heat exchangers, where applicable, to introduce outdoor air to the building.

Ventilation for the restrooms is supposed to be provided by two (2) exhaust fans; one (1) located on West side and one (1) located on the East side of the penthouse level. The fans were not operational during the site visit and according to the Building Engineer are out of commission due to environmental concerns. The fans look beyond their service life and should be replaced after abatement is complete; the Building Engineer did not know the year they were installed. The fan motors did not have OSHA required belt guards installed.

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 220 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.

One (1) kitchen hood with an integral Sentinel fire suppression system is installed above the warming oven. An automatic gas shutoff

system is installed with the kitchen equipment; the kitchen hood is beyond its service life and should be replaced. A make-up air unit is installed.

Controls & Instrumentation

The original pneumatic systems were replaced with a Niagara BMS system for the house fans and boilers. The Building Engineer reports that he has a computer to access the controls system and can monitor the status and change set points of the boilers and fans. The controls system was installed with the new boilers in 2009 and should provide reliable monitoring for the next 12-15 years. The temperature in each room is controlled by manual control valves installed on each radiator.

A new building automation system (BAS) with modern DDC modules and communications network should be installed to serve any new HVAC systems which might be installed 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.

Fire standpipes are installed in the stairwells on the North side of the school.

ELECTRICAL:

Site electrical service - The primary power is at 13.2KV from the street power pole (on Colonial Street) which feeds a 500KVA transformer (13.2KV – 120V/240V) located outside in an underground vault just close to the electrical room. The main switchgear is rated at 1200 Amp, 240 V, 3 phase, 3W, and is located in main electrical room. The switchgear has open and exposed bus bars very antique looking. The PECO meter (PECO 01 004199619) is also located inside the electrical room. The overall electrical service is old and has reached its useful service life (built in 1928). Also, the system has no extra capacity for the additional mechanical loads.

Distribution System - The electrical distribution is accomplished with a 120V distribution switchboard, located in the electrical room, feeding several panels throughout the building (two panels in each floor). These panels are not in good condition. They have also reached the end of their useful service life.

Receptacles - The receptacles in classrooms, computer rooms, libraries, and other areas are not adequate. There is not enough receptacles suitable for a modern classrooms (minimum of two receptacles on each wall of the classrooms).

Lighting - Interior building is illuminated by various types of fixtures. They include fluorescent lighting (T-8 and some T-12) in majority of the areas, including; classrooms, corridor, offices and Kitchen. Surface or pendant mounted industrial fluorescent fixtures are used in mechanical and electrical rooms. Gymnasium and cafeteria and multi-purpose rooms are illuminated by metal halide fixtures. The majority of interior lighting fixtures are in a poor condition and have reached the end of their service life.

Fire Alarm (FA) System - The present Fire Alarm system is fairly new (installed in 2013). It is automatic/addressable, and is in compliance with all safety codes. There are manual pulls stations throughout the building. There are sufficient number of horns/strobes installed in the classrooms, corridors, offices and other areas in the school.

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

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

Clock and Program system - The clock system is not working properly. Although each classroom is provided with a 12-inch wall mounted, round clock, it is not controlled by the central master control panel.

Television System - School is not provided with a Television System. Most classes are equipped with smart boards which have the

ability to connect with computers and internet.

Security Systems, access control, and video surveillance - This school is not provided with video surveillance system. Cameras are not installed at exit doors, corridors, exterior, and other critical areas. The cameras should be controlled by a Closed Circuit Television system (CCTV).

Emergency Power System - School is provided with a small 30 KW emergency generator. There is not adequate capacity for emergency lights and other emergency loads. The generator has reached the end of its useful service.

Emergency lighting system, including exit lights - there are insufficient emergency lighting fixtures in corridors, library and other exit ways. Also, the exit signs and emergency fixtures are old and beyond their useful life.

Lightning Protection System - There is no lightning protection system installed in the school.

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

Site lighting - The grounds are properly illuminated. There are pole-mounted outdoor fixtures that work properly to provide adequate illumination for safety.

Site paging – The grounds are provided with a few exterior speakers, additional exterior speakers are needed for proper communication and paging.

GROUNDS (SITE):

There is no parking lot at the site; staff parking is along the street. Pavement is in very poor condition,

A small entry courtyard separates the main entrance from West Chelten Ave. Its pavement is deteriorated, granite steps need resetting. There is a rooftop play area. There is a landscaped area between picket fence lining the sidewalk and the building elevations. Landscaping includes grass, shrubs and mature trees, in good condition.

ACCESSIBILITY:

The building does have accessible entrance and accessible route. Ramps have not been installed throughout the building where floors change elevation. The toilets are equipped with accessible fixtures, partitions and accessories, such as grab bars. Most doors in the building do not have ADA required door handles.

RECOMMENDATIONS:

- Refurbish wire mesh structure enclosing outdoor gym on 4^{th} floor; clean and paint framing, install new wire mesh.
- Replace topping on outdoor gym floor, install new waterproofing membrane.
- Replace all VAT tile in office spaces.
- Repair (10%) & refinish hardwood flooring (50%).
- Repair (15%) and repaint all walls.
- Repair (10%) and repaint all ceilings.
- Replace all acoustic tile.
- Install new signage throughout.
- Provide ADA compliant hardware on interior doors.
- Install ADA compliant elevator.
- Reset retaining wall brick.
- Replace the skid mounted duplex 7.5HP domestic water booster pumps and isolation valves on the incoming domestic water line which are damage from rust.
- Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for an unknown amount of time, 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 steam and condensate piping, in service for over 85 years, and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

- Remove the existing cast iron steam radiators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.
- Provide ventilation for the two (2) Cafeterias by installing two (2) constant volume air handling units with distribution ductwork and registers.
- Provide ventilation for the two (2) Gymnasiums by installing two (2) fan coil air handling units hung from the structure with outdoor air ducted to the unit from louvers in the window openings.
- 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 louvers in window openings.
- Provide ventilation for the Auditorium by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in window openings.
- Remove the window air conditioning units and install a 220 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 two (2) exhaust fans on the penthouse level serving the restrooms which are no longer in use and beyond their service lives.
- Replace the one (1) kitchen hood and integral fire suppression system which is beyond its service life.
- 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 new 1500 KVA, 480V, 3 phase electrical service, with a new 2000A, 480V, three phase main switchboard.
- Install new 1200A, 120V, three phase switchboard to replace the existing switchboard.
- Install new 120 V distribution panels throughout the building.
- Install minimum two receptacles on each wall (surface-mounted) of all classrooms and other areas within the building.
- Install new lighting system for the entire building.
- Install new Video Surveillance System with Cameras and CCTV.
- Install new Clock System.
- Install new emergency exit signs & emergency lights.
- Install new Emergency generator (100KW).
- Install new Lightning protection system.
- Install additional outdoor speakers on exterior walls for proper communication and paging.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 4 / Tm 4
Status:	Accepted by SDP	Team:	Tm 4
Site ID:	S713001		

Site Condition Summary

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

Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	3.61 %	$280,370.01
B20 - Exterior Enclosure	44.82 %	0.00 %	$0.00
B30 - Roofing	101.12 %	11.46 %	$321,243.68
C10 - Interior Construction	30.38 %	3.64 %	$72,818.40
C20 - Stairs	37.00 %	0.00 %	$0.00
C30 - Interior Finishes	74.23 %	13.15 %	$1,033,724.98
D10 - Conveying	105.71 %	0.00 %	$0.00
D20 - Plumbing	83.01 %	71.84 %	$1,174,625.75
D30 - HVAC	94.60 %	97.22 %	$8,823,213.61
D40 - Fire Protection	99.63 %	177.49 %	$1,167,166.37
D50 - Electrical	110.11 %	55.84 %	$2,677,910.21
E10 - Equipment	14.29 %	6.77 %	$87,912.14
E20 - Furnishings	12.50 %	0.00 %	$0.00
G20 - Site Improvements	18.80 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	29.72 %	$92,909.09
Totals:	**68.65 %**	**31.72 %**	**$15,731,894.24**

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)
B713001;Wagner	81,589	32.18	$1,167,166.37	$645,458.84	$3,545,122.65	$1,930,961.68	$8,350,275.61
G713001;Grounds	53,800	9.39	$0.00	$0.00	$0.00	$92,909.09	$0.00
Total:		**31.72**	**$1,167,166.37**	**$645,458.84**	**$3,545,122.65**	**$2,023,870.77**	**$8,350,275.61**

Deficiencies By Priority

1 - Response Time (< 2 yr) - $1,167,166.37
2 - Response Time (2-3 yrs) - $645,458.84
3 - Response Time (3-4 yrs) - $3,545,122.65
4 - Response Time (4-5 yrs) - $2,023,870.77
5 - Response Time (> 5 yrs) - $8,350,275.61

Budget Estimate Total: $15,731,894.24

Executive Summary

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

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

Function:	Middle School
Gross Area (SF):	81,589
Year Built:	1928
Last Renovation:	
Replacement Value:	$48,603,482
Repair Cost:	$15,638,985.15
Total FCI:	32.18 %
Total RSLI:	69.10 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B713001
Sewage Ejector:	Yes	Status:	Accepted by SDP
Site ID:	S713001		

