

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.

Gompers School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	5701 Wynnefield Ave. Philadelphia, Pa 19131	Enrollment	352
Phone/Fax	215-581-5503 / 215-581-5686	Grade Range	'00-07'
Website	Www.Philasd.Org/Schools/Gompers	Admissions Category	Neighborhood
		Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = $\frac{\text{Cost of Assessed Deficiencies}}{\text{Replacement Value}}$				
< 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	56.85%	\$20,183,041	\$35,500,029
Building	58.99 %	\$19,450,452	\$32,974,736
Grounds	29.01 %	\$732,589	\$2,525,293

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	88.27 %	\$1,618,076	\$1,833,153
Exterior Walls (Shows condition of the structural condition of the exterior facade)	24.92 %	\$435,632	\$1,748,320
Windows (Shows functionality of exterior windows)	292.78 %	\$2,234,708	\$763,280
Exterior Doors (Shows condition of exterior doors)	332.79 %	\$311,221	\$93,520
Interior Doors (Classroom doors)	226.57 %	\$477,059	\$210,560
Interior Walls (Paint and Finishes)	00.00 %	\$0	\$1,101,520
Plumbing Fixtures	02.57 %	\$45,475	\$1,768,480
Boilers	161.50 %	\$1,688,554	\$1,045,520
Chillers/Cooling Towers	65.60 %	\$899,340	\$1,370,880
Radiators/Unit Ventilators/HVAC	204.26 %	\$4,917,324	\$2,407,440
Heating/Cooling Controls	158.90 %	\$1,201,320	\$756,000
Electrical Service and Distribution	103.80 %	\$563,845	\$543,200
Lighting	38.89 %	\$755,320	\$1,942,080
Communications and Security (Cameras, Pa System and Fire Alarm)	37.50 %	\$272,824	\$727,440

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
S428001;Gompers
Final
Site Assessment Report

January 30, 2017



Table of Contents

Site Executive Summary	4
Site Condition Summary	12
<u>B428001:Gompers</u>	14
Executive Summary	14
Condition Summary	15
Condition Detail	16
System Listing	17
System Notes	19
Renewal Schedule	20
Forecasted Sustainment Requirement	23
Condition Index Forecast by Investment Scenario	24
Deficiency Summary By System	25
Deficiency Summary By Priority	26
Deficiency By Priority Investment	27
Deficiency Summary By Category	28
Deficiency Details By Priority	29
Equipment Inventory Detail	56
<u>G428001:Grounds</u>	57
Executive Summary	57
Condition Summary	58
Condition Detail	59
System Listing	60
System Notes	61
Renewal Schedule	62
Forecasted Sustainment Requirement	63
Condition Index Forecast by Investment Scenario	64
Deficiency Summary By System	65
Deficiency Summary By Priority	66
Deficiency By Priority Investment	67

Site Assessment Report

Deficiency Summary By Category	68
Deficiency Details By Priority	69
Equipment Inventory Detail	72
Glossary	73

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 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):	56,000
Year Built:	1950
Last Renovation:	
Replacement Value:	\$35,500,029
Repair Cost:	\$20,183,041.48
Total FCI:	56.85 %
Total RSLI:	65.72 %



Description:

Facility Assessment
October 26th, 2015

School District of Philadelphia
Samuel Gompers Elementary School
5701 Wynnefield Avenue
Philadelphia, PA 19131

56,000 SF / 537 Students / LN 02

Samuel Gompers School is located at 5701 Wynnefield Avenue in Philadelphia, PA. The 2 story, 56,000 square foot building was built in 1950. There have been no additions and no major renovations. The library was upgraded with a grant from Target, and the gym/cafeteria/kitchen floor coverings have been replaced. There are three portable buildings on the site that are not included in the assessment scope. The building has no basement, though portions of the ground floor are below adjacent grades due to the slope of the site. There are crawl spaces under a portion of the gym/locker room area and on the east half of the north wing at ground floor level.

The school capacity is approximately 700 students with 2015/16 enrollment of 388.

The school plan an open wedge shape with: a 2-story classroom wing to the north; auditorium, offices and stairwell at the apex: and classrooms, gym, cafeteria, and boiler room at the southwest wing. The building is set back from the street on the sloping lot with a large grassy front lawn.

Mr. Richard Toohey FAC, provided input to the assessment team on current problems. Mr. Art Moorland, Building Engineer provided input to the Parsons assessment team on current problems in the building and accompanied the team on its tour of the school providing information on building systems and maintenance history. Mr. Moorland Building engineer has been in the school one year. Principal Phillip Delucca reviewed the assessment team's findings and discussed his concerns about the building.

ARCHITECTURAL/STRUCTURAL SYSTEMS

Foundations are presumed to be standard concrete and visible areas are in good condition with no significant cracking observed. There is some cracking in masonry walls throughout the building that may indicate some settlement. Groundwater intrusion was observed along the west sub-grade wall in the crawl space of the north wing. Groundwater, possibly contaminated with oil, was rising in the boiler room. There is an interior ramp at the floor level change to the north classroom wing on level 1. Floor and roof construction are cast in place concrete. Spalled concrete exposing rebar is evident at slab edges creating roof overhangs. Exterior walls are blond brick on CMU. Some cracking in exterior walls was noted at various locations around the building. The chimney is banded with some cracking of bricks. Mortar joints are in need of pointing and control joints should be re-caulked. Spandrel panels of stone are placed between first and second floor windows on the east elevations. Lower levels and some areas above low roofs have been painted to overwrite graffiti. Classroom walls facing the playground are painted with murals above and below windows. Exterior windows are original aluminum frames with fixed and operable single pane glass and acrylic glazing. Windows are protected with security grilles. Windows around the auditorium lobby are wood framed single pane units. Windows are in poor condition with some operable sections broken, are difficult to operate, and are not energy efficient. Exterior doors are painted hollow metal in hollow metal frames with gun slot lites and transom glazing and panic hardware. Doors are in generally fair condition are not ADA compliant. There is not a handicap entrance with an exterior ramp. Roofing is low sloped with a built-up membrane with a granular cap sheet. There are two apparent roof installations. The older roofs are black and in poorer condition than the newer roofs with a more reddish appearance. There are reported and apparent leaks. The roofs are in poor condition and should be replaced. Poor roof conditions include loss of granules on the cap sheet, bubbling in the cap sheet (more prominent on the older roofs), and apparent ponding areas. The roofs have been scoured by overhanging tree branches and there is excess tree debris accumulated on roofs. Exterior walls are protected with overhanging roof slabs with metal drip edges. Wall to roof flashing is typically aluminum, though there are some areas of c copper. Some low roof areas towards the parking lot have coiled razor wire at the edges. Roof drainage is via interior piped roof drains. There are no overflow drains. Roof openings include roof hatches. Hatches are not manufactured and are comprised of plywood with standing seam metal weather protection. They are heavy and unsafe. Roof access is via fixed ladders to hatches and fixed ladders between various roof levels.

Interior partitions include CMU, glazed block at stairwells, the kitchen, student restrooms and locker rooms, and glass block at the cafeteria and office. There are some glazed openings in wood frames, notably at the main office. Interior partitions are in generally fair condition with some cracking noted. Interior doors are typically solid core wood in wood frames. Classroom doors are typically fully glazed with wired glass or clear acrylic glazing. Other interior doors include wood in wood frames with glazing, sidelites and transoms at stairwells and exit ways, and access doors. Doors are generally in fair condition with some broken glass, missing or damaged air grilles, scuffing and marks, and are not ADA compliant. Wardrobe doors are removed due to pinching/safety concerns. Doors swing in the direction of exit. Classroom doors are recessed and do not reduce exit width when opened. Fittings include: chalkboards that are outdated; few marker boards; tack boards; interior signage that is typically stenciled on doors or on walls adjacent to doors; toilet accessories and stone toilet partitions with plastic doors at student restrooms and baked enamel partitions at faculty/staff restrooms.

Exit stair construction is concrete filled metal pans. Stair treads and landings are sealed concrete with integral metal nosings. Handrails are wood and have no returns or extensions at floor landings. Handrails do wrap around intermediate landings. Metal barrier rails and railing picket spacing does not exceed 4". Wood stairs at the stage have resilient treads and wood nosings with no handrails. Steps in the auditorium lobby have stone treads and metal handrails with no extensions at landings.

Interior wall finishes are typically paint. Murals decorate the corridors. Acoustical tiles are applied to walls in the cafeteria and some are damaged. Ceramic tile is used at faculty/staff restrooms and at drinking fountain recesses in corridors. Wall finishes are generally in good condition with some damage at roof leaks or at wall cracking, and some peeling paint at exterior walls. Interior floor finishes are typically 9" VAT in classrooms, corridors and the auditorium. VCT tile is used in the gym, cafeteria, kitchen, and one classroom. Other floor finishes include terrazzo in restrooms in fair condition with staining and wear, ceramic tile faculty/staff and kindergarten restrooms in fair condition, wood on the stage in fair condition and stone in the auditorium lobby in good condition. Interior ceilings are typically painted concrete structure. Other ceiling finishes include: plaster in the auditorium and exposed structure in service rooms. Ceiling finishes are generally in good condition with some repairs needed at roof leaks.

Site Assessment Report - S428001;Gompers

This building has no elevator.

Institutional equipment includes: theatrical lighting; pull-down projection screens; a motorized projection screen at the stag; a Smartboard in the library; gym equipment – basketball backstops. Kitchen equipment is adequate.

Furnishings include: auditorium seating in poor condition; fixed wood casework aged condition; recessed display cases in corridors; window shades in poor condition.

MECHANICAL SYSTEMS

Most of the original plumbing fixtures remain in service. Fixtures in the restrooms on each floor consist of wall mounted flush valve water closets, wall hung urinals and lavatories with wheel handle faucets. Water closets in the staff restrooms are floor mounted. Sinks are installed in many of the classrooms. The fixtures appear in good repair and they should provide reliable service for the next 5-10 years with regular maintenance. However, the older units should be replaced as part of any renovation of the spaces.

Drinking fountains in the corridors and at the restrooms are either the original wall hung china fixtures or replacement units with refrigerated coolers that are typically badly damaged. They are well beyond their service life and should be replaced; the original units are NOT accessible type.

A service sink is available on each floor for use by the janitorial staff. The Cafeteria has a single compartment, stainless steel pot and pan sink with lever operated faucets and a grease trap.

A 4" city water service enters the building from Wynnefield Avenue near the intersection with Cardinal Avenue. The 4" meter and valves are located in the boiler room near the stair. A reduced pressure backflow preventer is installed on the makeup line to the boilers. The original domestic hot and cold water distribution piping was installed in 1948 with threaded galvanized piping; later retrofits were done using copper piping and sweat fittings. Wheel handle gate valves available in the corridor of the Ground Floor shut off large groups of fixtures on one side or the other of both floors. The maintenance staff reports no significant problems with the domestic piping and the supply seems adequate to the fixtures. However, the domestic water piping is well beyond its service life and should be replaced to avoid failures common in galvanized piping systems caused by excessive scale build-up.

Two gas-fired, tankless instantaneous (on demand) water heaters manufactured by Paloma were installed in the boiler room in 1994 to supply hot water for domestic use. The original tank type, water heaters are abandoned in place. The active units are equipped with T&P relief valves. The water heaters are beyond their service life and should be replaced to maintain reliable service. The building has no water softener for conditioning water supplied to the boilers.

