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.

South Philadelphia High School

Governance	DISTRICT	Report Type	High
Address	2101 S. Broad St.	Enrollment	591
	Philadelphia, Pa 19148	Grade Range	'09-12'
Phone/Fax	215-400-8400 / 215-400-8401	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Southphila	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	**40.37%**	**$71,968,368**	**$178,265,659**
Building	40.40 %	$71,287,936	$176,436,912
Grounds	37.21 %	$680,432	$1,828,747

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	91.29 %	$3,638,250	$3,985,479
Exterior Walls (Shows condition of the structural condition of the exterior facade)	04.90 %	$701,222	$14,318,208
Windows (Shows functionality of exterior windows)	90.51 %	$8,255,173	$9,121,229
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$384,470
Interior Doors (Classroom doors)	191.74 %	$2,389,520	$1,246,214
Interior Walls (Paint and Finishes)	30.27 %	$2,370,857	$7,831,927
Plumbing Fixtures	10.76 %	$482,032	$4,481,069
Boilers	00.00 %	$0	$6,187,985
Chillers/Cooling Towers	51.53 %	$4,180,576	$8,113,651
Radiators/Unit Ventilators/HVAC	103.71 %	$14,777,875	$14,248,606
Heating/Cooling Controls	136.47 %	$6,106,268	$4,474,440
Electrical Service and Distribution	126.51 %	$4,067,226	$3,214,968
Lighting	28.96 %	$3,328,938	$11,494,339
Communications and Security (Cameras, Pa System and Fire Alarm)	23.24 %	$1,000,747	$4,305,406

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

S200001;South Philadelphia

Final

Site Assessment Report

January 30, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	331,440
Year Built:	1957
Last Renovation:	2001
Replacement Value:	$178,265,659
Repair Cost:	$71,968,367.99
Total FCI:	40.37 %
Total RSLI:	76.10 %

Description:

Facility Assessment
September 15th, 2015

School District of Philadelphia
South Philadelphia High School
2101 S Broad Street
Philadelphia, PA 19148

331,400 SF / 2,498 Students / LN 01

GENERAL

The South Philadelphia High School building is located at 2101 Broad Street in Philadelphia, PA. The listed capacity of the school is 2,498 students. The current enrollment is approximately 800 students plus Head Start and day care programs. The principal foresees growing enrollment to approximately 1,200 students and increasing community uses of the building. The 5 story, 331,440 GSF building was originally constructed in 1957. It appears that connecting corridors with classrooms on the west side of the building at levels 4 & 5 are an addition of similar vintage to the

original construction. The building has a basement.

Mr. Rich Touhy, Facility Area Coordinator and Mr. Otis Hackney III, the School Principal, provided input to the Parsons assessment team on current problems and planned renovation/addition projects. Mr. John Kenney, the Building Engineer, accompanied the team on its tour of the school and provided information on building systems and maintenance history. Mr. Kenney has been in the school for 5 years.

ARCHTECTURAL/STRUCTURAL SYSTEMS

The building rests on concrete foundations and bearing walls that are not showing signs of settlement or damage. The basement floor is slab on grade. The main structure consists of cast-in-place concrete columns and beams with flat slabs. The roof structure consists of concrete slab supported by the main structural frame. The roof structure over the gym and auditorium is concrete roof panels supported by steel trusses. A waterproofed concrete entry plaza forms the roof over the basement cafeteria, kitchen and adjacent classroom spaces. The waterproofing membrane type is not visible as it is sandwiched between the structural slab and a wear slab. The joint between the plaza slab and adjacent building walls has leaked in the recent past. The joint was previously covered by a steel angle, which offered some protection to whatever waterproofing/flashing treatment existed, but did not allow for ready access to inspect or make repairs. The apparent repair is a large caulked joint. Damage to concrete beams including some spalling of concrete and rusty rebar, and damaged soffits are visible in the cafeteria ceiling. This area is slated for immediate repairs.

The building envelope is concrete unit masonry with face brick at north, south, and east elevations. The west elevation has stone panels between bands of windows. The gym entry features polished black granite panels that have some surface damage. Large painted murals enhance the gym module on the west elevation facing Broad Street, and on the south elevation facing the entry plaza. In general, masonry is in fair condition with evidence of some repairs/maintenance. The lower portions of the building, as well as depressed areaways are painted, presumably to cover graffiti. There is some distress in the brick mortar joints, likely at relief angle locations. On the north elevation, north exterior wall of the gym, there appears to be some displacement, possibly rotation of the parapet wall above a relief angle. The roof side of this condition is concealed beneath exterior wall panels above the roof line and below wall cap flashing. Original windows have been replaced at an unknown date, presumably mid ‘80s. Window assemblies incorporate insulated translucent sandwich panels over hopper style operable windows with acrylic dual panes in bronze aluminum frames. Acrylic glazing at south elevations is cloudy due to sun damage. A small amount of glass block is used in the cafeteria. Windows are generally in fair condition. Where translucent panels have been cut to receive window air conditioning units, the insulated panels are often damaged. Insect screens are not installed. Security grilles are installed at windows below grade, at the first floor, on the south elevation, and at selected upper level locations. Approximately 1/3 of the exterior windows have security grilles. High operable windows at the gym are difficult to access. Exterior doors are typically hollow metal with glazing, in hollow metal frames, in functional condition. Most exterior doors appear to have been painted multiple times. Surface mounted security locks need to be unlocked daily to provide emergency egress. An exterior coiling overhead door is provided at the boiler room. There are two large overhead coiling doors to the wood shop classroom. The main roof over the 5-story portion of the building is roughly in a lowercase “b” shape when viewed from north to south. Segments of the building are separated by expansion joints. The auditorium roof at approximately the third floor level is in the center of the “b”. The gym roof at approximately the third floor level is a N/S rectangle west of the stem of the “b”, and two lower other roofs occur to the east of the stem. Three elevator penthouses are located on the long axis at the fifth floor. A small roof occurs over the dock area. All roofs have the same roof covering system and appear to be of similar age. The roof coverings are built-up systems with tan granular cap sheets. In some areas the cap sheet is “wrinkled” and prone to cracking. Granules are loose and accumulate in corners. Some ponding was present at the time of assessment, and there is evidence of ongoing ponding, particularly in shaded areas. Some roof repairs are evident. Leaking occurs most often at roof to wall conditions along expansion joints. Roof access is via interior stairs to door openings at the roof level at the upper main roof. Lower roofs are accessed via window openings and/or fixed ladders. The gym roof has a roof hatch. The building is somewhat accessible per ADA requirements. An exterior ramp is located a considerable distance from the main entrance. The main entrance does not have handi-cap door operators. The gym is not handi-cap accessible from the exterior of the building, nor are secondary entrances used by Head Start and the day care.

Partition walls are typically painted CMU in corridors and between classrooms. Glazed block is used in stairwells, student restrooms, locker rooms, cafeteria and kitchen. Steel framed window walls with wired glass occur at the main office and cafeteria entrances. Partitions in renovated areas such as the culinary arts suite and health sciences area are gypboard on metal studs. Moveable partitions are installed in the main gym and in the weight room. A folding vinyl accordion type partition is installed in the culinary arts area. Interior classroom and office doors are generally flush wood veneer solid core with wire glass lites in hollow metal frames. Doors are in worn condition with some broken glass. Lever latches are not installed. Security locks at classroom doors are not installed. Where extra security is required, for example at IT rooms, computer classrooms, etc., supplementary swinging grills are installed at door openings. Doors leading to exit stairways are hollow metal doors and frames in functional condition; sidelites at these doors are fitted with vandal resistant screen material.

Fittings include: lockers along the corridor walls, in poor condition with rust, occasional missing doors and some broken or missing hardware; locker room lockers are missing; locker room benches, where present, are in poor condition; toilet accessories are in fair to poor condition; toilet partitions vary and include backed enamel, plastic, and marble varieties generally in poor condition; handrails and ornamental metals, are generally in fair condition but are not in compliance with modern building codes; interior identifying signage is typically directly painted on wall or door surfaces and are inadequate.

Stair construction is generally concrete filled metal pans with metal non-slip nosings in fair condition. Handrails are typically stainless steel not in compliance with modern codes. Handrails are well anchored with no problems noted. Handrails are missing at the steps to the wood shop area.

The interior wall finishes are generally painted block. Corridors are relatively recently painted and in fair condition. Classroom painted finishes are in poor condition, generally worse at exterior walls with peeling paint noted in many areas. Marble paneling is used in the main entrance and is in good condition. Wood wainscot is on side walls of the auditorium with paneling at the rear, in fair condition. Ceramic tile is used at staff restrooms, drinking fountain recesses, and miscellaneous areas in fair to poor condition. Paint is in generally fair condition with some deterioration in stairways, auditorium and water damaged areas. Flooring in classrooms, corridors, offices, the auditorium, and at floor landings in stairwells is typically 9" VAT in worn condition. A few classrooms, the culinary arts suite, and cafeteria have 12" VCT. In some cases it appears that 12" VCT was installed over plywood or some other underlayment, possibly to encapsulate VAT – however these floors are not wearing well with many cracked and broken tiles. Hardwood floors are installed in the gym, the weight room and the stage. The weight room and stage floors appear to be original and are in well maintained but worn condition. The gym floor appears to have been replaced and is in good condition with no staining, warping or cracking noted. Ceramic or quarry tile is used in the main kitchen, the culinary arts kitchen, and a few renovated restrooms. Terrazzo flooring is used in corridors at elevator entrances. Carpet is installed in a limited number of classrooms on the 2nd floor including some areas in the Head Start rooms, and in the alumni room. The locker rooms, portions of the kitchen, janitor closets, mechanical rooms, stairs and intermediate landings are concrete. Floor base is typically glazed block as the first course of interior partitions. Floor access panels on the 4th floor are potential tripping hazards, though on-site representatives did not report problems with them.

Classroom ceilings are typically painted concrete. There is some peeling paint, stains – particularly along expansion joints, and some areas of patching with mis-matched gloss. Some classrooms, including the large music classrooms have 12" glued on acoustical tile. Corridor ceilings are typically 12" glued on acoustical tile in fair condition. There are some stained, broken or missing tiles, and occasional loose or missing perimeter trim. There is some 2x4 suspended acoustical panels in the 4th and 5th floor addition area in poor condition with mis-matched broken or sagging tiles and discolored grid. 2 x 4 ceiling is also used in the culinary suite with some water stained tiles under leaking expansion joint. The auditorium has a plaster ceiling in fair to good condition. The cafeteria has spray textured ceilings. The gym ceiling has Tectum or Homosote type acoustical panels with an open metal mesh covering for protection and to prevent falling chunks. Service areas have exposed structure.

The building has three very large 14,500# capacity passenger elevators. The elevators were undergoing modernization at the time of assessment.

Institutional and Commercial equipment includes: stage light bar; auditorium sound system; stage draperies, generally beyond their expected service life; Smartboards/Promethean boards in approximately 50% of the classrooms; TV monitors hanging in many classrooms are abandoned in place; scientific casework in poor condition; basketball backstops. Other equipment includes kitchen equipment at both the culinary arts suite and the cafeteria kitchen, generally in fair to good condition.

Furnishings include: fixed wood casework with plastic laminate counters in classrooms, generally original and in fair to poor condition; metal framed glass display cases in corridors generally in fair to good condition; window shades, generally in fair to poor condition, shades are missing at some classrooms; fixed auditorium seating is original, generally in poor to fair condition with some damaged seats; fixed seating/tables in the cafeteria; and gym bleachers in fair to poor condition.

MECHANICAL SYSTEMS

Building plumbing fixtures are a mixture of original 1950's vintage and more modern replacements including some contemporary low flow fixtures. Toilet fixtures on each floor consist of porcelain wall hung water closets and urinals. Lavatories are porcelain or enamel on cast iron. Individual lavatories have mixing faucets, while gang bathrooms have separate taps for hot and cold. Water closets and urinals have exposed flush valves. Most fixtures are in fair condition, although a few cast iron lavatories are rust stained. The district should budget to replace 10% of lavatories. The remainder of toilet room plumbing fixtures are in fair condition and will last 10 more years with routine maintenance.

The building has two commercial kitchens: one for culinary arts vocational education and Sunrise program use at the north end of the third floor and the other for the school cafeteria in the basement. They are equipped similarly with stainless steel, commercial grade, floor standing sinks for cooking and dishwashing. They have grease traps and chemical injection systems. Fuel burning appliances have fume hoods with fire suppression systems. There are also several domestic kitchens for life skills and family and consumer science classrooms, etc. Some appear original to the building while others were installed in the past decade. They include rim mounted sinks installed in cabinet bases. Domestic installations also include clothes washing machine hot and cold water supply connections and drains. Supply lines have level operated dual shutoff valves. Kitchen and laundry plumbing systems are in good condition and can be expected to last 10 more years.

Science classrooms are located on the third floor and have multiple laboratory sinks. New sinks including faucets and drains were added recently and their plastic drain pipes are visible in the second floor classrooms below. New drain pipes connect to existing cast iron drains with banded couplings. Some of the faucets are loose or missing handles and should be repairable with regular maintenance. Lab sinks have 5 years life remaining minimum. There is no safety shower in the science classroom area. The school nurse office has an eye wash installed with a lavatory.

Service sinks in janitor closets on all floors as well as a few other areas are floor level cast iron with stainless steel rims. They have short neck mixing faucets with vacuum breakers. They are mostly original and are heavily stained. The building engineer stated they drain slowly. They are beyond their service life and should be replaced.

The original living arts apartment has its original bathtub. The faucet has been replaced with a service sink faucet including vacuum breaker. The tub is surprisingly in good condition and should last 15 to 20 more years.

There were multiple shower rooms throughout the school: student gym locker rooms, gym teacher toilet rooms, cleaning staff locker rooms. None of them appear to be in use currently. The student shower rooms have had most shower nozzles and valves removed. Boys' showers included approximately 50 nozzle; girls, 25. The showers should be renovated along with the locker rooms.

Drinking fountains throughout the building are a mixture of various types and vintages. They are not ADA compliant, generally beyond their expected lifespan, and some are out of order. Fountains should be replaced with refrigerated, accessible fountains. There are 2 unused, obsolete potable water chillers in the basement.

Water service enters the building along the north side of the boiler room from Snyder Ave. through a 4" line. There is a 4" backflow preventer with a 3" bypass with its own backflow preventer. They and the adjoining gate valves are in good condition. There is a water pressure booster system consisting of two 7.5 HP pumps and a hydro-pneumatic bladder storage tank installed in 2010. Domestic hot and cold water distribution piping is copper with soldered connections. Pipe is in fair condition and should last 5 to 10 more years. There is a single domestic water heater: Bradford White, 75 gallons, natural gas burning, installed 2013. The water heater is in good condition and has 8 years expected life remaining. It has 2 recirculation pumps. Hot water delivery times to upper floors is uneven, i.e. 5th floor toilet room lavatories get hot water in under 10 seconds, but 3rd floor science room sinks still run cold after 30 seconds.