Condition Summary

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

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	3.61 %	$280,370.01
B20 - Exterior Enclosure	44.82 %	0.00 %	$0.00
B30 - Roofing	101.12 %	11.46 %	$321,243.68
C10 - Interior Construction	30.38 %	3.64 %	$72,818.40
C20 - Stairs	37.00 %	0.00 %	$0.00
C30 - Interior Finishes	74.23 %	13.15 %	$1,033,724.98
D10 - Conveying	105.71 %	0.00 %	$0.00
D20 - Plumbing	83.01 %	71.84 %	$1,174,625.75
D30 - HVAC	94.60 %	97.22 %	$8,823,213.61
D40 - Fire Protection	99.63 %	177.49 %	$1,167,166.37
D50 - Electrical	110.11 %	55.84 %	$2,677,910.21
E10 - Equipment	14.29 %	6.77 %	$87,912.14
E20 - Furnishings	12.50 %	0.00 %	$0.00
Totals:	**69.10 %**	**32.18 %**	**$15,638,985.15**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$23.16	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$1,889,601
A1030	Slab on Grade	$5.17	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$421,815
A2010	Basement Excavation	$4.36	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$355,728
A2020	Basement Walls	$10.05	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$819,969
B1010	Floor Construction	$85.94	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$7,011,759
B1020	Roof Construction	$9.26	S.F.	81,589	100	1928	2028	2052	37.00 %	37.11 %	37		$280,370.01	$755,514
B2010	Exterior Walls	$43.78	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$3,571,966
B2020	Exterior Windows	$21.40	S.F.	81,589	40	2000	2040		62.50 %	0.00 %	25			$1,746,005
B2030	Exterior Doors	$1.45	S.F.	81,589	25	1995	2020		20.00 %	0.00 %	5			$118,304
B3010105	Built-Up	$37.76	S.F.	65,800	20	2015	2035		100.00 %	0.00 %	20			$2,484,608
B3010120	Single Ply Membrane	$38.73	S.F.	8,100	20	1995	2015	2037	110.00 %	102.40 %	22		$321,243.68	$313,713
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	81,589	30	2015	2045		100.00 %	0.00 %	30			$4,895
C1010	Partitions	$17.91	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$1,461,259
C1020	Interior Doors	$3.51	S.F.	81,589	40	1980	2020		12.50 %	17.10 %	5		$48,978.11	$286,377
C1030	Fittings	$3.12	S.F.	81,589	40	1980	2020		12.50 %	9.37 %	5		$23,840.29	$254,558
C2010	Stair Construction	$1.41	S.F.	81,589	100	1928	2028	2052	37.00 %	0.00 %	37			$115,040

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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	$13.21	S.F.	81,589	10	2010	2020		50.00 %	0.00 %	5			$1,077,791
C3010231	Vinyl Wall Covering	$0.97	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.	81,589	30	2000	2030		50.00 %	0.00 %	15			$214,579
C3020411	Carpet	$7.30	S.F.	12,500	10	2000	2010	2027	120.00 %	0.00 %	12			$91,250
C3020412	Terrazzo & Tile	$75.52	S.F.	5,200	50	2000	2050		70.00 %	0.00 %	35			$392,704
C3020413	Vinyl Flooring	$9.68	S.F.	92,500	20	2000	2020		25.00 %	17.79 %	5		$159,250.01	$895,400
C3020414	Wood Flooring	$22.27	S.F.	50,500	25	1928	1953	2020	20.00 %	9.67 %	5		$108,777.08	$1,124,635
C3020415	Concrete Floor Finishes	$0.97	S.F.	36,500	50	1928	1978	2020	10.00 %	0.00 %	5			$35,405
C3030	Ceiling Finishes	$20.97	S.F.	192,200	25	1928	1953	2042	108.00 %	19.00 %	27		$765,697.89	$4,030,434
D1010	Elevators and Lifts	$18.30	S.F.	81,589	35	1928	1963	2052	105.71 %	0.00 %	37			$1,493,079
D2010	Plumbing Fixtures	$13.52	S.F.	81,589	35	2005	2040		71.43 %	0.00 %	25			$1,103,083
D2020	Domestic Water Distribution	$1.68	S.F.	81,589	25	1928	1953	2042	108.00 %	340.23 %	27		$466,348.53	$137,070
D2030	Sanitary Waste	$2.52	S.F.	81,589	30	1928	1958	2047	106.67 %	168.52 %	32		$346,476.49	$205,604
D2040	Rain Water Drainage	$2.32	S.F.	81,589	30	1928	1958	2047	106.67 %	191.14 %	32		$361,800.73	$189,286
D3020	Heat Generating Systems	$18.67	S.F.	81,589	35	2009	2044		82.86 %	0.00 %	29			$1,523,267
D3030	Cooling Generating Systems	$24.48	S.F.	81,589	20			2037	110.00 %	65.60 %	22		$1,310,289.95	$1,997,299
D3040	Distribution Systems	$42.99	S.F.	81,589	25	1928	1953	2042	108.00 %	214.20 %	27		$7,512,923.66	$3,507,511
D3050	Terminal & Package Units	$11.60	S.F.	81,589	20	1928	1948	2027	60.00 %	0.00 %	12			$946,432
D3060	Controls & Instrumentation	$13.50	S.F.	81,589	20	2009	2029		70.00 %	0.00 %	14			$1,101,452
D4010	Sprinklers	$7.05	S.F.	81,589	35			2052	105.71 %	202.91 %	37		$1,167,166.37	$575,202
D4020	Standpipes	$1.01	S.F.	81,589	35	2000	2035		57.14 %	0.00 %	20			$82,405
D5010	Electrical Service/Distribution	$9.70	S.F.	81,589	30	1928	1958	2047	106.67 %	100.69 %	32		$796,884.91	$791,413
D5020	Lighting and Branch Wiring	$34.68	S.F.	81,589	20	1928	1948	2037	110.00 %	39.99 %	22		$1,131,414.94	$2,829,507
D5030	Communications and Security	$12.99	S.F.	81,589	15	1928	1943	2032	113.33 %	21.92 %	17		$232,279.67	$1,059,841
D5090	Other Electrical Systems	$1.41	S.F.	81,589	30	1928	1958	2047	106.67 %	449.70 %	32		$517,330.69	$115,040
E1020	Institutional Equipment	$4.82	S.F.	81,589	35	1928	1963	2020	14.29 %	0.00 %	5			$393,259
E1090	Other Equipment	$11.10	S.F.	81,589	35	1928	1963	2020	14.29 %	9.71 %	5		$87,912.14	$905,638
E2010	Fixed Furnishings	$2.13	S.F.	81,589	40	1928	1968	2020	12.50 %	0.00 %	5			$173,785
								Total	**69.10 %**	**32.18 %**			**$15,638,985.15**	**$48,603,482**

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: C3020413 - Vinyl Flooring — This system contains no images

Note: VAT - 8,900

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:	**$15,638,985**	**$0**	**$0**	**$0**	**$0**	**$6,714,129**	**$0**	**$0**	**$0**	**$0**	**$0**	**$22,353,115**
*** 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	$280,370	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$280,370**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$150,861	$0	$0	$0	$0	$0	**$150,861**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010120 - Single Ply Membrane	$321,244	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$321,244**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

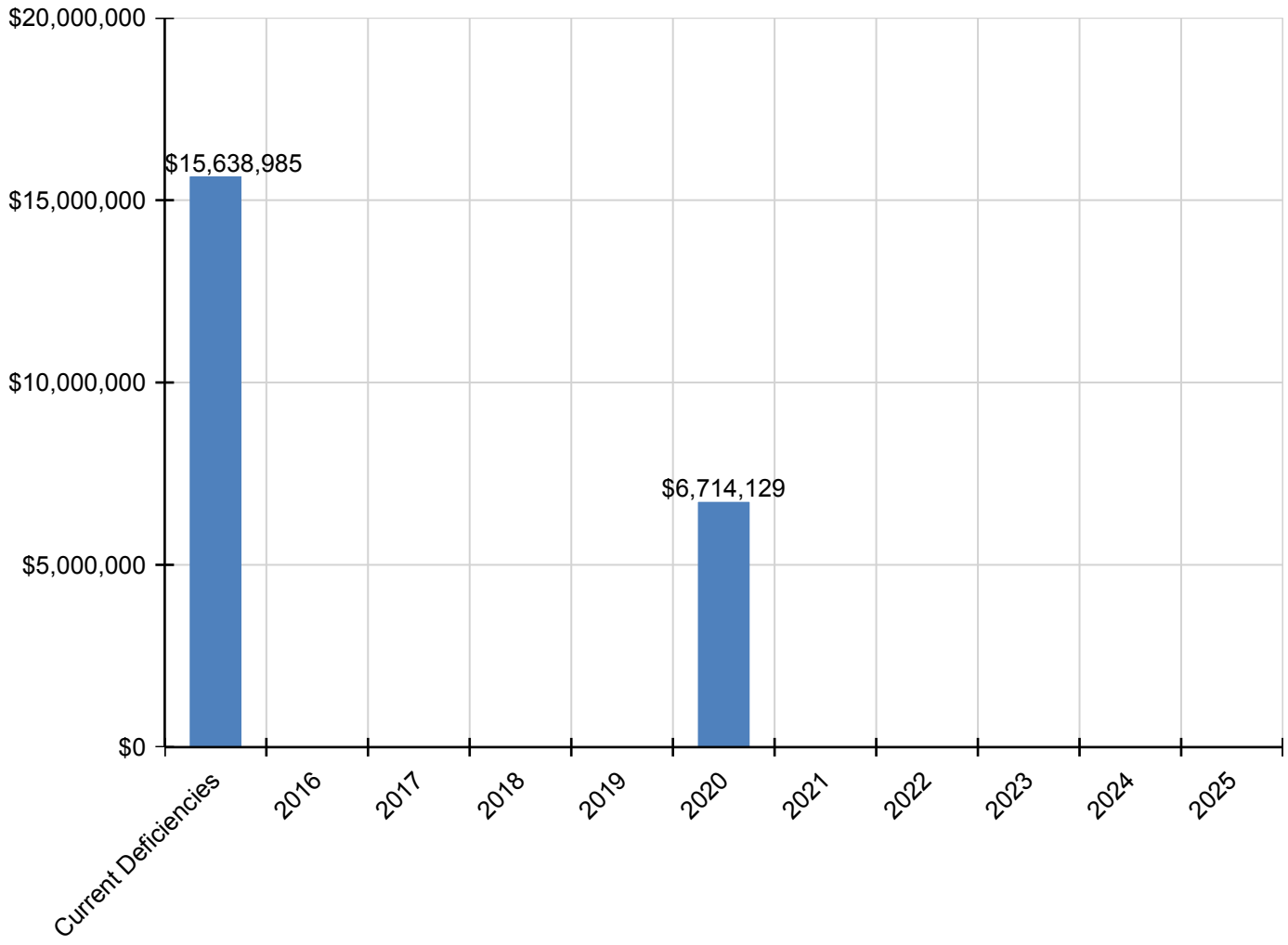
C1020 - Interior Doors	$48,978	$0	$0	$0	$0	$365,189	$0	$0	$0	$0	$0	**$414,167**
C1030 - Fittings	$23,840	$0	$0	$0	$0	$324,612	$0	$0	$0	$0	$0	**$348,452**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$1,374,401	$0	$0	$0	$0	$0	**$1,374,401**
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	$159,250	$0	$0	$0	$0	$1,141,815	$0	$0	$0	$0	$0	**$1,301,065**
C3020414 - Wood Flooring	$108,777	$0	$0	$0	$0	$1,434,137	$0	$0	$0	$0	$0	**$1,542,914**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$45,149	$0	$0	$0	$0	$0	**$45,149**
C3030 - Ceiling Finishes	$765,698	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$765,698**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2020 - Domestic Water Distribution	$466,349	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$466,349**
D2030 - Sanitary Waste	$346,476	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$346,476**
D2040 - Rain Water Drainage	$361,801	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$361,801**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$1,310,290	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,310,290**
D3040 - Distribution Systems	$7,512,924	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$7,512,924**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,167,166	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,167,166**
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	$796,885	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$796,885**
D5020 - Lighting and Branch Wiring	$1,131,415	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,131,415**
D5030 - Communications and Security	$232,280	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$232,280**
D5090 - Other Electrical Systems	$517,331	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$517,331**
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	$501,485	$0	$0	$0	$0	$0	**$501,485**
E1090 - Other Equipment	$87,912	$0	$0	$0	$0	$1,154,871	$0	$0	$0	$0	$0	**$1,242,783**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$221,610	$0	$0	$0	$0	$0	**$221,610**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