Roof drains conduct storm water to the sewer system on the site. The original sewer discharges to Wynnefield Avenue and combines sanitary wastes and storm drainage. Piping is galvanized steel with threaded fittings. Sections of pipe have been replaced using cast iron pipe with hub less fittings joined with banded couplings. A new manhole and sanitary waste piping should be installed to separate the storm and sanitary sewer systems to avoid backups through the drains on the lower level.

Ground water leaks have developed at monitoring wells that were provided when the oil tank was installed in the old coal ash bunker at the NW corner of the Ground Floor. These wells were necessary to monitor ground water migration of fuel leaking from a tank at St. Joseph's University up the hill from the school. A potential solution to this problem might be to install under slab drain tile around the perimeter of the boiler room connected to a sump pit with duplex pumps that discharge to the storm sewer.

The maintenance staff reported no problems with the sanitary waste piping systems. However, the original sewer piping has been in service for nearly 70 years and will require more frequent attention from the maintenance staff as time passes. The District should hire a qualified contractor to examine the sanitary waste piping using video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

Low pressure steam is generated at 15 lbs. /sq. in. or less by two 120 HP Weil McLain cast iron sectional boilers installed in 1976. One unit can handle the load in all weather conditions. A third smaller original boiler and the incinerator are abandoned in place. Each boiler is equipped with a Power Flame burner designed to operate on natural gas or fuel oil. Combustion air makeup is supplied by louvers equipped with motorized dampers. Burner controls provide full modulation with digital flame sensing, pressure atomization on oil and natural gas pilot ignition. Burner oil pumps are loose and not driven by the fan motor. The oil supply to the burner is equipped with dual solenoid valves and strainer, but does not have a disposable media filter. The breeching for each boiler is equipped with a barometric flue damper intended to maintain positive draft; these controls have failed. Cast iron sectional boilers have an anticipated service life of 35 years or more; these units have been in service over 40 years. The boilers appear well maintained, but the District should budget to replace them in the next 5-10 years. The new units should be equipped with gas/oil burners that incorporate

Site Assessment Report - S428001;Gompers

features like electronic ignition.

The reserve oil supply is stored in a 4,500 gallon single wall, steel tank. The tank is located in the old coal ash bunker at the NW corner of the Ground Floor. It is not equipped with automatic leak detection and monitoring. Duplex pumps located adjacent to the tank bunker circulate oil through the system. Natural gas is supplied to the burner pilots, but oil is used as the primary fuel. The District does not receive credit from the gas utility as an interruptible service. The current supply of oil should be tested for quality on a regular schedule. Oil storage tanks have an anticipated service life of 20 years. The District should budget for replacing this tank with an aboveground concrete-encased tank in the next few years.

A 1-1/4" natural gas service enters the building from Wynnefield Avenue near the intersection with Cardinal Avenue. The meter and valves are located in the boiler room near the stair. This service should be improved to provide sufficient capacity and pressure to support burning natural gas as the primary fuel. Cooking equipment is also powered by electricity.

The vacuum condensate receiver tank and boiler feed pump assembly was installed in the boiler room in 1976 and should be replaced as it is beyond the anticipated service life. A serious problem was reported with failed steam traps. Live steam passes into the condensate piping system from the failed traps. The District has not conducted a recent steam trap survey for this building and traps are not serviced on a regular schedule.

Packing leaks were observed at the bonnets of the OS&Y gate valves at the steam header above the boilers. The boilers are equipped with steam pressure relief valves.

Steam piping is black steel (ASTM A53) with welded fittings. The condensate piping is Schedule 80 black steel with threaded fittings. Steam and condensate piping mains from the basement level run up through the building to the terminal units on all floors. The original distribution piping installed in 1948 has been in service nearly 70 years and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes. The District should hire a qualified contractor to examine the steam and condensate piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

Unit ventilators (UV) provide heating and ventilation for the majority of the classrooms. Most are the original units installed in 1948 and are equipped with mixing dampers and steam heating coils, but have no cooling coils. The Building Engineer doesn't run the UV's except in cold weather due to failed temperature controls. They are not designed to supply minimum outdoor air ventilation required by current codes. The outdoor air intake for these units is ducted directly through the wall and the louver is just above the roof level for units that serve a portion of the second floor. Excess air supplied by the unit ventilators transfers to the corridor and relieves to the outdoors through gravity hoods on the upper level. Exhaust from the restrooms is made up by air transferred from the corridors through louvers in the doors. These conditions do not meet requirements of NFPA 90A that prohibit utilizing an egress corridor as part of the air path. The unit ventilators are well beyond their anticipated service life of 15-20 years and should be scheduled for replacement. The new units should be designed for quiet operation and equipped with hot water and chilled water coils, and integral heat exchangers that do not require transfer to the corridor.

In addition, only about half of the classrooms in the school building have window air conditioning units due to limitations of the existing electrical service. These units have an anticipated service life of only 10 years. Installing an air-cooled chiller on the roof with pumps located in the boiler room and chilled water distribution piping could supply more reliable air conditioning for the building with a much longer service life.

Two fan coil air handling units mounted in the ceiling space above the locker rooms supply heating and ventilation for the Gymnasium. The blades of the wall supply diffusers are badly damaged and should be replaced with vandal resistant type. Similarly, two fan coil units hung from the structure of the stage supply heating and ventilation for the Auditorium. Return air for these units is drawn through the plenum space below the stage. These fan coil units are equipped with steam heating coils and mixing dampers, but do not have air conditioning coils. The fan coil units should be replaced as they are beyond their anticipated service life. Steam finned tube radiation terminals provide supplemental heat for many of the spaces including the classrooms, offices, lunchroom, and at the high windows in the auditorium and gym.

Rooms 112 & 113 near the intersection of the corridors on the Ground Floor have no mechanical ventilation. Ventilation could be provided for these spaces by installing distribution ductwork and registers supplied by a constant volume air handling unit in the boiler room. The main administrative offices and the kitchen office also have no mechanical ventilation.

Six (6) low profile, power roof ventilators exhaust air from the restrooms and utility rooms. They are controlled by a time clock. These fans should be replaced as they are well beyond their anticipated service life and many are failing. The janitor closets have no exhaust fan for ventilation. The kitchen convection oven should also be relocated so that it is fully covered by the existing exhaust hood.

Site Assessment Report - S428001;Gompers

The original pneumatic systems still provide basic control functions. Pneumatic room thermostats drive the unit ventilators, the damper actuators and control valves. Pneumatic control air is supplied from a compressor and dryer located in the boiler room. The maintenance staff reports temperature control is poor due to significant problems with oil, moisture and dirt in the pneumatic supply lines and failed copper tubing buried in the walls and floor slabs. The older pneumatic controls have small rubber gaskets and tubing connections at devices that have become brittle and fail regularly. The Building Engineer is forced to turn the boilers on/off to regulate temperature in the building during the heating season. The pneumatic systems are beyond their service life and require too much attention from the maintenance staff. The original control valves, dampers and pneumatic actuators are over 35 years old and should be rebuilt or replaced. These controls should be converted to DDC.

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

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

ELECTRICAL SYSTEMS

An underground transformer vault (location was not identified) and an underground lateral secondary conductors serve this school. The electrical room is located on the first floor. The electrical room houses the utility main disconnect switch, utility metering 222MU 38250 and 120/240V, 400A (estimated) distribution section. The existing service has no extra capacity for expansion or new Heating, Ventilation, Air Conditioning (HVAC) system. The electrical service needs to be upgraded. The new service will be 480V/277V, 3 phase power, approximate 1000 amperes. The new electrical service would feed a 480V Motor Control Center (MCC) and HVAC (Heating, Ventilation and Air Conditioning) equipment, and a 480V 3 phase to 120V/208V 3 phase 225 KVA step-down transformer to feed receptacles, lighting and other smaller loads.

On each floor, there are original 120/240V recessed, panel-boards for lighting and receptacles. The original panelboards and associated wiring have exceeded their useful life and they need to be replaced. There is (1) 45KVA phase converters from 240V to 120/208V which normally feeds newest mechanical equipment.

There number of receptacles in all of the classrooms is inadequate. 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.

Classrooms are illuminated with pendant mounted fluorescent fixtures. The stairwells and corridors are illuminated with surface mounted fluorescent fixtures. The mechanical rooms are illuminated, with pendant mounted, industrial type fluorescent fixtures. The auditorium and the gymnasium are illuminated with pendant mounted HID fixtures. Fluorescent fixtures are provided with T-12 lamps. T-12 lamps are becoming more expensive, consume more energy and are difficult to find, therefore replace all existing fluorescent fixtures with T-12 lamps with fluorescent fixtures with T-8 lamps.

The fire alarm system is manufactured by S.H. Couch Inc. The system is approximately 30 years old. The present fire alarm system does not meet current code and needs to be replaced. Fire alarm system is tested every day in the morning.

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

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

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

There is not a television system.

The school does not have a security system. For a safe environment provide surveillance CCTV cameras for a complete coverage of the interior of the school.

The school does not have emergency power system. Provide an outdoor diesel powered generator.

Site Assessment Report - S428001;Gompers

There is adequate UPS in the IT room.

The emergency lighting is obtained with lighting fixtures with battery backup. Emergency lighting is provided to the gymnasium, auditorium and main entrance. Provide additional emergency lighting fixtures to fully coverage the exit paths.

The school does not have a lightning protection system. A study needs to be conducted to determine if the school requires lightning protection system.

The auditorium is provided with one row of pendant mounted theatrical lighting controlled by local panel board. Modern school auditorium requires front, upstage, high side, back, theatrical lighting and to create different scenes theatrical lighting fixtures are controlled by a dimming system. Provide theatrical lighting and dimming control system.

The auditorium sound system is obtained with wall mounted speakers and a sound rack equipment. The rack with the sound equipment and the speakers appears to be exceeded their useful service life. Provide a permanent installed sound system

GROUNDS SYSTEMS

Parking lots are asphalt in poor condition with cracking, vegetation in the cracks, settled areas and lumpy patching. The parking lot is not striped, there is no signage and no designated accessible spaces with an accessible route to the building. Some parking curbs are installed. Perimeter pedestrian pavements are concrete in fair condition and are generally maintained to minimize trip hazards with some replacement slabs noted. Site steps are in fair condition with some separation in control joints. The north stair to the playground level has several chipped nosings and exterior handrails are inadequate. No ramps are provided at the main building/auditorium entrance. Play areas are paved in asphalt in poor condition with much settlement, rough surface, and uneven patching. Fencing and gates are chain link in fair condition with some rusting, and some leaning sections. Retaining walls, planter walls and curbs, and site feature walls are concrete in fair condition. The flagpole is in fair condition. There is a community/school playground installed on top of the asphalt paving with padded fall protection. The playground equipment is in good condition. Landscaping consists of an expansive front lawn, mature trees, a few shrubs and vines growing on the buildings and fencing. Trees close to the building and vines on the building should be removed to prevent damage to the structure.

The school perimeter is illuminated with wall mounted lighting fixtures and pole mounted floodlights. Add pole mounted floodlights to the back and side of the school.

There are not outdoor, surveillance CCTV cameras around the building perimeter. For a safer environment provide outdoor, surveillance CCTV cameras.