The sanitary sewer piping is threaded galvanized steel pipe with hubless banded cast iron pipe for additions and repairs. The pipe is mostly original to the building. There is no history of system wide inspection and repair. The sanitary drain piping should be entirely inspected and repaired where needed based on age, material, and existing repairs. There is no sewage ejector.

Rain water drain pipes are also threaded galvanized steel and original to the building. The roof does not have overflow drains (but lacks parapet walls in many areas). Despite the age of the pipe there were no reports of leaks and no prior failures visible, and the rain water drain pipes should last 5 years or more before needing inspection. There is a ground water sump with two pumps in a pit below the boiler room floor.

The school classrooms are heated and ventilated by unit ventilators and radiators, while larger areas have multiple air handlers.

The building is heated by steam generated in 4 Smith model 4500A, 22 section, 5,994 MBH (179 HP) capacity, cast iron boilers with Industrial Combustion oil or natural gas fired burners. They were installed in 1998 and have 18 years lifespan remaining. There are 5 feedwater pumps with 1 HP motors and 4 individual feed lines. There are two condensate collection tanks with transfer pumps in the boiler room. The domestic water makeup line has a backflow preventer where it joins the steam system. There is a chemical injection package and two water softeners (but no salt supply). The building has 2 fuel oil storage tanks in the basement with 20,000 gallons capacity each. Two of the building's original boilers have been abandoned in place along with some of their feed water plumbing.

The building has no central cooling generating equipment. Some classrooms, offices, and computer equipment closets are cooled by 79 window units and 3 mini-split system air conditioners. The third floor commercial kitchen complex has 3 direct expansion air conditioners with ceiling mounted evaporators and condensers on the roof above. The entire building currently has approximately 170 tons of cooling capacity. Based upon building area, an 825 ton capacity system should be installed to provide air conditioning to the entire building.

Steam and condensate piping is steel with threaded connections. Pipe, valves, and fittings are in poor condition. Distribution piping is at the end of its service life and should be replaced. There is no history of steam trap maintenance and lots of steam returns in the condensate system, so steam traps should be surveyed and repaired as well.

Multiple small air handlers (5 or 7.5 H P fan motors) provide heat and ventilation for the gymnasium (4), locker rooms (2), auditorium (2), third floor kitchen (1), music room (1), and cafeteria (1). The cafeteria AHU is a replacement installed in 1994 (based upon dates on duct labels). The third floor kitchen AHU is a rooftop unit of unknown age. The remaining AHUs are original equipment. They all lack cooling coils and should be replaced when a chiller system is installed.

The building is primarily heated, cooled, and ventilated by unit vents in the classrooms. These are original equipment from 1957 and the 1960s in the addition. Based on age and lack of cooling coils, unit vents should be replaced. Room exhaust air goes through transfer ducts in the interior wall to the corridor and eventually to rooftop vents. Classroom secondary heating is provided by finned tube radiators built into book cases as part of unit vent cabinets. Toilet rooms and small offices have radiators only.

The pneumatic control system is obsolete. Rooms and hallways have pneumatic thermostats of multiple vintage and manufacture. The engineer stated the control system was mostly functional and he would like it repaired; however multiple areas have complete failures of the pneumatics, such as the rooftop exhaust dampers which have been jammed open. Air conditioning units in the vocational education and Sunrise program kitchen areas have electric (mercury switch) thermostats. Additionally, HVAC equipment replacements and upgrades would be more economical with modern controls. A new building automation system (BAS) with modern DDC modules and communications network should be installed to serve the HVAC systems to improve reliability, comfort, and energy efficiency. There are a single and a duplex air compressor with filter dryer. They are both operable. The two original control air pumps have been abandoned in place near the old boilers.

The school building has both wet and dry standpipes. There is a sprinkler system for the carpentry shop only. There is no fire pump for the sprinklers. A sprinkler system should be installed in the remainder of the building to improve life safety. A fire pump should be installed if fire mains have insufficient capacity.

ELECTRICAL SYSTEMS

A double ended substation, 1000KVA, 13.2KV-120/208V, Main-Tie-Main, located in the school basement serves this facility. Manufacturer nameplate of the circuit breaker sections do not exist, the transformer section is manufactured by Olsun Electrics Corporation. The double ended substation is original installation and has already exceeded its 40 years of useful service life and has no extra capacity for expansion or new Heating, Ventilation, Air Conditioning (HVAC) system. Two new substations are required to feed this facility, one 2500KVA, 13.2KV-277/480V substation for HVAC equipment and large motor loads and another 1500 KVA, 13.2KV-120/208V substation for receptacles, lighting and small motor loads.

There are panel-boards in each floor for lighting and receptacles. These panel-boards and associated wiring have exceeded the end of their useful life and are undersized to absorb additional loads. They need to be replaced. Panel-board's doors at corridors are not locked and represent a potential hazard for students. As a safety issue all panel-boards at corridor or in areas where students are present must be provided with lockable devices.

The number of receptacles in 80% of the classrooms are inadequate most of them do not work. Teachers use extension cords. The teacher's whiteboard wall and the opposite of it need to be provided with double compartment surface raceways, the other two walls with minimum two duplex outlets each, when feasible.

Most of the classrooms, offices are illuminated with fluorescent fixtures, with T-12 lamps. Corridors and stairways are illuminated with fluorescent fixtures with T-8 lamps. The auditorium is illuminated with most probably HID downlights. The Gymnasium is illuminated with twin HID fixtures.T-12 lamps are becoming more expensive, consume more energy and are difficult to find. Lighting fixtures with T-12 lamps must be replaced which represent, approximate 70% of the fluorescent fixtures in this facility.

The Fire Alarm system is manufactured by Edwards System Technology EST2 and was installed in 2000. The present Fire Alarm system does not provide audio/visual devices in classrooms. Provide a new fire alarm system

The present telephone system is adequate. During the assessment, randomly, we verified that each wall mounted handset is provided with dial tone.

An independent and separate PA system does not exist. School uses the telephone systems for public announcement. System is working adequately for most part.

The present clock control system is manufactured by Simplex Time Control Center. The system is old and difficult to find parts and repair. Replace clock system with wireless, synchronized, battery operated, clock system.

There is not television system.

The security system consists of CCTV cameras in corridors and stairways. There are approximate 5 CCTV cameras per corridor. CCTV cameras provide complete coverage of the interior of the school.

The emergency power system consists of a gas powered generator, manufactured by ONAN 45KW/56.3KVA, 120/208V. The present emergency power system serves the boiler room, corridors, exit signs, auditorium, and stairways. The gas powered generator is approximate 30 years old and has reached its useful service life. For future loads and emergency power requirements provide an outdoor mounted diesel powered 300KW generator.

There is adequate UPS in the IT room.

The emergency lighting is obtained with dedicated fixtures connected to the emergency generator. Exit signs are located at each exit door and corridors and are connected to the school emergency system. Exit signs are incandescent type. Replace exit signs with incandescent lamps with LED type.

The lightning protection is obtained with air terminals around the building perimeter providing total lightning protection coverage.

The school has three traction power elevator rated 75HP at 208V. They are in process of replacing the elevator motors, controllers and cables.

The stage theatrical lighting is composed of two rows of pendant mounted theatrical lighting that are ON/OFF from a local panelboard. Modern school auditorium requires front, upstage, high side, back theatrical lighting and to create different scenes, theatrical lighting fixtures are controlled by dimming system. Provide theatrical lighting controlled by a dimming system.

The stage sound system is provided by Bogen. The present sound system is approximately 20 years old and needs to be replaced.

GROUNDS SYSTEMS

Two asphalt surfaced parking lots takes up most of the site west of the building, with a large landscape buffer to Broad Street. The lots are separated by a wide concrete pedestrian path to the entry plaza. Parking lots have significant ponding. The pavement is in fair condition with some cracking and settlement. There are no parking bumpers. The lot perimeter is curbed. Parking lot striping is faded. There are not clearly designated handicap parking spaces. Service areas at the dock and west side of the building have concrete paving in worn but serviceable condition. There is not significant settlement or cracking.

Pedestrian paving is concrete in serviceable condition with some surface wear evident. Exterior stairs are generally in poor condition with spalling at nosings and exposed re-bar. Bluestone tiling at the gym entrance is much deteriorated. Two exterior doors in the service area do not have landings. One handi-cap ramp is located at the south end of the plaza area and serves the main entrance. There are not handicap ramps at the gym or other building entrances. Exterior handrails are missing at the gym entrance. Elsewhere, exterior handrails are unpainted welded pipe steel.

Fencing along Broad Street is decorative wrought iron. Elsewhere, fencing and gates are typically chain link. A large rolling gate secures the service area. A flag pole is located at the southwest corner of the entrance plaza area. Retaining/site walls are brick faced in deteriorating condition. Site signage is inadequate.

Landscaping consists of a wide grassy area with mature deciduous trees parallel to Broad Street at the west side of the site. Two fenced garden plots are situated at the north and south ends of the parking areas. The site has no irrigation.

The front and the backside of the school are illuminated with wall mounted High Intensity discharge (HID) lighting fixtures providing complete coverage.

There are CCTV cameras around the building perimeter that provide full coverage.

There are not wall mounted loud speaker facing the parking lot. Since this is a High School, outdoor loud speakers are not required.

RECOMMENDATIONS

- Investigate and repair exterior walls
- Install new roofing system including insulation, flashing, counter flashing, reglets, and expansion joints
- Replace exterior windows
- Refurbish student and faculty/staff toilet rooms throughout the building
- Replace VAT where it occurs throughout the building with VCT
- Replace floor access doors on the 4^{th} floor east corridor
- Replace deteriorated VCT
- Refurbish locker rooms
- Replace interior doors
- Install new student lockers in corridors
- Upgrade interior signage
- Repair acoustical ceilings in corridors and classrooms
- Replace expansion joint covers at interior ceilings at 3^{rd} and 5^{th} floors

- Replace gym ceiling
- Repaint classroom walls and ceilings throughout the building
- Repair & refinish hardwood flooring at the stage and weight room
- Replace auditorium seating
- Replace auditorium draperies and projection screen
- Replace science classroom equipment
- Replace fixed cabinetry throughout the building
- Provide accessible ramp to student court bench
- Repair asphalt parking lots
- Repair exterior stairs. Provide a ramped entrance to the gym. Install landings at service area doors. Install handrails as needed.
- Replace 10% of lavatories due to rust stains, 15 each.
- Replace drinking fountains due to age, damage, and lack of accessibility, 20 pairs.
- Replace service sinks due to age and appearance.
- Remodel boys' and girls' gym showers, 80 shower heads.
- Perform a detailed examination of the sanitary drainage pipe due to age and material.
- Install 825 ton capacity cooling generating system for entire building.
- Replace steam and condensate pipe due to age and failure.
- Conduct steam trap survey to identify and replace failed traps based upon report of lots of steam returning in condensate.
- Replace air handlers for auditorium and music room to add cooling capability, 2,000 seats.
- Replace air handlers for gymnasium and locker rooms to add cooling capability, 36,000 sq. ft. area.
- Replace air handlers for third floor kitchen and basement cafeteria to add cooling capability, 1,700 students.
- Replace unit ventilators due to age and obsolete controls.
- Convert obsolete pneumatic controls to DDC.
- Install a fire protection sprinkler system.
- Two new unit substations are required to feed this facility, one 2500KVA, 13.2KV-277/480V unit substation for HVAC equipment and large motor loads and another 1500 KVA, 13.2KV-120/208V unit substation for receptacles, lighting and small motor loads.
- Replace the entire distribution system with new panels and new wiring/conduits. Approximate (36) 208/120V panel boards. Provide new (3) 600A 480V MCCs
- Provide (2)25FT of surface raceways with receptacles spaced 24" on center and 4 wall mount receptacles per classroom. Approximate 896 receptacles
- Replace 70% of the existing fluorescent fixtures. Approximate 3100 fixtures.
- Provide a new fire alarm system with audio/visual devices in public areas and classrooms. Approximate 442 devices
- Replace existing clock system with wireless, battery operated system. Approximate 120
- Provide an outdoor 300KW diesel powered generator.
- Replace existing incandescent exit signs with LED type. Approximate 200
- Replace the auditorium theatrical lighting with new theatrical lighting and dimming system.
- Replace the auditorium aged sound system

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 3 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S200001		

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.