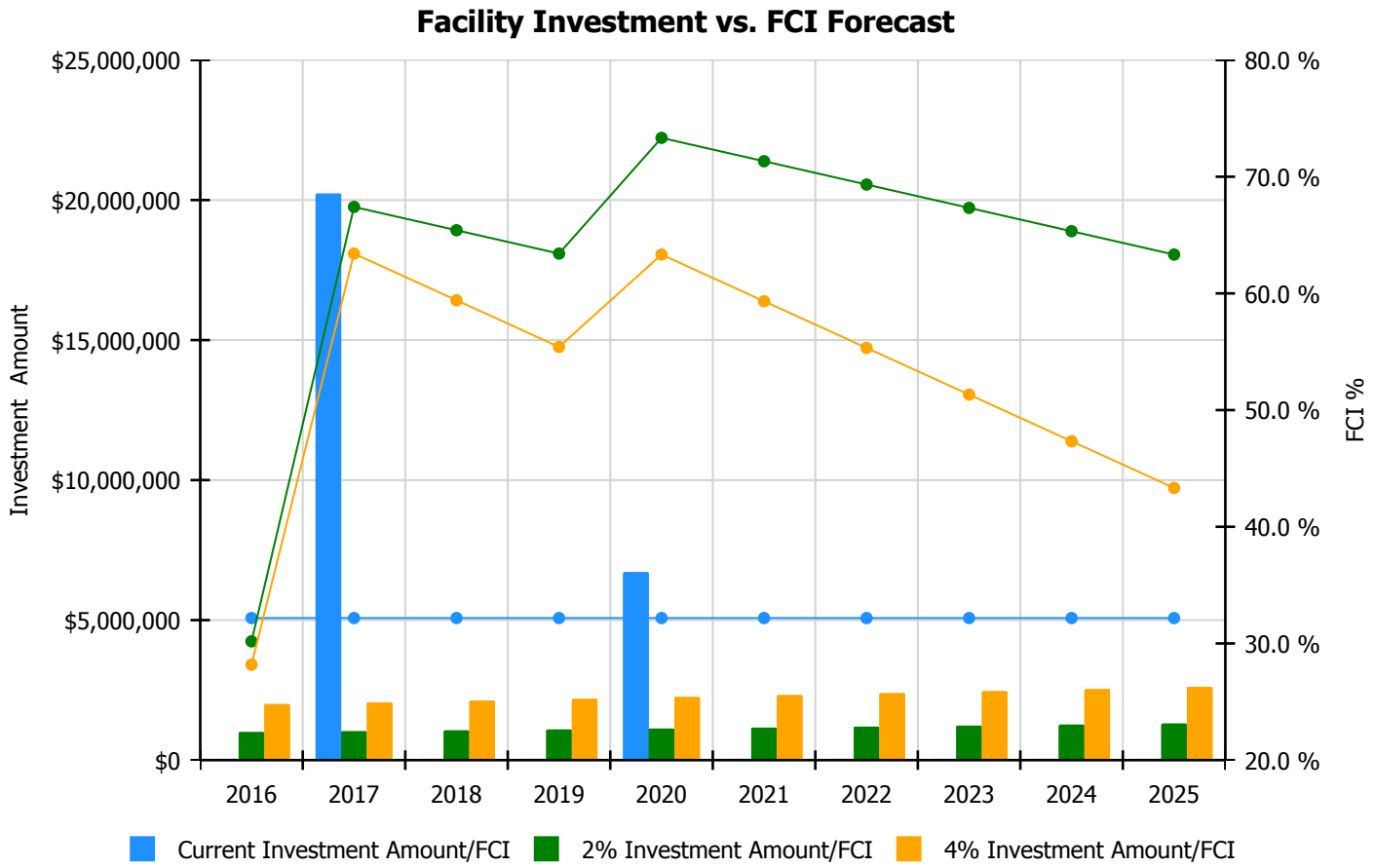
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

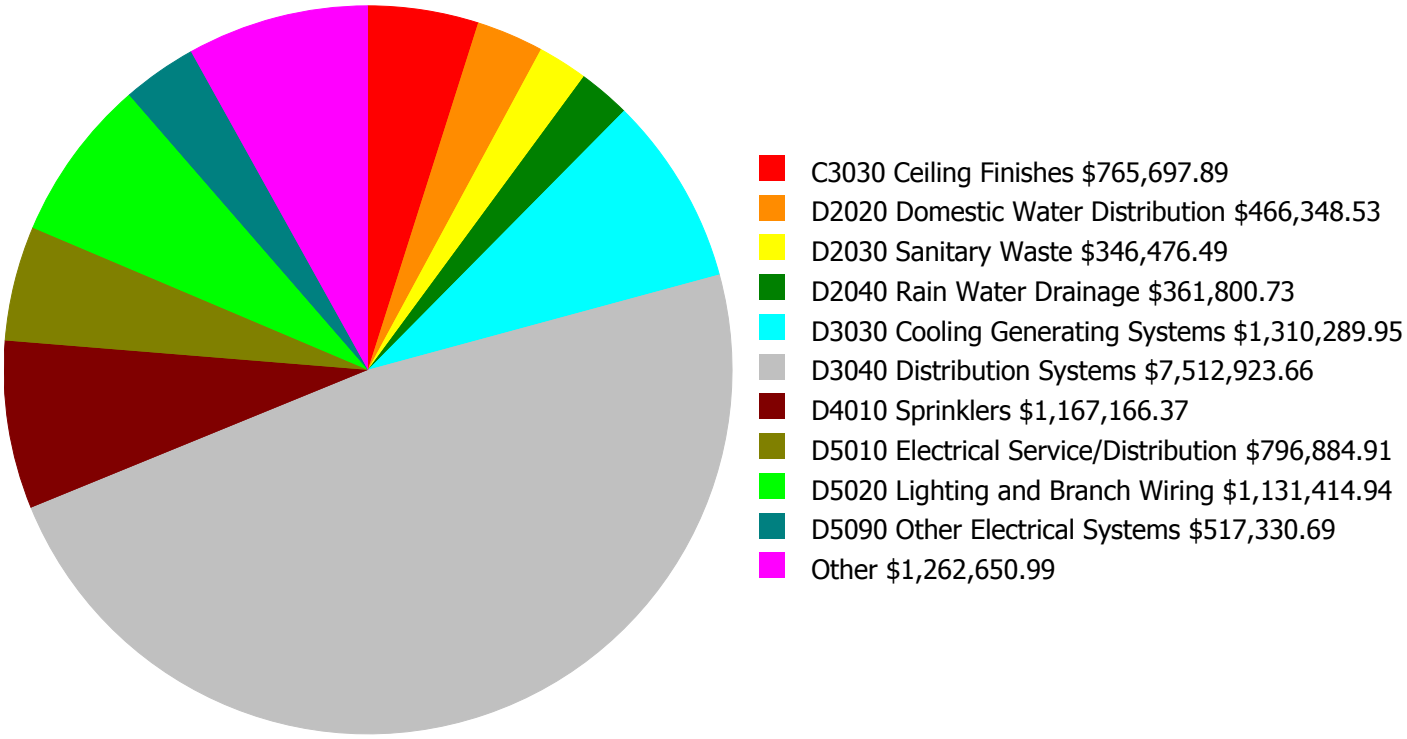
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 32.18%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$1,001,232.00	30.18 %	$2,002,463.00	28.18 %
2017	$20,231,230	$1,031,269.00	67.41 %	$2,062,537.00	63.41 %
2018	$0	$1,062,207.00	65.41 %	$2,124,413.00	59.41 %
2019	$0	$1,094,073.00	63.41 %	$2,188,146.00	55.41 %
2020	$6,714,129	$1,126,895.00	73.33 %	$2,253,790.00	63.33 %
2021	$0	$1,160,702.00	71.33 %	$2,321,404.00	59.33 %
2022	$0	$1,195,523.00	69.33 %	$2,391,046.00	55.33 %
2023	$0	$1,231,389.00	67.33 %	$2,462,777.00	51.33 %
2024	$0	$1,268,330.00	65.33 %	$2,536,661.00	47.33 %
2025	$0	$1,306,380.00	63.33 %	$2,612,761.00	43.33 %
Total:	**$26,945,360**	**$11,478,000.00**		**$22,955,998.00**	