There are (2) wall mounted loud speakers facing the playground area. There was no indication that additional loud speakers are required.

RECOMMENDATIONS

- Repair exterior walls: point brick. Repair cracked brick. Replace caulk joints.
- Replace windows
- Replace exterior doors
- Replace all roofs, flashing, etc.
- Replace roof hatches.
- Replace interior doors and frames
- Provide white marker boards in classrooms
- Install code compliant signage
- Replace 9" VAT with 12" VCT throughout the building
- Refurbish restrooms and make ADA compliant
- Install an elevator
- Replace auditorium seating
- Replace the motorized projection screen on the stage
- Replace six (6) wall hung drinking fountains and integral refrigerated coolers located in the corridors and at the restrooms. These units are well beyond their service life; several are damaged and two are the original china non-accessible type.
- Replace the original galvanized steel domestic water piping in service for nearly 70 years to avoid failures caused by excessive scale build-up.
- Replace the two gas-fired, tankless instantaneous (on demand) domestic water heaters manufactured by Paloma installed in the boiler room in 1994 to maintain reliable service.

Site Assessment Report - S428001;Gompers

- Provide a softener for conditioning water supplied to the boilers.
- Hire a qualified contractor to perform a detailed examination of the galvanized steel sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Provide a new manhole and sanitary waste piping to separate the storm and sanitary sewer systems to avoid backups through the drains on the lower level.
- Install under slab drain tile around the perimeter of the boiler room connected to a sump pit with duplex pumps that discharge to the storm sewer to manage ground water leaks at monitoring wells in the old coal ash bunker at the NW corner of the Ground Floor.
- Replace the two 120 HP Weil McLain cast iron sectional boilers in service since 1976. The new units should be equipped with gas/oil burners that incorporate features like electronic ignition and positive draft controls.
- Replace the 4,500 gallon steel storage tank in the old coal bunker with an aboveground concrete-encased tank.
- Improve the 1-1/4" natural gas service that enters the boiler room from Wynnefield Avenue to provide sufficient capacity and pressure to support burning natural gas as the primary fuel.
- Replace the OS&Y gate valves at the steam header above the boilers to eliminate packing leaks observed at the bonnets.
- Replace the vacuum condensate receiver tank and boiler feed pump assembly installed in the boiler room in 1976. This unit is beyond the anticipated service life.
- Conduct a steam trap survey to identify and replace failed traps passing live steam into the condensate piping system.
- Hire a qualified contractor to examine the steam and condensate piping in service nearly 70 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Replace the two fan coil air handling units mounted in the ceiling space above the locker rooms that supply heating and ventilation for the Gymnasium. The new fan coil units should be equipped with both heating and air conditioning coils and economizer dampers.
- Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE STD 62. The new units should be equipped with hot water / chilled water coils and integral heat recovery wheels. Install steam converters in the existing boiler room with circulating pumps, distribution piping and controls to provide heating hot water for the new coils.
- Replace the two fan coil units hung from the structure of the stage that supply heating and ventilation for the auditorium. The new fan coil units should be equipped with both heating and air conditioning coils and economizer dampers.
- Remove the window air conditioning units and install an air-cooled chiller with two refrigerant circuits on the roof and chilled water distribution piping and pumps located in the boiler room to supply air conditioning for the building.
- Provide ventilation for Rooms 112 & 113 near the intersection of the corridors on the Ground Floor by installing distribution ductwork and registers supplied by a constant volume air handling unit in the boiler room. These rooms have no mechanical ventilation.
- Install a rooftop air conditioning unit to provide ventilation for the main administrative offices.
- Install a rooftop air conditioning unit to provide ventilation for the kitchen office.
- Replace the six (6) low profile, power roof ventilators that exhaust air from the restrooms and utility rooms. These fans should be replaced as they are well beyond their anticipated service life and many are failing.
- Install a power roof ventilator to provide exhaust for the janitor closets as they have no ventilation.
- Replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency.
- Provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.
- Provide a new electrical service 480V/277V, 3 phase power, 1000 Amperes and will be located in the vicinity of the existing electrical service.
- Replace the entire distribution system with new panels and new wiring/conduits. Approximate (10) 208/120V panel boards.
- Provide (2)25FT of surface raceways with 24" receptacles on center and two-duplex wall mount receptacles. Approximate 320
- Replace existing lighting fixtures with up/down, pendant fluorescent fixtures with T8 lamps. Approximate 740 fixtures
- Replace old fire alarm system with addressable type with audio/visual devices at corridors and classrooms. Approximate 75 devices
- Provide indoor surveillance CCTV cameras for a complete coverage of the school interior. Approximate 25 CCTV cameras
- Provide 60 KW, outdoor, diesel powered generator.
- Provide additional emergency lighting fixtures with battery backup. Approximate 16
- Prepare a study to determine if the school requires lightning protection system.
- Provide the auditorium with theatrical lighting and dimming system.
- Provide the auditorium with a permanent installed sound system.
- Provide pole mounted floodlight fixtures. Approximate 4
- Provide outdoor surveillance CCTV cameras. Approximate 20 CCTV cameras
- Replace asphalt paving in parking and play areas, including striping and signage
- Repair exterior steps and install ADA compliant ramps at the main entrance

Site Assessment Report - S428001;Gompers

- Remove vegetation close to the building to prevent further damage and to increase visibility of the building

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 4 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S428001		

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	35.00 %	6.34 %	\$141,517.52
A20 - Basement Construction	35.00 %	0.00 %	\$0.00
B10 - Superstructure	35.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	58.13 %	114.45 %	\$2,981,560.96
B30 - Roofing	110.00 %	88.27 %	\$1,618,075.59
C10 - Interior Construction	59.18 %	86.95 %	\$1,110,606.80
C20 - Stairs	35.00 %	0.00 %	\$0.00
C30 - Interior Finishes	45.32 %	21.26 %	\$630,630.91
D10 - Conveying	77.14 %	272.18 %	\$387,153.48
D20 - Plumbing	36.86 %	33.06 %	\$753,030.92
D30 - HVAC	104.14 %	140.52 %	\$8,753,777.91
D40 - Fire Protection	105.71 %	158.77 %	\$801,103.56
D50 - Electrical	110.11 %	53.95 %	\$1,775,997.11
E10 - Equipment	53.24 %	11.84 %	\$105,570.65
E20 - Furnishings	105.00 %	328.16 %	\$391,426.99
G20 - Site Improvements	81.29 %	20.99 %	\$380,924.98
G40 - Site Electrical Utilities	33.33 %	49.51 %	\$351,664.10
Totals:	65.72 %	56.85 %	\$20,183,041.48

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)
B428001;Gompers	56,000	58.99	\$4,699,057.97	\$6,605,645.69	\$4,319,763.48	\$904,911.58	\$2,921,073.68
G428001;Grounds	163,400	29.01	\$0.00	\$186,111.57	\$546,477.51	\$0.00	\$0.00
Total:		56.85	\$4,699,057.97	\$6,791,757.26	\$4,866,240.99	\$904,911.58	\$2,921,073.68

Deficiencies By Priority



- 1 - Response Time (< 2 yr) - \$4,699,057.97
- 2 - Response Time (2-3 yrs) - \$6,791,757.26
- 3 - Response Time (3-4 yrs) - \$4,866,240.99
- 4 - Response Time (4-5 yrs) - \$904,911.58
- 5 - Response Time (> 5 yrs) - \$2,921,073.68

Budget Estimate Total: \$20,183,041.48

Executive Summary

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

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

Function:	Elementary School
Gross Area (SF):	56,000
Year Built:	1950
Last Renovation:	
Replacement Value:	\$32,974,736
Repair Cost:	\$19,450,452.40
Total FCI:	58.99 %
Total RSLI:	65.56 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B428001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S428001		

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	35.00 %	6.34 %	\$141,517.52
A20 - Basement Construction	35.00 %	0.00 %	\$0.00
B10 - Superstructure	35.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	58.13 %	114.45 %	\$2,981,560.96
B30 - Roofing	110.00 %	88.27 %	\$1,618,075.59
C10 - Interior Construction	59.18 %	86.95 %	\$1,110,606.80
C20 - Stairs	35.00 %	0.00 %	\$0.00
C30 - Interior Finishes	45.32 %	21.26 %	\$630,630.91
D10 - Conveying	77.14 %	272.18 %	\$387,153.48
D20 - Plumbing	36.86 %	33.06 %	\$753,030.92
D30 - HVAC	104.14 %	140.52 %	\$8,753,777.91
D40 - Fire Protection	105.71 %	158.77 %	\$801,103.56
D50 - Electrical	110.11 %	53.95 %	\$1,775,997.11
E10 - Equipment	53.24 %	11.84 %	\$105,570.65
E20 - Furnishings	105.00 %	328.16 %	\$391,426.99
Totals:	65.56 %	58.99 %	\$19,450,452.40

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 the system 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	RSLT%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$24.32	S.F.	56,000	100	1950	2050		35.00 %	0.00 %	35			\$1,361,920
A1030	Slab on Grade	\$15.51	S.F.	56,000	100	1950	2050		35.00 %	16.29 %	35		\$141,517.52	\$868,560
A2010	Basement Excavation	\$13.07	S.F.	56,000	100	1950	2050		35.00 %	0.00 %	35			\$731,920
A2020	Basement Walls	\$23.02	S.F.	56,000	100	1950	2050		35.00 %	0.00 %	35			\$1,289,120
B1010	Floor Construction	\$92.20	S.F.	56,000	100	1950	2050		35.00 %	0.00 %	35			\$5,163,200
B1020	Roof Construction	\$24.11	S.F.	56,000	100	1950	2050		35.00 %	0.00 %	35			\$1,350,160
B2010	Exterior Walls	\$31.22	S.F.	56,000	100	1950	2050		35.00 %	24.92 %	35		\$435,632.10	\$1,748,320
B2020	Exterior Windows	\$13.63	S.F.	56,000	40	1950	1990	2057	105.00 %	292.78 %	42		\$2,234,707.83	\$763,280
B2030	Exterior Doors	\$1.67	S.F.	56,000	25	1950	1975	2042	108.00 %	332.79 %	27		\$311,221.03	\$93,520
B3010105	Built-Up	\$37.76	S.F.	47,539	20	1997	2017	2037	110.00 %	89.73 %	22		\$1,610,716.93	\$1,795,073
B3010120	Single Ply Membrane	\$38.73	S.F.		20				0.00 %	0.00 %				\$0
B3010130	Preformed Metal Roofing	\$54.22	S.F.		30				0.00 %	0.00 %				\$0
B3010140	Shingle & Tile	\$38.73	S.F.		20				0.00 %	0.00 %				\$0
B3020	Roof Openings	\$0.68	S.F.	56,000	20	1950	1970	2037	110.00 %	19.32 %	22		\$7,358.66	\$38,080
C1010	Partitions	\$14.93	S.F.	56,000	100	1950	2050		35.00 %	67.24 %	35		\$562,159.95	\$836,080
C1020	Interior Doors	\$3.76	S.F.	56,000	40	1950	1990	2057	105.00 %	226.57 %	42		\$477,058.71	\$210,560
C1030	Fittings	\$4.12	S.F.	56,000	40	1950	1990	2057	105.00 %	30.94 %	42		\$71,388.14	\$230,720
C2010	Stair Construction	\$1.28	S.F.	56,000	100	1950	2050		35.00 %	0.00 %	35			\$71,680