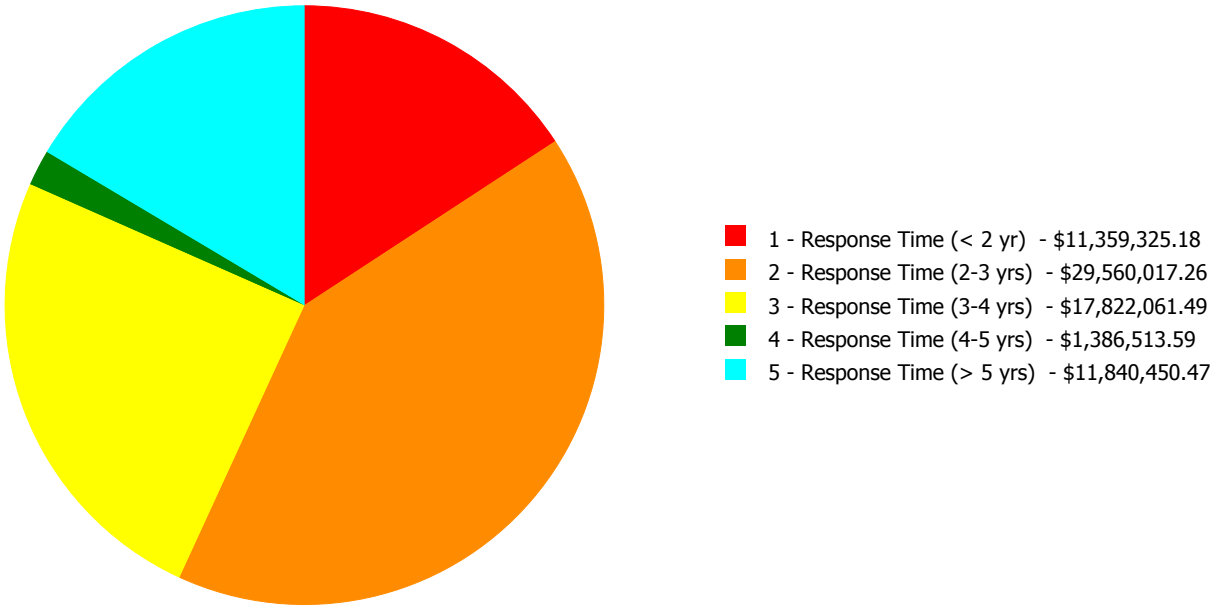
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	42.00 %	0.00 %	$0.00
A20 - Basement Construction	42.00 %	0.00 %	$0.00
A30 - Pool Construction	0.00 %	0.00 %	$0.00
B10 - Superstructure	42.00 %	0.10 %	$31,751.05
B20 - Exterior Enclosure	65.77 %	37.59 %	$8,956,395.18
B30 - Roofing	109.45 %	91.29 %	$3,638,249.80
C10 - Interior Construction	57.14 %	77.08 %	$7,078,843.49
C20 - Stairs	41.50 %	1.93 %	$10,020.69
C30 - Interior Finishes	104.39 %	43.25 %	$7,833,895.12
D10 - Conveying	105.71 %	0.00 %	$0.00
D20 - Plumbing	31.28 %	7.49 %	$482,031.57
D30 - HVAC	98.66 %	67.98 %	$25,064,718.54
D40 - Fire Protection	94.26 %	176.72 %	$4,720,797.32
D50 - Electrical	110.11 %	46.04 %	$8,969,454.81
E10 - Equipment	105.71 %	28.72 %	$1,629,708.81
E20 - Furnishings	105.00 %	406.83 %	$2,872,070.01
G20 - Site Improvements	80.34 %	49.99 %	$680,431.60
G40 - Site Electrical Utilities	50.00 %	0.00 %	$0.00
Totals:	**76.10 %**	**40.37 %**	**$71,968,367.99**

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)
B200001;South Philadelphia HS	331,440	40.40	$11,246,607.83	$28,992,303.01	$17,822,061.49	$1,386,513.59	$11,840,450.47
G200001;Grounds	107,500	37.21	$112,717.35	$567,714.25	$0.00	$0.00	$0.00
Total:		**40.37**	**$11,359,325.18**	**$29,560,017.26**	**$17,822,061.49**	**$1,386,513.59**	**$11,840,450.47**

Deficiencies By Priority



Budget Estimate Total: $71,968,367.99

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:	High School
Gross Area (SF):	331,440
Year Built:	1957
Last Renovation:	
Replacement Value:	$176,436,912
Repair Cost:	$71,287,936.39
Total FCI:	40.40 %
Total RSLI:	76.14 %

Description:

Insert the approximate SF of the pool area - including decks in the pool excavation and pool lining item in the cost model.

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B200001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S200001		

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	42.00 %	0.00 %	$0.00
A20 - Basement Construction	42.00 %	0.00 %	$0.00
A30 - Pool Construction	0.00 %	0.00 %	$0.00
B10 - Superstructure	42.00 %	0.10 %	$31,751.05
B20 - Exterior Enclosure	65.77 %	37.59 %	$8,956,395.18
B30 - Roofing	109.45 %	91.29 %	$3,638,249.80
C10 - Interior Construction	57.14 %	77.08 %	$7,078,843.49
C20 - Stairs	41.50 %	1.93 %	$10,020.69
C30 - Interior Finishes	104.39 %	43.25 %	$7,833,895.12
D10 - Conveying	105.71 %	0.00 %	$0.00
D20 - Plumbing	31.28 %	7.49 %	$482,031.57
D30 - HVAC	98.66 %	67.98 %	$25,064,718.54
D40 - Fire Protection	94.26 %	176.72 %	$4,720,797.32
D50 - Electrical	110.11 %	46.04 %	$8,969,454.81
E10 - Equipment	105.71 %	28.72 %	$1,629,708.81
E20 - Furnishings	105.00 %	406.83 %	$2,872,070.01
Totals:	**76.14 %**	**40.40 %**	**$71,287,936.39**

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	$27.30	S.F.	331,440	100	1957	2057		42.00 %	0.00 %	42			$9,048,312
A1030	Slab on Grade	$5.17	S.F.	331,440	100	1957	2057		42.00 %	0.00 %	42			$1,713,545
A2010	Basement Excavation	$4.36	S.F.	331,440	100	1957	2057		42.00 %	0.00 %	42			$1,445,078
A2020	Basement Walls	$9.91	S.F.	331,440	100	1957	2057		42.00 %	0.00 %	42			$3,284,570
A30	Pool Construction	$0.00	S.F.	331,440	0				0.00 %	0.00 %				$0
B1010	Floor Construction	$85.34	S.F.	331,440	100	1957	2057		42.00 %	0.11 %	42		$31,751.05	$28,285,090
B1020	Roof Construction	$14.39	S.F.	331,440	100	1957	2057		42.00 %	0.00 %	42			$4,769,422
B2010	Exterior Walls	$43.20	S.F.	331,440	100	1957	2057		42.00 %	4.90 %	42		$701,221.75	$14,318,208
B2020	Exterior Windows	$27.52	S.F.	331,440	40	1985	2025	2057	105.00 %	90.51 %	42		$8,255,173.43	$9,121,229
B2030	Exterior Doors	$1.16	S.F.	331,440	25	1995	2020		20.00 %	0.00 %	5			$384,470
B3010105	Built-Up	$37.76	S.F.	105,021	20	1992	2012	2037	110.00 %	91.75 %	22		$3,638,249.80	$3,965,593
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	331,440	30	1957	1987		0.00 %	0.00 %	-28			$19,886
C1010	Partitions	$21.05	S.F.	331,440	100	1957	2057		42.00 %	37.49 %	42		$2,615,741.55	$6,976,812
C1020	Interior Doors	$3.76	S.F.	331,440	40	1957	1997	2057	105.00 %	191.74 %	42		$2,389,519.93	$1,246,214
C1030	Fittings	$2.90	S.F.	331,440	40	1957	1997	2057	105.00 %	215.73 %	42		$2,073,582.01	$961,176

Site Assessment Report - B200001;South Philadelphia HS

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 $
C2010	Stair Construction	$1.18	S.F.	331,440	100	1957	2057		42.00 %	2.56 %	42		$10,020.69	$391,099
C2020	Stair Finishes	$0.39	S.F.	331,440	30	1957	1987	2027	40.00 %	0.00 %	12			$129,262
C3010230	Paint & Covering	$17.70	S.F.	331,440	10	2007	2017	2027	120.00 %	40.41 %	12		$2,370,856.95	$5,866,488
C3010231	Vinyl Wall Covering	$0.00	S.F.	331,440	15	1957	1972		0.00 %	0.00 %	-43			$0
C3010232	Wall Tile	$3.95	S.F.	331,440	30	1957	1987	2027	40.00 %	0.00 %	12			$1,309,188
C3010237	Wood Paneling	$1.98	S.F.	331,440	20	1957	1977	2027	60.00 %	0.00 %	12			$656,251
C3020411	Carpet	$7.30	S.F.	6,620	10	2005	2015	2027	120.00 %	115.78 %	12		$55,953.81	$48,326
C3020412	Terrazzo & Tile	$75.52	S.F.	3,310	50	1957	2007	2027	24.00 %	0.00 %	12			$249,971
C3020413	Vinyl Flooring	$9.68	S.F.	271,770	20	1957	1977	2037	110.00 %	146.59 %	22		$3,856,360.43	$2,630,734
C3020414	Wood Flooring	$22.27	S.F.	16,600	25	1957	1982	2042	108.00 %	11.02 %	27		$40,720.72	$369,682
C3020415	Concrete Floor Finishes	$0.97	S.F.	33,140	50	1957	2007	2067	104.00 %	270.60 %	52		$86,985.64	$32,146
C3030	Ceiling Finishes	$20.97	S.F.	331,440	25	1980	2005	2042	108.00 %	20.47 %	27		$1,423,017.57	$6,950,297
D1010	Elevators and Lifts	$1.28	S.F.	331,440	35	1957	1992	2052	105.71 %	0.00 %	37			$424,243
D2010	Plumbing Fixtures	$13.52	S.F.	331,440	35	1957	1992	2025	28.57 %	10.76 %	10		$482,031.57	$4,481,069
D2020	Domestic Water Distribution	$1.68	S.F.	331,440	25	1957	1982	2025	40.00 %	0.00 %	10			$556,819
D2030	Sanitary Waste	$2.32	S.F.	331,440	30	1957	1987	2030	50.00 %	0.00 %	15			$768,941
D2040	Rain Water Drainage	$1.90	S.F.	331,440	30	1957	1987	2021	20.00 %	0.00 %	6			$629,736
D3020	Heat Generating Systems	$18.67	S.F.	331,440	35	1998	2033		51.43 %	0.00 %	18			$6,187,985
D3030	Cooling Generating Systems	$24.48	S.F.	331,440	30			2047	106.67 %	51.53 %	32		$4,180,575.55	$8,113,651
D3040	Distribution Systems	$42.99	S.F.	331,440	25	1957	1982	2042	108.00 %	103.71 %	27		$14,777,875.29	$14,248,606
D3050	Terminal & Package Units	$11.60	S.F.	331,440	20	1957	1977	2037	110.00 %	0.00 %	22			$3,844,704
D3060	Controls & Instrumentation	$13.50	S.F.	331,440	20	1957	1977	2037	110.00 %	136.47 %	22		$6,106,267.70	$4,474,440
D4010	Sprinklers	$7.05	S.F.	331,440	35	1957	1992	2052	105.71 %	202.03 %	37		$4,720,797.32	$2,336,652
D4020	Standpipes	$1.01	S.F.	331,440	35	1957	1992	2020	14.29 %	0.00 %	5			$334,754
D5010	Electrical Service/Distribution	$9.70	S.F.	331,440	30	1957	1987	2047	106.67 %	126.51 %	32		$4,067,225.87	$3,214,968
D5020	Lighting and Branch Wiring	$34.68	S.F.	331,440	20	1957	1977	2037	110.00 %	28.96 %	22		$3,328,938.47	$11,494,339
D5030	Communications and Security	$12.99	S.F.	331,440	15	1957	1972	2032	113.33 %	23.24 %	17		$1,000,747.15	$4,305,406
D5090	Other Electrical Systems	$1.41	S.F.	331,440	30	1957	1987	2047	106.67 %	122.51 %	32		$572,543.32	$467,330
E1020	Institutional Equipment	$4.82	S.F.	331,440	35	1957	1992	2052	105.71 %	73.03 %	37		$1,166,616.14	$1,597,541
E1090	Other Equipment	$12.30	S.F.	331,440	35	1957	1992	2052	105.71 %	11.36 %	37		$463,092.67	$4,076,712
E2010	Fixed Furnishings	$2.13	S.F.	331,440	40	1957	1997	2057	105.00 %	406.83 %	42		$2,872,070.01	$705,967
								Total	**76.14 %**	**40.40 %**			**$71,287,936.39**	**$176,436,912**

System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

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

Note: Paint 97%
Stone and tile 2% (marble in lobby, ceramic at drinking fountain recesses, a small number of renovated toilet rooms, wainscot at janitor closets)
Wood wainscot at auditorium 1%

Note: glazed block used in stairwells and student restrooms is considered at partitions

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

Note:

Carpet	2%
Terrazzo & Tile	1%
Vinyl	83%
Wood	5%
Concrete	10%

System: C3030 - Ceiling Finishes — This system contains no images

Note: Painted concrete is typical in classrooms, locker rooms. Painted plaster/drywall in bathrooms. 70%

Painted structure with acoustic treatment between joists in gym. 1%

Plaster in auditorium. 1%

Some classrooms, main office, and portions of the corridors have 2x4 suspended ceilings. 8%

Typical corridors have 12" glued on acoustical tile. 15%

Unpainted utility spaces 5%

System: D5010 - Electrical Service/Distribution

Note:

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:	**$71,287,936**	**$0**	**$0**	**$0**	**$0**	**$917,156**	**$827,132**	**$0**	**$0**	**$0**	**$7,447,550**	**$80,479,775**
*** 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**
A30 - Pool Construction	$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	$31,751	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,751**
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	$701,222	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$701,222**
B2020 - Exterior Windows	$8,255,173	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$8,255,173**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$490,277	$0	$0	$0	$0	$0	**$490,277**
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	$3,638,250	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,638,250**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

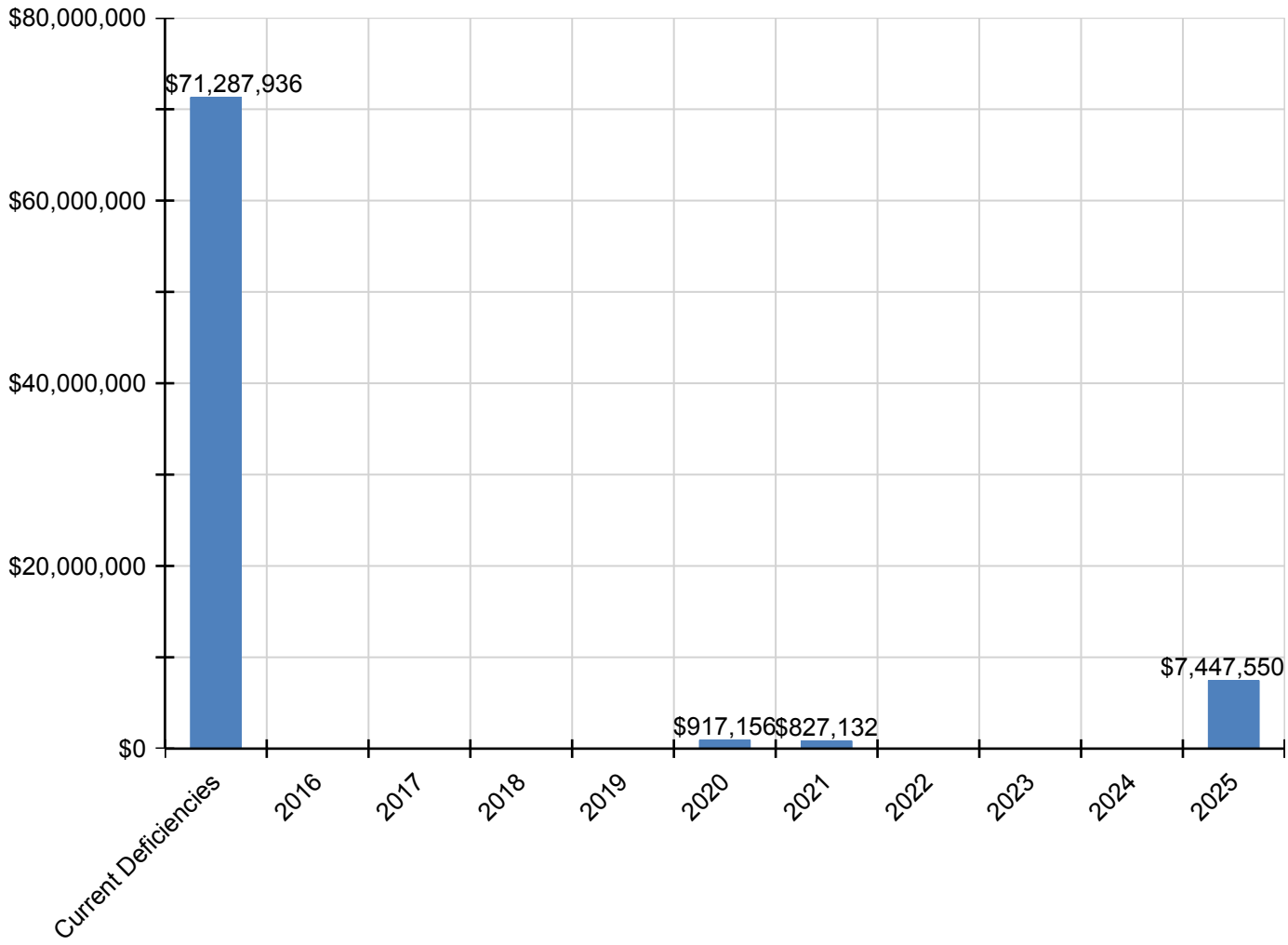
C1010 - Partitions	$2,615,742	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,615,742**
C1020 - Interior Doors	$2,389,520	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,389,520**
C1030 - Fittings	$2,073,582	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,073,582**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$10,021	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$10,021**
C2020 - Stair Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$2,370,857	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,370,857**
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**
C3010237 - Wood Paneling	$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	$55,954	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$55,954**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$3,856,360	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,856,360**
C3020414 - Wood Flooring	$40,721	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$40,721**
C3020415 - Concrete Floor Finishes	$86,986	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$86,986**
C3030 - Ceiling Finishes	$1,423,018	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,423,018**
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	$482,032	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,624,400	**$7,106,432**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$823,150	**$823,150**
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	$827,132	$0	$0	$0	$0	**$827,132**
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	$4,180,576	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,180,576**
D3040 - Distribution Systems	$14,777,875	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$14,777,875**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$6,106,268	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,106,268**

