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.

Bridesburg School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	2824 Jenks St.	Enrollment	791
	Philadelphia, Pa 19137	Grade Range	'00-08'
Phone/Fax	215-537-2515 / 215-537-3145	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Bridesburg	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	**01.86%**	**$1,188,290**	**$63,767,136**
Building	01.81 %	$1,136,598	$62,840,275
Grounds	05.58 %	$51,692	$926,861

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	04.97 %	$80,559	$1,621,260
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.67 %	$31,341	$4,666,900
Windows (Shows functionality of exterior windows)	23.91 %	$544,408	$2,277,184
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$183,338
Interior Doors (Classroom doors)	00.62 %	$2,753	$443,804
Interior Walls (Paint and Finishes)	00.00 %	$0	$2,125,457
Plumbing Fixtures	00.00 %	$0	$1,709,469
Boilers	00.00 %	$0	$2,360,635
Chillers/Cooling Towers	00.00 %	$0	$3,095,251
Radiators/Unit Ventilators/HVAC	00.00 %	$0	$5,435,656
Heating/Cooling Controls	22.01 %	$375,687	$1,706,940
Electrical Service and Distribution	00.00 %	$0	$1,226,468
Lighting	00.11 %	$4,622	$4,384,939
Communications and Security (Cameras, Pa System and Fire Alarm)	00.00 %	$0	$1,642,456

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

S747001;Bridesburg

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):	126,440
Year Built:	1958
Last Renovation:	2012
Replacement Value:	$63,767,136
Repair Cost:	$1,188,290.42
Total FCI:	1.86 %
Total RSLI:	61.97 %

Description:

Facility Condition Assessment
July 2015

School District of Philadelphia
Bridesburg Elementary School
2824 Jenks Street
Philadelphia, PA 19137

126,440sf / 338 students / LN 07

General

Bridesburg School is located at 2824 Jenks Street. The main entrance faces the parking lot, Jenks Street. The original school building was constructed in the 1930's. It was demolished in 1957 when a new building ("Element 1") was constructed on the same site. Additions were constructed on the north (Element 2") and south sides of that structure in the early 1970's. In 2012, the south addition was demolished, a new building addition ("Element 3") and chiller room addition were constructed, and the entire complex was renovated and upgraded. The original 1957 building is a 2 story structure with a partial basement, the old addition is a 2 level, 1

story structure, and the new addition is a 2 story structure. Angela Wilson, the Building Engineer accompanied the team during the building inspection.

Architectural/Structural

Foundations in the original 1957 building appear to be constructed of concrete; the additions are have foundations constructed of concrete block with concrete footings. Joints are in good condition with no major settlement cracks observed. Paint on the basement walls and ceilings, is generally in good condition and well maintained, with some damages and dirt in the original building area. Footings were not seen and their construction type or condition could not be ascertained.

Floor slabs in the boiler room located in the original building basement are constructed of concrete with sealer in good condition with some areas of minor dirt; floor slabs in the chiller room located in the basement of the chiller addition are clean and in good condition. Upper floor slabs in Elements 2 and 3 are constructed of concrete slabs on metal deck with structural steel beams. There was no observed structural cracking and spalling of the concrete slabs and structure. The one oddity observed in Element 1 was a 2-3" gap between the floor slab and the exterior wall in all classrooms. This is somewhat unsightly and unusual, although not necessarily an indication of a deficiency or problem; general maintenance is required to keep this elastomeric material clean and neat in appearance.

Roof construction over Element 1 is thought to be reinforced concrete beams and deck, bearing on a concrete structure. The superstructure is thought to be constructed of reinforced concrete columns, beams, and floor slabs. Roof construction over Elements 2 and 3 are metal deck supported by structural steel beams and columns. All roof decks are flat with minimum overall slope. Areas around roof drains are depressed for drainage; the only roofs with overflow drains are the addition (Element 3) and chiller room roofs. Roof access to the Element 3 roof is via a door out of a masonry penthouse. There is an equipment screen on Element 3 roof, blocking from view rooftop air handlers, condensers, fans and ductwork. The screen is supported by structural steel tubes and extruded aluminum panels painted light gray. Steel tube are rusting in some locations. The roof over Element 2 is two levels, accessed by a hatch on the higher roof and a ladder down to the lower roof. Roofs over Elements 1 and 2 have roof drains with depressed areas around the drains. Although there are no overflow drains, these roofs have a gravel stop that allows for water ponding of no more than 4-6" at the edge of the roof before spilling over. If roof drains are clogged, water will spill over the gravel stop minimizing any excessive weight gain that would occur due to ponding water.

Exterior walls of the new addition, Element 3, are constructed of two brick colors giving the flat wall an appearance of depth. A yellow glazed brick accent wall flanks the entrance doorway, is located to the left of the main entrance, and extends into the lobby. Masonry is generally in good condition with minor efflorescence observed in isolated locations. Element 2, constructed in the early 1970's is constructed of brick masonry with limestone accent panels above and below the windows. Brickwork has an anti-graffiti coating along the first story which has a milky white appearance and some streaking at the top. The corner of the building on Jenks and Richmond has a vertical crack approximately 5 feet tall extending up from the sidewalk; this should be investigated further and repaired. Other areas of concern occur above the windows where the limestone panels and flashing have been recaulked, indicating possible locations of water penetration into the building, although no leaks were reported during the site inspection. A painted steel fence is located along the one-story roof edge of Element 2 to possibly minimize the chance of balls and foreign objects landing on the roof. The exterior walls of the original building, Element 1, are also constructed of masonry with limestone accent panels on the sides and between windows. Like Element 2, there is also evidence of past recaulking along the top of all limestone panels which are possible sources of water penetration. It appears that uninvent louvers were recently added into the existing brick Element 1 walls. In one location, cracks were observed in the brickwork around the uninvent continuing along the lintel into the adjacent masonry.

Exterior windows in Element 1 were not replaced when the new addition was constructed. They are made of bronze anodized aluminum frames with operable single hung units and single thickness clear plexiglass vision panel glazing. These windows are in poor condition with oxidized frames and severely scratched single-pane plexiglass vision panels. Operable units are difficult to operate up and down, due to broken internal counterbalance weights. Single pane plexiglass units do not meet today's energy code requirements and are large sources of heat loss. Element 1 windows facing play areas on both have external steel security screens. Steel lintels over these windows are in good condition. Element 2 windows are similar to the Element 1 original building windows – single glazed plexiglass panels in anodized aluminum frames. Element 3 new addition windows are more modern double glazed glass windows in clear anodized aluminum frames. Each window unit grouping has at least one operable "hopper" window that can be opened to allow for natural ventilation when appropriate. First floor windows have external steel security screens for protection of glazing. Element 3 windows appear to be in good condition.

Exterior doors without vision panels and those providing access to mechanical areas are flush, textured, fiberglass reinforced plastic (FRP) units with painted steel frames. Student entry doors and those that have large glazing panels are anodized aluminum frame units with glass. FRP door panels are in good condition with functioning panic hardware. Aluminum and glass doors in Element 2 show signs of oxidation but appear to be in fair-good condition with operation hardware. Painted steel frames surrounding the FRP doors are peeling or aging and need repainting. There is one handicap entrance facing the parking lot side, which is the main

entrance to the building. It is flush with grade and does not require ramps. Two other entrances to the connecting corridor between Element 2 and Element 1 are grade level, but have one step up. These two entrances and the main parking lot entrance all have vestibules.

Roof coverings on Elements 1 and 2 flat roofs are ceramic granule impregnated, fully adhered rolled asphalt sheet systems. Brick rooftop structures on Element 2 and ventilation fan structures on Element 1 roofs are flashed with metal flashing with an asphaltic backing. Element 2 penetrations are flashed with ceramic granule asphaltic flashing. The roof membranes on both roofs are showing signs of aging with dried cracked asphalt seen along membrane joints. There are a number of patches and areas of standing water on both roofs. Standing water is due to small blockages at roof drains or slightly depressed areas just beyond roof drains, not completely draining to roof drains. Aluminum coping appears to be in good condition. It is thought that these roofs are past their normal service life of 20 years, although no leaks were reported at this time. Roof covering on Element 3 is a fully adhered asphalt-backed, white plastic-faced (PVC or TPO) sheet system. There are aluminum gravel stops around the main roof of Element 3 and concrete coping blocks on the Chiller Building Addition Roof, which is considered part of Element 3. Roofing and insulation is depressed around roof drains and there are overflow roof drains adjacent to roof drains. There are small areas of ponding due to compressed insulation and inadequate water flow to roof drains. Overflow drains have outlet pipes on the Jenks Street side of the building, which show signs of water spilling out. This means there is water draining into the overflow drains – the reason for this should be investigated to ensure good roof drainage and minimization of ponding. The small roof overhang over the main entrance facing the parking lot has a single drainpipe projecting off to the left side (as seen from the ground). This pipe is clogged and the overhang is filled with approximately 2-3" of water; this needs to be cleaned out to allow for proper drainage.

Partitions in basements are constructed of concrete block. All stairways, corridors, and toilet rooms area constructed of block; toilet rooms have ceramic tile wainscots on all walls. The gymnasium addition has block partitions. Classrooms have gypsum board partitions backing most exterior walls and some internal walls. The first floor corridor between Element 1 and Element 2 has a beautiful tile mural built onto one wall. All partitions are generally in good condition and appear to have been repainted recently.

Interior doors are solid core wood with oak veneer. Most classroom and stairway doors have narrow vertical vision panels. Mechanical room doors are hollow metal or FRP like exterior doors. All doors are set into hollow metal frames. Doors are generally in good condition throughout the building, have ADA compliant lever lock or latchsets, and are not fire rated where required. Most classroom doors have security locking feature from inside the classrooms. (Some classrooms were locked and could not be checked).

Interior fittings/hardware include smart boards in every classroom. Toilet room partitions are solid plastic partitions, which have doors. Toilet room accessories (toilet paper dispensers, soap, paper towel or dryers, grab bars, door latches) are provided in all toilet rooms and look like they were replaced as part of the latest building addition.

Stair construction consists of steel pan and riser stair systems with concrete-filled treads. Stairs in Element 1 did not have guards along stairways, but have 36" high handrails and 42" high guards at platforms with steel vertical balusters with 4" maximum spacing. The new addition stairways are equipment with the code-required guards throughout and code compliant handrails and balusters. All stair hardware is painted steel in good condition.

Wall finishes in the entire school are painted block or gypsum board, all in good condition. Doors are clean-stained oak also in good condition. Toilet room walls are painted block above ceramic tile wainscots.

Floor finishes consist of 12"x12" vinyl composition tile (VCT). This material is meticulously maintained and thoroughly cleaned before rewaxing to eliminate any dirt and wax buildup. The maintenance staff should receive commendations for the care and maintenance of this floor system. The gymnasium has a seamless vinyl floor, in good condition. The Library has carpet tiles. Stair walking surfaces and toilet rooms in Element 1 are exposed sealed concrete that should be stripped, cleaned, and resealed. Toilet rooms in Element 3 have ceramic tile floors. With the exception of the exposed concrete, all floors are well maintained and in good condition.