Deficiency Summary by System

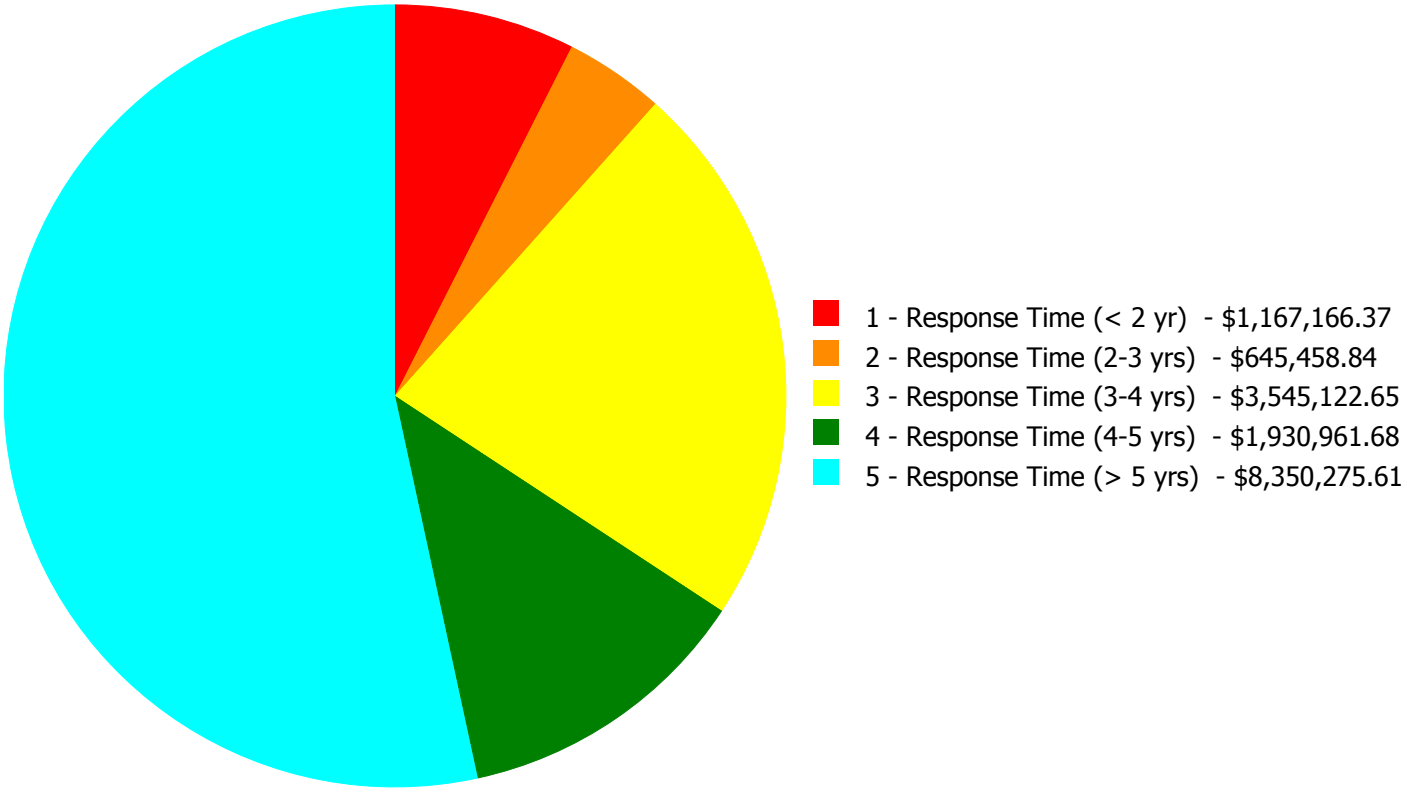
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $15,638,985.15