D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$4,720,797	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,720,797**
D4020 - Standpipes	$0	$0	$0	$0	$0	$426,879	$0	$0	$0	$0	$0	**$426,879**
D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$4,067,226	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,067,226**
D5020 - Lighting and Branch Wiring	$3,328,938	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,328,938**
D5030 - Communications and Security	$1,000,747	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,000,747**
D5090 - Other Electrical Systems	$572,543	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$572,543**
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	$1,166,616	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,166,616**
E1090 - Other Equipment	$463,093	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$463,093**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$2,872,070	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,872,070**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

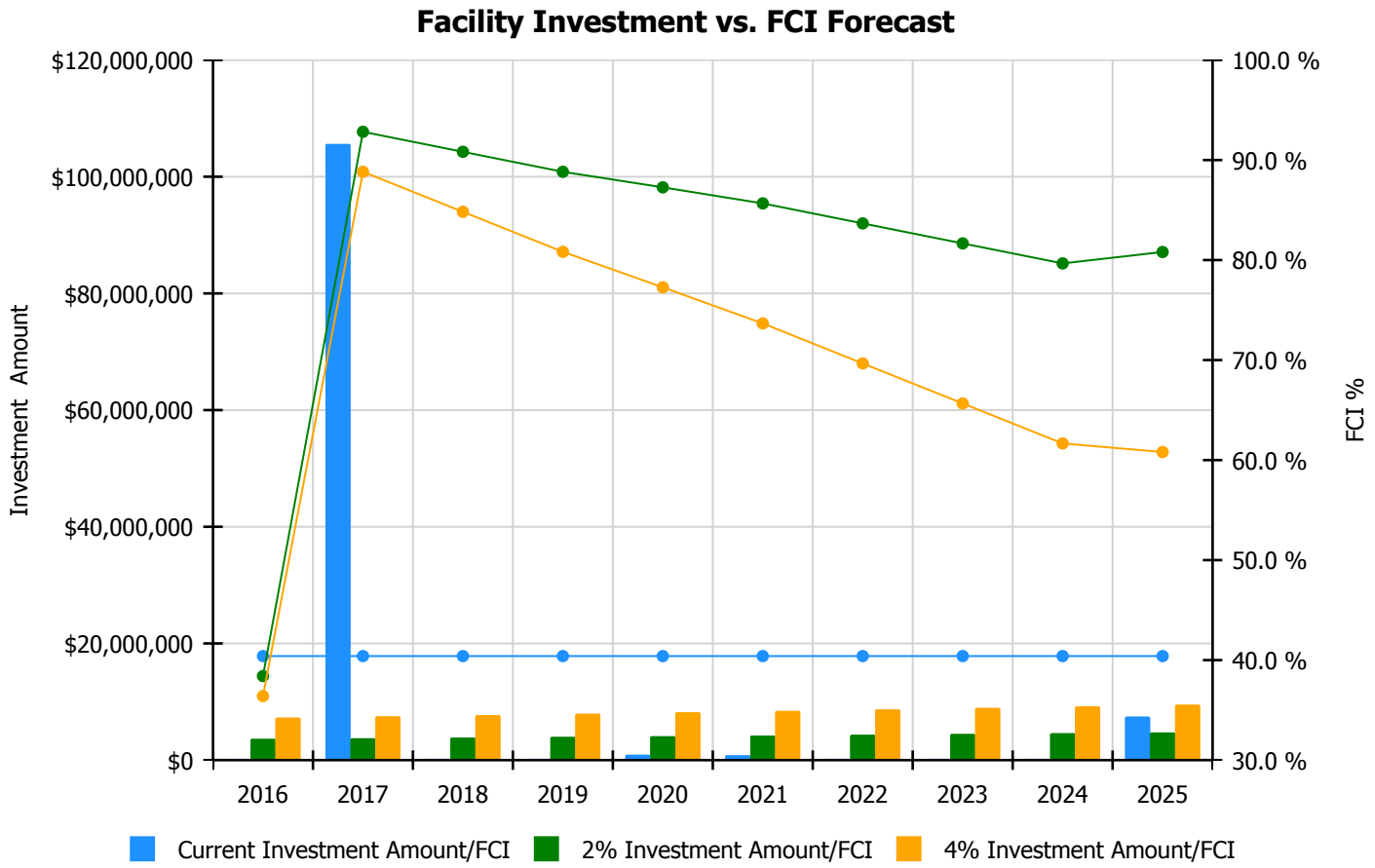
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

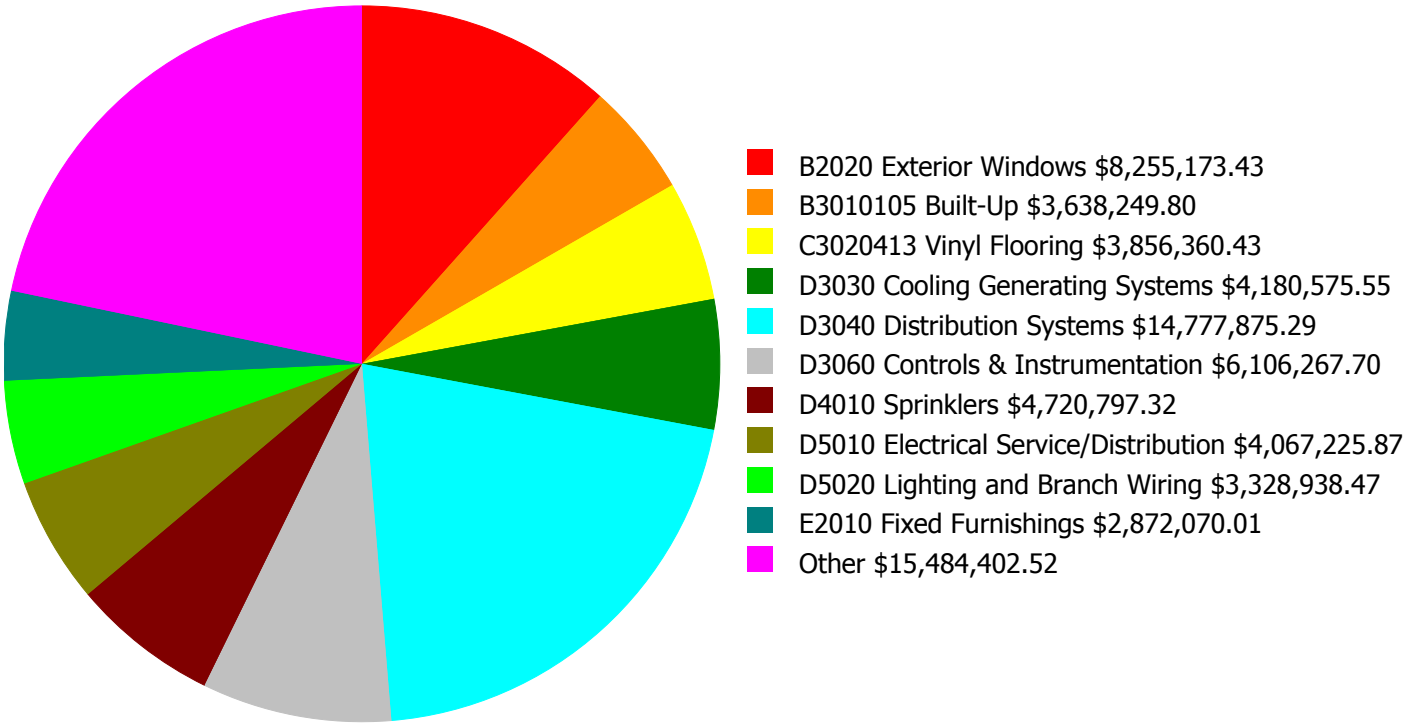
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 40.4%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$3,634,600.00	38.40 %	$7,269,201.00	36.40 %
2017	$105,608,444	$3,743,638.00	92.82 %	$7,487,277.00	88.82 %
2018	$0	$3,855,948.00	90.82 %	$7,711,895.00	84.82 %
2019	$0	$3,971,626.00	88.82 %	$7,943,252.00	80.82 %
2020	$917,156	$4,090,775.00	87.27 %	$8,181,550.00	77.27 %
2021	$827,132	$4,213,498.00	85.67 %	$8,426,996.00	73.67 %
2022	$0	$4,339,903.00	83.67 %	$8,679,806.00	69.67 %
2023	$0	$4,470,100.00	81.67 %	$8,940,200.00	65.67 %
2024	$0	$4,604,203.00	79.67 %	$9,208,406.00	61.67 %
2025	$7,447,550	$4,742,329.00	80.81 %	$9,484,658.00	60.81 %
Total:	**$114,800,282**	**$41,666,620.00**		**$83,333,241.00**	

Deficiency Summary by System

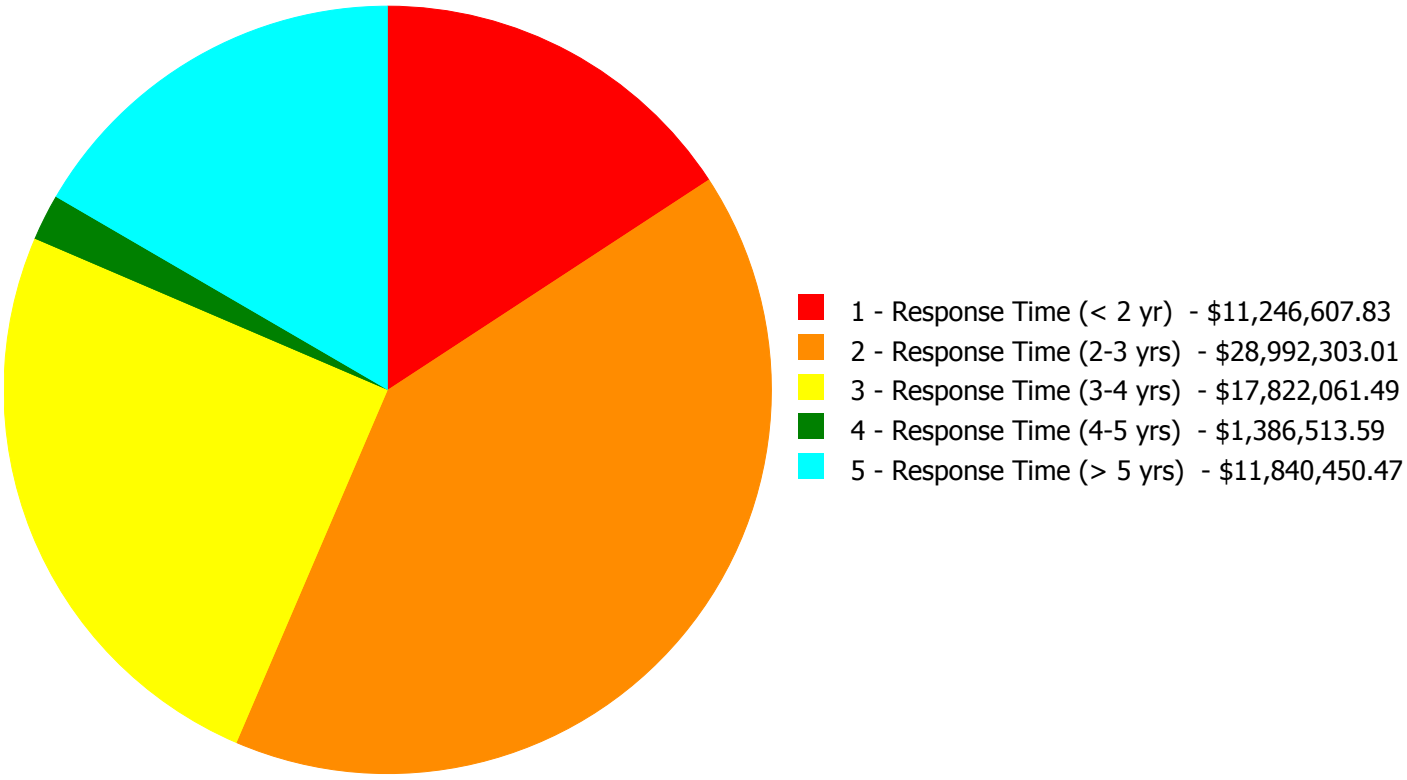
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $71,287,936.39