Ceiling finishes are mostly 2'x4' suspended acoustical tile ceilings with recessed fluorescent lighting fixtures, all in good condition. Toilet rooms in the new addition have gypsum board ceilings. Toilet rooms in the old renovated building have exposed plaster ceilings. The ceiling of the gymnasium is open with exposed painted bar joists and suspended industrial-type lighting. The open stairway in the entrance lobby of the new addition has a large skylight at the top of the open stairway; first floor ceilings around the opening are gypsum board with round lighting fixtures, creating a pleasant, bright entry.

A three-stop, 4500lb capacity, hydraulic elevator is provided, complying with ADA providing access to first and second floors.

Fixed furnishings are limited in this building. There is plastic laminate storage casework and storage cabinets in the classrooms.

Mechanical

Plumbing Fixtures

All of the plumbing fixtures were replaced in 2011. Fixtures in the restrooms on each floor consist of wall mounted water closets, wall hung urinals and lavatories with pull handle faucets. The fixtures appear to be in satisfactory condition and should provide reliable service for at least the next 10 years.

Drinking fountains in the corridors and at the restrooms are wall hung with integral refrigerated coolers. The majority of the drinking fountains are in satisfactory condition and should not need replacement for the next 10 years. There are a few drinking fountains in the gymnasium area that should be replaced.

A service sink is available in the corridor on each floor for use by the janitorial staff. The Cafeteria has one three compartment, stainless steel sink with lever operated faucets and one hand sink. At the time of inspection, no chemicals were available for the washing and the sanitizing basins. The plumbing systems throughout the building appear to be in satisfactory condition and should not need replacement for the next 10 years.

Domestic Water Distribution

Domestic water distribution piping is soldered copper and in good condition. Water service enters the building in the basement, with the water meter on the main line after entering the building. No backflow preventers could be found on the domestic water line during the survey. There is a water booster pump skid with 3 pumps providing a boost in water pressure for the building. The domestic water distribution system appears to be the original installed equipment and should not need service or replacement for the next 10 years. Three State Ultra Force natural gas fired vertical water heater tanks are installed in the basement with appropriate piping, controls, and venting. The water heaters appear to be in satisfactory condition and should not need replacement for the next 10 years.

Sanitary Waste

The maintenance staff reported no problems with the sanitary waste piping systems. The small sewer ejector pit is located in the basement with dual pumps. The complete sanitary system appears to in satisfactory condition and should not need replacement for the next 10 years.

Rain Water Drainage

The rain water drains from the roof are routed through mechanical chases in the building and appear to be in good condition. There also appears to be adequate roof overflow drains on each roof.

Energy Supply

Duplex fuel oil supply pumps provide the required fuel to the boilers when operating on fuel oil. There is a 6,000 gal underground fuel oil tank adjacent to the generator, which has its own day tank. The boilers run on natural gas unless the power company specifically requests that they operate on fuel oil. The natural gas service enters the building through the basement of the original building. There is a natural gas booster pump in the same area. .

Heat Generating Systems

Heating hot water is generated by two 3112 Mbtu/hr Buderus Logano GE615/13 dual fuel boilers. Each boiler is equipped with a Power Flame burner designed to operate on natural gas or fuel oil. Two hot water distribution pumps distribute the heating hot water throughout the facility. This equipment is in satisfactory condition and should not need replacement for the next 10 years.

Cooling Generating Systems

300 Tons (nominal) of chilled water is generated by a York model YK centrifugal water cooled chiller in the basement with two chilled water pumps. The water cooling is provided by one Baltimore Aircoil Company PT2 series cooling tower with two condensing water pumps . A Sherlock refrigerant gas monitor with visible and audible alarm monitors refrigerant leaks in the chiller room. This equipment is in satisfactory condition and should not need replacement for the next 10 years.

Distribution Systems

The water is treated with a combination of chemicals in the chiller room. There are two dual temperature water pumps which pump the hot or cold water through the distribution network depending upon valve configuration.

The two pipe distribution network serves unit ventilators and VAV boxes units throughout the building. The 2011 expansion uses unit ventilators and VAV boxes while the remainder of the facility uses only unit ventilators. They are served with fresh air from heat recovery units mounted on the roof. There is no air condition in the gymnasium (there is only heat), but per the building engineer the chiller has excess capacity to cool the gym. This appears to be the original installed equipment and should not need replacement for the next 10 years

Terminal & Package Units

There is a total of two Heat Recovery Units with heat recovery wheels and one air handling unit. There are also two condensing units for the Mitsubishi mini split systems that serve the server room. The mini split units are DX while the others utilize hot and cold water. There is also a makeup air unit serving the kitchen hood. All of these units are located on the roof in the open mechanical area. They appear to be the original installed equipment and should not need replacement for the next 10 years.

Controls & Instrumentation

The building is controlled by a CM building solutions DDC system installed in 2011 when the building addition was built. This system includes the control and monitoring for the original building and the expansions. Appropriate room and unit parameters are available to the controller. All major mechanical equipment (boilers, chillers, pumps, fans, etc) is monitored and controlled by the system and it is in proper working order. The outdoor air appears to be controlled by CO2 sensors throughout the building integrated into the DDC. The building engineer indicated that no maintenance or calibration has been done on the CO2 sensors since they were installed. Calibration or replacement of CO2 sensors and incorporating them into the maintenance program is recommended. There are also small issues with control and setpoints that are not functioning correctly. It is recommended to evaluate, repair, and recommission the system and provide training to the building engineer.

Sprinklers

The building is equipped with a wet pipe sprinkler system. The fire water enters the building in the basement along the same wall as the domestic water. There is one Clarke diesel powered fire pump, with the fuel storage tank in the area. The pump is rated at 750 gpm at 116ft of head. There is also one jockey pump. The kitchen hood is protected by an Ansul R-102 wet chemical system. The fire suppression systems all appear to be in satisfactory condition and should not need replacement for the next 10 years.

Electrical

Site electrical service is provided from the utility transformer located in a room that functions as a transformer room. An underground medium voltage cable drop from the utility power pole located on Jenks Street is feeding the utility transformer. Transformer room is accessible only to utility personnel. The main service switchgear is located in the pump room and fed from utility transformer. Main service switchgear consists of 600A medium voltage load interrupter, PT/CT section, and 750/1000KVA, 13200V to 480/277V, 3PH, 4 wires, dry type transformer and 1200A, 408/277V power distribution switchboard. Utility meter was installed in separate enclosure adjacent to the switchgear assembly. There is a 150KVA (480V to 120/208V) step down transformer that feeds a main 800A, 208V, 3PH, 4W distribution panel board located in the same room and the low voltage distribution panel, feeding all 208/120V power panels throughout the building. Service switchgear is new and is in a very good condition with ample capacity.

Power distribution and raceway system consists of a number of lighting and power panels located throughout the building. The distribution system is working adequate without any major deficiencies.

There is sufficient number of receptacles installed in classrooms, offices, corridors and other areas throughout the building. No major deficiencies were observed with the exception that in a few classrooms there are general-type receptacles without ground contacts, still in service. These receptacles are obsolete and should be replaced with ground-type receptacles.

Interior building is illuminated by various type fixtures (due to the architectural Design). Classrooms, corridors, and dining are illuminated by new decorative 2x4 lay-in grid fluorescent lighting fixtures with (4) T8 lamps. The boiler and pump rooms are illuminated by 1x4 surface mounted/pendent fluorescent fixtures with clear lenses. Exterior building lighting consists of decorative cylindrical uplight/downlight fixtures. All interior and exterior lighting fixtures are in a good condition and building illumination is sufficient.

Fire alarm system is adequate. Smoke is monitored by duct smoke detectors, area smoke detectors in corridors, and pulls stations.

There are sufficient number of horn/strobes installed in the classrooms, corridors, offices and other areas in the school. No major deficiencies were observed.

Telephone/LAN equipment/devices are located in two IT rooms (the main room is on the first floor and other secondary IT Room is on the second floor). The school telephone and data systems are new and working adequately.

Public address and music are not provided in this school. The telephone systems are used for public announcements. This system is working adequately.

Intercom System and paging is functioning adequately and is completely functional. The paging system is one way communication from office to classrooms. Two way communications is obtained through use of wall mounted phones in the classrooms and other areas.

Clock and Program systems are working adequately. Each classroom has a 12 inches diameter, wall mounted clock. The clocks are controlled by central master control panel, which is also programmed for class change. The controllers are located in main IT room.

Television System is not provided in the school. Classrooms are equipped with Smart boards.

Security Systems-access control, video surveillance system, and intrusion alarms are provided in this school. Sufficient numbers of cameras are installed at exit doors, corridors, and other critical areas, controlled by a Closed Circuit Television system (CCTV). The system is working properly.

Emergency Power System (back-up power generator) is provided in the school. A 135KW, 480/277V, 3PH, 4W outdoor diesel generator manufactured by "Onsite Energy" feeds the life safety and other critical emergency loads via two transfer switches. This diesel generator and its respective transfer switches are new and are in very good condition.

UPS (Uninterruptable Power System) is provided for the Local Area Network on each IT rack.

Sufficient numbers of emergency lighting fixture are instated in corridors, the library, and exit ways. All exit signs are also equipped with batteries.

Lightning Protection System may not provide adequate protection to the school. A Risk Assessment Study needs to be conducted to verify if lightning protection system is required for the school.

Grounding system is present and appears to be adequate in design and installation.

There is one 40HP hydraulic type elevator manufactured by Otis Elevator Company, provided in the school. The elevator is working properly and no major deficiencies were observed during the assessment.

Site Lighting is adequate. The fixtures at exit doors are on the emergency power circuit.

Site Video Surveillance system is provided in the school. Areas around the building are covered by a sufficient number of cameras and adequately monitored by the school Closed Circuit TV system (CCTV).

Site paging system is provided and operating adequately.

Grounds

Paving and parking is asphalt. A parking lot is with a grass median divider is located on the entrance side of the facility, separated from the building by a rubberized fenced play area. The asphalt parking has numerous cracks and needs to be scarified and repaved. A second bus-staging parking/play area is located on the west side of the building. Striping demarking bus staging places is worn in this area and it should be restriped. The number of required parking spaces for school staff is unknown.

Steel fencing is painted black and generally in good condition.

Landscaping needs some trimming but in general is adequately maintained.

RECOMMENDATIONS

Architectural

- Re-apply sealant to cover gap in Element 1 between floor slab and exterior wall. (300lf)
- Strip, clean and reseal concrete floors in Element 1 toilet rooms and stairways. (1200+2000sf = 3200sf)
- Repair vertical crack in brick masonry at corner of Element 2 building and around uninvent louvers in at least 2 locations (150sf)
- Recaulk top of limestone panels at window heads in Element 1 and Element 2 (150lf)
- Replace all exterior windows in Element 1 with insulated single hung units (140)3.5x6
- Repair existing flat roof areas where water is ponding – all roofs (3,000sf)
- Repair roof over new building entrance – provide better drainage - Element 3 (400sf)
- Improve drainage to roof drains – Element 3 and Element 2 – roof drains are not draining properly causing water to go thru overflows and show on building exterior wall(12 drains)
- Repaint steel supporting the rooftop mechanical area enclosure – Element 3 (100sf)
- Recaulk top of reglet set into brick penthouses – Element 3 and Element 2 (500lf)
- Provide security hardware for classrooms and offices, locking from inside classroom – Element 1 building. (12)
- Remove and replace stairway handrails and guards with code compliant systems – Element 1 (2) 2 story;=2x2x12=48lf
- Repair cast in place treads/risers at exterior stairs – Element 1 (8 treads, 20ft long)

Mechanical

- Calibrate and/or replace CO2 sensors. Add CO2 sensor calibration as an inspection and maintenance item per manufacturers recommend intervals.
- Inspect, repair, and recommission the DDC Building Management System. Include training for building engineer.