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: $15,638,985.15

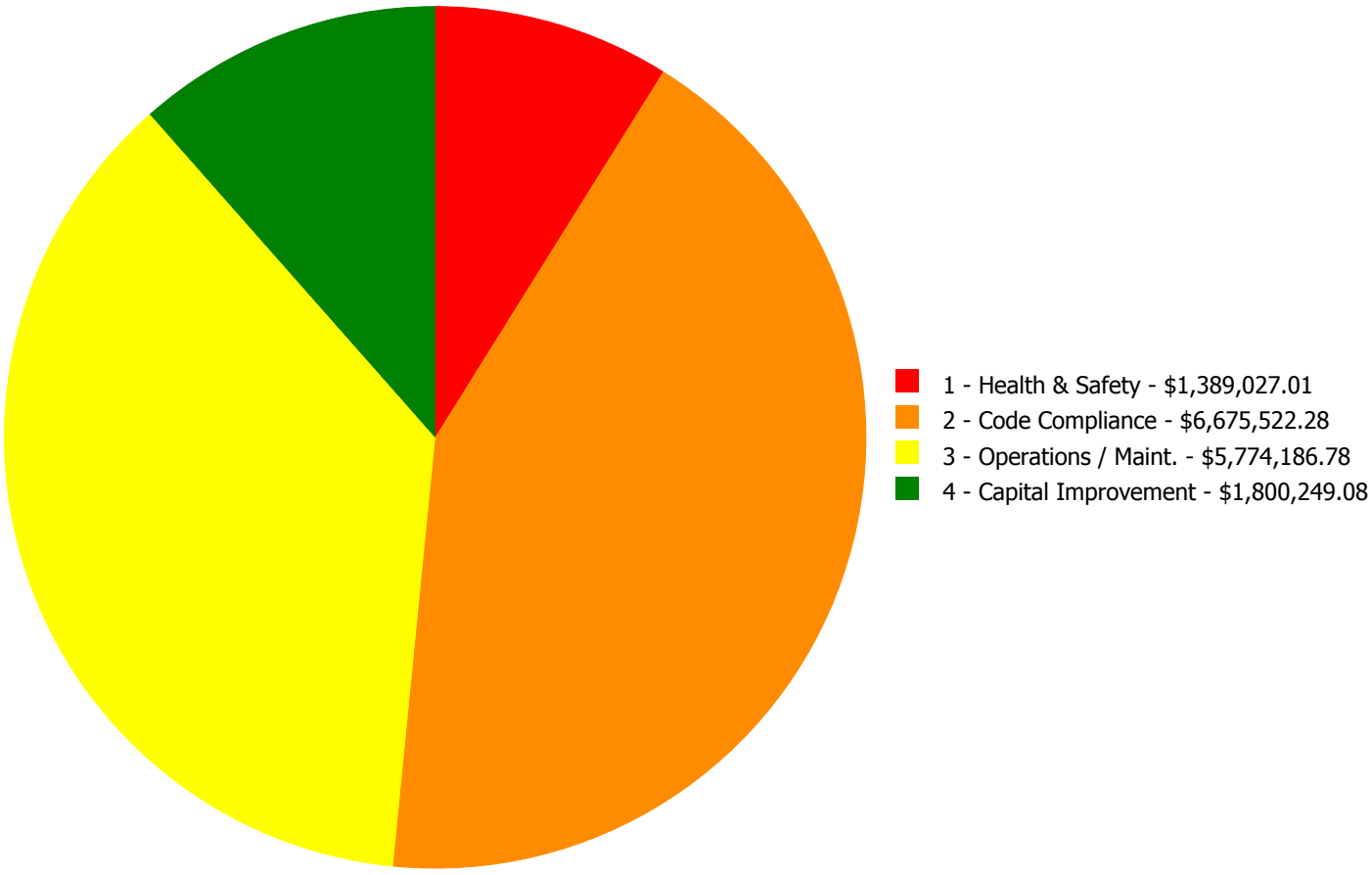
Deficiency By Priority Investment Table

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
B1020	Roof Construction	$0.00	$0.00	$280,370.01	$0.00	$0.00	$280,370.01
B3010120	Single Ply Membrane	$0.00	$321,243.68	$0.00	$0.00	$0.00	$321,243.68
C1020	Interior Doors	$0.00	$0.00	$48,978.11	$0.00	$0.00	$48,978.11
C1030	Fittings	$0.00	$0.00	$0.00	$23,840.29	$0.00	$23,840.29
C3020413	Vinyl Flooring	$0.00	$159,250.01	$0.00	$0.00	$0.00	$159,250.01
C3020414	Wood Flooring	$0.00	$108,777.08	$0.00	$0.00	$0.00	$108,777.08
C3030	Ceiling Finishes	$0.00	$3,281.03	$0.00	$762,416.86	$0.00	$765,697.89
D2020	Domestic Water Distribution	$0.00	$52,907.04	$0.00	$0.00	$413,441.49	$466,348.53
D2030	Sanitary Waste	$0.00	$0.00	$346,476.49	$0.00	$0.00	$346,476.49
D2040	Rain Water Drainage	$0.00	$0.00	$361,800.73	$0.00	$0.00	$361,800.73
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,310,289.95	$1,310,289.95
D3040	Distribution Systems	$0.00	$0.00	$886,379.49	$0.00	$6,626,544.17	$7,512,923.66
D4010	Sprinklers	$1,167,166.37	$0.00	$0.00	$0.00	$0.00	$1,167,166.37
D5010	Electrical Service/Distribution	$0.00	$0.00	$0.00	$796,884.91	$0.00	$796,884.91
D5020	Lighting and Branch Wiring	$0.00	$0.00	$1,131,414.94	$0.00	$0.00	$1,131,414.94
D5030	Communications and Security	$0.00	$0.00	$0.00	$232,279.67	$0.00	$232,279.67
D5090	Other Electrical Systems	$0.00	$0.00	$489,702.88	$27,627.81	$0.00	$517,330.69
E1090	Other Equipment	$0.00	$0.00	$0.00	$87,912.14	$0.00	$87,912.14
	Total:	$1,167,166.37	$645,458.84	$3,545,122.65	$1,930,961.68	$8,350,275.61	$15,638,985.15

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: $15,638,985.15

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: D4010 - Sprinklers

Location: Throughout building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Install a fire protection sprinkler system

Qty: 81,589.00

Unit of Measure: S.F.

Estimate: $1,167,166.37

Assessor Name: System

Date Created: 12/23/2015

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: B3010120 - Single Ply Membrane

Location: Roof top

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Remove and replace concrete deck topping including remove and replace waterproofing membrane - add for epoxy coating if required by inserting the SF in the estimate

Qty: 8,100.00

Unit of Measure: S.F.

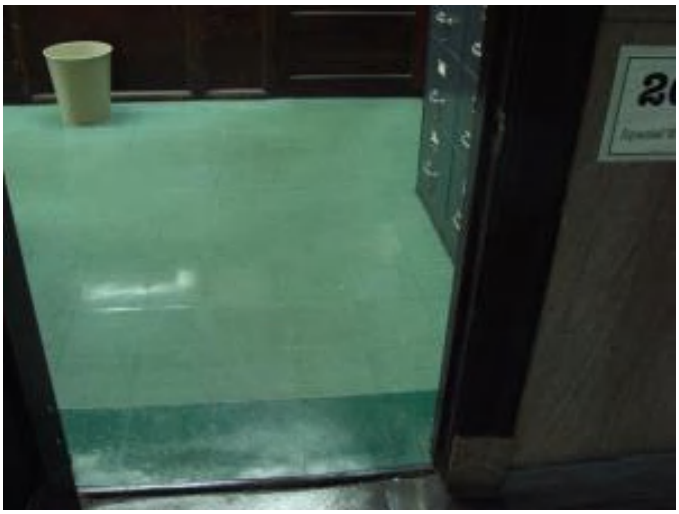
Estimate: $321,243.68

Assessor Name: System

Date Created: 02/22/2016

Notes: Replace topping on outdoor gym floor, install new waterproofing membrane.

System: C3020413 - Vinyl Flooring



Location: Second and third floor; east and west wings

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Remove VAT and replace with VCT - SF of area

Qty: 10,500.00

Unit of Measure: S.F.

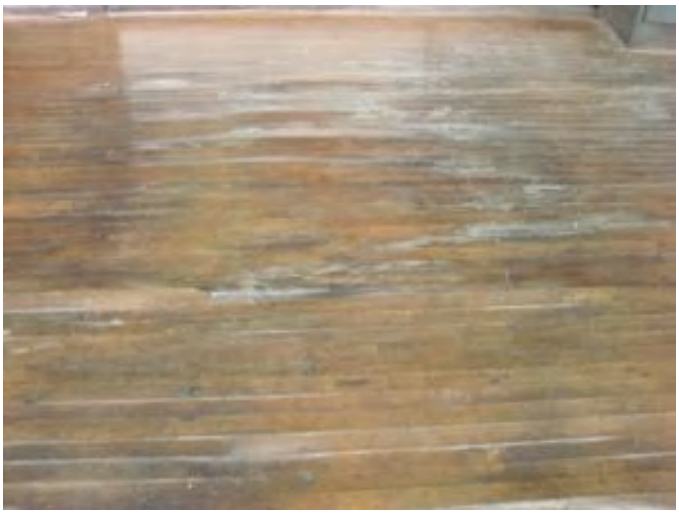
Estimate: $159,250.01

Assessor Name: System

Date Created: 02/22/2016

Notes: Replace all VAT tile in office spaces.

System: C3020414 - Wood Flooring



Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace partial area of wood flooring and refinish entire floor - set replacement area

Qty: 15,500.00

Unit of Measure: S.F.

Estimate: $108,777.08

Assessor Name: System

Date Created: 02/22/2016

Notes: Repair (10%) refinish hardwood flooring (50%).

System: C3030 - Ceiling Finishes

Location: Penthouse

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair and resurface plaster ceilings - 2 coats plaster

Qty: 250.00

Unit of Measure: S.F.

Estimate: $3,281.03

Assessor Name: System

Date Created: 02/22/2016

Notes: Repair (10%) and repaint all ceilings.

System: D2020 - Domestic Water Distribution

Location: Boiler room

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $52,907.04

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace the skid mounted duplex 7.5HP domestic water booster pumps and isolation valves on the incoming domestic water line which are damage from rust.

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

System: B1020 - Roof Construction

Location: Roof top

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Rehabilitate chain link fabric roof structure - paint the frame and replace the chain link - insert the SF of roof area in the qty.

Qty: 8,100.00

Unit of Measure: S.F.

Estimate: $280,370.01

Assessor Name: System

Date Created: 02/22/2016

Notes: Refurbish wire mesh structure enclosing outdoor gym on 4th floor; clean and paint framing, install new wire mesh.

System: C1020 - Interior Doors

Location: Throughout building

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Replace door knobs with compliant lever type

Qty: 88.00

Unit of Measure: Ea.

Estimate: $48,978.11

Assessor Name: System

Date Created: 02/22/2016

Notes: Provide ADA compliant hardware on interior doors.

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. (+100KSF)

Qty: 81,589.00

Unit of Measure: S.F.

Estimate: $346,476.49

Assessor Name: System

Date Created: 12/23/2015

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: 81,589.00

Unit of Measure: S.F.

Estimate: $361,800.73

Assessor Name: System

Date Created: 12/23/2015

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: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 81,589.00

Unit of Measure: S.F.

Estimate: $771,862.47

Assessor Name: System

Date Created: 12/23/2015

Notes: Hire a qualified contractor to examine the steam and condensate piping, in service for over 85 years, and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D3040 - Distribution Systems

Location: Penthouse

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace utility set exhaust fan (10 HP)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $114,517.02

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace two (2) exhaust fans on the penthouse level serving the restrooms which are no longer in use and beyond their service lives.

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: $669,083.62

Assessor Name: System

Date Created: 01/21/2016

Notes: Install new lighting system for the entire building.

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: $462,331.32

Assessor Name: System

Date Created: 01/21/2016

Notes: Install minimum two receptacles on each wall (surface-mounted) of all classrooms and other areas within the building.

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: $309,541.78
Assessor Name: System
Date Created: 01/21/2016

Notes: Install new emergency exit signs emergency lights.

System: D5090 - Other Electrical Systems

Location: electrical room
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace standby generator system
Qty: 1.00
Unit of Measure: Ea.
Estimate: $180,161.10
Assessor Name: System
Date Created: 01/21/2016

Notes: Install new Emergency generator (100KW).

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

System: C1030 - Fittings

Location: Throughout building

Distress: Obsolete

Category: 3 - Operations / Maint.

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

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

Qty: 88.00

Unit of Measure: Ea.

Estimate: $23,840.29

Assessor Name: System

Date Created: 02/22/2016

Notes: Install new signage throughout.

System: C3030 - Ceiling Finishes

Location: Corridors, classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 50,550.00

Unit of Measure: S.F.

Estimate: $762,416.86

Assessor Name: System

Date Created: 02/22/2016

Notes: Replace all acoustic tile.

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: $414,310.59

Assessor Name: System

Date Created: 01/21/2016

Notes: Install new 1500 KVA, 480V, 3 phase electrical service, with a new 2000A, 480V, three phase main switchboard. Install new 1200A, 120V, three phase switchboard to replace the existing switchboard.

System: D5010 - Electrical Service/Distribution

Location: throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Panelboard - 225A

Qty: 0.00

Unit of Measure: Ea.

Estimate: $382,574.32

Assessor Name: System

Date Created: 01/21/2016

Notes: Install new 120 V distribution panels throughout the building.

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: Add/Replace Clock System or Components

Qty: 0.00

Unit of Measure: Ea.

Estimate: $169,669.04

Assessor Name: System

Date Created: 01/21/2016

Notes: Install new Clock System.
Note: A multiplier of 1.4 (instead of 1.0) is used to cover the additional cost of other related construction, including conduit and wiring, etc.

System: D5030 - Communications and Security

This deficiency has no image.

Location: throughout the building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Add/Replace Video Surveillance System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $62,610.63

Assessor Name: System

Date Created: 01/21/2016

Notes: Install new Video Surveillance System with Cameras and CCTV.
Note: There is no picture attached since the school presently has no video surveillance system.