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: $71,287,936.39

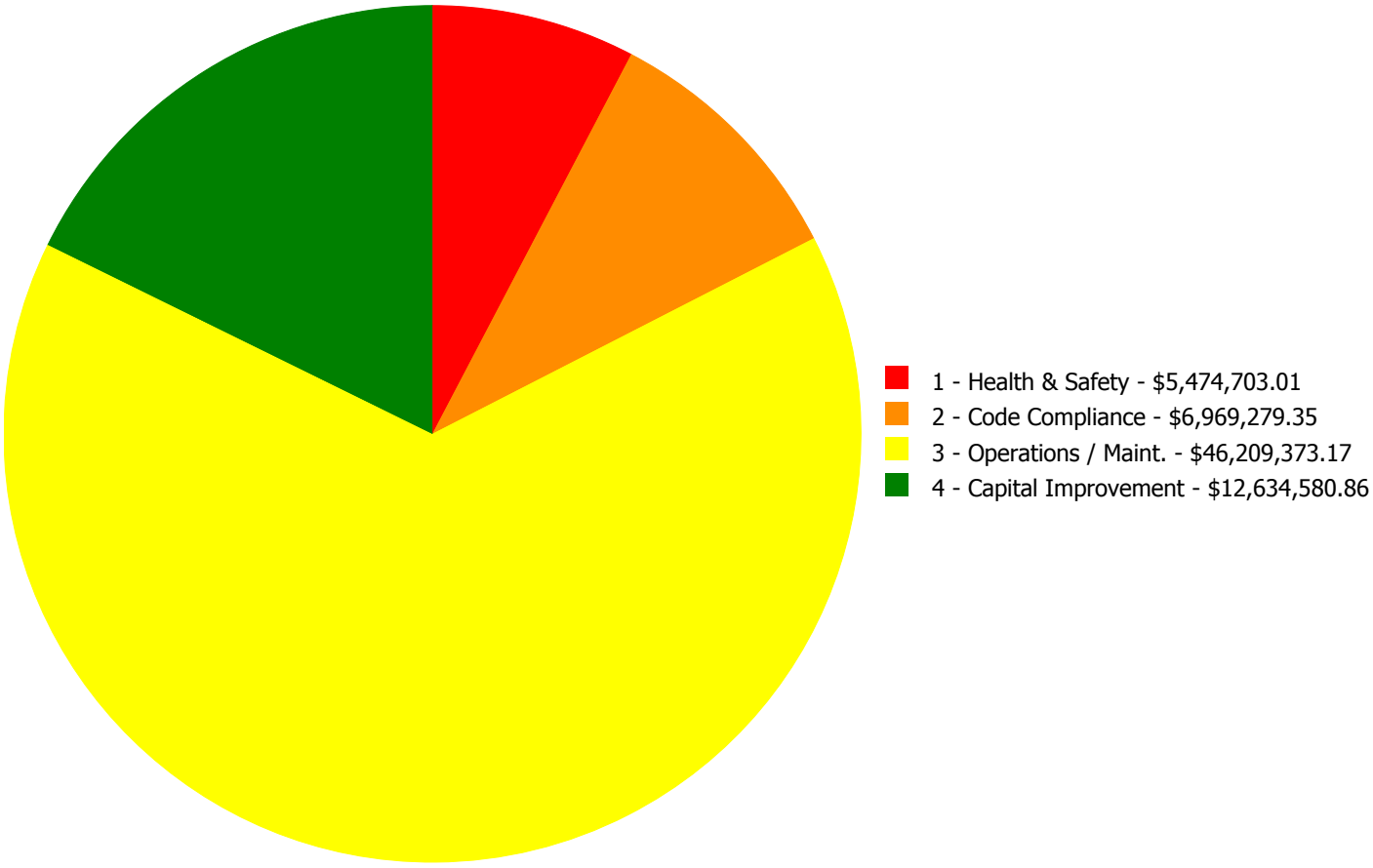
Deficiency By Priority Investment Table

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
B1010	Floor Construction	$0.00	$0.00	$31,751.05	$0.00	$0.00	$31,751.05
B2010	Exterior Walls	$0.00	$701,221.75	$0.00	$0.00	$0.00	$701,221.75
B2020	Exterior Windows	$0.00	$8,255,173.43	$0.00	$0.00	$0.00	$8,255,173.43
B3010105	Built-Up	$3,638,249.80	$0.00	$0.00	$0.00	$0.00	$3,638,249.80
C1010	Partitions	$0.00	$2,615,741.55	$0.00	$0.00	$0.00	$2,615,741.55
C1020	Interior Doors	$0.00	$2,385,293.56	$4,226.37	$0.00	$0.00	$2,389,519.93
C1030	Fittings	$0.00	$2,073,582.01	$0.00	$0.00	$0.00	$2,073,582.01
C2010	Stair Construction	$10,020.69	$0.00	$0.00	$0.00	$0.00	$10,020.69
C3010230	Paint & Covering	$0.00	$0.00	$2,370,856.95	$0.00	$0.00	$2,370,856.95
C3020411	Carpet	$0.00	$55,953.81	$0.00	$0.00	$0.00	$55,953.81
C3020413	Vinyl Flooring	$0.00	$3,856,360.43	$0.00	$0.00	$0.00	$3,856,360.43
C3020414	Wood Flooring	$0.00	$0.00	$40,720.72	$0.00	$0.00	$40,720.72
C3020415	Concrete Floor Finishes	$0.00	$86,985.64	$0.00	$0.00	$0.00	$86,985.64
C3030	Ceiling Finishes	$0.00	$216,694.35	$979,509.59	$226,813.63	$0.00	$1,423,017.57
D2010	Plumbing Fixtures	$0.00	$482,031.57	$0.00	$0.00	$0.00	$482,031.57
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$4,180,575.55	$4,180,575.55
D3040	Distribution Systems	$7,598,337.34	$0.00	$4,240,460.35	$0.00	$2,939,077.60	$14,777,875.29
D3060	Controls & Instrumentation	$0.00	$6,106,267.70	$0.00	$0.00	$0.00	$6,106,267.70
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$4,720,797.32	$4,720,797.32
D5010	Electrical Service/Distribution	$0.00	$0.00	$4,067,225.87	$0.00	$0.00	$4,067,225.87
D5020	Lighting and Branch Wiring	$0.00	$0.00	$3,328,938.47	$0.00	$0.00	$3,328,938.47
D5030	Communications and Security	$0.00	$0.00	$749,679.32	$251,067.83	$0.00	$1,000,747.15
D5090	Other Electrical Systems	$0.00	$0.00	$572,543.32	$0.00	$0.00	$572,543.32
E1020	Institutional Equipment	$0.00	$858,253.28	$14,768.16	$293,594.70	$0.00	$1,166,616.14
E1090	Other Equipment	$0.00	$0.00	$0.00	$463,092.67	$0.00	$463,092.67
E2010	Fixed Furnishings	$0.00	$1,298,743.93	$1,421,381.32	$151,944.76	$0.00	$2,872,070.01
	Total:	$11,246,607.83	$28,992,303.01	$17,822,061.49	$1,386,513.59	$11,840,450.47	$71,287,936.39

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: $71,287,936.39

Deficiency Details by Priority

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

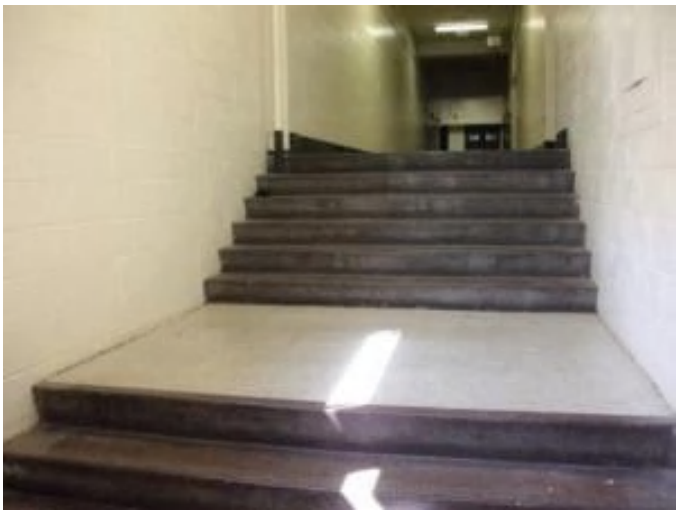
Priority 1 - Response Time (< 2 yr):

System: B3010105 - Built-Up

Location: Roofs
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Remove and Replace Built Up Roof
Qty: 105,021.00
Unit of Measure: S.F.
Estimate: $3,638,249.80
Assessor Name: System
Date Created: 01/08/2016

Notes: Install new roofing system including insulation, flashing, counter flashing, reglets, and expansion joints

System: C2010 - Stair Construction



Location: Level 1 stairs to shops
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 1 - Response Time (< 2 yr)
Correction: Replace inadequate or install proper stair railing - select appropriate material
Qty: 36.00
Unit of Measure: L.F.
Estimate: $10,020.69
Assessor Name: System
Date Created: 01/12/2016

Notes: Interior stairs have no handrails at north corridor to shops.

System: D3040 - Distribution Systems

Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE Std 62 - insert the SF of bldg. in the qty.

Qty: 135,000.00

Unit of Measure: S.F.

Estimate: $6,512,290.01

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace unit ventilators due to age.

System: D3040 - Distribution Systems

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Conduct a steam trap survey and replace failed units.

Qty: 331,000.00

Unit of Measure: S.F.

Estimate: $1,086,047.33

Assessor Name: System

Date Created: 12/23/2015

Notes: Conduct steam trap survey to identify and replace failed traps based upon report of lots of steam returning in condensate.

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

System: B2010 - Exterior Walls

Location: Brick Exterior Walls

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

Qty: 20,000.00

Unit of Measure: S.F.

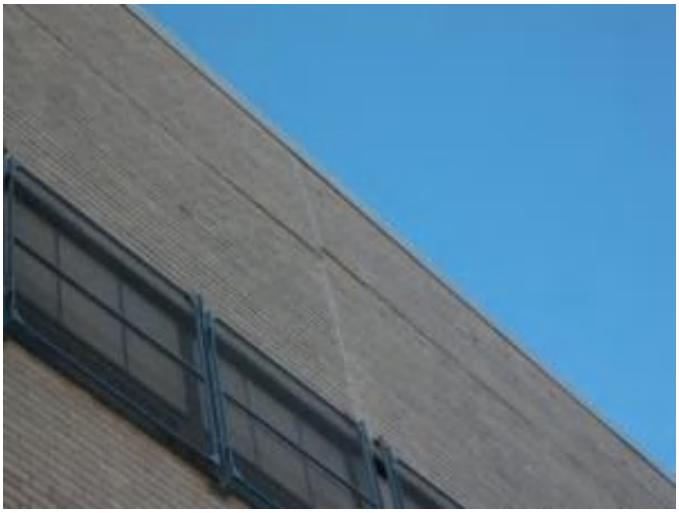
Estimate: $645,789.44

Assessor Name: System

Date Created: 01/11/2016

Notes: Mortar is obviously failing at several locations around the building, notably on east and north elevations.

System: B2010 - Exterior Walls



Location: Gym Exterior Wall - North end

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 100.00

Unit of Measure: L.F.

Estimate: $55,432.31

Assessor Name: System

Date Created: 01/11/2016

Notes: It appears that the steel relief angle framing at the roof line in the north wall of the gym is causing failure of the mortar joint, and possibly some rotation of the wall itself. This condition could not be viewed from the roof side due to the application of an exterior siding material between roof line and top of wall.

System: B2020 - Exterior Windows

Location: Exterior windows

Distress: Building Envelope Integrity

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: 1,365.00

Unit of Measure: Ea.

Estimate: $8,255,173.43

Assessor Name: System

Date Created: 01/08/2016

Notes: Replace exterior windows.

System: C1010 - Partitions

Location: Gym locker rooms

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Remodel and refurbish shower room - based on approximately 8 showers

Qty: 10.00

Unit of Measure: Ea.

Estimate: $2,193,785.71

Assessor Name: System

Date Created: 12/23/2015

Notes: Remodel boys' and girls' gym showers, 80 shower heads.

System: C1010 - Partitions

Location: Each floor of building

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Build new single restroom to meet code requirements

Qty: 6.00

Unit of Measure: Ea.

Estimate: $421,955.84

Assessor Name: System

Date Created: 01/11/2016

Notes: Faculty/staff restrooms throughout the building are not ADA compliant. Provide a minimum of 1 accessible uni-sex bathroom at each level of the building.

System: C1020 - Interior Doors

Location: Interior doors

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 500.00

Unit of Measure: Ea.

Estimate: $2,385,293.56

Assessor Name: System

Date Created: 01/11/2016

Notes: Interior doors are in generally functional, but varying condition. Most appear to be original and have retrofitted hardware. However, few have lever type latches for accessibility. Doors do not have lock-down capability for security. In general doors are worn looking and hard to maintain.

System: C1030 - Fittings

Location: Corridors and locker rooms
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace lockers - select size
Qty: 2,500.00
Unit of Measure: Ea.
Estimate: $1,744,990.80
Assessor Name: System
Date Created: 01/11/2016

Notes: Replace student lockers in corridors. Lockers are rusted and have malfunctioning hardware. Install lockers in gym locker rooms - they are missing.

System: C1030 - Fittings

Location: Student restrooms
Distress: Accessibility
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace toilet partitions
Qty: 72.00
Unit of Measure: Ea.
Estimate: $193,134.97
Assessor Name: System
Date Created: 01/11/2016

Notes: Student restrooms throughout the building are not configured for accessibility. Provide handi-cap toilet partitions with grab bars. Toilet partitions in general are in poor condition.

System: C1030 - Fittings

Location: Building-wide

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 500.00

Unit of Measure: Ea.

Estimate: $135,456.24

Assessor Name: System

Date Created: 01/11/2016

Notes: Provide code compliant signage throughout the building.

System: C3020411 - Carpet

Location: 2nd floor classrooms, alumni room, student court

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace carpet

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $55,953.81

Assessor Name: System

Date Created: 01/11/2016

Notes: Carpeting is stained and worn.

System: C3020413 - Vinyl Flooring

Location: Throughout the building

Distress: Health Hazard / Risk

Category: 2 - Code Compliance

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

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

Qty: 250,000.00

Unit of Measure: S.F.

Estimate: $3,791,667.00

Assessor Name: System

Date Created: 01/11/2016

Notes: Typical floors throughout the building are 9" VAT, which is assumed to be asbestos tile and mastic. Friable asbestos is a known health hazard. In addition to being well beyond its expected useful life, the tile is in generally poor condition. Replace obsolete 9" vinyl floor tile with 12" VCT where it occurs.

System: C3020413 - Vinyl Flooring

Location: Classrooms 304, 305, 306

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace VCT

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $64,693.43

Assessor Name: System

Date Created: 01/11/2016

Notes: VCT appears to be installed over an uneven substrate, possibly in an effort to encapsulate VAT. In any case, the VCT is deteriorated with cracked tiles and open joints.