Electrical

- Replace existing no-ground receptacles with ground-type receptacles. Estimated 30 each
- Perform lightning protection studies to ascertain that the mechanical equipments on the roof are protected against the lightning strikes.

Grounds

- Repave and restripe cracked section of asphalt parking area (20,000sf)
- Repair sunken asphalt area outside chiller room (400sf)
- Repaint rusted sections of steel post site fence (100sf)

Attributes:

General Attributes:			
Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 2
Status:	Accepted by SDP	Team:	Tm 2
Site ID:	S747001		

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	43.00 %	0.00 %	$0.00
A20 - Basement Construction	43.00 %	0.00 %	$0.00
B10 - Superstructure	43.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	62.22 %	8.08 %	$575,749.34
B30 - Roofing	25.00 %	4.97 %	$80,558.96
C10 - Interior Construction	9.53 %	0.09 %	$2,753.24
C20 - Stairs	43.00 %	34.91 %	$62,245.31
C30 - Interior Finishes	73.54 %	0.15 %	$9,328.04
D10 - Conveying	91.43 %	0.00 %	$0.00
D20 - Plumbing	87.33 %	0.00 %	$0.00
D30 - HVAC	84.45 %	2.67 %	$375,687.22
D40 - Fire Protection	88.57 %	0.00 %	$0.00
D50 - Electrical	84.84 %	0.41 %	$30,276.21
E10 - Equipment	14.29 %	0.00 %	$0.00
E20 - Furnishings	12.50 %	0.00 %	$0.00
G20 - Site Improvements	57.50 %	6.24 %	$51,692.10
G40 - Site Electrical Utilities	90.00 %	0.00 %	$0.00
Totals:	**61.97 %**	**1.86 %**	**$1,188,290.42**

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)
B747001;Bridesburg	126,440	1.81	$150,074.47	$548,679.71	$62,156.92	$0.00	$375,687.22
G747001;Grounds	22,700	5.58	$7,070.45	$6,526.01	$38,095.64	$0.00	$0.00
Total:		**1.86**	**$157,144.92**	**$555,205.72**	**$100,252.56**	**$0.00**	**$375,687.22**

Deficiencies By Priority

Budget Estimate Total: $1,188,290.42

Executive Summary

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

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

Function:	Elementary School
Gross Area (SF):	126,440
Year Built:	1958
Last Renovation:	2012
Replacement Value:	$62,840,275
Repair Cost:	$1,136,598.32
Total FCI:	1.81 %
Total RSLI:	61.98 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B747001
Sewage Ejector:	Yes	Status:	Accepted by SDP
Site ID:	S747001		

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	43.00 %	0.00 %	$0.00
A20 - Basement Construction	43.00 %	0.00 %	$0.00
B10 - Superstructure	43.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	62.22 %	8.08 %	$575,749.34
B30 - Roofing	25.00 %	4.97 %	$80,558.96
C10 - Interior Construction	9.53 %	0.09 %	$2,753.24
C20 - Stairs	43.00 %	34.91 %	$62,245.31
C30 - Interior Finishes	73.54 %	0.15 %	$9,328.04
D10 - Conveying	91.43 %	0.00 %	$0.00
D20 - Plumbing	87.33 %	0.00 %	$0.00
D30 - HVAC	84.45 %	2.67 %	$375,687.22
D40 - Fire Protection	88.57 %	0.00 %	$0.00
D50 - Electrical	84.84 %	0.41 %	$30,276.21
E10 - Equipment	14.29 %	0.00 %	$0.00
E20 - Furnishings	12.50 %	0.00 %	$0.00
Totals:	**61.98 %**	**1.81 %**	**$1,136,598.32**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$18.40	S.F.	126,440	100	1958	2058		43.00 %	0.00 %	43			$2,326,496
A1030	Slab on Grade	$7.73	S.F.	126,440	100	1958	2058		43.00 %	0.00 %	43			$977,381
A2010	Basement Excavation	$6.55	S.F.	126,440	100	1958	2058		43.00 %	0.00 %	43			$828,182
A2020	Basement Walls	$12.70	S.F.	126,440	100	1958	2058		43.00 %	0.00 %	43			$1,605,788
B1010	Floor Construction	$75.10	S.F.	126,440	100	1958	2058		43.00 %	0.00 %	43			$9,495,644
B1020	Roof Construction	$13.88	S.F.	126,440	100	1958	2058		43.00 %	0.00 %	43			$1,754,987
B2010	Exterior Walls	$36.91	S.F.	126,440	100	1958	2058		43.00 %	0.67 %	43		$31,341.09	$4,666,900
B2020	Exterior Windows	$18.01	S.F.	126,440	40	1980	2020	2057	105.00 %	23.91 %	42		$544,408.25	$2,277,184
B2030	Exterior Doors	$1.45	S.F.	126,440	25	1995	2020		20.00 %	0.00 %	5			$183,338
B3010105	Built-Up	$37.76	S.F.	42,735	20	1995	2015	2020	25.00 %	4.99 %	5		$80,558.96	$1,613,674
B3010120	Single Ply Membrane	$38.73	S.F.	0	20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.	0	30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.	0	25				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	126,440	20	1958	1978	2020	25.00 %	0.00 %	5			$7,586
C1010	Partitions	$17.91	S.F.	126,440	100	1958	2058	2020	5.00 %	0.00 %	5			$2,264,540
C1020	Interior Doors	$3.51	S.F.	126,440	40	1958	1998	2027	30.00 %	0.62 %	12		$2,753.24	$443,804
C1030	Fittings	$3.12	S.F.	126,440	40	1958	1998	2020	12.50 %	0.00 %	5			$394,493
C2010	Stair Construction	$1.41	S.F.	126,440	100	1958	2058		43.00 %	34.91 %	43		$62,245.31	$178,280

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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	$13.69	S.F.	126,440	10	2012	2022		70.00 %	0.00 %	7			$1,730,964
C3010231	Vinyl Wall Covering	$0.00	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$3.12	S.F.	126,440	30	1958	1988	2027	40.00 %	0.00 %	12			$394,493
C3020411	Carpet	$7.30	S.F.	3,600	10	2012	2022		70.00 %	0.00 %	7			$26,280
C3020412	Terrazzo & Tile	$75.52	S.F.	6,000	50	1970	2020		10.00 %	0.00 %	5			$453,120
C3020413	Vinyl Flooring	$9.68	S.F.	100,440	20	2012	2032		85.00 %	0.00 %	17			$972,259
C3020414	Wood Flooring	$22.27	S.F.	0	25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	20,000	50	1958	2008	2020	10.00 %	48.08 %	5		$9,328.04	$19,400
C3030	Ceiling Finishes	$20.97	S.F.	126,440	25	2012	2037		88.00 %	0.00 %	22			$2,651,447
D1010	Elevators and Lifts	$1.53	S.F.	126,440	35	2012	2047		91.43 %	0.00 %	32			$193,453
D2010	Plumbing Fixtures	$13.52	S.F.	126,440	35	2011	2046		88.57 %	0.00 %	31			$1,709,469
D2020	Domestic Water Distribution	$1.68	S.F.	126,440	25	2011	2036		84.00 %	0.00 %	21			$212,419
D2030	Sanitary Waste	$2.90	S.F.	126,440	25	2011	2036		84.00 %	0.00 %	21			$366,676
D2040	Rain Water Drainage	$2.32	S.F.	126,440	30	2011	2041		86.67 %	0.00 %	26			$293,341
D3020	Heat Generating Systems	$18.67	S.F.	126,440	35	2011	2046		88.57 %	0.00 %	31			$2,360,635
D3030	Cooling Generating Systems	$24.48	S.F.	126,440	30	2011	2041		86.67 %	0.00 %	26			$3,095,251
D3040	Distribution Systems	$42.99	S.F.	126,440	25	2011	2036		84.00 %	0.00 %	21			$5,435,656
D3050	Terminal & Package Units	$11.60	S.F.	126,440	20	2011	2031		80.00 %	0.00 %	16			$1,466,704
D3060	Controls & Instrumentation	$13.50	S.F.	126,440	20	2011	2031		80.00 %	22.01 %	16		$375,687.22	$1,706,940
D4010	Sprinklers	$7.05	S.F.	126,440	35	2011	2046		88.57 %	0.00 %	31			$891,402
D4020	Standpipes	$1.01	S.F.	126,440	35	2011	2046		88.57 %	0.00 %	31			$127,704
D5010	Electrical Service/Distribution	$9.70	S.F.	126,440	30	1958	1988	2042	90.00 %	0.00 %	27			$1,226,468
D5020	Lighting and Branch Wiring	$34.68	S.F.	126,440	20	1958	1978	2032	85.00 %	0.11 %	17		$4,622.04	$4,384,939
D5030	Communications and Security	$12.99	S.F.	126,440	15	1958	1973	2027	80.00 %	0.00 %	12			$1,642,456
D5090	Other Electrical Systems	$1.41	S.F.	126,440	30	1958	1988	2042	90.00 %	14.39 %	27		$25,654.17	$178,280
E1020	Institutional Equipment	$4.82	S.F.	126,440	35	1958	1993	2020	14.29 %	0.00 %	5			$609,441
E1090	Other Equipment	$11.10	S.F.	126,440	35	1958	1993	2020	14.29 %	0.00 %	5			$1,403,484
E2010	Fixed Furnishings	$2.13	S.F.	126,440	40	1958	1998	2020	12.50 %	0.00 %	5			$269,317
								Total	**61.98 %**	**1.81 %**			**$1,136,598.32**	**$62,840,275**

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: B20 - Exterior Enclosure — This system contains no images

Note: Element 1 (original building) replacement windows and windows in Element 2 - estimated installation in 1970
windows in Element 3, installed in 2012 when building completed

System: B3010 - Roof Coverings — This system contains no images

Note: Element 3 newest addition constructed in 2012
Assumed that Elements 1 and 2 were not re-roofed with newest addition; roof estimated to be installed in 1995

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

Note: painted block or gypsum board 98%
ceramic tile wainscot 2%

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

Note: sealed concrete 12%
VCT and seamless sheet vinyl (gym) 80%
ceramic tile 5%
carpet tile 3%

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:	**$1,136,598**	**$0**	**$0**	**$0**	**$0**	**$9,204,905**	**$0**	**$2,377,307**	**$0**	**$0**	**$0**	**$12,718,810**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A10 - Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A20 - Basement Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2010 - Basement Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2020 - Basement Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$31,341	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,341**
B2020 - Exterior Windows	$544,408	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$544,408**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$233,793	$0	$0	$0	$0	$0	**$233,793**
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	$80,559	$0	$0	$0	$0	$2,057,759	$0	$0	$0	$0	$0	**$2,138,318**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$9,674	$0	$0	$0	$0	$0	**$9,674**
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	$2,887,745	$0	$0	$0	$0	$0	**$2,887,745**