System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: roof
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 4 - Response Time (4-5 yrs)
Correction: Provide Lightning Protection System
Qty: 1.00
Unit of Measure: LS
Estimate: $27,627.81
Assessor Name: System
Date Created: 01/21/2016

Notes: Install new Lightning protection system.

System: E1090 - Other Equipment

Location: Kitchen
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Replace kitchen exhaust hood (10 ft)
Qty: 1.00
Unit of Measure: Ea.
Estimate: $87,912.14
Assessor Name: System
Date Created: 12/23/2015

Notes: Replace the one (1) kitchen hood and integral fire suppression system which is beyond its service life.

Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace domestic water piping (75 KSF)

Qty: 81,589.00

Unit of Measure: S.F.

Estimate: $413,441.49

Assessor Name: System

Date Created: 12/23/2015

Notes: Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for an unknown amount of time, and replace any damaged piping.

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: 81,589.00

Unit of Measure: S.F.

Estimate: $1,310,289.95

Assessor Name: System

Date Created: 12/23/2015

Notes: Remove the window air conditioning units and install a 220 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.

System: D3040 - Distribution Systems

Location: Classrooms

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Provide classroom FC units and dedicated OA ventilation system. (20 clsrms)

Qty: 48.00

Unit of Measure: C

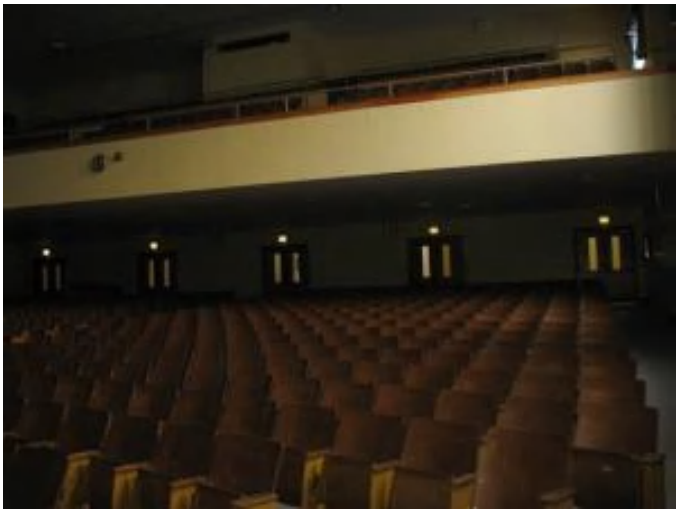
Estimate: $3,986,927.45

Assessor Name: System

Date Created: 12/23/2015

Notes: Remove the existing cast iron steam radiators 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: Auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 700.00

Unit of Measure: Seat

Estimate: $997,798.98

Assessor Name: System

Date Created: 12/23/2015

Notes: Provide ventilation for the Auditorium by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in window openings.

System: D3040 - Distribution Systems

Location: Gymnasiums

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 12,000.00

Unit of Measure: Ea.

Estimate: $689,720.53

Assessor Name: System

Date Created: 12/23/2015

Notes: Provide ventilation for the two (2) Gymnasiums by installing two (2) fan coil air handling units hung from the structure with outdoor air ducted to the unit from louvers in the window openings.

System: D3040 - Distribution Systems

Location: Cafeteria

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Cafeteria (850 students).

Qty: 1,008.00

Unit of Measure: Pr.

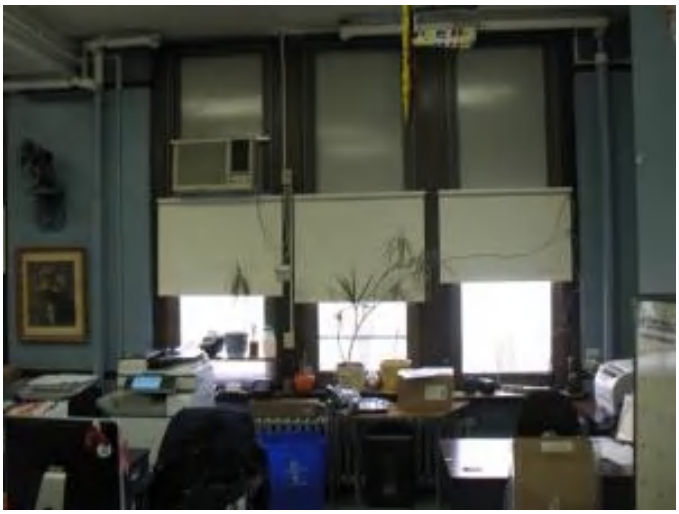
Estimate: $515,811.02

Assessor Name: System

Date Created: 12/23/2015

Notes: Provide ventilation for the two (2) Cafeterias by installing two (2) constant volume air handling units with distribution ductwork and registers.

System: D3040 - Distribution Systems



Location: Administration

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 1,008.00

Unit of Measure: Pr.

Estimate: $436,286.19

Assessor Name: System

Date Created: 12/23/2015

Notes: 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 louvers in window openings.

Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D2020 Domestic Water Distribution	Pump, pressure booster system, variable speed, base, controls, starter, duplex, 100' head, 400 GPM, 7-1/2 H.P., 4" discharge	1.00	Ea.	Boiler Room	Bell and Gossett				25	2009	2034	$51,870.00	$57,057.00
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 5520 MBH, includes standard controls and insulated flush jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	4500A-S/W-17	4500A-S-17-080056		35	2009	2044	$118,960.50	$392,569.65
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 5520 MBH, includes standard controls and insulated flush jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	4500A-S/W-17	4500A-S-17-080055		35	2009	2044	$118,960.50	$392,569.65
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 5520 MBH, includes standard controls and insulated flush jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	4500A-S/W-17	4500A-S-17-080054		35	2009	2044	$118,960.50	$392,569.65
D5010 Electrical Service/Distribution	Circuit breaker, 3 pole, 600 volt, 1200 amp, enclosed (NEMA 1)	1.00	Ea.	electrical room					30	1928	2047	$13,662.00	$15,028.20
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 400 kVA & above, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	1.00	Ea.	electrical room					30	1928	2047	$42,849.00	$47,133.90
D5010 Electrical Service/Distribution	Panelboards, 3 pole 3 wire, main lugs, 240 V, 400 amp, no main breaker	4.00	Ea.	electrical room					30	1928	2047	$2,297.70	$10,109.88
D5090 Other Electrical Systems	Generator set, diesel, 3 phase 4 wire, 277/480 V, 125 kW, incl battery, charger, muffler, & day tank, excl conduit, wiring, & concrete	1.00	Ea.	electrical room					30	1928	2047	$50,797.80	$55,877.58
												Total:	**$1,362,915.51**

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):	53,800
Year Built:	1928
Last Renovation:	
Replacement Value:	$989,742
Repair Cost:	$92,909.09
Total FCI:	9.39 %
Total RSLI:	46.55 %

Description:

Attributes:

General Attributes:

Bldg ID:	S713001	Site ID:	S713001

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	18.80 %	0.00 %	$0.00
G40 - Site Electrical Utilities	106.67 %	29.72 %	$92,909.09
Totals:	**46.55 %**	**9.39 %**	**$92,909.09**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$8.50	S.F.		30				0.00 %	0.00 %				$0
G2030	Pedestrian Paving	$12.30	S.F.	26,200	40	1928	1968	2020	12.50 %	0.00 %	5			$322,260
G2040	Site Development	$4.36	S.F.	53,800	25	1928	1953	2020	20.00 %	0.00 %	5			$234,568
G2050	Landscaping & Irrigation	$4.36	S.F.	27,600	15	1928	1943	2020	33.33 %	0.00 %	5			$120,336
G4020	Site Lighting	$4.84	S.F.	53,800	30	1928	1958	2047	106.67 %	0.00 %	32			$260,392
G4030	Site Communications & Security	$0.97	S.F.	53,800	30	1928	1958	2047	106.67 %	178.03 %	32		$92,909.09	$52,186
								Total	**46.55 %**	**9.39 %**			**$92,909.09**	**$989,742**

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.