System: C3020415 - Concrete Floor Finishes

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Prepare and repaint concrete floor

Qty: 15,000.00

Unit of Measure: S.F.

Estimate: $86,985.64

Assessor Name: System

Date Created: 01/11/2016

Notes: Concrete floors, particularly in student restrooms, are in poor condition. In some cases, concrete is spalled with exposed rebar, creating unsanitary conditions and tripping hazards.

System: C3030 - Ceiling Finishes

Location: Corridors, classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace ceiling tiles only in suspended ceiling - pick the proper material

Qty: 20,000.00

Unit of Measure: S.F.

Estimate: $154,300.32

Assessor Name: System

Date Created: 01/12/2016

Notes: Some acoustical ceilings are damaged or stained. Replacement of tile in existing grid is recommended.

System: C3030 - Ceiling Finishes

Location: Corridors

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace glued on or mechanically attached acoustical ceiling tiles

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $62,394.03

Assessor Name: System

Date Created: 01/12/2016

Notes: 12" glued on ceiling tiles, used mostly in corridors, has some damage. Due to the number of utilities running under ceiling materials, it is recommended that spot repairs be made and repainting be done.

System: D2010 - Plumbing Fixtures

Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 20.00

Unit of Measure: Ea.

Estimate: $313,857.93

Assessor Name: System

Date Created: 12/21/2015

Notes: Replace drinking fountains due to age, damage, and lack of accessibility.

System: D2010 - Plumbing Fixtures

Location: Mop closets

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 15.00

Unit of Measure: Ea.

Estimate: $102,241.39

Assessor Name: System

Date Created: 12/21/2015

Notes: Replace service sinks due to age and appearance.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms

Distress: Appearance

Category: 3 - Operations / Maint.

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

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

Qty: 15.00

Unit of Measure: Ea.

Estimate: $65,932.25

Assessor Name: System

Date Created: 12/21/2015

Notes: Replace 10% of lavatories due to appearance.

System: D3060 - Controls & Instrumentation

Location: Entire building

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (350KSF)

Qty: 331,440.00

Unit of Measure: S.F.

Estimate: $6,106,267.70

Assessor Name: System

Date Created: 12/21/2015

Notes: Convert obsolete and failing pneumatic control to DDC.

System: E1020 - Institutional Equipment

Location: Science classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace lab base cabinets and countertops - per LF - add sinks in plumbing fixtures if required

Qty: 480.00

Unit of Measure: L.F.

Estimate: $858,253.28

Assessor Name: System

Date Created: 01/12/2016

Notes: Science classroom casework is original the building and in poor condition.

System: E2010 - Fixed Furnishings

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace auditorium seating - add tablet arms if required. Veneer seating is an option.

Qty: 1,440.00

Unit of Measure: Ea.

Estimate: $1,298,743.93

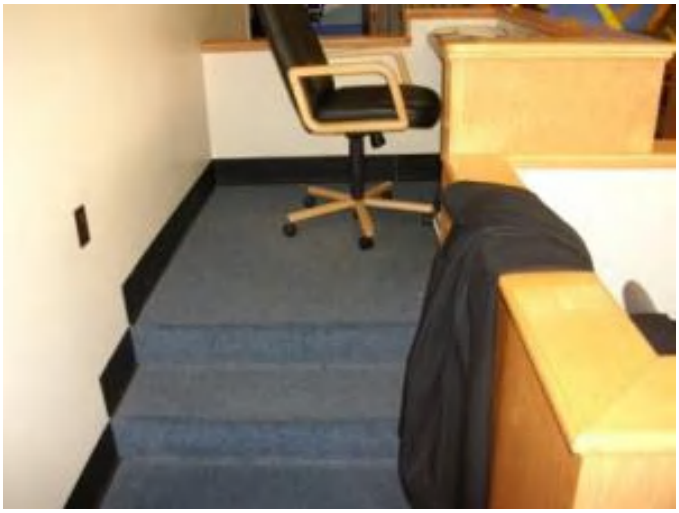
Assessor Name: System

Date Created: 01/12/2016

Notes: Replace original auditorium chairs. Coordinate project with VAT replacement.

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

System: B1010 - Floor Construction



Location: Student courtroom

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Install interior handicap ramp - per LF 5' wide - insert the LF in the quantity

Qty: 10.00

Unit of Measure: L.F.

Estimate: $31,751.05

Assessor Name: System

Date Created: 01/12/2016

Notes: Provide a handicap ramp to the student court bench.

System: C1020 - Interior Doors

Location: 4th floor east corridor

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Remove and replace access doors - pick the size and change the quantities in the estimate

Qty: 4.00

Unit of Measure: Ea.

Estimate: $4,226.37

Assessor Name: System

Date Created: 01/11/2016

Notes: Floor access doors in corridor are a tripping hazard. Replace with doors flush to floor.

System: C3010230 - Paint & Covering

Location: Classrooms, corridors, locker rooms, restrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 350,000.00

Unit of Measure: S.F.

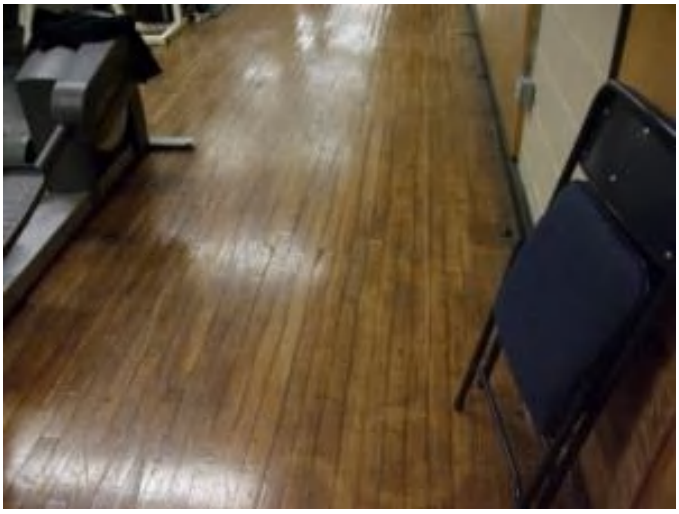
Estimate: $2,370,856.95

Assessor Name: System

Date Created: 01/12/2016

Notes: Paint throughout the building is in variable condition ranging from poor to good. It is expected that in the period covered by this report, re-painting will be necessary virtually throughout the building. Minor repairs are anticipated.

System: C3020414 - Wood Flooring



Location: Basement weight room and stage

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

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

Qty: 3,500.00

Unit of Measure: S.F.

Estimate: $40,720.72

Assessor Name: System

Date Created: 01/12/2016

Notes: Repair refinish hardwood flooring at the stage and weight room

System: C3030 - Ceiling Finishes

Location: Classroom ceilings

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Re-paint ceilings - SF of ceilings

Qty: 200,000.00

Unit of Measure: S.F.

Estimate: $957,405.60

Assessor Name: System

Date Created: 01/12/2016

Notes: Most classroom ceilings in the school are painted concrete structure. While well maintained with problem areas being address with spot touch-ups, in general, re-painting throughout is recommended as the system will be beyond its expected life.

System: C3030 - Ceiling Finishes

Location: 3rd and 5th Floors

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace ceiling expansion joint cover

Qty: 300.00

Unit of Measure: L.F.

Estimate: $22,103.99

Assessor Name: System

Date Created: 01/14/2016

Notes: Replace/repair/install expansion joint covers at 3rd and 5th floor ceilings.

System: D3040 - Distribution Systems

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 330,000.00

Unit of Measure: S.F.

Estimate: $3,121,922.92

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace steam and condensate pipe due to age and failure.

System: D3040 - Distribution Systems

Location: Auditorium and music room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Install / replace HVAC unit for Auditorium (800 seat).

Qty: 2,000.00

Unit of Measure: Seat

Estimate: $1,118,537.43

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace air handlers for auditorium and music room to add cooling capability.

System: D5010 - Electrical Service/Distribution

Location: Basement electrical room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace unit substation

Qty: 1.00

Unit of Measure: Ea.

Estimate: $2,837,525.35

Assessor Name: System

Date Created: 12/14/2015

Notes: Two new unit substations are required to feed this facility, one 2500KVA, 13.2KV-277/480V unit substation for HVAC equipment and large motor loads and another 1500 KVA, 13.2KV-120/208V unit substation for receptacles, lighting and small motor loads.

System: D5010 - Electrical Service/Distribution

Location: Entire Building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Electrical Distribution System (U)

Qty: 36.00

Unit of Measure: Ea.

Estimate: $1,229,700.52

Assessor Name: System

Date Created: 12/14/2015

Notes: Replace the entire distribution system with new panels and new wiring/conduits. Approximate (36) 208/120V panel boards. Provide new (3) 600A 480V MCCs

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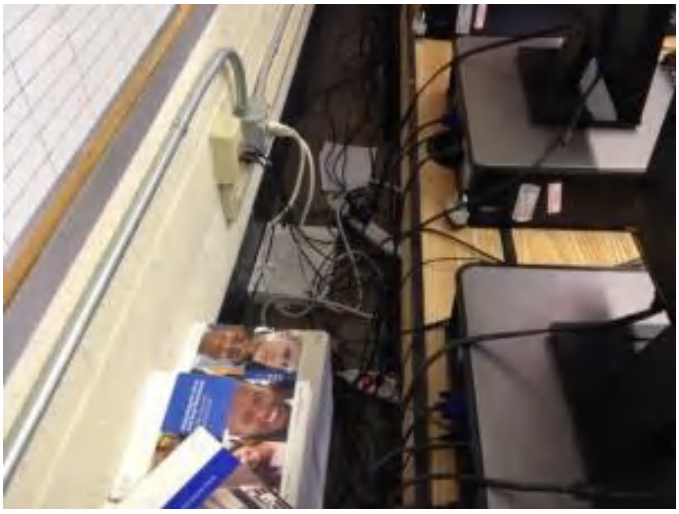
System: D5020 - Lighting and Branch Wiring

Location: Entire Building
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace lighting fixtures
Qty: 3,100.00
Unit of Measure: Ea.
Estimate: $2,999,774.06
Assessor Name: System
Date Created: 12/15/2015

Notes: Replace 70% of the existing fluorescent fixtures. Approximate 3100 fixtures.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add wiring device
Qty: 896.00
Unit of Measure: Ea.
Estimate: $329,164.41
Assessor Name: System
Date Created: 12/15/2015

Notes: Provide (2)25FT of surface raceways with receptacles spaced 24” on center and 4 wall mount receptacles per classroom. Approximate 896 receptacles

System: D5030 - Communications and Security

Location: Entire Building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace fire alarm system
Qty: 442.00
Unit of Measure: S.F.
Estimate: $749,679.32
Assessor Name: System
Date Created: 12/15/2015

Notes: Provide a new fire alarm system with audio/visual devices in public areas and classrooms. Approximate 442 devices

System: D5090 - Other Electrical Systems

Location: Outdoor
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $357,281.98
Assessor Name: System
Date Created: 12/15/2015

Notes: Provide an outdoor 300KW diesel powered generator

System: D5090 - Other Electrical Systems

Location: Exit Corridors

Distress: Not Reliable

Category: 3 - Operations / Maint.

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

Correction: Replace Emergency/Exit Lighting

Qty: 200.00

Unit of Measure: Ea.

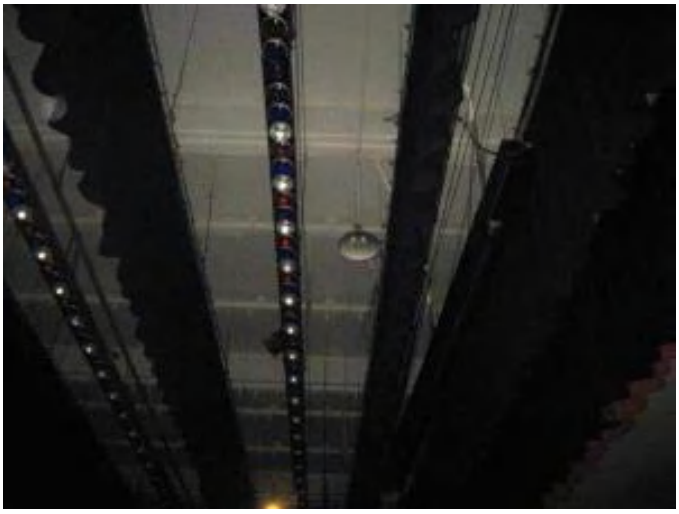
Estimate: $215,261.34

Assessor Name: System

Date Created: 12/15/2015

Notes: Replace existing incandescent exit signs with LED type. Approximate 200

System: E1020 - Institutional Equipment



Location: Stage

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace motorized projection screen - heavy duty stage size

Qty: 1.00

Unit of Measure: Ea.

Estimate: $14,768.16

Assessor Name: System

Date Created: 01/12/2016

Notes: Replace damaged motorized projection screen at auditorium stage.

System: E2010 - Fixed Furnishings

Location: Classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace casework - per LF - insert quantities for cabinets in the estimate

Qty: 1,000.00

Unit of Measure: L.F.

Estimate: $1,421,381.32

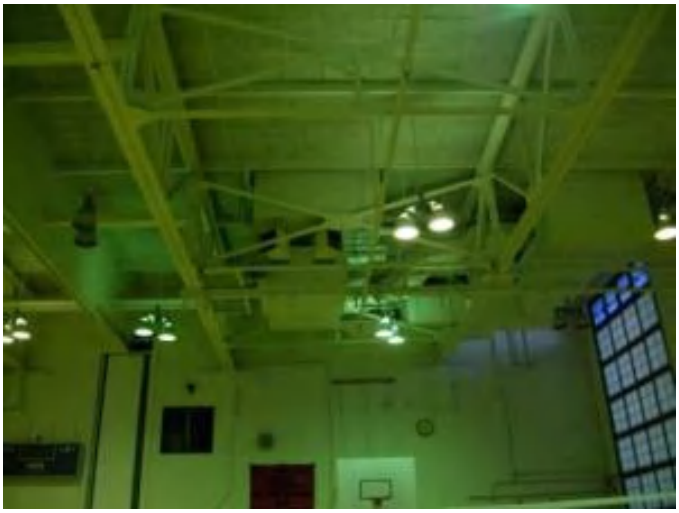
Assessor Name: System

Date Created: 01/12/2016

Notes: Fixed casework/cabinetry is typically original and in poor condition throughout the building. Replace classroom casework.

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

System: C3030 - Ceiling Finishes



Location: Gym ceiling

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace glued on or mechanically attached acoustical ceiling tiles

Qty: 18,000.00

Unit of Measure: S.F.