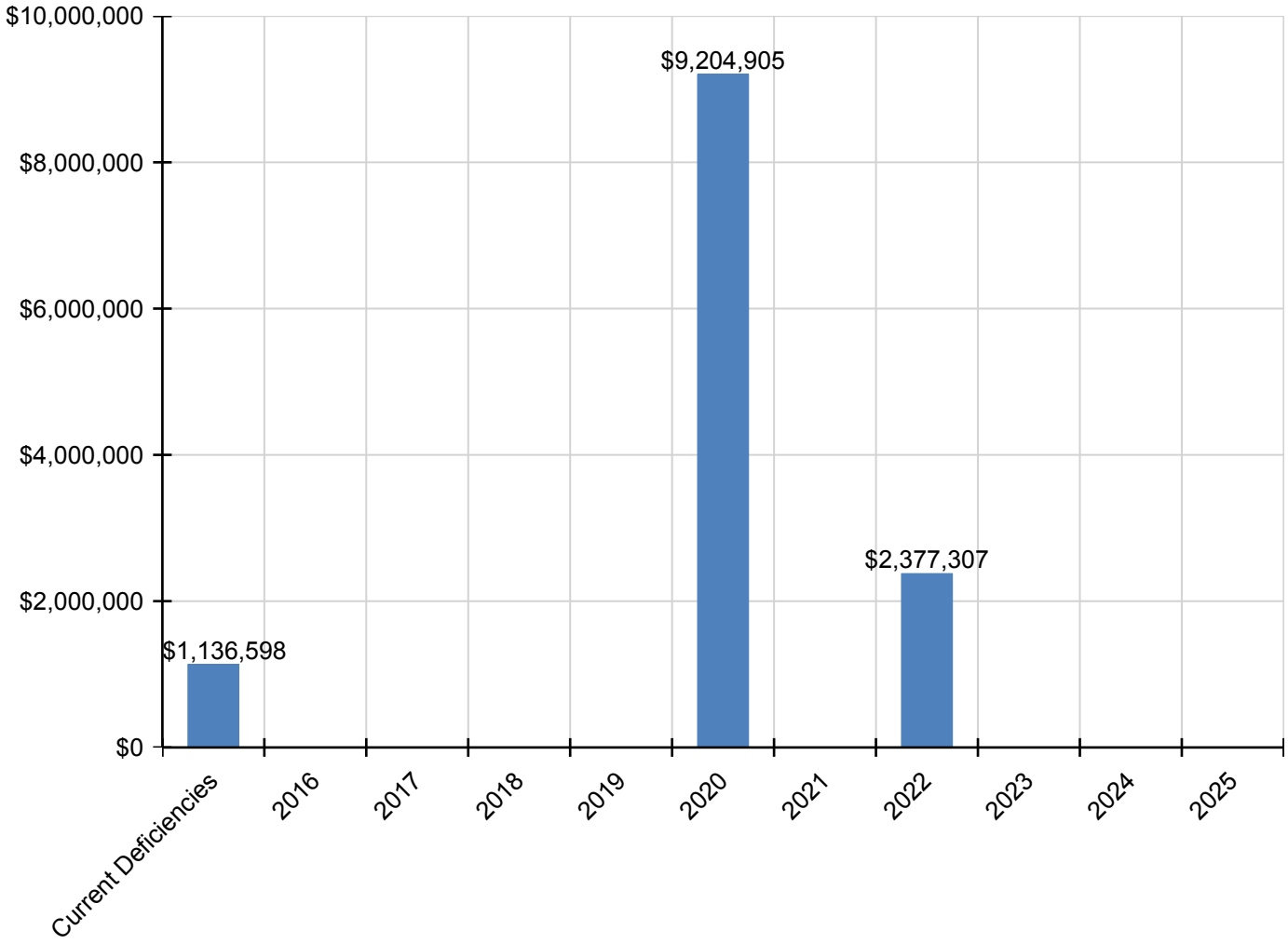
C1020 - Interior Doors	$2,753	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,753**
C1030 - Fittings	$0	$0	$0	$0	$0	$503,058	$0	$0	$0	$0	$0	**$503,058**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$62,245	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$62,245**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$0	$2,341,754	$0	$0	$0	**$2,341,754**
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	$35,553	$0	$0	$0	**$35,553**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$577,819	$0	$0	$0	$0	$0	**$577,819**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$9,328	$0	$0	$0	$0	$24,739	$0	$0	$0	$0	$0	**$34,067**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2030 - Sanitary Waste	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$375,687	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$375,687**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5020 - Lighting and Branch Wiring	$4,622	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,622**
D5030 - Communications and Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5090 - Other Electrical Systems	$25,654	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$25,654**
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	$777,160	$0	$0	$0	$0	$0	**$777,160**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$1,789,724	$0	$0	$0	$0	$0	**$1,789,724**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$343,434	$0	$0	$0	$0	$0	**$343,434**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

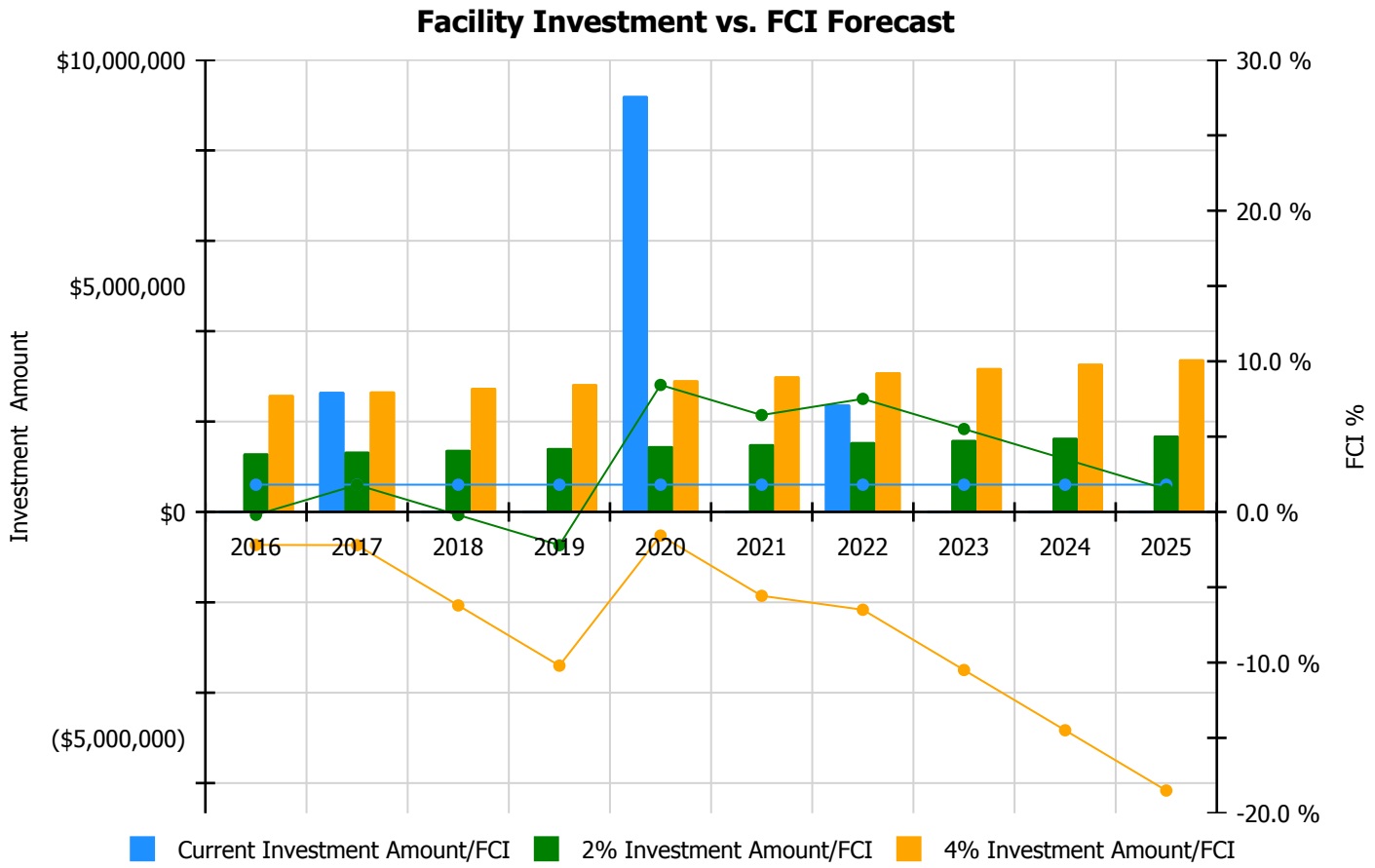
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

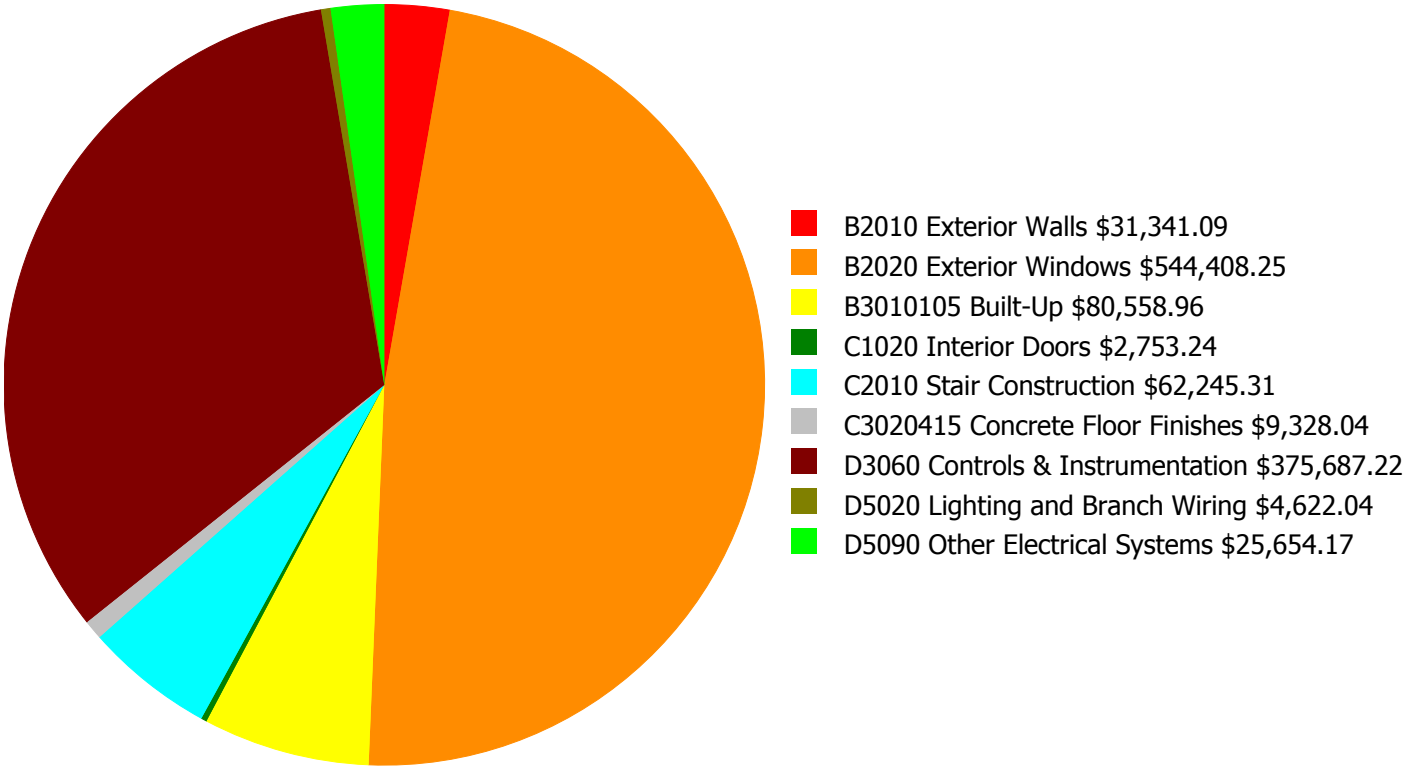
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 1.81%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$1,294,510.00	-0.19 %	$2,589,019.00	-2.19 %
2017	$2,657,452	$1,333,345.00	1.79 %	$2,666,690.00	-2.21 %
2018	$0	$1,373,345.00	-0.21 %	$2,746,691.00	-6.21 %
2019	$0	$1,414,546.00	-2.21 %	$2,829,091.00	-10.21 %
2020	$9,204,905	$1,456,982.00	8.43 %	$2,913,964.00	-1.57 %
2021	$0	$1,500,691.00	6.43 %	$3,001,383.00	-5.57 %
2022	$2,377,307	$1,545,712.00	7.51 %	$3,091,424.00	-6.49 %
2023	$0	$1,592,084.00	5.51 %	$3,184,167.00	-10.49 %
2024	$0	$1,639,846.00	3.51 %	$3,279,692.00	-14.49 %
2025	$0	$1,689,041.00	1.51 %	$3,378,083.00	-18.49 %
Total:	**$14,239,664**	**$14,840,102.00**		**$29,680,204.00**	