Site Assessment Report - B428001;Gompers

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
C3010230	Paint & Covering	\$19.46	S.F.	56,000	10	2012	2022		70.00 %	0.00 %	7			\$1,089,760
C3010231	Vinyl Wall Covering	\$0.00	S.F.		15				0.00 %	0.00 %				\$0
C3010232	Wall Tile	\$0.21	S.F.	56,000	30	1950	1980	2047	106.67 %	0.00 %	32			\$11,760
C3020411	Carpet	\$7.30	S.F.	1,680	10	2012	2022		70.00 %	0.00 %	7			\$12,264
C3020412	Terrazzo & Tile	\$75.52	S.F.	2,800	50	1950	2000	2028	26.00 %	11.33 %	13		\$23,964.19	\$211,456
C3020413	Vinyl Flooring	\$9.68	S.F.	46,480	20	1950	1970	2037	110.00 %	134.84 %	22		\$606,666.72	\$449,926
C3020414	Wood Flooring	\$22.27	S.F.	560	25	1950	1975	2030	60.00 %	0.00 %	15			\$12,471
C3020415	Concrete Floor Finishes	\$0.97	S.F.	4,480	50	1950	2000	2050	70.00 %	0.00 %	35			\$4,346
C3030	Ceiling Finishes	\$20.97	S.F.	56,000	25	1950	1975		0.00 %	0.00 %	-40			\$1,174,320
D1010	Elevators and Lifts	\$2.54	S.F.	56,000	35	1950	1985	2042	77.14 %	272.18 %	27		\$387,153.48	\$142,240
D2010	Plumbing Fixtures	\$31.58	S.F.	56,000	35	1950	1985	2022	20.00 %	2.57 %	7		\$45,475.14	\$1,768,480
D2020	Domestic Water Distribution	\$2.90	S.F.	56,000	25	1950	1975	2042	108.00 %	222.28 %	27		\$360,985.48	\$162,400
D2030	Sanitary Waste	\$2.90	S.F.	56,000	25	1950	1975	2042	108.00 %	213.41 %	27		\$346,570.30	\$162,400
D2040	Rain Water Drainage	\$3.29	S.F.	56,000	30	1950	1980	2037	73.33 %	0.00 %	22			\$184,240
D3020	Heat Generating Systems	\$18.67	S.F.	56,000	35	1950	1985	2052	105.71 %	161.50 %	37		\$1,688,553.75	\$1,045,520
D3030	Cooling Generating Systems	\$24.48	S.F.	56,000	30			2052	123.33 %	65.60 %	37		\$899,339.74	\$1,370,880
D3040	Distribution Systems	\$42.99	S.F.	56,000	25	1950	1975	2042	108.00 %	204.26 %	27		\$4,917,324.07	\$2,407,440
D3050	Terminal & Package Units	\$11.60	S.F.	56,000	20	1950	1970	2023	40.00 %	7.27 %	8		\$47,240.76	\$649,600
D3060	Controls & Instrumentation	\$13.50	S.F.	56,000	20	1950	1970	2037	110.00 %	158.90 %	22		\$1,201,319.59	\$756,000
D4010	Sprinklers	\$8.02	S.F.	56,000	35			2052	105.71 %	178.37 %	37		\$801,103.56	\$449,120
D4020	Standpipes	\$0.99	S.F.	56,000	35			2052	105.71 %	0.00 %	37			\$55,440
D5010	Electrical Service/Distribution	\$9.70	S.F.	56,000	30	1950	1980	2047	106.67 %	103.80 %	32		\$563,845.24	\$543,200
D5020	Lighting and Branch Wiring	\$34.68	S.F.	56,000	20	1950	1970	2037	110.00 %	38.89 %	22		\$755,319.82	\$1,942,080
D5030	Communications and Security	\$12.99	S.F.	56,000	15	1950	1965	2032	113.33 %	37.50 %	17		\$272,823.90	\$727,440
D5090	Other Electrical Systems	\$1.41	S.F.	56,000	30	1950	1980	2047	106.67 %	233.04 %	32		\$184,008.15	\$78,960
E1020	Institutional Equipment	\$4.82	S.F.	56,000	35	1950	1985	2042	77.14 %	39.11 %	27		\$105,570.65	\$269,920
E1090	Other Equipment	\$11.10	S.F.	56,000	35	1995	2030		42.86 %	0.00 %	15			\$621,600
E2010	Fixed Furnishings	\$2.13	S.F.	56,000	40	1950	1990	2057	105.00 %	328.16 %	42		\$391,426.99	\$119,280
Total									65.56 %	58.99 %			\$19,450,452.40	\$32,974,736

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: Tile 1%
Paint 99%

System: C3020 - Floor Finishes This system contains no images

Note: Carpet 1%
Terrazzo & Tile 5% (includes stone flooring at auditorium lobby)
Vinyl 83%
Wood 1%
Concrete 8%

System: C3030 - Ceiling Finishes This system contains no images

Note: Painted Structure 88%
Unfinished Structure 6%
Plaster 6%

System: D5010 - Electrical Service/Distribution



Note: Phase converter 45KVA 240V 120/208V

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:	\$19,450,452	\$0	\$0	\$0	\$0	\$0	\$0	\$3,883,393	\$905,183	\$0	\$0	\$24,239,029
* 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	\$141,518	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$141,518
* A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2010 - Exterior Walls	\$435,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$435,632
B2020 - Exterior Windows	\$2,234,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,234,708
B2030 - Exterior Doors	\$311,221	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$311,221
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	\$1,610,717	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,610,717
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	\$7,359	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,359
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	\$562,160	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$562,160

Site Assessment Report - B428001;Gompers

C1020 - Interior Doors	\$477,059	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$477,059
C1030 - Fittings	\$71,388	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,388
C20 - Stairs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C2010 - Stair Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C30 - Interior Finishes	\$0	\$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	\$0
C3010230 - Paint & Covering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,474,294	\$0	\$0	\$0	\$0	\$1,474,294
C3010231 - Vinyl Wall Covering	\$0	\$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	\$0
C3020 - Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020411 - Carpet	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,591	\$0	\$0	\$0	\$0	\$16,591
C3020412 - Terrazzo & Tile	\$23,964	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$23,964
C3020413 - Vinyl Flooring	\$606,667	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$606,667
C3020414 - Wood Flooring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020415 - Concrete Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3030 - Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D - Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D10 - Conveying	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D1010 - Elevators and Lifts	\$387,153	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$387,153
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$45,475	\$0	\$0	\$0	\$0	\$0	\$0	\$2,392,508	\$0	\$0	\$0	\$0	\$2,437,983
D2020 - Domestic Water Distribution	\$360,985	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$360,985
D2030 - Sanitary Waste	\$346,570	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$346,570
D2040 - Rain Water Drainage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3020 - Heat Generating Systems	\$1,688,554	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,688,554
D3030 - Cooling Generating Systems	\$899,340	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$899,340
D3040 - Distribution Systems	\$4,917,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,917,324
D3050 - Terminal & Package Units	\$47,241	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$905,183	\$0	\$0	\$0	\$952,424
D3060 - Controls & Instrumentation	\$1,201,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,201,320
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$801,104	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$801,104
D4020 - Standpipes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

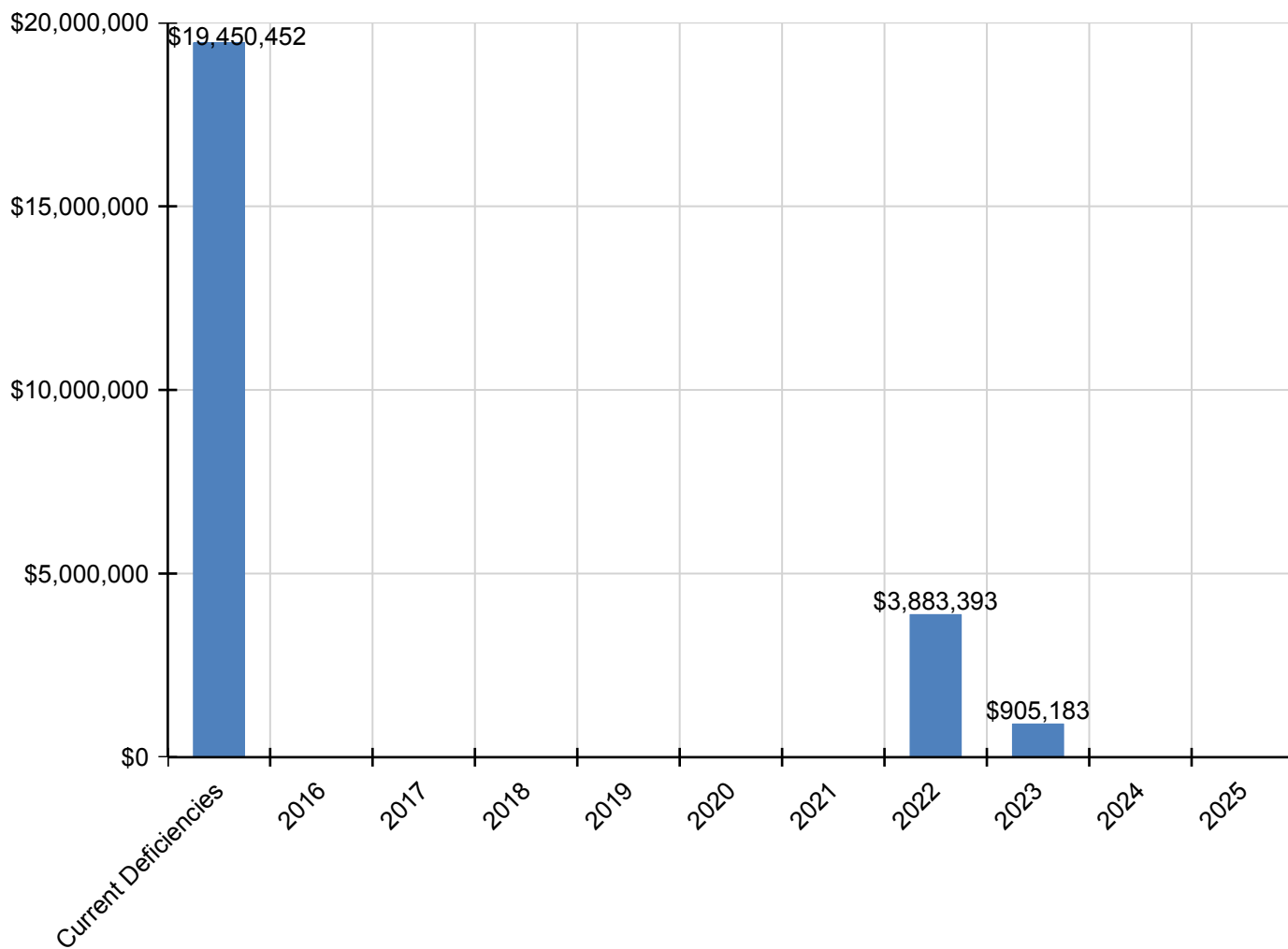
Site Assessment Report - B428001;Gompers