Estimate: $226,813.63

Assessor Name: System

Date Created: 01/12/2016

Notes: Replace sound absorbing ceiling panels in gym.

System: D5030 - Communications and Security

Location: Entire Building

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Clock System or Components

Qty: 120.00

Unit of Measure: Ea.

Estimate: $225,120.45

Assessor Name: System

Date Created: 12/15/2015

Notes: Replace existing clock and bell system with wireless, battery operated system. Approximate 120

System: D5030 - Communications and Security

Location: Auditorium
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Sound System
Qty: 1.00
Unit of Measure: LS
Estimate: $25,947.38
Assessor Name: System
Date Created: 12/15/2015

Notes: Replace the auditorium aged sound system

System: E1020 - Institutional Equipment

Location: Auditorium
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Stage Theatrical Lighting System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $293,594.70
Assessor Name: System
Date Created: 12/15/2015

Notes: Replace the auditorium theatrical lighting with new theatrical lighting and dimming system

System: E1090 - Other Equipment

This deficiency has no image.

Location: Culinary Arts Kitchen

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Remove and replace kitchen equipment - fill the quantities required in the estimate

Qty: 1.00

Unit of Measure: Ea.

Estimate: $463,092.67

Assessor Name: System

Date Created: 01/12/2016

Notes: Upgrade kitchen equipment in the culinary arts kitchen. Requested by the school principal.

System: E2010 - Fixed Furnishings

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace stage curtain - insert the LF of track and SF of curtain

Qty: 1.00

Unit of Measure: Ea.

Estimate: $151,944.76

Assessor Name: System

Date Created: 01/12/2016

Notes: Replace worn stage draperies in auditorium

Priority 5 - Response Time (> 5 yrs):

System: D3030 - Cooling Generating Systems

Location: Entire building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Install chilled water system with distribution piping and pumps. (+250KSF)

Qty: 275,000.00

Unit of Measure: S.F.

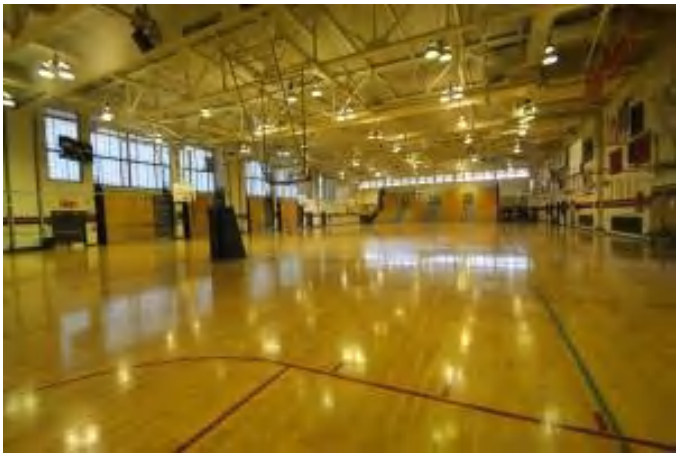
Estimate: $4,180,575.55

Assessor Name: System

Date Created: 12/23/2015

Notes: Install 825 ton capacity cooling generating system for entire building.

System: D3040 - Distribution Systems



Location: Gymnasium and locker rooms

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 36,000.00

Unit of Measure: Ea.

Estimate: $2,069,161.60

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace air handlers for gymnasium and locker rooms to add cooling capability, 36,000 sq. ft. area.

System: D3040 - Distribution Systems

Location: Kitchen and cafeteria

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 1,700.00

Unit of Measure: Pr.

Estimate: $869,916.00

Assessor Name: System

Date Created: 12/23/2015

Notes: Replace air handlers for third floor kitchen and basement cafeteria to add cooling capability.

System: D4010 - Sprinklers

Location: Entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 330,000.00

Unit of Measure: S.F.

Estimate: $4,720,797.32

Assessor Name: System

Date Created: 12/21/2015

Notes: Install a fire protection sprinkler system.

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	Electric traction freight elevators, base unit, standard finish, 4000 lb, 200 fpm, 4 stop	3.00	Ea.	Roof					35	2015	2050	$164,636.00	$543,298.80
D2020 Domestic Water Distribution	Pump, pressure booster system, 7-1/2 HP pump, includes diaphragm tank, control and pressure switch	1.00	Ea.	Boiler room					25	2010	2035	$12,198.00	$13,417.80
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 6100 MBH, includes burners, controls and insulated jacket, packaged	4.00	Ea.	Boiler room					35	1998	2033	$140,742.00	$619,264.80
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 300 kVA & below, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	2.00	Ea.	Basement electrical room					30	1957	2017	$42,600.60	$93,721.32
D5010 Electrical Service/Distribution	Transformer, liquid-filled, 5 kV or 15 kV primary, 277/480 V secondary, 3 phase, 1000 kVA, pad mounted	2.00	Ea.	Basement electrical room					30	1957	2017	$50,425.20	$110,935.44
												Total:	**$1,380,638.16**

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):	107,500
Year Built:	1957
Last Renovation:	
Replacement Value:	$1,828,747
Repair Cost:	$680,431.60
Total FCI:	37.21 %
Total RSLI:	72.58 %

Description:

Attributes:

General Attributes:

Bldg ID:	S200001	Site ID:	S200001

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	80.34 %	49.99 %	$680,431.60
G40 - Site Electrical Utilities	50.00 %	0.00 %	$0.00
Totals:	**72.58 %**	**37.21 %**	**$680,431.60**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$7.65	S.F.	39,600	30	1980	2010	2047	106.67 %	187.40 %	32		$567,714.25	$302,940
G2030	Pedestrian Paving	$11.52	S.F.	43,000	40	1957	1997	2057	105.00 %	22.75 %	42		$112,717.35	$495,360
G2040	Site Development	$4.36	S.F.	107,500	25	2000	2025	2025	40.00 %	0.00 %	10			$468,700
G2050	Landscaping & Irrigation	$3.78	S.F.	24,900	15	2000	2015	2025	66.67 %	0.00 %	10			$94,122
G4020	Site Lighting	$3.58	S.F.	107,500	30	2000	2030		50.00 %	0.00 %	15			$384,850
G4030	Site Communications & Security	$0.77	S.F.	107,500	30	2000	2030		50.00 %	0.00 %	15			$82,775
								Total	**72.58 %**	**37.21 %**			**$680,431.60**	**$1,828,747**

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.

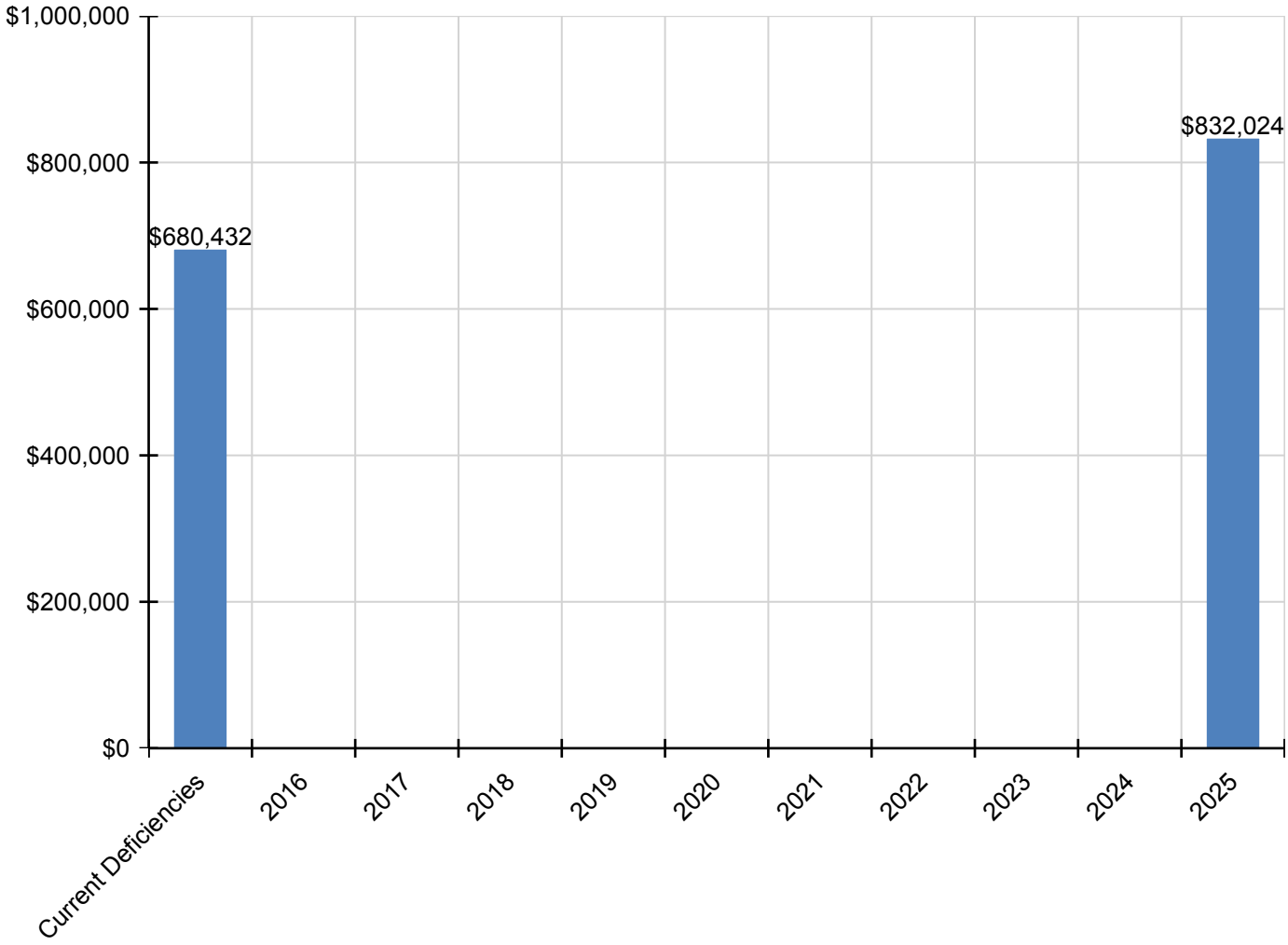
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$680,432**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$832,024**	**$1,512,456**
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	$567,714	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$567,714**
G2030 - Pedestrian Paving	$112,717	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$112,717**
G2040 - Site Development	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$692,883	**$692,883**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$139,141	**$139,141**
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

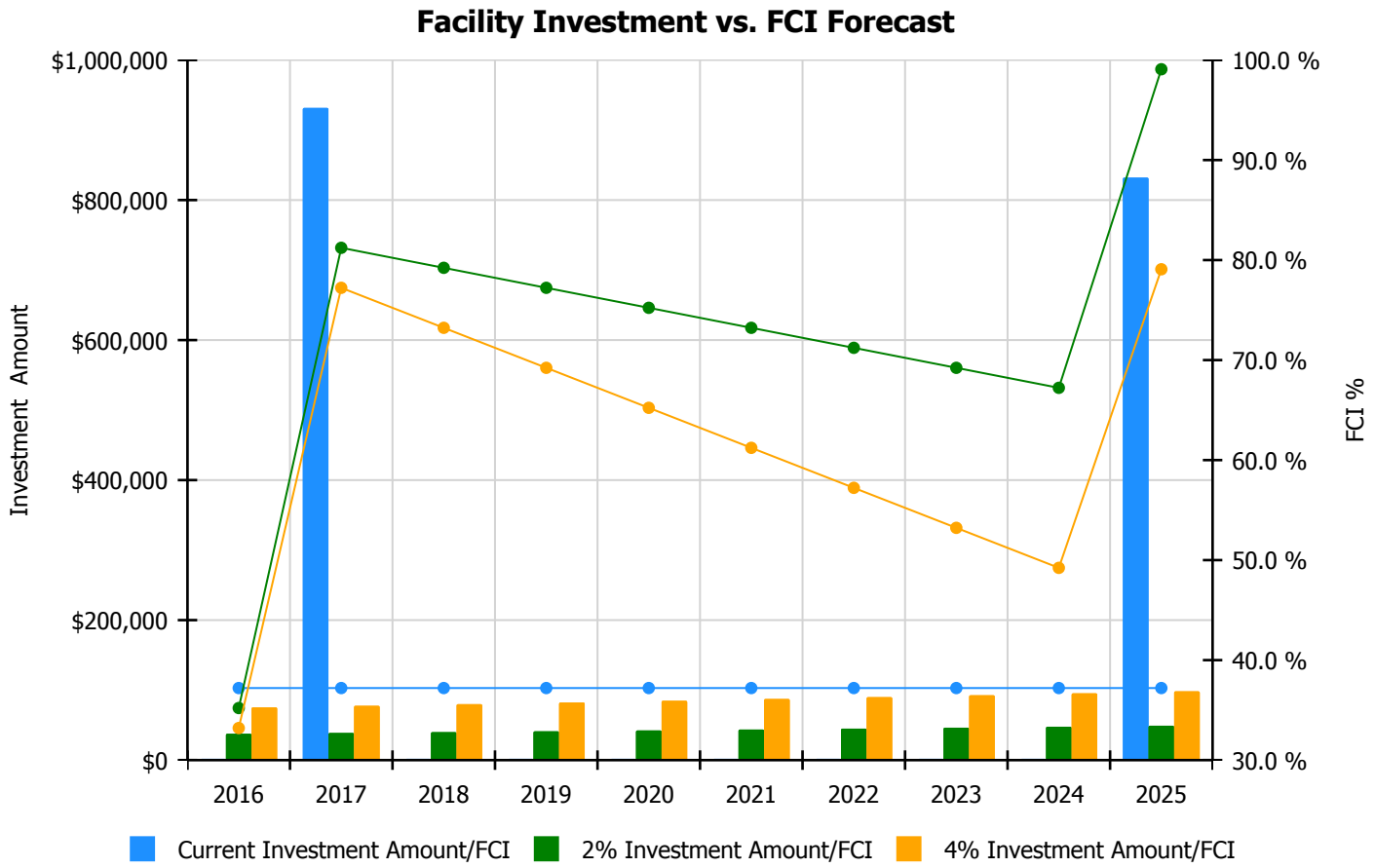
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