Deficiency Summary by System

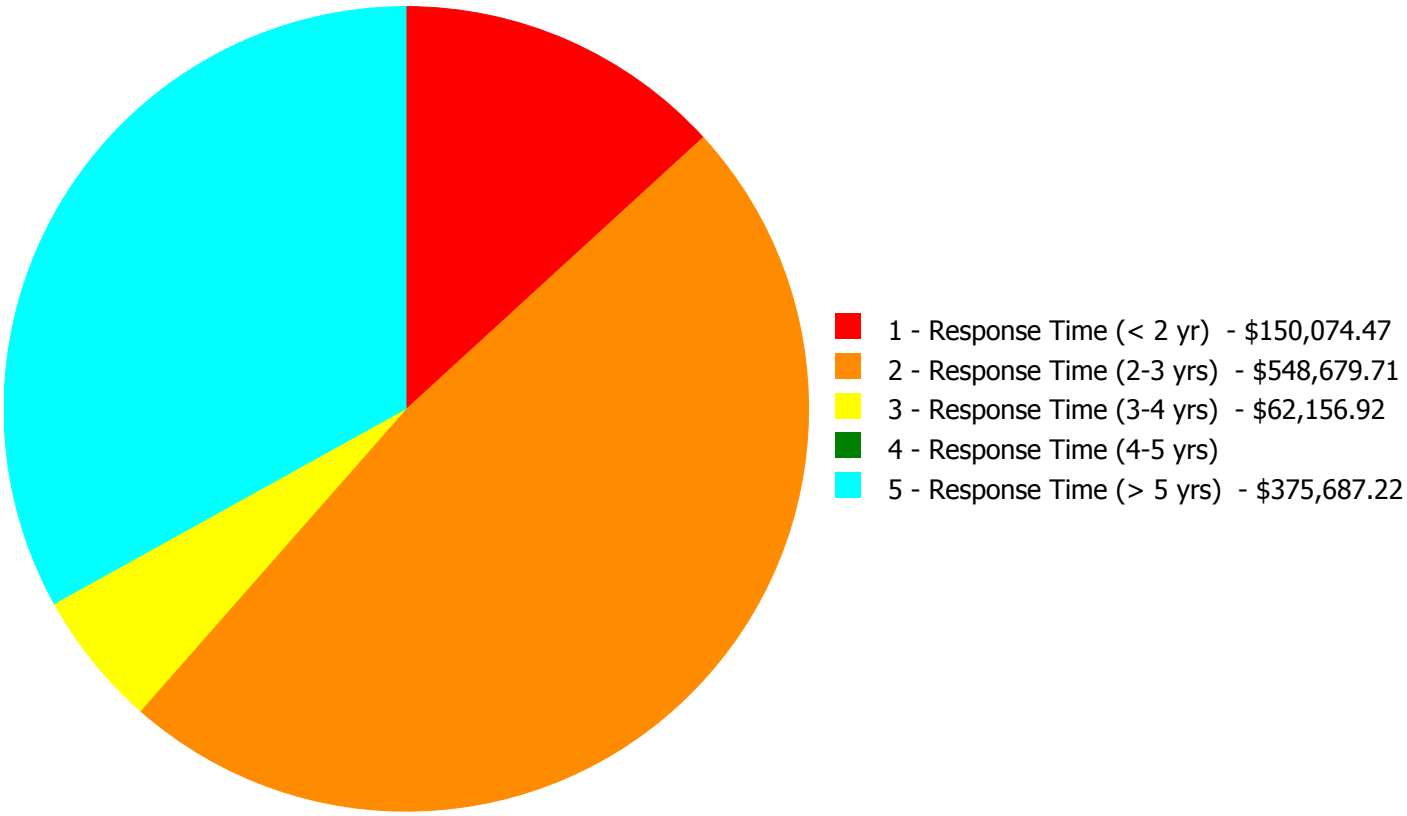
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $1,136,598.32

Deficiency Summary by Priority

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



Budget Estimate Total: $1,136,598.32

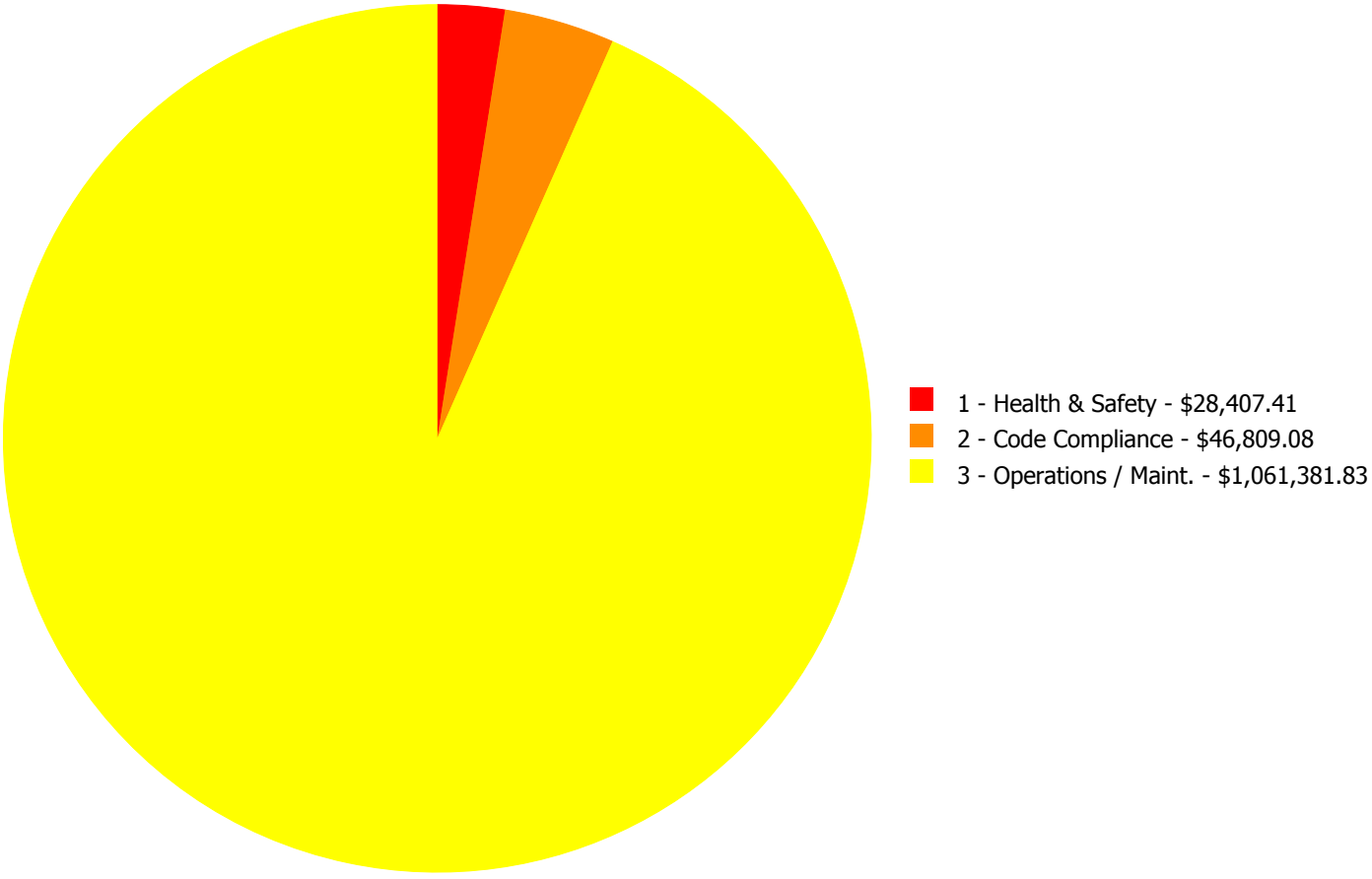
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
B2010	Exterior Walls	$23,803.07	$1,518.22	$6,019.80	$0.00	$0.00	$31,341.09
B2020	Exterior Windows	$0.00	$544,408.25	$0.00	$0.00	$0.00	$544,408.25
B3010105	Built-Up	$80,558.96	$0.00	$0.00	$0.00	$0.00	$80,558.96
C1020	Interior Doors	$0.00	$2,753.24	$0.00	$0.00	$0.00	$2,753.24
C2010	Stair Construction	$15,436.23	$0.00	$46,809.08	$0.00	$0.00	$62,245.31
C3020415	Concrete Floor Finishes	$0.00	$0.00	$9,328.04	$0.00	$0.00	$9,328.04
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$0.00	$375,687.22	$375,687.22
D5020	Lighting and Branch Wiring	$4,622.04	$0.00	$0.00	$0.00	$0.00	$4,622.04
D5090	Other Electrical Systems	$25,654.17	$0.00	$0.00	$0.00	$0.00	$25,654.17
	Total:	$150,074.47	$548,679.71	$62,156.92	$0.00	$375,687.22	$1,136,598.32

Deficiency Summary by Category

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



Budget Estimate Total: $1,136,598.32

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: B2010 - Exterior Walls

Location: walls

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and replacing failing steel lintels in brick wall construction

Qty: 50.00

Unit of Measure: L.F.

Estimate: $20,793.17

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repair vertical crack in brick masonry at corner of Element 2 building and around uninvent louvers in at least 2 locations

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System: B2010 - Exterior Walls

Location: walls - old building

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Re-caulk exterior control joints and other caulk joints

Qty: 150.00

Unit of Measure: L.F.

Estimate: $3,009.90

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Recaulk top of limestone panels at window heads in Element 1 and Element 2

System: B3010105 - Built-Up

Location: roof

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Blister or membrane repair - partial areas

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $44,233.53

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repair existing flat roof areas where water is ponding – Element 1 and Element 2 roofs

System: B3010105 - Built-Up

Location: roof

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Repair or replace flashing where it connects to masonry parapet - choose proper material

Qty: 500.00

Unit of Measure: L.F.