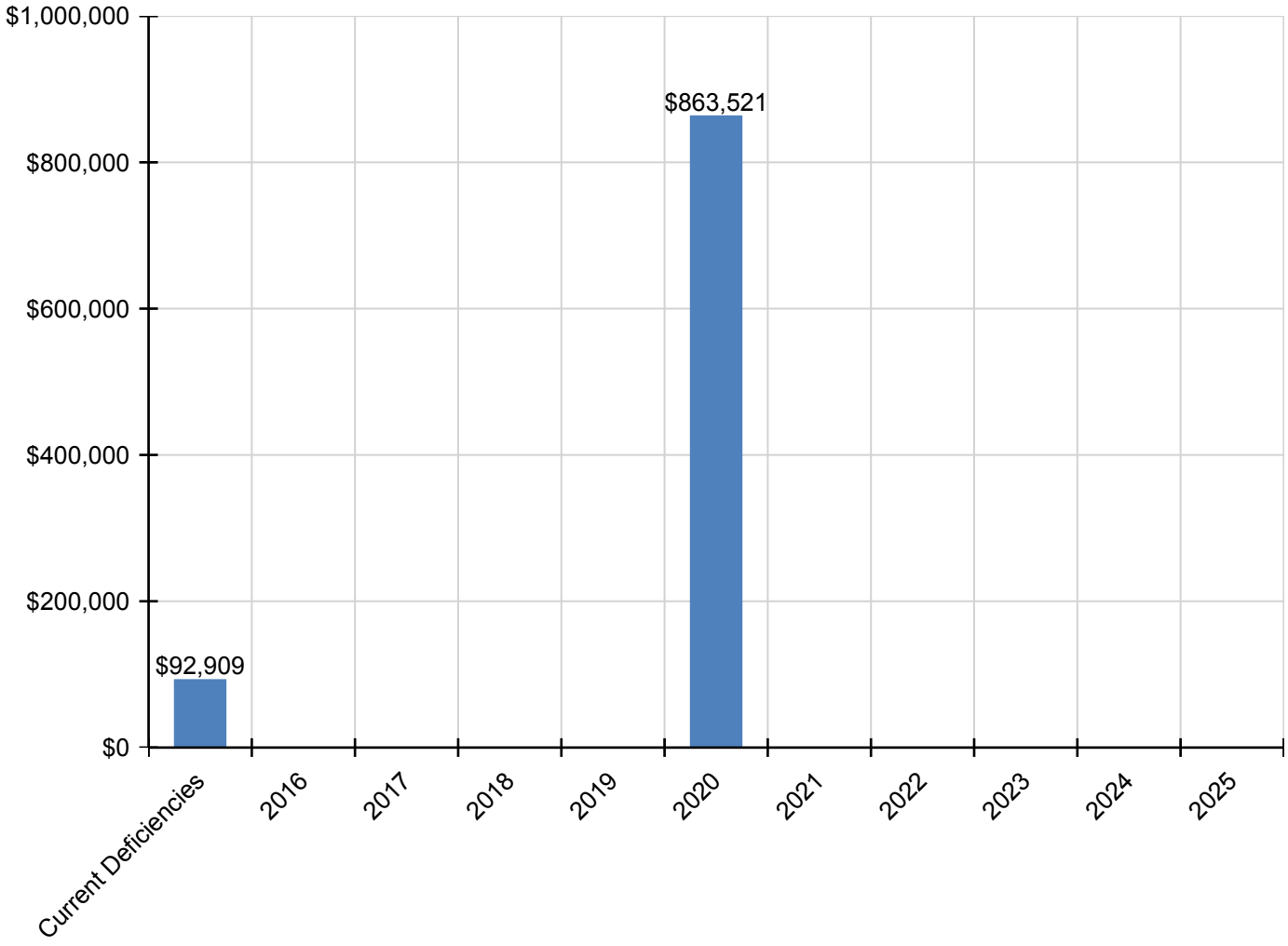
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$92,909**	**$0**	**$0**	**$0**	**$0**	**$863,521**	**$0**	**$0**	**$0**	**$0**	**$0**	**$956,430**
G - Building Sitework	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G20 - Site Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2010 - Roadways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2020 - Parking Lots	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$410,946	$0	$0	$0	$0	$0	**$410,946**
G2040 - Site Development	$0	$0	$0	$0	$0	$299,122	$0	$0	$0	$0	$0	**$299,122**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$153,453	$0	$0	$0	$0	$0	**$153,453**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$92,909	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$92,909**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

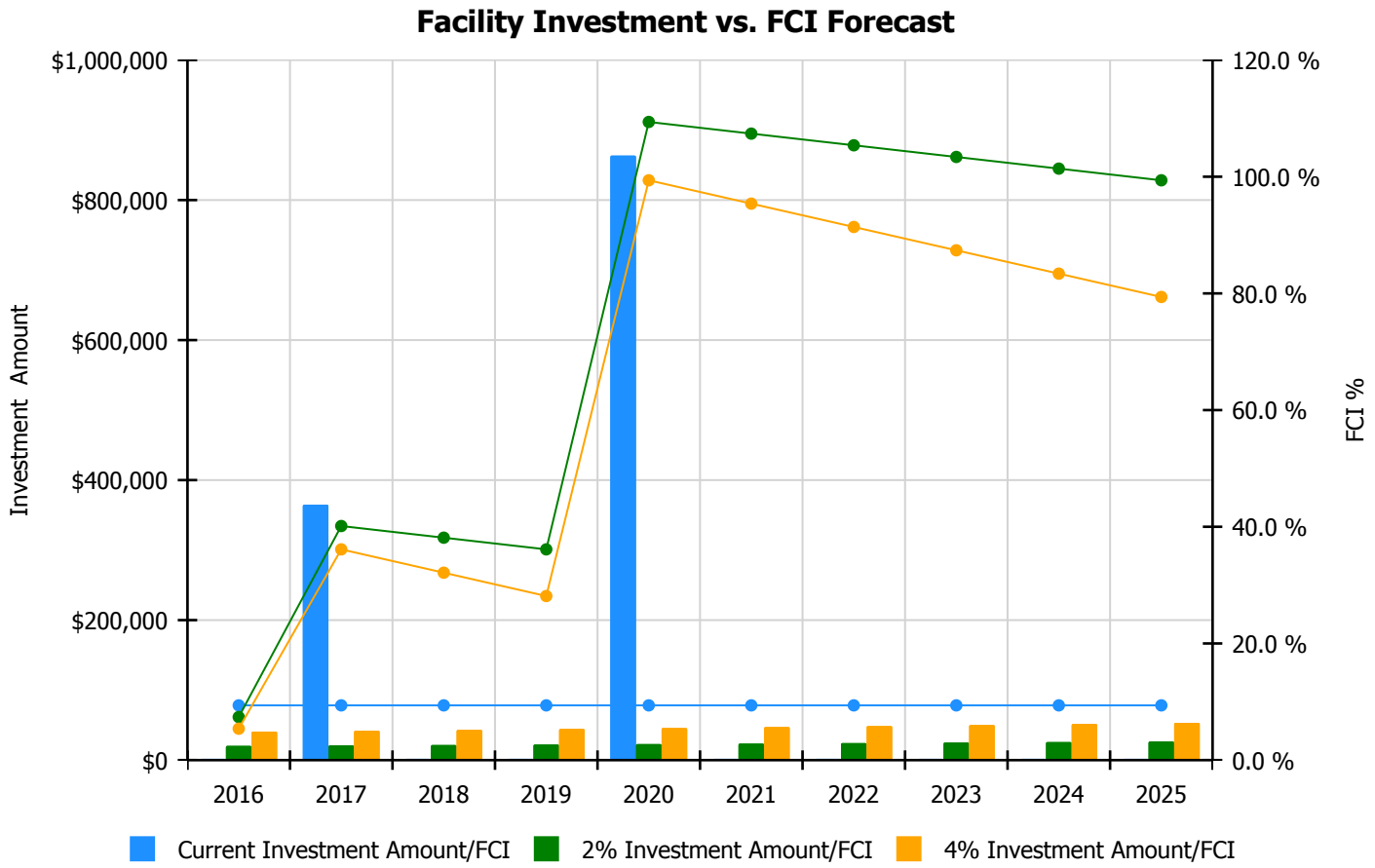
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

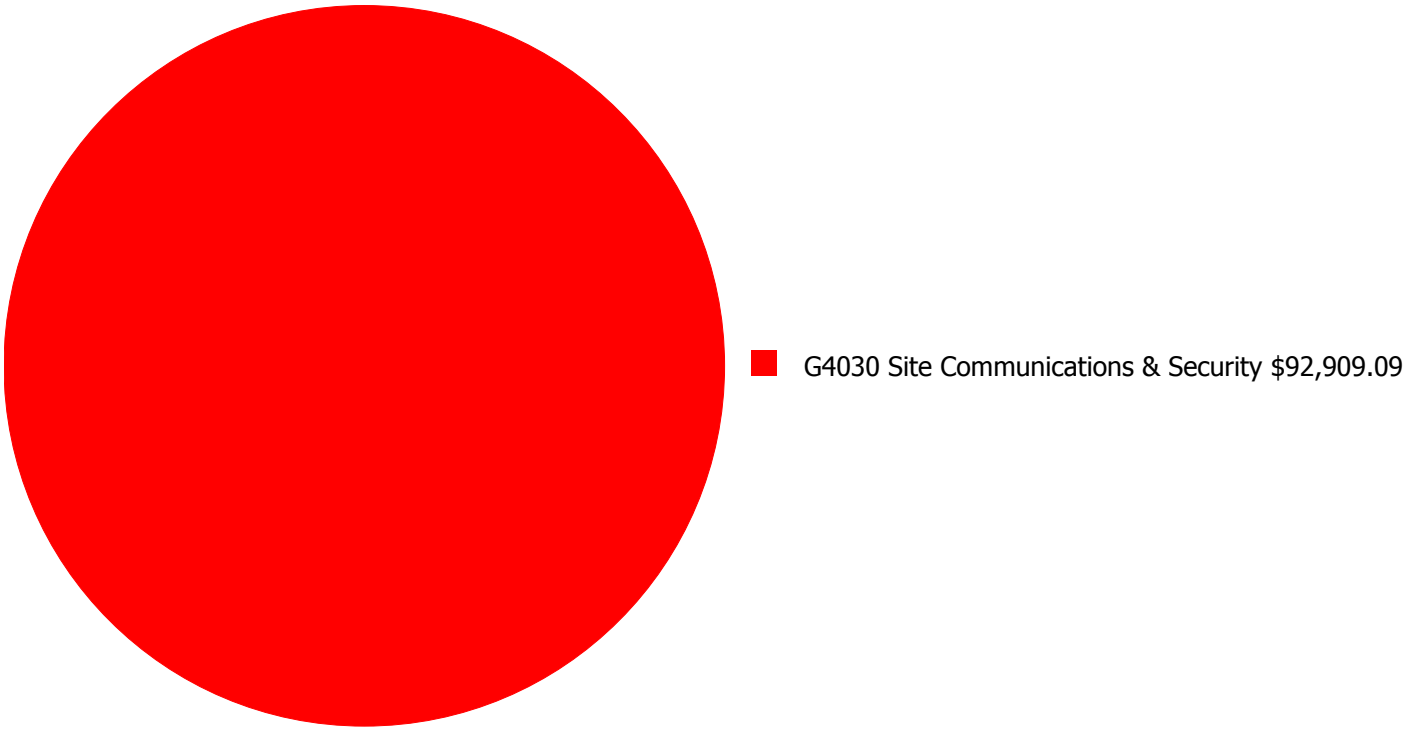
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 9.39%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$20,389.00	7.39 %	$40,777.00	5.39 %
2017	$364,776	$21,000.00	40.13 %	$42,001.00	36.13 %
2018	$0	$21,630.00	38.13 %	$43,261.00	32.13 %
2019	$0	$22,279.00	36.13 %	$44,559.00	28.13 %
2020	$863,521	$22,948.00	109.39 %	$45,895.00	99.39 %
2021	$0	$23,636.00	107.39 %	$47,272.00	95.39 %
2022	$0	$24,345.00	105.39 %	$48,690.00	91.39 %
2023	$0	$25,076.00	103.39 %	$50,151.00	87.39 %
2024	$0	$25,828.00	101.39 %	$51,656.00	83.39 %
2025	$0	$26,603.00	99.39 %	$53,205.00	79.39 %
Total:	**$1,228,297**	**$233,734.00**		**$467,467.00**	