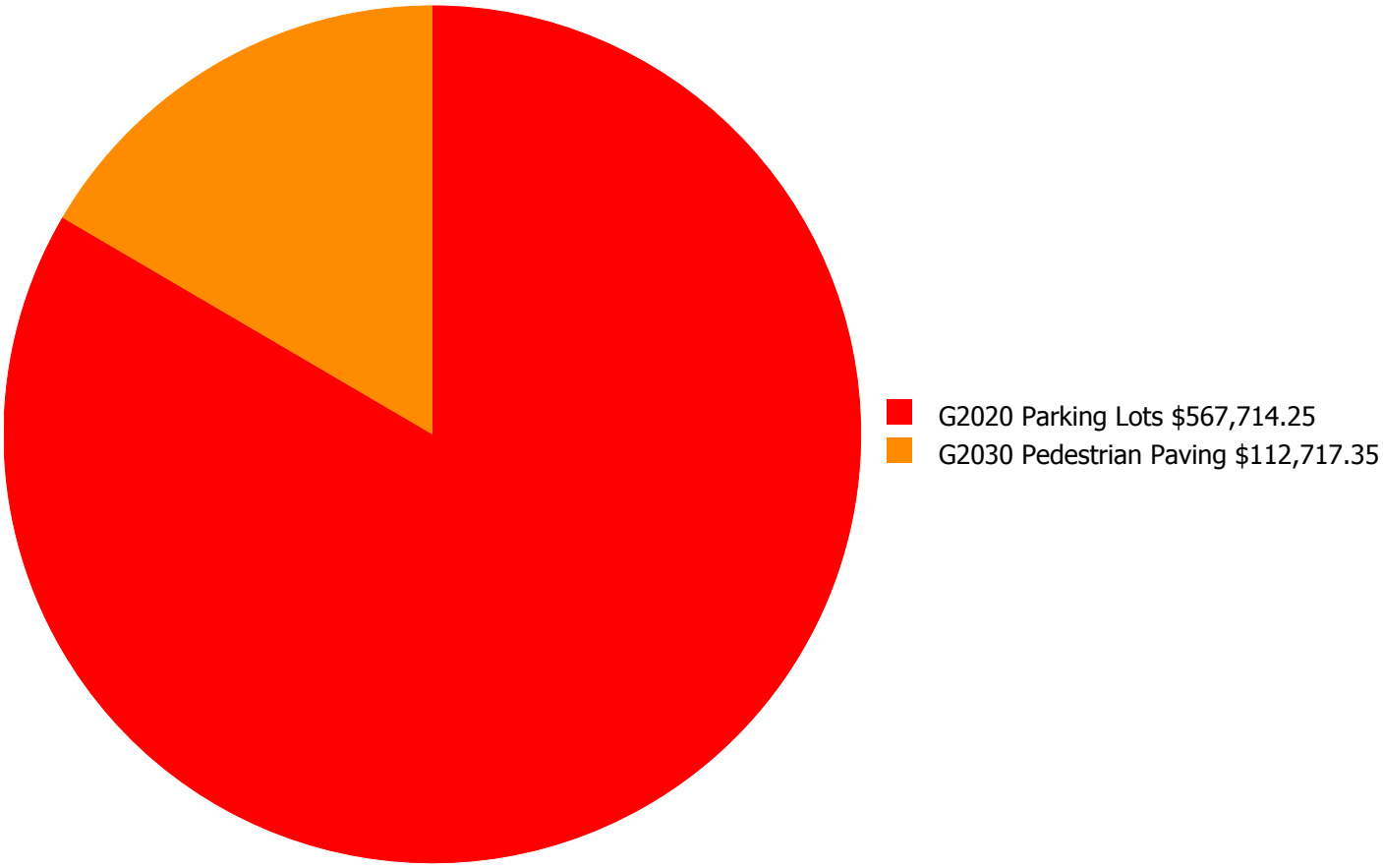
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 37.21%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$37,672.00	35.21 %	$75,344.00	33.21 %
2017	$931,608	$38,802.00	81.23 %	$77,605.00	77.23 %
2018	$0	$39,966.00	79.23 %	$79,933.00	73.23 %
2019	$0	$41,165.00	77.23 %	$82,331.00	69.23 %
2020	$0	$42,400.00	75.23 %	$84,801.00	65.23 %
2021	$0	$43,672.00	73.23 %	$87,345.00	61.23 %
2022	$0	$44,983.00	71.23 %	$89,965.00	57.23 %
2023	$0	$46,332.00	69.23 %	$92,664.00	53.23 %
2024	$0	$47,722.00	67.23 %	$95,444.00	49.23 %
2025	$832,024	$49,154.00	99.08 %	$98,307.00	79.08 %
Total:	**$1,763,632**	**$431,868.00**		**$863,739.00**	

Deficiency Summary by System

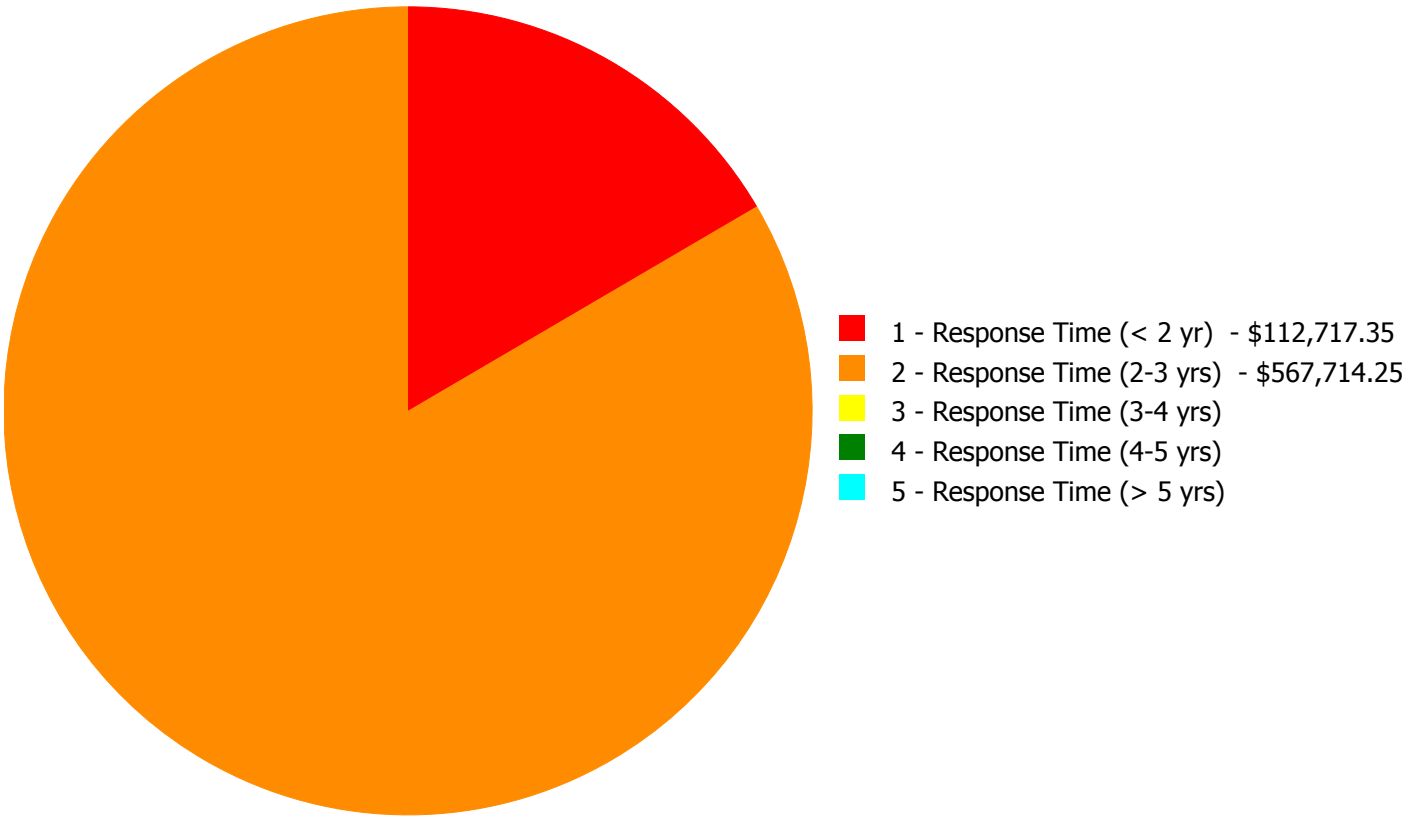
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $680,431.60

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: $680,431.60

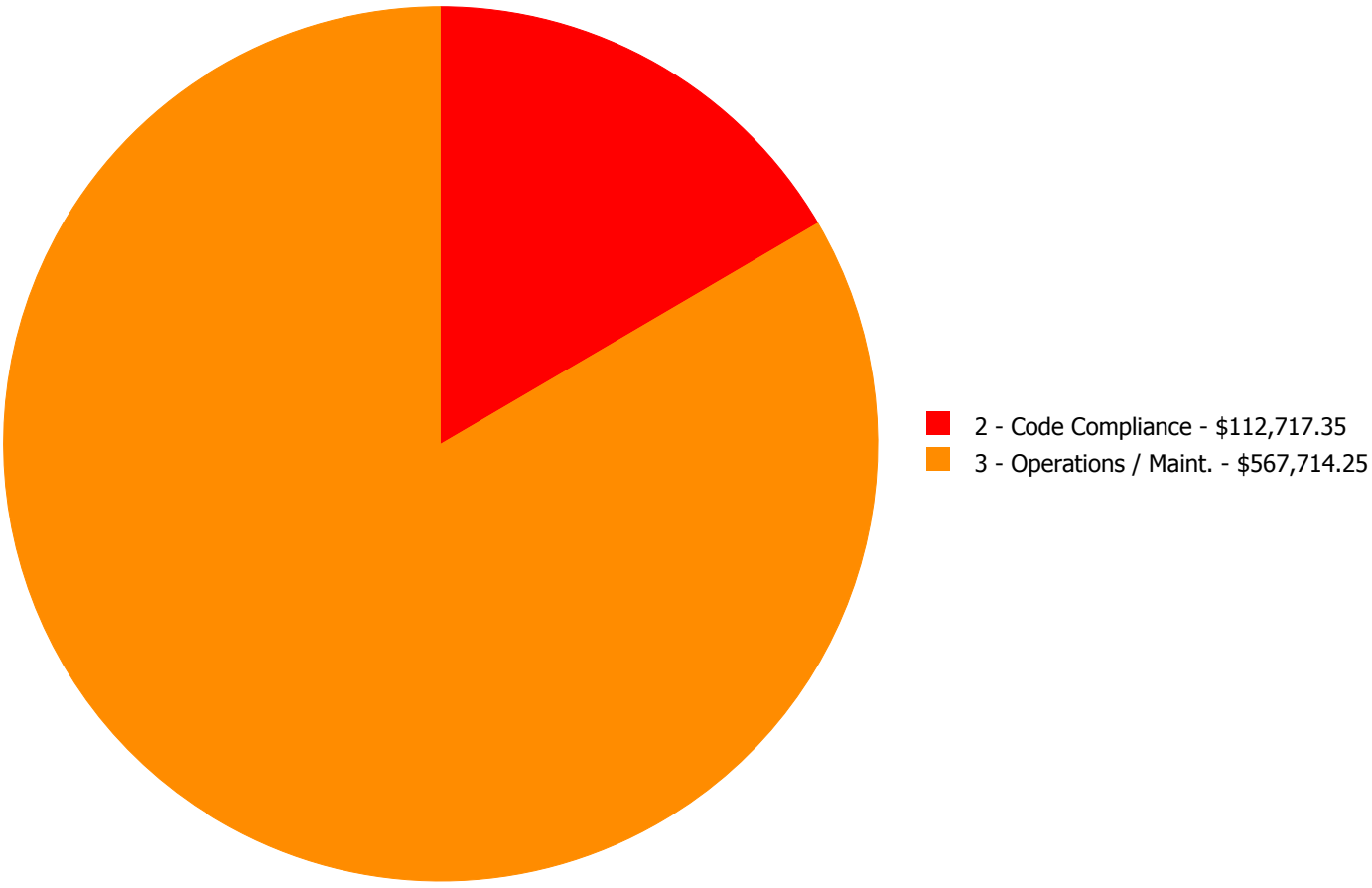
Deficiency By Priority Investment Table

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	$0.00	$567,714.25	$0.00	$0.00	$0.00	$567,714.25
G2030	Pedestrian Paving	$112,717.35	$0.00	$0.00	$0.00	$0.00	$112,717.35
	Total:	$112,717.35	$567,714.25	$0.00	$0.00	$0.00	$680,431.60

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: $680,431.60

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: G2030 - Pedestrian Paving

Location: Exterior stairs at gym, plaza area, doors at dock courtyard.

Distress: Health Hazard / Risk

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install missing concrete landings at exterior doors reducing the step down from the door

Qty: 3.00

Unit of Measure: Ea.

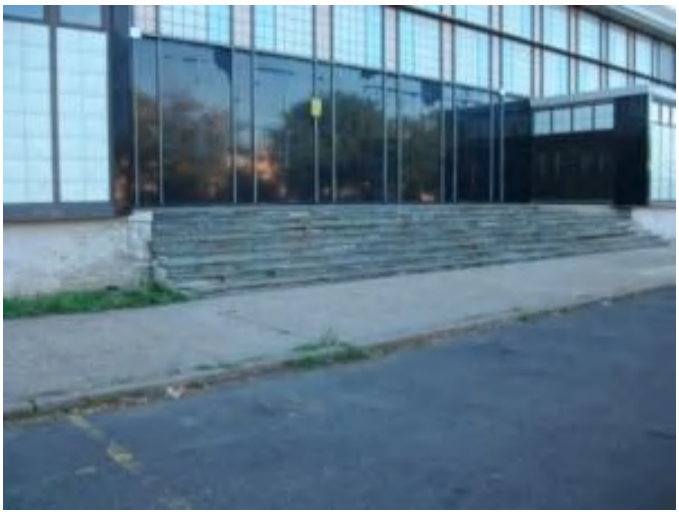
Estimate: $65,950.12

Assessor Name: Craig Anding

Date Created: 01/12/2016

Notes: Stairs are in poor condition with broken pavers, chipped concrete nosings, exposed rebar, etc. Repair stairs. Exterior doors in the dock courtyard area do not have landings flush with floor level. Provide landings. Provide railings at exterior stairs to gym entrance.

System: G2030 - Pedestrian Paving



Location: Gym entrance

Distress: Failing

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to a 48" rise - per LF of ramp - figure 1 LF per inch of rise

Qty: 36.00

Unit of Measure: L.F.

Estimate: $46,767.23

Assessor Name: Craig Anding

Date Created: 01/12/2016

Notes: Provide a ramped entrance to the gym. Install handrails.

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

System: G2020 - Parking Lots

Location: West parking lot

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace AC paving parking lot

Qty: 40,000.00

Unit of Measure: S.F.

Estimate: $567,714.25

Assessor Name: Craig Anding

Date Created: 01/12/2016

Notes: The parking lot does not drain properly with considerable ponding after rains. Regrade to area drains and repave. The parking lots are not striped or signed.

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