Estimate: $20,410.71

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Recaulk top of reglet set into brick penthouses – Element 3 and Element 2

System: B3010105 - Built-Up

Location: roof

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Blister or membrane repair - partial areas

Qty: 500.00

Unit of Measure: S.F.

Estimate: $8,423.29

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Improve drainage to roof drains in Element 3 and Element 2 - roof drains are not draining properly causing water to go thru overflows and show on building exterior wall

System: B3010105 - Built-Up

Location: roof over entrance

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and Replace Built Up Roof

Qty: 400.00

Unit of Measure: S.F.

Estimate: $7,491.43

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repair roof over new building entrance – provide better drainage - Element 3

System: C2010 - Stair Construction

Location: exterior stairs
Distress: Failing
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Repair exterior stairs
Qty: 8.00
Unit of Measure: Riser
Estimate: $15,436.23
Assessor Name: Steven Litman
Date Created: 08/07/2015

Notes: Repair cast in place treads/risers at exterior stairs – Element 1

System: D5020 - Lighting and Branch Wiring

Location: walls
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace Wiring Device
Qty: 30.00
Unit of Measure: Ea.
Estimate: $4,622.04
Assessor Name: Steven Litman
Date Created: 07/30/2015

Notes: Replace non-grounding type receptacles with grounding type receptacles

System: D5090 - Other Electrical Systems

Location: roof / chimney

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Repair Lightning Protection System

Qty: 1.00

Unit of Measure: Job

Estimate: $25,654.17

Assessor Name: Steven Litman

Date Created: 08/05/2015

Notes: Perform lightning protection studies to ascertain that the mechanical equipment on the roof is protected against lightning strikes.

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

System: B2010 - Exterior Walls

Location: roof - penthouse enclosure

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Prepare and paint exterior steel beams or steel surfaces

Qty: 200.00

Unit of Measure: S.F.

Estimate: $1,518.22

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repaint steel supporting the rooftop mechanical area enclosure – Element 3

System: B2020 - Exterior Windows

Location: windows - old building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace aluminum windows - pick the appropriate size and style and insert the number of units

Qty: 100.00

Unit of Measure: Ea.

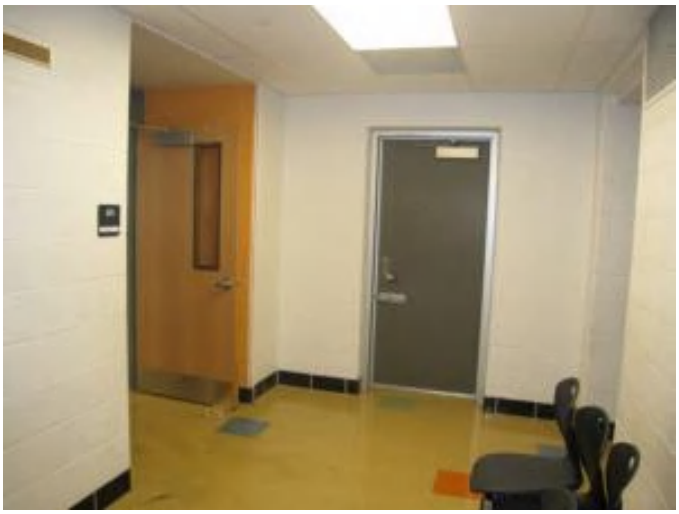
Estimate: $544,408.25

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Replace all exterior windows in Element 1 with insulated single hung units

System: C1020 - Interior Doors



Location:	classrooms and offices - old building
Distress:	Security Issue
Category:	1 - Health & Safety
Priority:	2 - Response Time (2-3 yrs)
Correction:	Provide security hardware for classroom and office doors
Qty:	12.00
Unit of Measure:	Ea.
Estimate:	$2,753.24
Assessor Name:	Steven Litman
Date Created:	08/07/2015

Notes: Provide security hardware for classrooms and offices, locking from inside classroom – Element 1 building.

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

System: B2010 - Exterior Walls

Location: interior wall / floor joint

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Re-caulk exterior control joints and other caulk joints

Qty: 300.00

Unit of Measure: L.F.

Estimate: $6,019.80

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Re-apply sealant to cover gap in Element 1 between floor slab and exterior wall

System: C2010 - Stair Construction

Location: stairways - old building

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 100.00

Unit of Measure: L.F.

Estimate: $46,809.08

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Remove and replace stairway handrails and guards with code compliant systems – Element 1 (2) 2 story; wall mounted handrails and center mounted railings and balustrade

System: C3020415 - Concrete Floor Finishes

Location: stairs and toilet rooms - old building

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Clean and reseal concrete floors

Qty: 3,200.00

Unit of Measure: S.F.

Estimate: $9,328.04

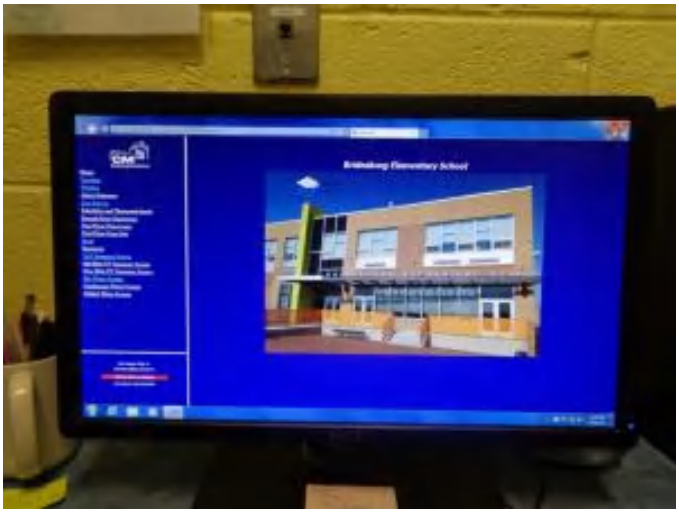
Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Strip, clean and reseal concrete floors in Element 1 toilet rooms and stairways

Priority 5 - Response Time (> 5 yrs):

System: D3060 - Controls & Instrumentation



Location: entire building

Distress: Maintenance Required

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Recommission DDC Building Management System

Qty: 126,440.00

Unit of Measure: S.F.

Estimate: $375,687.22

Assessor Name: Steven Litman

Date Created: 08/21/2015

Notes: Inspect, repair, and recommission the DDC Building Management System. Include training for building engineer. Calibrate and/or replace CO2 sensors.

Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D1010 Elevators and Lifts	Hydraulic passenger elevators, base unit, standard finish, 1500 lb, 100 fpm, 2 stop	1.00	Ea.	In the building					35	1958	2028	$61,999.00	$68,198.90
D2020 Domestic Water Distribution	Pump, pressure booster system, 3 HP pump, includes diaphragm tank, control and pressure switch	3.00	Ea.	DBP-1	Alyan Pump				25	2011	2036	$9,861.00	$32,541.30
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	1.00	Ea.	boiler room	Buderus	GE615/13			35	2011	2046	$75,956.00	$83,551.60
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	1.00	Ea.	boiler room	Buderus	GE615/13			35	2011	2046	$75,956.00	$83,551.60
D3030 Cooling Generating Systems	Chiller, centrifugal, water cooled, packaged hermetic, standard controls, 400 ton	1.00	Ea.	chiller room	York	YKC5CQQ4-CJGS			30	2011	2041	$218,800.20	$240,680.22
D3030 Cooling Generating Systems	Cooling tower, galvanized steel, packaged unit, draw thru, 300 ton	1.00	Ea.	mechanical yard	Baltimore Aircoil Company	PT2-0812A-3L1	U112018902-01		30	2011	2041	$75,868.80	$83,455.68
D3040 Distribution Systems	Heat recovery package, air to air, enthalpy recovery wheel, 20,000 max CFM	2.00	Ea.	HRU-2	Annex Air	ERP-E-16-EW-D-T8	1891-01-0512		25	2012	2037	$31,099.20	$68,418.24
D3040 Distribution Systems	Heat recovery package, air to air, enthalpy recovery wheel, 20,000 max CFM	2.00	Ea.	HRU-1	Annex Air	ERP-E-16-EW-D-T8	1891-01-0512		25	2012	2037	$31,099.20	$68,418.24
D3040 Distribution Systems	Pump, general utility, centrifugal, end suction, horizontal base mounted, horizontal split case, rated @ 100' head, single stage, 500 GPM, 20 H.P., 4" discharge, includes drip proof motor	2.00	Ea.	CHWP-2	Paco				25	2011	2036	$13,566.00	$29,845.20
D3040 Distribution Systems	Pump, general utility, centrifugal, end suction, horizontal base mounted, horizontal split case, rated @ 100' head, single stage, 500 GPM, 20 H.P., 4" discharge, includes drip proof motor	2.00	Ea.	CHWP-1	Paco				25	2011	2036	$13,566.00	$29,845.20
D3040 Distribution Systems	Pump, general utility, centrifugal, end suction, horizontal base mounted, horizontal split case, rated @ 100' head, single stage, 750 GPM, 25 H.P., 5" discharge, includes drip proof motor	2.00	Ea.	DTWP-2	Paco				25	2011	2036	$14,136.00	$31,099.20
D3040 Distribution Systems	Pump, general utility, centrifugal, end suction, horizontal base mounted, horizontal split case, rated @ 100' head, single stage, 750 GPM, 25 H.P., 5" discharge, includes drip proof motor	2.00	Ea.	CWP-2	Paco				25	2011	2036	$14,136.00	$31,099.20
D3040 Distribution Systems	Pump, general utility, centrifugal, end suction, horizontal base mounted, horizontal split case, rated @ 100' head, single stage, 750 GPM, 25 H.P., 5" discharge, includes drip proof motor	2.00	Ea.	CWP-1	Paco				25	2011	2036	$14,136.00	$31,099.20
D3040 Distribution Systems	Pump, general utility, centrifugal, end suction, horizontal base mounted, horizontal split case, rated @ 100' head, single stage, 750 GPM, 25 H.P., 5" discharge, includes drip proof motor	2.00	Ea.	DTWP-1	Paco				25	2011	2036	$14,136.00	$31,099.20

D4010 Sprinklers	Fire pumps, electric, 1000 GPM, 150 psi, 142 HP, 3550 RPM, 5" pump, including controller, fittings and relief valve	1.00	Ea.	Pump room					35	2011	2046	$38,724.70	$42,597.17
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.	Main Electrical room located at the basement of the building					30	1958	1988	$42,849.00	$47,133.90
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 277/480 V, 800 A	1.00	Ea.	Main electrical room					20	1958	2040	$31,205.25	$34,325.78
D5010 Electrical Service/Distribution	Transformer, liquid-filled, 5 kV or 15 kV primary, 277/480 V secondary, 3 phase, 1000 kVA, pad mounted	1.00	Ea.	main electrical room					30	1958	2025	$50,425.20	$55,467.72
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.	Outside the building					30	2012	2042	$50,797.80	$55,877.58
												Total:	**$1,148,305.13**

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):	22,700
Year Built:	1958
Last Renovation:	2012
Replacement Value:	$926,861
Repair Cost:	$51,692.10
Total FCI:	5.58 %
Total RSLI:	60.96 %

Description:

Attributes:

General Attributes:

Bldg ID:	S747001	Site ID:	S747001

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	57.50 %	6.24 %	$51,692.10
G40 - Site Electrical Utilities	90.00 %	0.00 %	$0.00
Totals:	**60.96 %**	**5.58 %**	**$51,692.10**

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.	25,000	30	2012	2042		90.00 %	0.00 %	27			$288,000
G2020	Parking Lots	$7.65	S.F.	25,000	30	1970	2000	2027	40.00 %	23.62 %	12		$45,166.09	$191,250
G2030	Pedestrian Paving	$11.52	S.F.	21,200	40	1958	1998	2023	20.00 %	0.00 %	8			$244,224
G2040	Site Development	$4.36	S.F.	22,700	25	2012	2037		88.00 %	6.59 %	22		$6,526.01	$98,972
G2050	Landscaping & Irrigation	$3.78	S.F.	1,500	15	2012	2027		80.00 %	0.00 %	12			$5,670
G4020	Site Lighting	$3.58	S.F.	22,700	30	2012	2042		90.00 %	0.00 %	27			$81,266
G4030	Site Communications & Security	$0.77	S.F.	22,700	30	2012	2042		90.00 %	0.00 %	27			$17,479
								Total	**60.96 %**	**5.58 %**			**$51,692.10**	**$926,861**

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.