D50 - Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5010 - Electrical Service/Distribution	\$563,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$563,845
D5020 - Lighting and Branch Wiring	\$755,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$755,320
D5030 - Communications and Security	\$272,824	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$272,824
D5090 - Other Electrical Systems	\$184,008	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$184,008
E - Equipment & Furnishings	\$0	\$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	\$0
E1020 - Institutional Equipment	\$105,571	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,571
E1090 - Other Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E20 - Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E2010 - Fixed Furnishings	\$391,427	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$391,427

* Indicates non-renewable system

Forecasted Sustainment Requirement

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

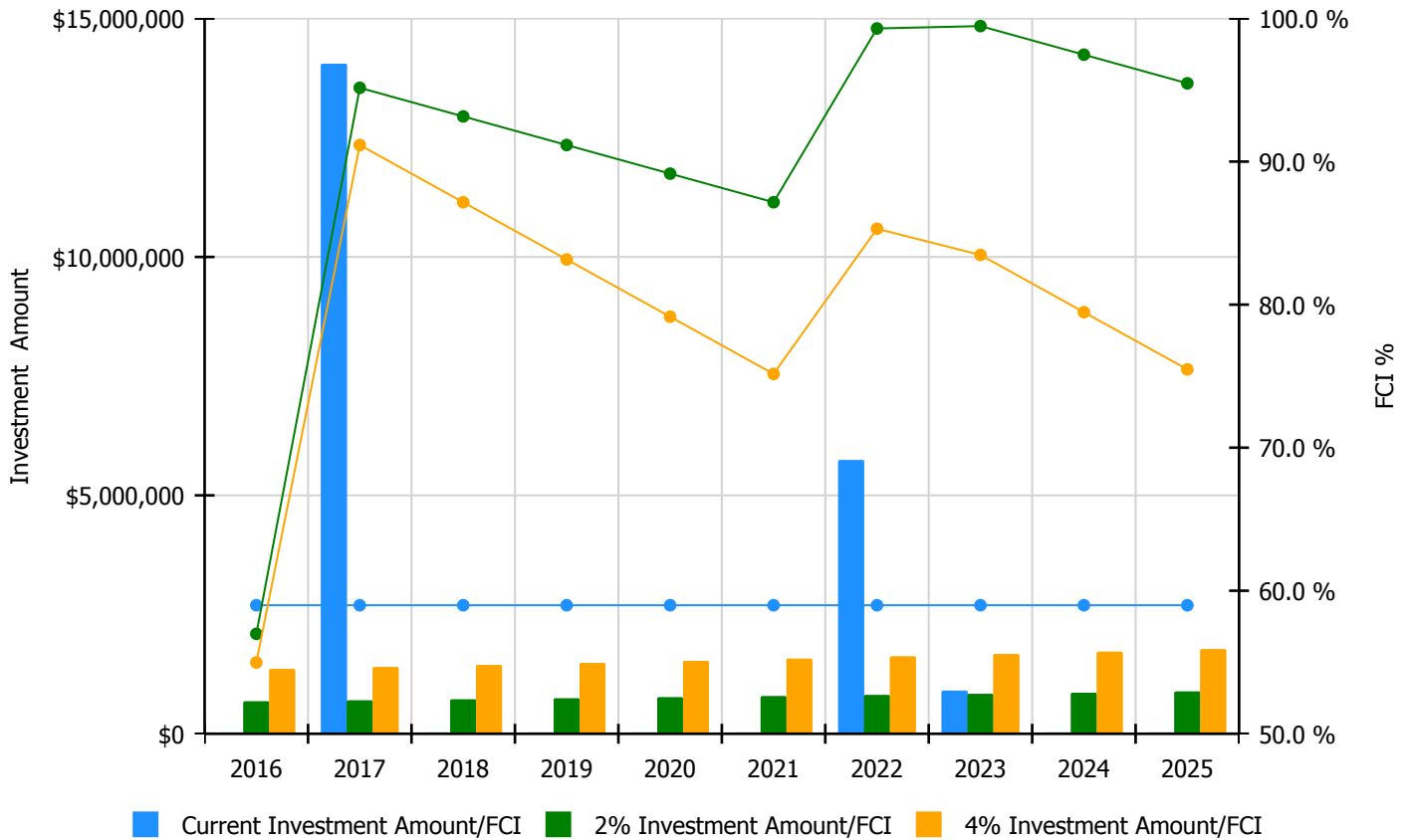


10 Year FCI Forecast by Investment Scenario

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

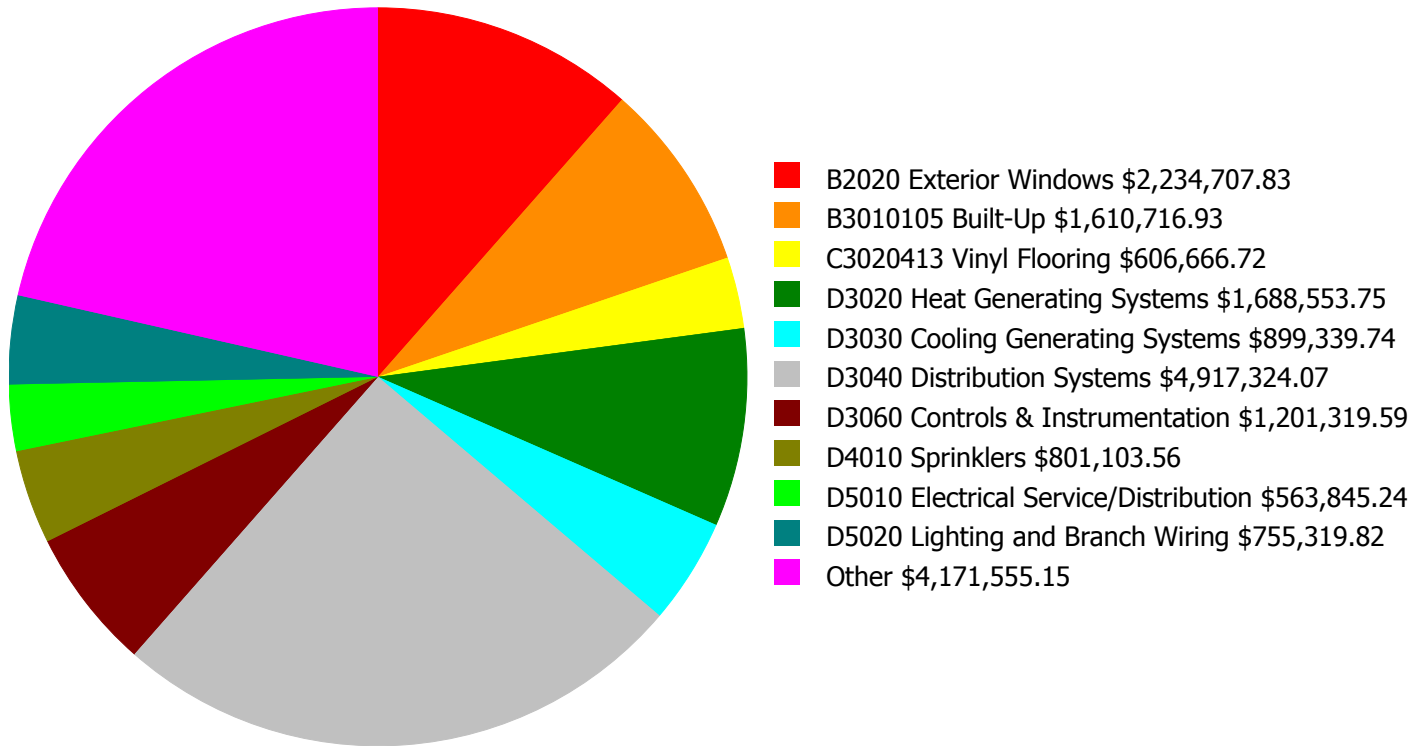
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 58.99%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$679,280.00	56.99 %	\$1,358,559.00	54.99 %
2017	\$14,053,126	\$699,658.00	95.16 %	\$1,399,316.00	91.16 %
2018	\$0	\$720,648.00	93.16 %	\$1,441,295.00	87.16 %
2019	\$0	\$742,267.00	91.16 %	\$1,484,534.00	83.16 %
2020	\$0	\$764,535.00	89.16 %	\$1,529,070.00	79.16 %
2021	\$0	\$787,471.00	87.16 %	\$1,574,942.00	75.16 %
2022	\$5,738,004	\$811,095.00	99.31 %	\$1,622,191.00	85.31 %
2023	\$905,183	\$835,428.00	99.47 %	\$1,670,856.00	83.47 %
2024	\$0	\$860,491.00	97.47 %	\$1,720,982.00	79.47 %
2025	\$0	\$886,306.00	95.47 %	\$1,772,612.00	75.47 %
Total:	\$20,696,313	\$7,787,179.00		\$15,574,357.00	

Deficiency Summary by System

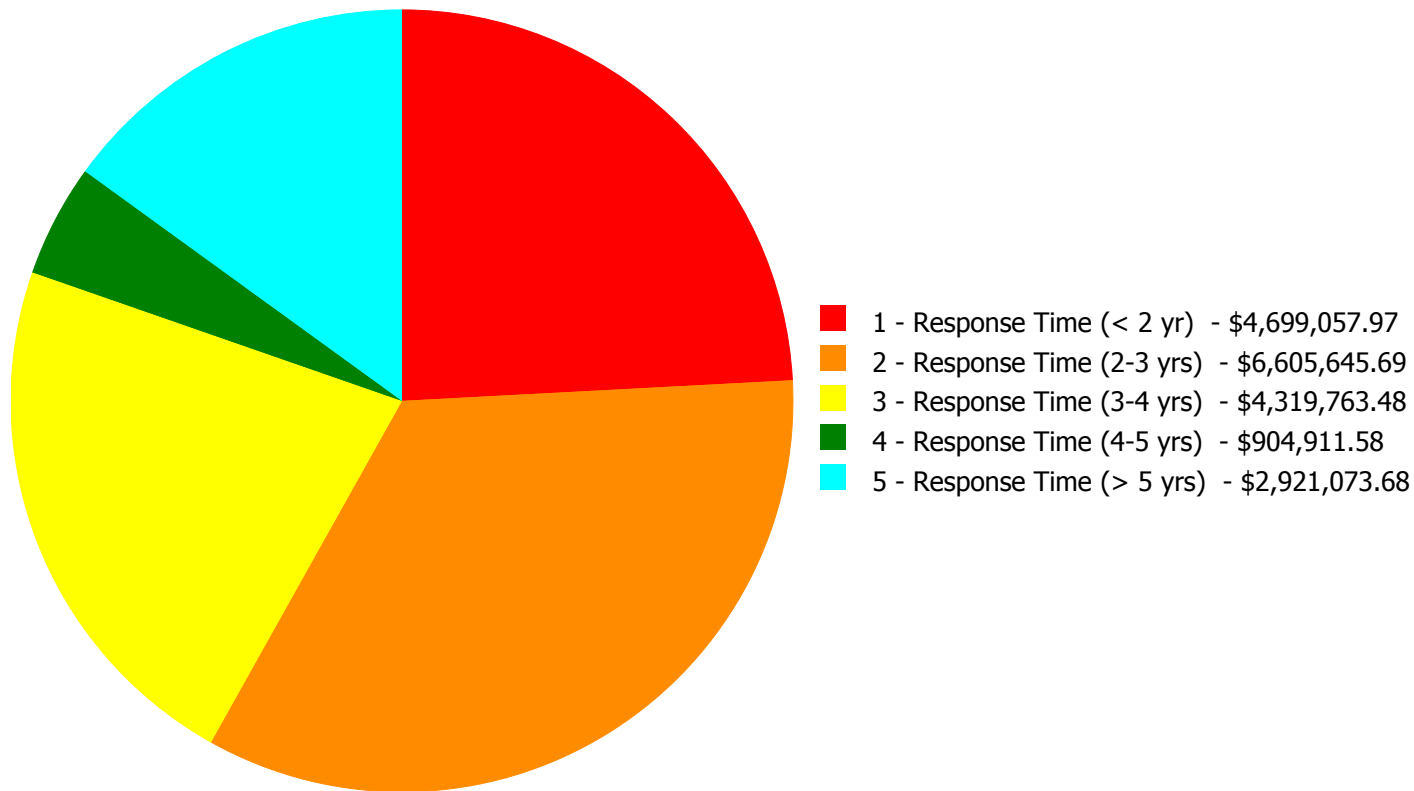
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: \$19,450,452.40