Deficiency Summary by System

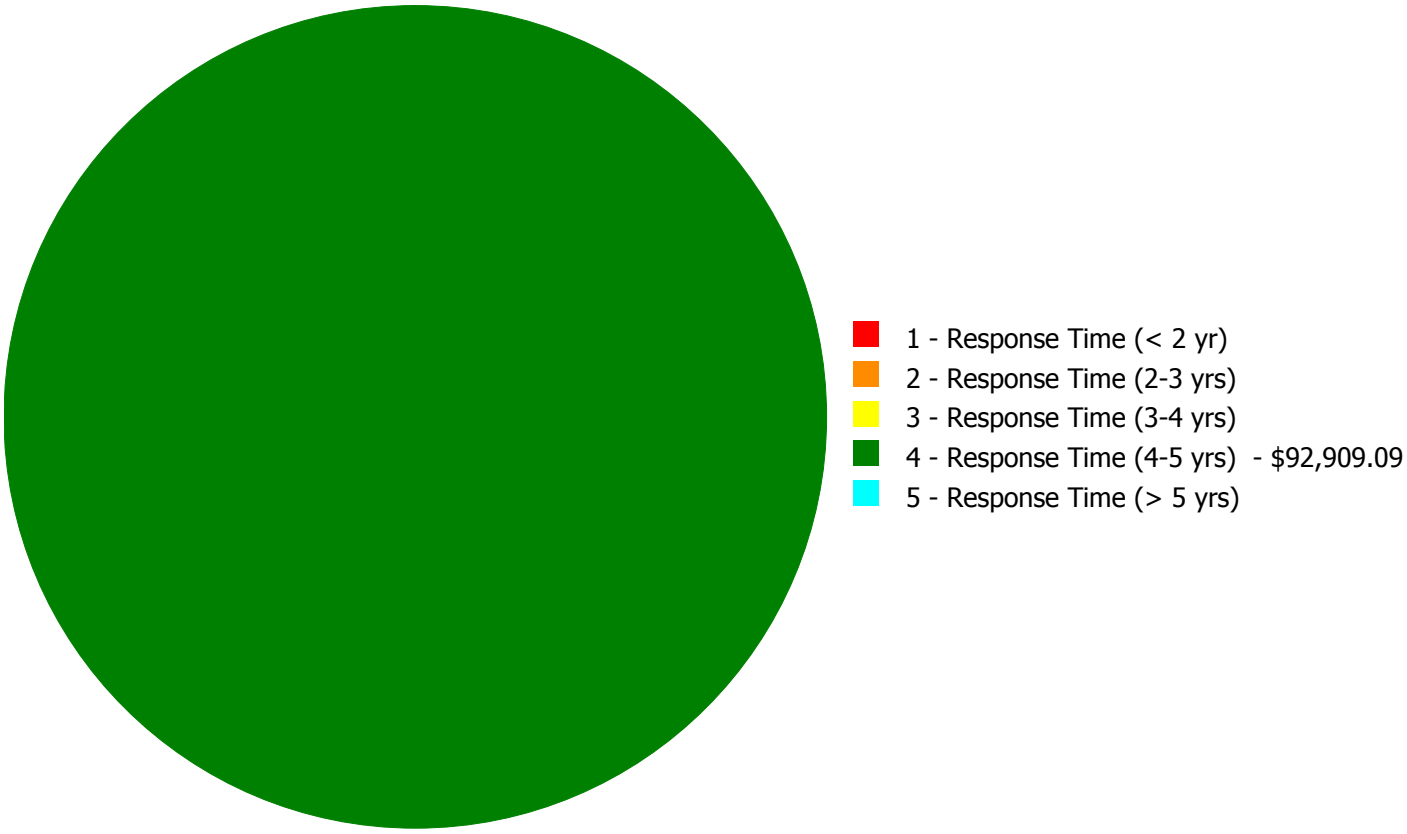
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $92,909.09

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: $92,909.09

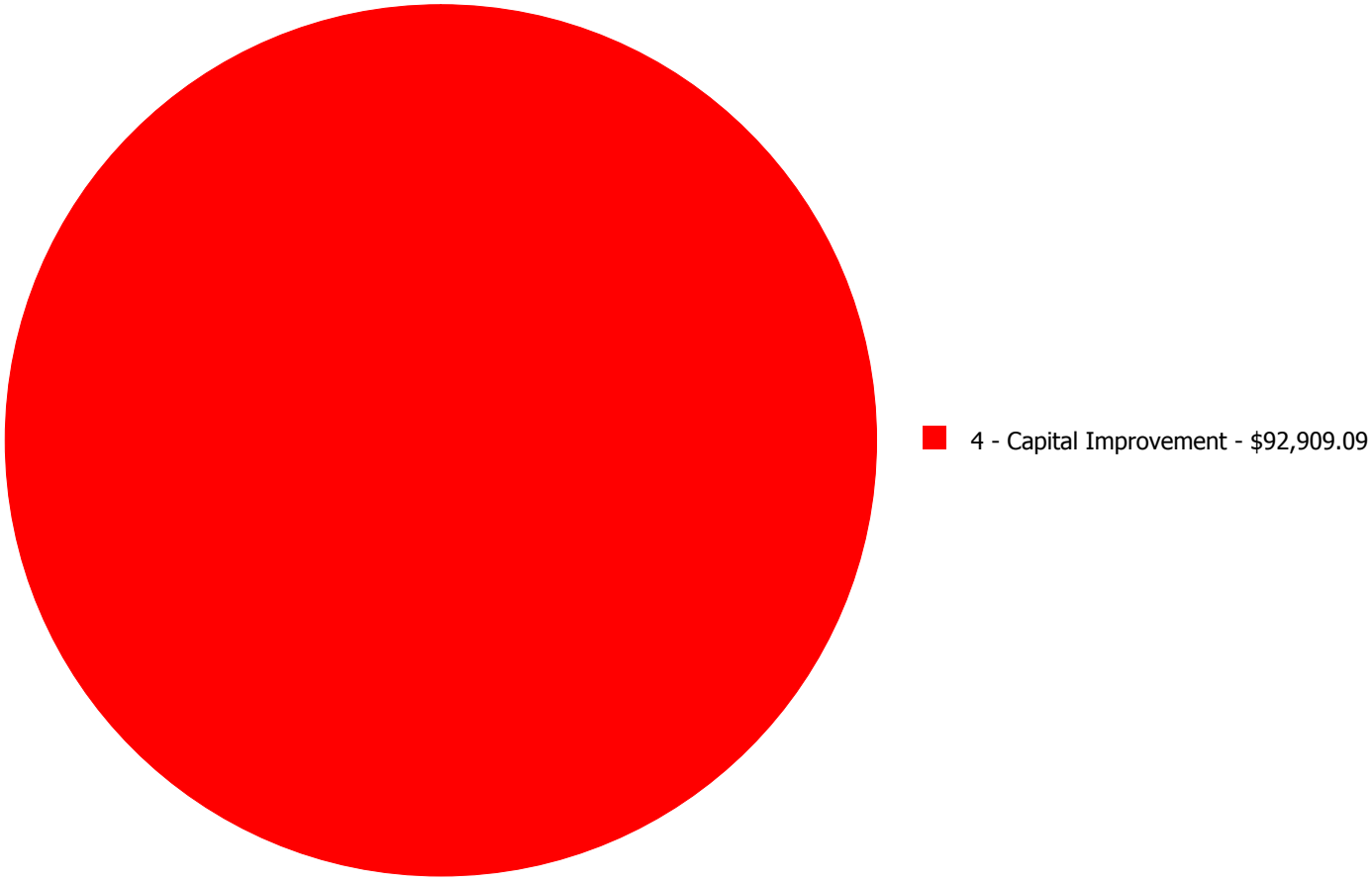
Deficiency By Priority Investment Table

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
G4030	Site Communications & Security	$0.00	$0.00	$0.00	$92,909.09	$0.00	$92,909.09
	Total:	$0.00	$0.00	$0.00	$92,909.09	$0.00	$92,909.09

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: $92,909.09

Deficiency Details by Priority

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

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: $92,909.09

Assessor Name: Christopher Finnican

Date Created: 01/21/2016

Notes: Install additional outdoor speakers on exterior walls for proper communication and paging.

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