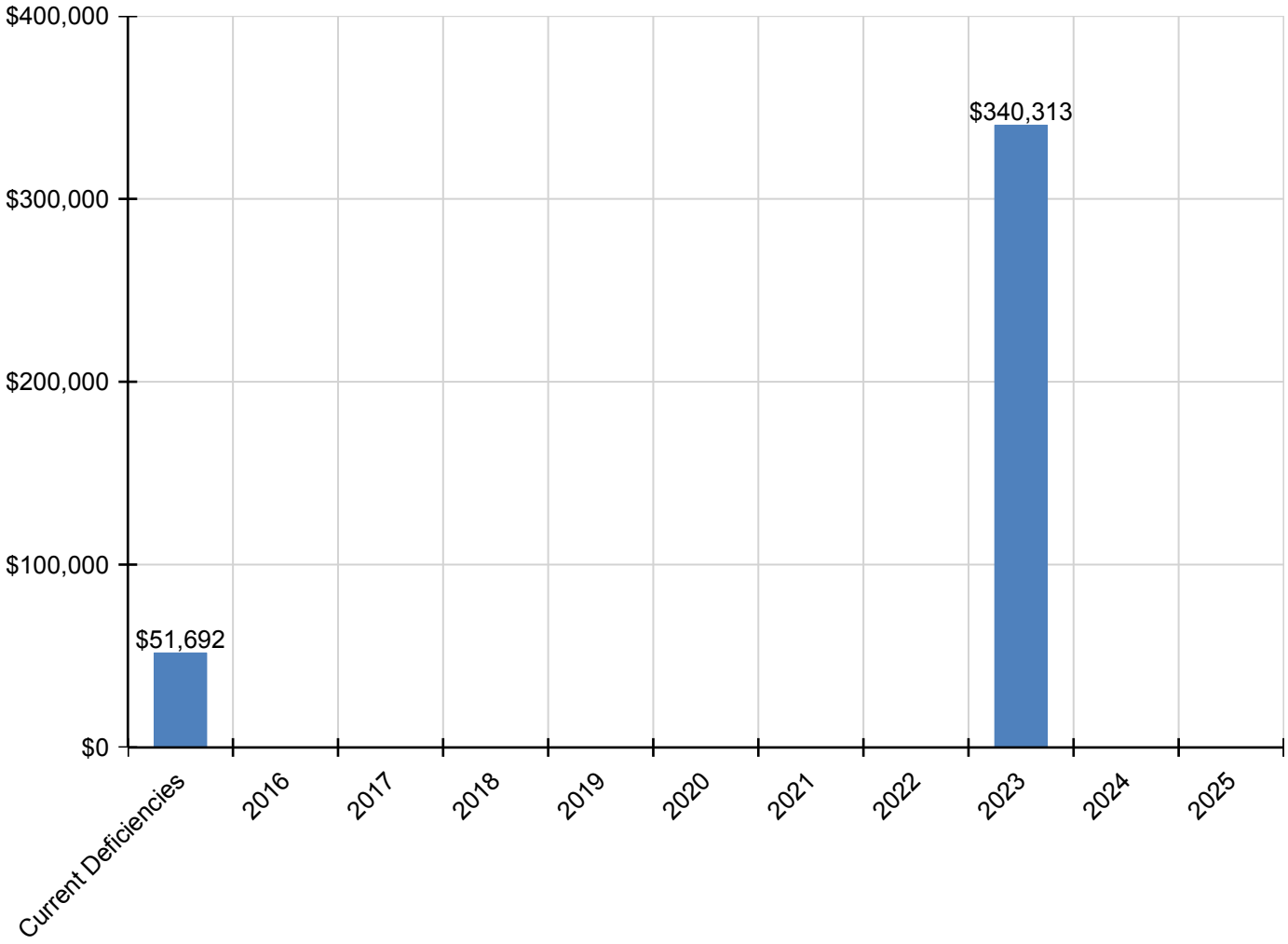
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$51,692**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$340,313**	**$0**	**$0**	**$392,005**
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	$45,166	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$45,166**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$340,313	$0	$0	**$340,313**
G2040 - Site Development	$6,526	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,526**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

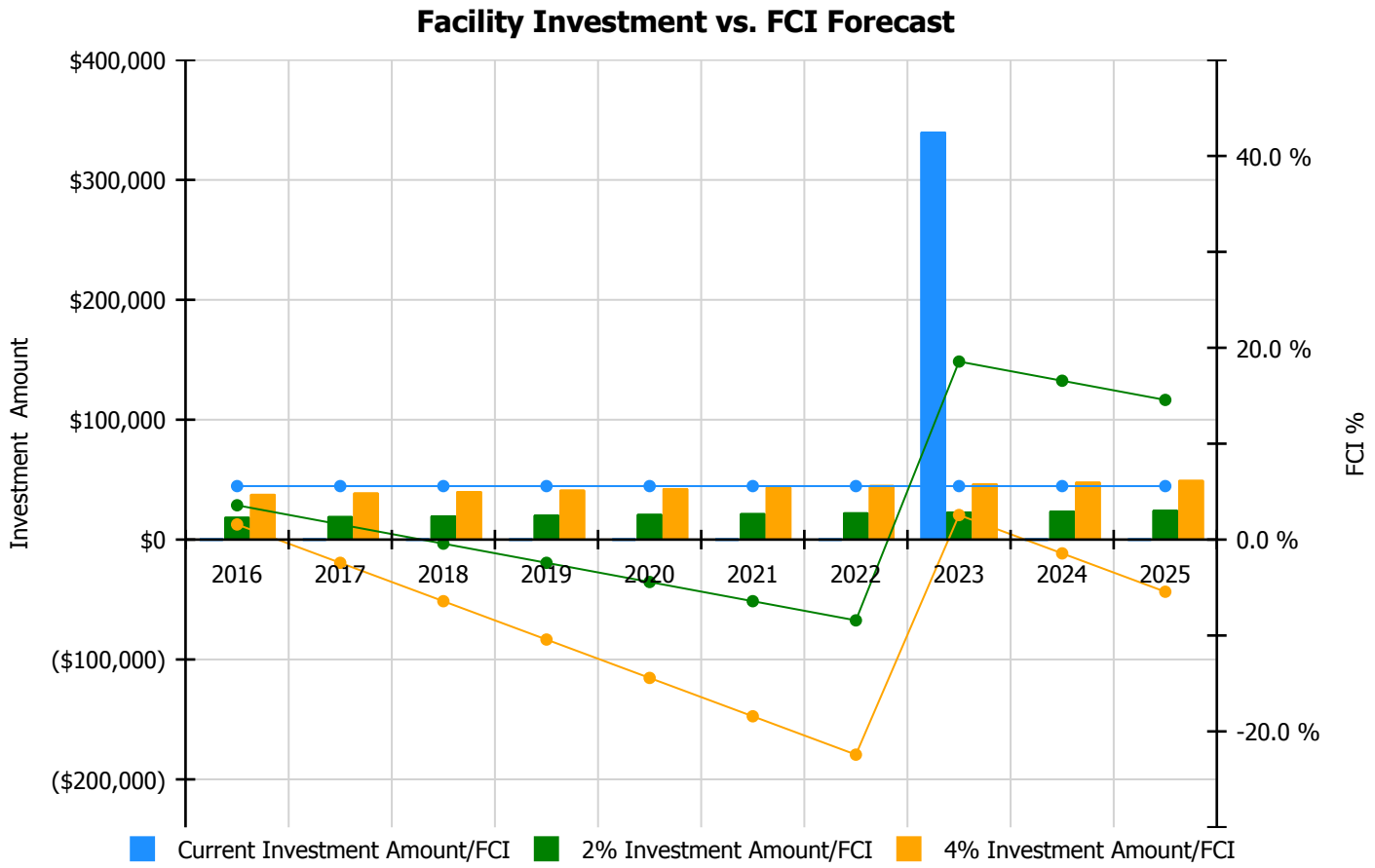
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