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: \$19,450,452.40

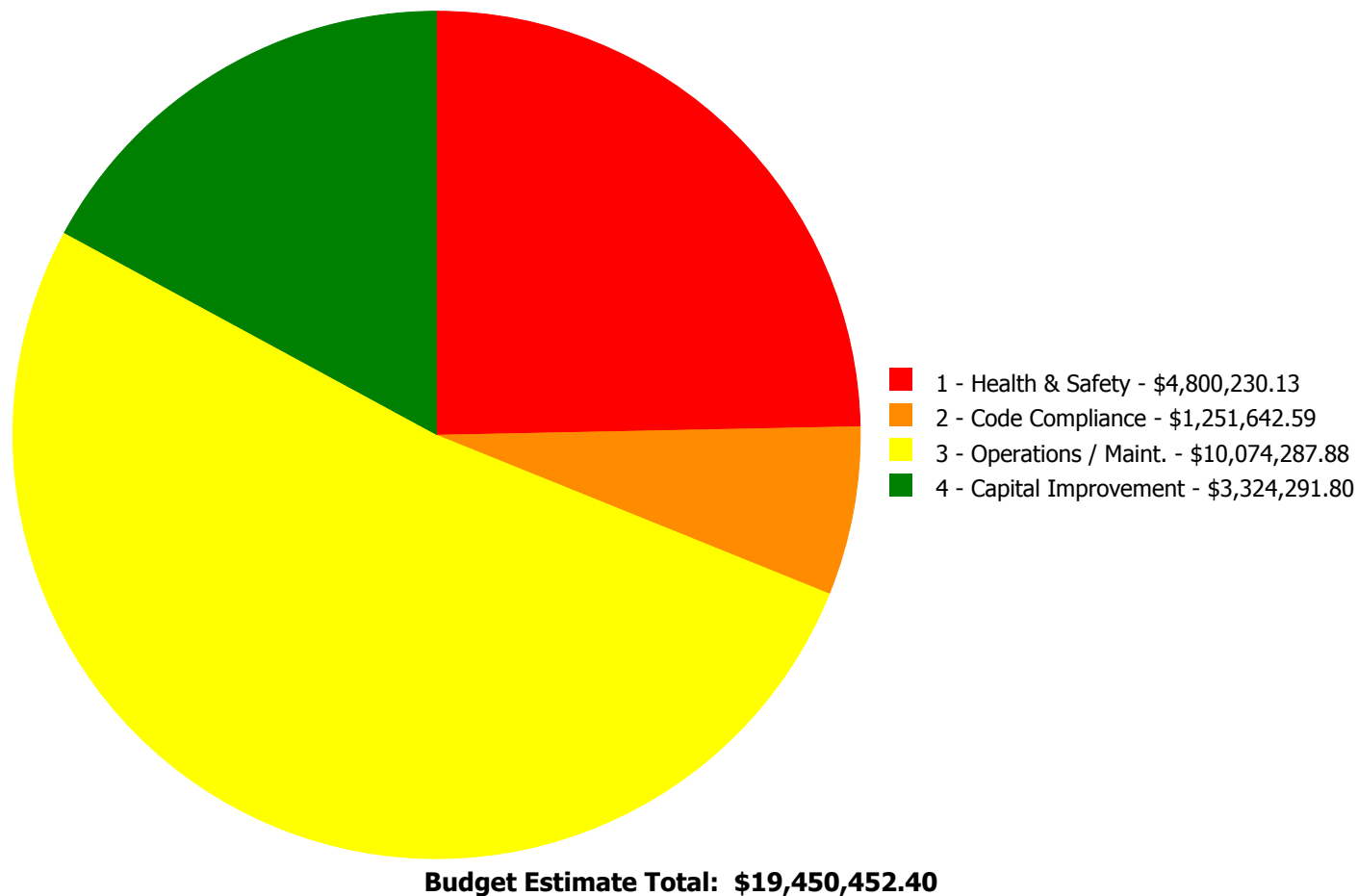
Deficiency By Priority Investment Table

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
A1030	Slab on Grade	\$0.00	\$141,517.52	\$0.00	\$0.00	\$0.00	\$141,517.52
B2010	Exterior Walls	\$48,158.43	\$387,473.67	\$0.00	\$0.00	\$0.00	\$435,632.10
B2020	Exterior Windows	\$0.00	\$2,234,707.83	\$0.00	\$0.00	\$0.00	\$2,234,707.83
B2030	Exterior Doors	\$0.00	\$311,221.03	\$0.00	\$0.00	\$0.00	\$311,221.03
B3010105	Built-Up	\$1,610,716.93	\$0.00	\$0.00	\$0.00	\$0.00	\$1,610,716.93
B3020	Roof Openings	\$0.00	\$7,358.66	\$0.00	\$0.00	\$0.00	\$7,358.66
C1010	Partitions	\$0.00	\$562,159.95	\$0.00	\$0.00	\$0.00	\$562,159.95
C1020	Interior Doors	\$0.00	\$477,058.71	\$0.00	\$0.00	\$0.00	\$477,058.71
C1030	Fittings	\$0.00	\$71,388.14	\$0.00	\$0.00	\$0.00	\$71,388.14
C3020412	Terrazzo & Tile	\$0.00	\$23,964.19	\$0.00	\$0.00	\$0.00	\$23,964.19
C3020413	Vinyl Flooring	\$0.00	\$606,666.72	\$0.00	\$0.00	\$0.00	\$606,666.72
D1010	Elevators and Lifts	\$0.00	\$387,153.48	\$0.00	\$0.00	\$0.00	\$387,153.48
D2010	Plumbing Fixtures	\$0.00	\$0.00	\$45,475.14	\$0.00	\$0.00	\$45,475.14
D2020	Domestic Water Distribution	\$0.00	\$0.00	\$0.00	\$48,947.09	\$312,038.39	\$360,985.48
D2030	Sanitary Waste	\$0.00	\$57,899.65	\$288,670.65	\$0.00	\$0.00	\$346,570.30
D3020	Heat Generating Systems	\$0.00	\$0.00	\$1,121,770.22	\$0.00	\$566,783.53	\$1,688,553.75
D3030	Cooling Generating Systems	\$0.00	\$0.00	\$0.00	\$0.00	\$899,339.74	\$899,339.74
D3040	Distribution Systems	\$3,040,182.61	\$135,756.55	\$1,446,817.21	\$0.00	\$294,567.70	\$4,917,324.07
D3050	Terminal & Package Units	\$0.00	\$0.00	\$0.00	\$0.00	\$47,240.76	\$47,240.76
D3060	Controls & Instrumentation	\$0.00	\$1,201,319.59	\$0.00	\$0.00	\$0.00	\$1,201,319.59
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$0.00	\$801,103.56	\$801,103.56
D5010	Electrical Service/Distribution	\$0.00	\$0.00	\$563,845.24	\$0.00	\$0.00	\$563,845.24
D5020	Lighting and Branch Wiring	\$0.00	\$0.00	\$117,558.72	\$637,761.10	\$0.00	\$755,319.82
D5030	Communications and Security	\$0.00	\$0.00	\$145,423.00	\$127,400.90	\$0.00	\$272,823.90
D5090	Other Electrical Systems	\$0.00	\$0.00	\$184,008.15	\$0.00	\$0.00	\$184,008.15
E1020	Institutional Equipment	\$0.00	\$0.00	\$14,768.16	\$90,802.49	\$0.00	\$105,570.65
E2010	Fixed Furnishings	\$0.00	\$0.00	\$391,426.99	\$0.00	\$0.00	\$391,426.99
	Total:	\$4,699,057.97	\$6,605,645.69	\$4,319,763.48	\$904,911.58	\$2,921,073.68	\$19,450,452.40

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:



Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: B2010 - Exterior Walls



Location: Exterior Walls

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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

Qty: 2,400.00

Unit of Measure: L.F.

Estimate: \$48,158.43

Assessor Name: System

Date Created: 01/20/2016

Notes: Recaulk exterior control joints.

System: B3010105 - Built-Up



Location: Roofs

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and Replace Built Up Roof

Qty: 47,539.00

Unit of Measure: S.F.

Estimate: \$1,610,716.93

Assessor Name: System

Date Created: 01/20/2016

Notes: Roofs are near or beyond their service life. Evidence of leaks is present in various places at the interior of the building. There are several areas of patching on the roof. Cap sheets are degraded with loss of granules, bubbling, and splits. System renewal is recommended.

System: D3040 - Distribution Systems



Location: Throughout Building

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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: 56,000.00

Unit of Measure: S.F.

Estimate: \$2,667,954.18

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units should be equipped with hot water / chilled water coils and integral heat recovery wheels. Install steam converters in the existing boiler room with circulating pumps, distribution piping and controls to provide heating hot water for the new coils.

System: D3040 - Distribution Systems



Location: Throughout Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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

Qty: 56,000.00

Unit of Measure: S.F.

Estimate: \$193,744.50

Assessor Name: System

Date Created: 01/29/2016

Notes: Conduct a steam trap survey to identify and replace failed traps passing live steam into the condensate piping system.

System: D3040 - Distribution Systems

This deficiency has no image.

Location: Rooms 112 and 113

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Install indoor AHU, CV, DT (15T)

Qty: 7.50

Unit of Measure: TonAC

Estimate: \$178,483.93

Assessor Name: System

Date Created: 01/30/2016

Notes: Provide ventilation for Rooms 112 and 113 near the intersection of the corridors on the Ground Floor by installing distribution ductwork and registers supplied by a constant volume air handling unit in the boiler room. These rooms have no mechanical ventilation.

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

System: A1030 - Slab on Grade



Location: Boiler Room

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Provide dewatering sump basin w/duplex pumps and under slab drain tile

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$141,517.52

Assessor Name: System

Date Created: 01/29/2016

Notes: Install under slab drain tile around the perimeter of the boiler room connected to a sump pit with duplex pumps that discharge to the storm sewer to manage ground water leaks at monitoring wells in the old coal ash bunker at the NW corner of the Ground Floor.

System: B2010 - Exterior Walls



Location: Exterior walls

Distress: Building Envelope Integrity

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: 12,000.00

Unit of Measure: S.F.

Estimate: \$387,473.67

Assessor Name: System

Date Created: 01/20/2016

Notes: Repair exterior walls - point brick. Repair open mortar joints. Replace cracked brick.

System: B2020 - Exterior Windows



Location: Exterior Windows

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 360.00

Unit of Measure: Ea.

Estimate: \$2,234,707.83

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace exterior windows throughout the building. Windows are well beyond their expected service life, do not operate properly, and are energy inefficient.

System: B2030 - Exterior Doors



Location: Exterior Doors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior doors - per leaf

Qty: 27.00

Unit of Measure: Ea.

Estimate: \$311,221.03

Assessor Name: System

Date Created: 01/21/2016

Notes: It is recommended that exterior doors be replaced throughout the building, with particular attention to ADA compliance.

System: B3020 - Roof Openings



Location: Roofs
Distress: OSHA
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace roof hatch - pick the closest size
Qty: 2.00
Unit of Measure: Ea.
Estimate: \$7,358.66
Assessor Name: System
Date Created: 01/20/2016

Notes: Existing roof hatches are "home-made" constructed of plywood and covered with metal roofing. They are extremely heavy, are not hinged, and are unsafe. Provide new roof hatches to facilitate safe maintenance of roofs and roof mounted systems.

System: C1010 - Partitions



Location: TBD
Distress: Accessibility
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Build new gang restroom to meet code or occupant needs - select type and number of fixtures and toilet partitions for mens or womens
Qty: 2.00
Unit of Measure: Ea.
Estimate: \$421,508.00
Assessor Name: System
Date Created: 01/21/2016

Notes: Provide fully accessible student restrooms. It is recommended that the toilet/shower/locker rooms adjacent to the gym be utilized for this purpose as they are not used for their original intent.

System: C1010 - Partitions



Location: One each floor
Distress: Accessibility
Category: 2 - Code Compliance
Priority: 2 - Response Time (2-3 yrs)
Correction: Build new single restroom to meet code requirements
Qty: 2.00
Unit of Measure: Ea.
Estimate: \$140,651.95
Assessor Name: System
Date Created: 01/21/2016

Notes: Provide unisex handicap accessible restrooms for faculty/staff, one per floor.

System: C1020 - Interior Doors



Location: Interior doors
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace interior doors - wood doors with hollow metal frames - per leaf
Qty: 100.00
Unit of Measure: Ea.
Estimate: \$477,058.71
Assessor Name: System
Date Created: 01/20/2016

Notes: Interior doors are original wood in wood frames, typically with wire glass glazing and are in well maintained, operational, but overall fair to poor condition, do not have accessible hardware, and do not provide security. Replace interior door systems including frames.

System: C1030 - Fittings



Location: Classrooms
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace blackboards with marker boards - pick the appropriate size and insert the quantities
Qty: 40.00
Unit of Measure: Ea.
Estimate: \$55,133.39
Assessor Name: System
Date Created: 01/20/2016

Notes: Classrooms typically have chalkboards. Provide modern white boards in classrooms throughout the school.

System: C1030 - Fittings



Location: Interiors 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: 60.00
Unit of Measure: Ea.
Estimate: \$16,254.75
Assessor Name: System
Date Created: 01/20/2016

Notes: Interior signage is not compliant with current building codes, including accessibility codes.

System: C3020412 - Terrazzo & Tile



Location: Student Restrooms

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Refinish terrazzo or tile flooring

Qty: 1,100.00

Unit of Measure: S.F.

Estimate: \$23,964.19

Assessor Name: System

Date Created: 01/21/2016

Notes: Refinish terrazzo flooring in student restrooms at ground and first floors.

System: C3020413 - Vinyl Flooring



Location: Throughout the building

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

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

Qty: 40,000.00

Unit of Measure: S.F.

Estimate: \$606,666.72

Assessor Name: System

Date Created: 01/20/2016

Notes: Most of the building has original 9" VAT. Though not hazardous in a well adhered installation, the flooring is old and areas of failure, patching, and repair were seen. The floors are difficult to maintain to a clean, glossy appearance.

System: D1010 - Elevators and Lifts



Location: TBD

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Add interior hydraulic elevator - 2 floors - adjust the electrical run lengths to hook up the elevator

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$387,153.48

Assessor Name: System

Date Created: 01/21/2016

Notes: The school has two levels. The primary functional entrance is at the upper level from the parking lot. There is no elevator or ramp system connecting the upper level with the ground floor, which has main functional areas such as the offices, auditorium, library, and kindergarten classrooms. Installation of an elevator for accessibility is recommended.

System: D2030 - Sanitary Waste



Location: Site

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Install backwater prevention system to prevent storm water from backing up into the sanitary sewer system - 6" - change the pipe lengths if necessary - assumes 100 SF hardscape repair

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$57,899.65

Assessor Name: System

Date Created: 01/29/2016

Notes: Provide a new manhole and sanitary waste piping to separate the storm and sanitary sewer systems to avoid backups through the drains on the lower level.

System: D3040 - Distribution Systems



Location: Boiler Room
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace duplex vacuum and condensate receiver
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$135,756.55
Assessor Name: System
Date Created: 01/29/2016

Notes: Replace the vacuum condensate receiver tank and boiler feed pump assembly installed in the boiler room in 1976. This unit is beyond the anticipated service life.

System: D3060 - Controls & Instrumentation



Location: Throughout Building
Distress: Energy Efficiency
Category: 4 - Capital Improvement
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace pneumatic controls with DDC (75KSF)
Qty: 56,000.00
Unit of Measure: S.F.
Estimate: \$1,201,319.59
Assessor Name: System
Date Created: 01/29/2016

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

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

System: D2010 - Plumbing Fixtures



Location: Corridors

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 6.00

Unit of Measure: Ea.

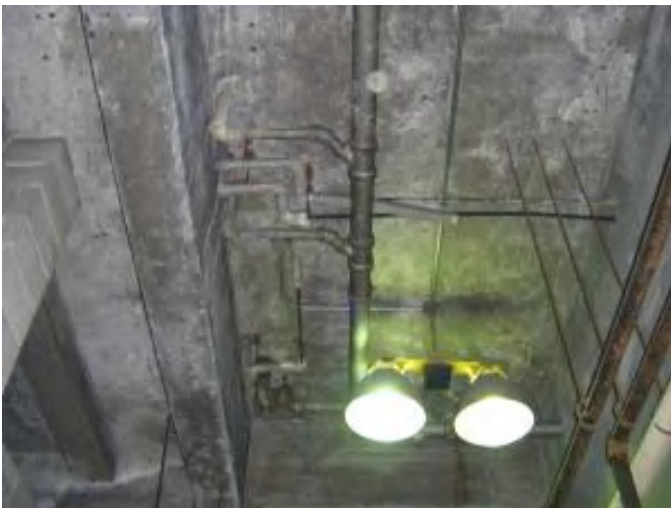
Estimate: \$45,475.14

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace six (6) wall hung drinking fountains and integral refrigerated coolers located in the corridors and at the restrooms. These units are well beyond their service life; several are damaged and two are the original china non-accessible type.

System: D2030 - Sanitary Waste



Location: Throughout Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 56,000.00

Unit of Measure: S.F.

Estimate: \$288,670.65

Assessor Name: System

Date Created: 01/29/2016

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

System: D3020 - Heat Generating Systems



Location: Boiler Room
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace boiler, cast iron sectional (150 HP)
Qty: 2.00
Unit of Measure: Ea.
Estimate: \$1,012,205.26
Assessor Name: System
Date Created: 01/29/2016

Notes: Replace the two 120 HP Weil McLain cast iron sectional boilers in service since 1976. The new units should be equipped with gas/oil burners that incorporate features like electronic ignition and positive draft controls.

System: D3020 - Heat Generating Systems



Location: Boiler Room
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace OSY valves (4" thru 8") - edit quantities
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$109,564.96
Assessor Name: System
Date Created: 01/29/2016

Notes: Replace the OSY gate valves at the steam header above the boilers to eliminate packing leaks observed at the bonnets.

System: D3040 - Distribution Systems



Location: Throughout Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 56,000.00

Unit of Measure: S.F.

Estimate: \$526,349.59

Assessor Name: System

Date Created: 01/29/2016

Notes: Hire a qualified contractor to examine the steam and condensate piping in service nearly 70 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D3040 - Distribution Systems

This deficiency has no image.

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 200.00

Unit of Measure: Seat

Estimate: \$424,055.35

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the two fan coil units hung from the structure of the stage that supply heating and ventilation for the auditorium. The new fan coil units should be equipped with both heating and air conditioning coils and economizer dampers.

System: D3040 - Distribution Systems



Location: Gymnasium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: \$295,015.71

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the two fan coil air handling units mounted in the ceiling space above the locker rooms that supply heating and ventilation for the Gymnasium. The new fan coil units should be equipped with both heating and air conditioning coils and economizer dampers.

System: D3040 - Distribution Systems



Location: Roof

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 6.00

Unit of Measure: Ea.

Estimate: \$181,971.61

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the six (6) low profile, power roof ventilators that exhaust air from the restrooms and utility rooms. These fans should be replaced as they are well beyond their anticipated service life and many are failing.

System: D3040 - Distribution Systems

This deficiency has no image.

Location: Janitor closets

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Provide inline ceiling exhaust fan and wall outlet louver

Qty: 2.00

Unit of Measure: Ea.

Estimate: \$19,424.95

Assessor Name: System

Date Created: 01/29/2016

Notes: Install a power roof ventilator to provide exhaust for the janitor closets as they have no ventilation.

System: D5010 - Electrical Service/Distribution



Location: Basement

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$294,315.04

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide a new electrical service 480V/277V, 3 phase power, 1000 Amperes and will be located in the vicinity of the existing electrical service.

System: D5010 - Electrical Service/Distribution



Location: Entire Building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Electrical Distribution System (U)
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$269,530.20
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace the entire distribution system with new panels and new wiring/conduits. Approximate (10) 208/120V panel boards.

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: 320.00
Unit of Measure: Ea.
Estimate: \$117,558.72
Assessor Name: System
Date Created: 01/18/2016

Notes: Provide (2)25FT of surface raceways with 24" receptacles on center and two-duplex wall mount receptacles. Approximate 320

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: 1.00
Unit of Measure: S.F.
Estimate: \$145,423.00
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace old fire alarm system with addressable type with audio/visual devices at corridors and classrooms. Approximate 75 devices

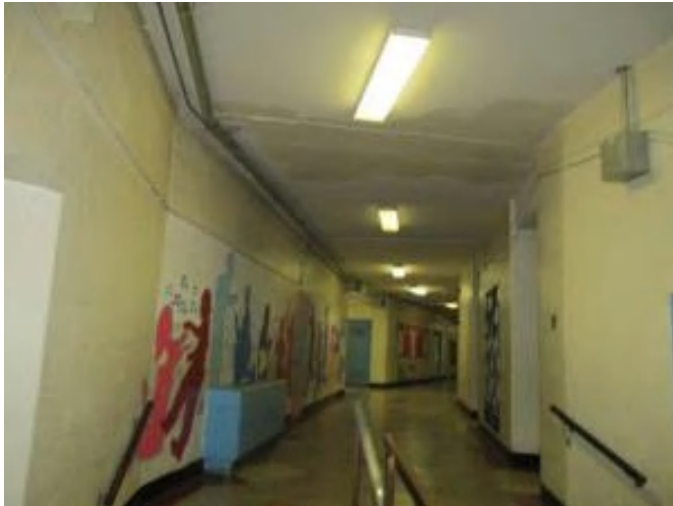
System: D5090 - Other Electrical Systems

This deficiency has no image.