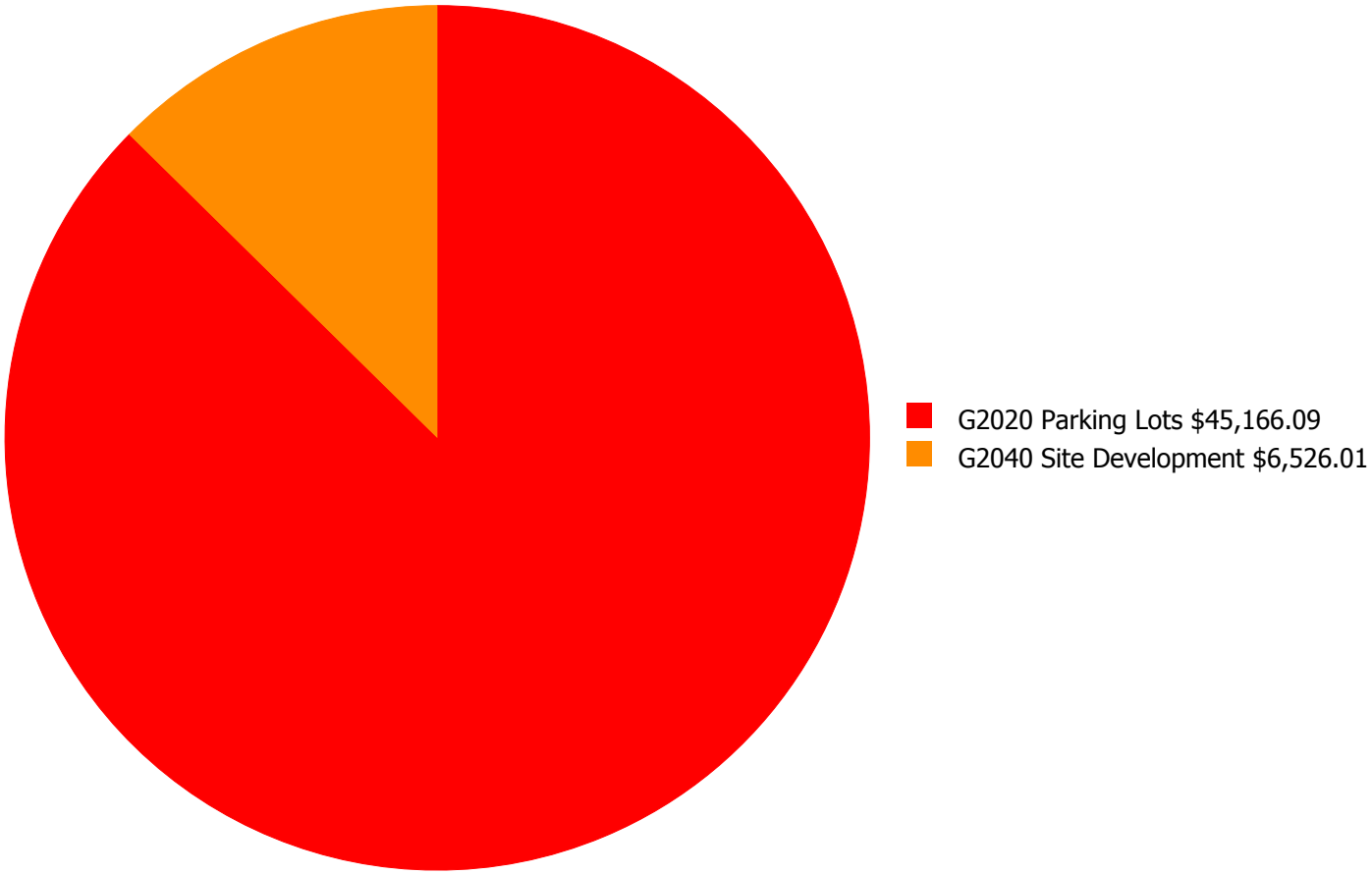
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 5.58%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$19,093.00	3.58 %	$38,187.00	1.58 %
2017	$0	$19,666.00	1.58 %	$39,332.00	-2.42 %
2018	$0	$20,256.00	-0.42 %	$40,512.00	-6.42 %
2019	$0	$20,864.00	-2.42 %	$41,728.00	-10.42 %
2020	$0	$21,490.00	-4.42 %	$42,979.00	-14.42 %
2021	$0	$22,134.00	-6.42 %	$44,269.00	-18.42 %
2022	$0	$22,798.00	-8.42 %	$45,597.00	-22.42 %
2023	$340,313	$23,482.00	18.56 %	$46,965.00	2.56 %
2024	$0	$24,187.00	16.56 %	$48,374.00	-1.44 %
2025	$0	$24,912.00	14.56 %	$49,825.00	-5.44 %
Total:	**$340,313**	**$218,882.00**		**$437,768.00**	

Deficiency Summary by System

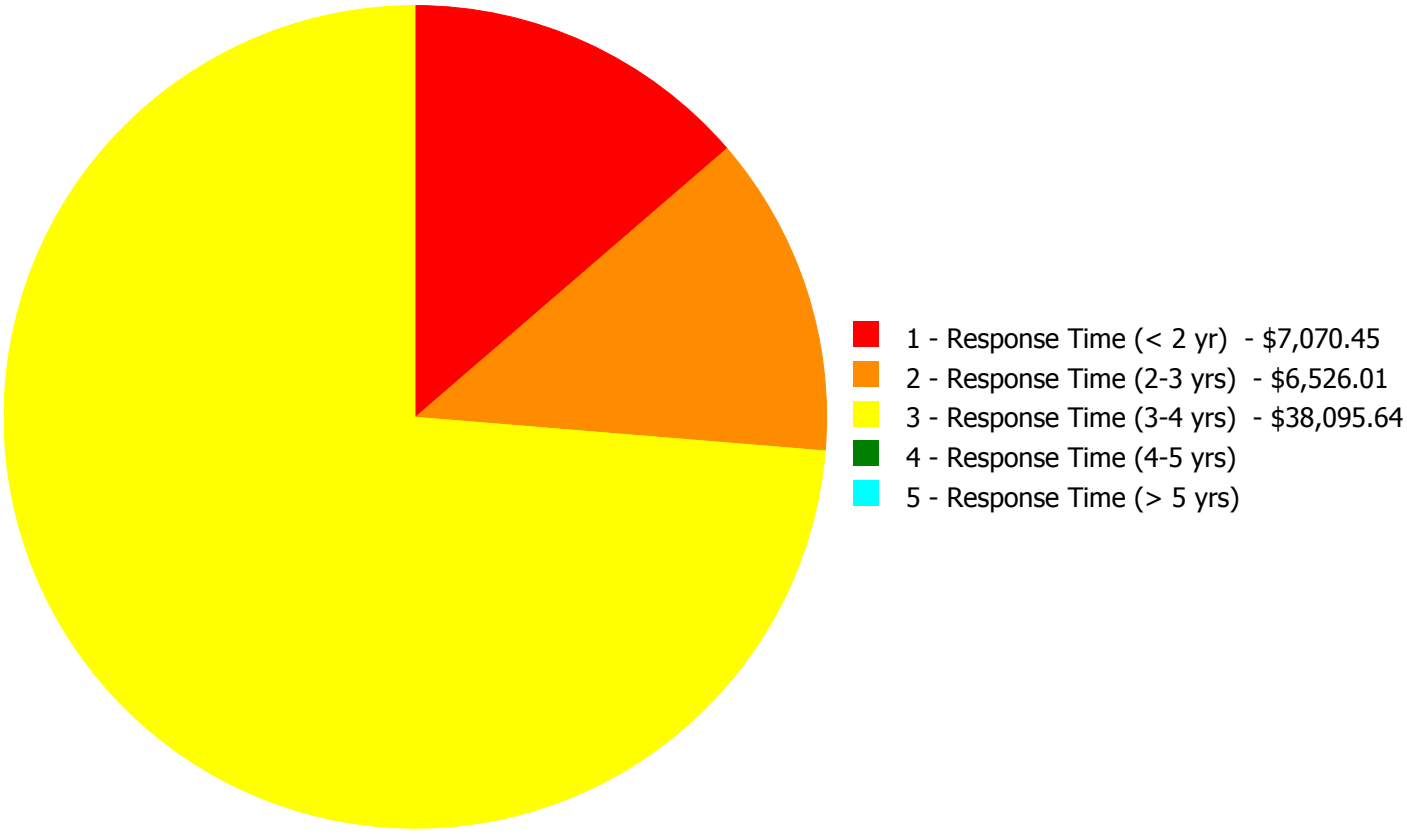
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $51,692.10

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: $51,692.10

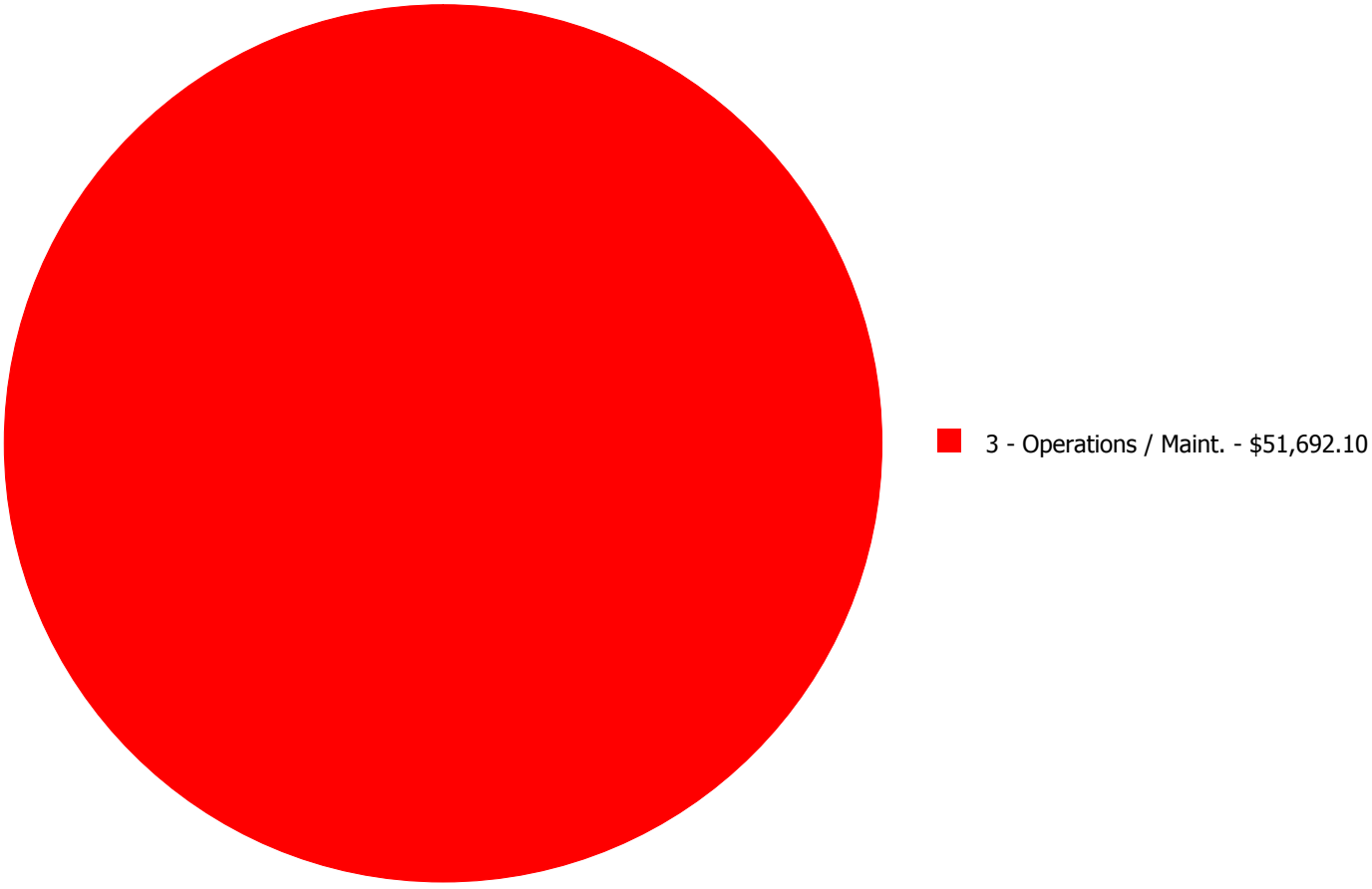
Deficiency By Priority Investment Table

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
G2020	Parking Lots	$7,070.45	$0.00	$38,095.64	$0.00	$0.00	$45,166.09
G2040	Site Development	$0.00	$6,526.01	$0.00	$0.00	$0.00	$6,526.01
	Total:	$7,070.45	$6,526.01	$38,095.64	$0.00	$0.00	$51,692.10

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: $51,692.10

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: G2020 - Parking Lots

Location: G747001;Grounds

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and replace AC paving parking lot

Qty: 500.00

Unit of Measure: S.F.

Estimate: $7,070.45

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repair sunken asphalt area outside chiller room

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

System: G2040 - Site Development

Location: G747001;Grounds

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Paint steel picket fence - LF of fence 6' high

Qty: 100.00

Unit of Measure: L.F.

Estimate: $6,526.01

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repaint rusted sections of steel post site fence

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

System: G2020 - Parking Lots

Location: G747001;Grounds

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Resurface parking lot - grind and resurface including striping

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $38,095.64

Assessor Name: Steven Litman

Date Created: 08/07/2015

Notes: Repave and restripe cracked section of asphalt parking area (

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