Location: Outdoor
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$131,037.71
Assessor Name: System
Date Created: 01/18/2016

Notes: Provide 60 KW, outdoor, diesel powered generator.

System: D5090 - Other Electrical Systems



Location: Entire Building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Emergency/Exit Lighting
Qty: 16.00
Unit of Measure: Ea.
Estimate: \$28,720.62
Assessor Name: System
Date Created: 01/18/2016

Notes: Provide additional emergency lighting fixtures with battery backup. Approximate 16

System: D5090 - Other Electrical Systems



Location: Roof
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 3 - Response Time (3-4 yrs)
Correction: Repair Lightning Protection System
Qty: 1.00
Unit of Measure: Job
Estimate: \$24,249.82
Assessor Name: System
Date Created: 01/18/2016

Notes: Prepare a study to determine if the school requires lightning protection system.

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: 01/20/2016

Notes: The projection screen in the auditorium does not operate properly. Install a new motorized projection screen.

System: E2010 - Fixed Furnishings



Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 434.00

Unit of Measure: Ea.

Estimate: \$391,426.99

Assessor Name: System

Date Created: 01/20/2016

Notes: Auditorium seating is original and in deteriorated condition. Replacement parts are hard to find. Replacement of auditorium seating is recommended.

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

System: D2020 - Domestic Water Distribution

This deficiency has no image.

Location: Boiler Room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace instantaneous water heater

Qty: 2.00

Unit of Measure: Ea.

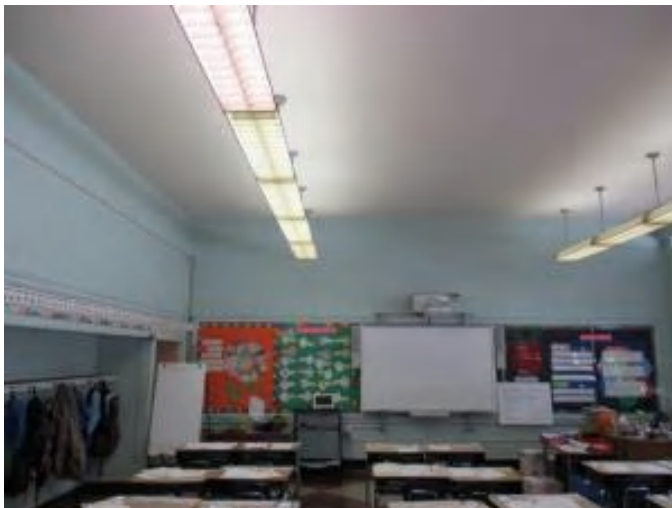
Estimate: \$48,947.09

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the two gas-fired, tankless instantaneous (on demand) domestic water heaters manufactured by Paloma installed in the boiler room in 1994 to maintain reliable service.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add Lighting Fixtures

Qty: 740.00

Unit of Measure: Ea.

Estimate: \$637,761.10

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace existing lighting fixtures with up/down, pendant fluorescent fixtures with T8 lamps. Approximate 740 fixtures

System: D5030 - Communications and Security



Location: Entire Building

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add/Replace Video Surveillance System

Qty: 25.00

Unit of Measure: Ea.

Estimate: \$101,256.00

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide indoor surveillance CCTV cameras for a complete coverage of the school interior. Approximate 25 CCTV cameras

System: D5030 - Communications and Security



Location: Auditorium

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Add/Replace Sound System

Qty: 1.00

Unit of Measure: LS

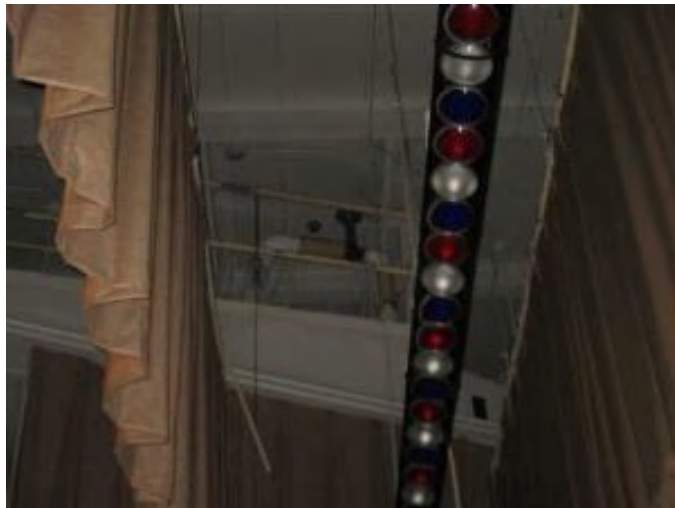
Estimate: \$26,144.90

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide the auditorium with a permanent installed sound system.

System: E1020 - Institutional Equipment



Location: Auditorium

Distress: Obsolete

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: \$90,802.49

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide the auditorium with theatrical lighting and dimming system.

Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution



Location: B428001;Gompers

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace domestic water piping (75 KSF)

Qty: 56,000.00

Unit of Measure: S.F.

Estimate: \$283,772.54

Assessor Name: System

Date Created: 01/29/2016

Notes: Replace the original galvanized steel domestic water piping in service for nearly 70 years to avoid failures caused by excessive scale build-up.

System: D2020 - Domestic Water Distribution

This deficiency has no image.

Location: Boiler Room

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Provide water softener (90,000 Gr / 25 gpm)

Qty: 1.00

Unit of Measure: Ea.

Estimate: \$28,265.85

Assessor Name: System

Date Created: 01/29/2016

Notes: Provide a softener for conditioning water supplied to the boilers.

System: D3020 - Heat Generating Systems



Location: Site
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 5 - Response Time (> 5 yrs)
Correction: Improve service to support burning natural gas as the primary fuel (75KSF)
Qty: 150.00
Unit of Measure: L.F.
Estimate: \$331,742.55
Assessor Name: System
Date Created: 01/30/2016

Notes: Improve the 1-1/4" natural gas service that enters the boiler room from Wynnefield Avenue to provide sufficient capacity and pressure to support burning natural gas as the primary fuel.

System: D3020 - Heat Generating Systems

This deficiency has no image.

Location: Boiler Room
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 5 - Response Time (> 5 yrs)
Correction: Provide fuel oil tank, above ground concrete encased (8,000 gal)
Qty: 1.00
Unit of Measure: Ea.
Estimate: \$235,040.98
Assessor Name: System
Date Created: 01/29/2016

Notes: Replace the 4,500 gallon steel storage tank in the old coal bunker with an aboveground concrete-encased tank.

System: D3030 - Cooling Generating Systems

This deficiency has no image.

Location: Throughout Building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 56,000.00

Unit of Measure: S.F.

Estimate: \$899,339.74

Assessor Name: System

Date Created: 01/29/2016

Notes: Remove the window air conditioning units and install an air-cooled chiller with two refrigerant circuits on the roof and chilled water distribution piping and pumps located in the boiler room to supply air conditioning for the building.

System: D3040 - Distribution Systems

This deficiency has no image.

Location: administrative offices

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 537.00

Unit of Measure: Student

Estimate: \$294,567.70

Assessor Name: System

Date Created: 01/29/2016

Notes: Install a rooftop air conditioning unit to provide ventilation for the main administrative offices.

System: D3050 - Terminal & Package Units

This deficiency has no image.

Location: kitchen office

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HP RTU for Classroom (30 students).

Qty: 1.00

Unit of Measure: C

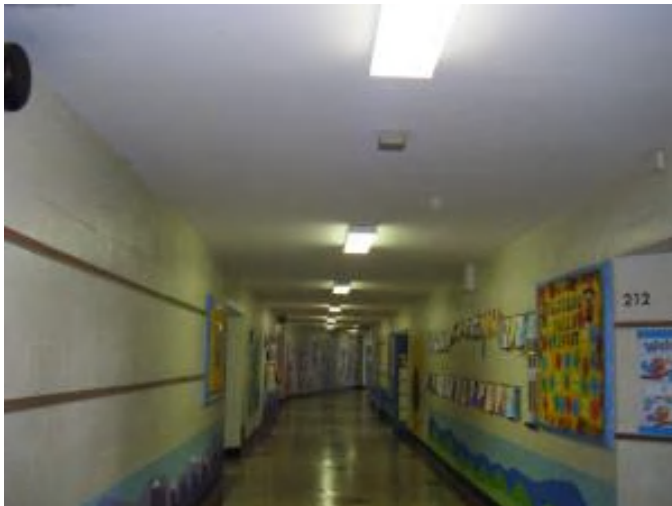
Estimate: \$47,240.76

Assessor Name: System

Date Created: 01/29/2016

Notes: Install a rooftop air conditioning unit to provide ventilation for the kitchen office.

System: D4010 - Sprinklers



Location: Throughout Building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 56,000.00

Unit of Measure: S.F.

Estimate: \$801,103.56

Assessor Name: System

Date Created: 01/29/2016

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

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
D3020 Heat Generating Systems	Boiler, cast iron, gas & oil, steam, 4650 MBH	2.00	Ea.	Boiler Room	Weil McLain	1994 Series 3			35			\$168,672.60	\$371,079.72
D5010 Electrical Service/Distribution	Load centers, 1 phase, 3 wire, main lugs, rainproof, 120/240 V, 400 amp, 42 circuits, incl 20 A 1 pole plug-in breakers	1.00	Ea.	First floor electrical room					30	1950	2047	\$3,663.90	\$4,030.29
												Total:	\$375,110.01

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):	163,400
Year Built:	1950
Last Renovation:	
Replacement Value:	\$2,525,293
Repair Cost:	\$732,589.08
Total FCI:	29.01 %
Total RSLI:	67.80 %



Description:

Attributes:

General Attributes:

Bldg ID:	S428001	Site ID:	S428001
----------	---------	----------	---------

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	81.29 %	20.99 %	\$380,924.98
G40 - Site Electrical Utilities	33.33 %	49.51 %	\$351,664.10
Totals:	67.80 %	29.01 %	\$732,589.08

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 the system 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.	6,000	30	1950	1980	2047	106.67 %	0.00 %	32			\$69,120
G2020	Parking Lots	\$7.65	S.F.	12,600	30	1950	1980	2047	106.67 %	185.55 %	32		\$178,856.19	\$96,390
G2030	Pedestrian Paving	\$11.52	S.F.	50,400	40	1950	1990	2057	105.00 %	32.05 %	42		\$186,111.57	\$580,608
G2040	Site Development	\$4.36	S.F.	163,300	25	2000	2025		40.00 %	0.00 %	10			\$711,988
G2050	Landscaping & Irrigation	\$3.78	S.F.	94,400	15	1950	1965	2032	113.33 %	4.47 %	17		\$15,957.22	\$356,832
G4020	Site Lighting	\$3.58	S.F.	163,300	30	1950	1980	2025	33.33 %	20.48 %	10		\$119,740.34	\$584,614
G4030	Site Communications & Security	\$0.77	S.F.	163,300	30	1950	1980	2025	33.33 %	184.45 %	10		\$231,923.76	\$125,741
Total									67.80 %	29.01 %			\$732,589.08	\$2,525,293

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.

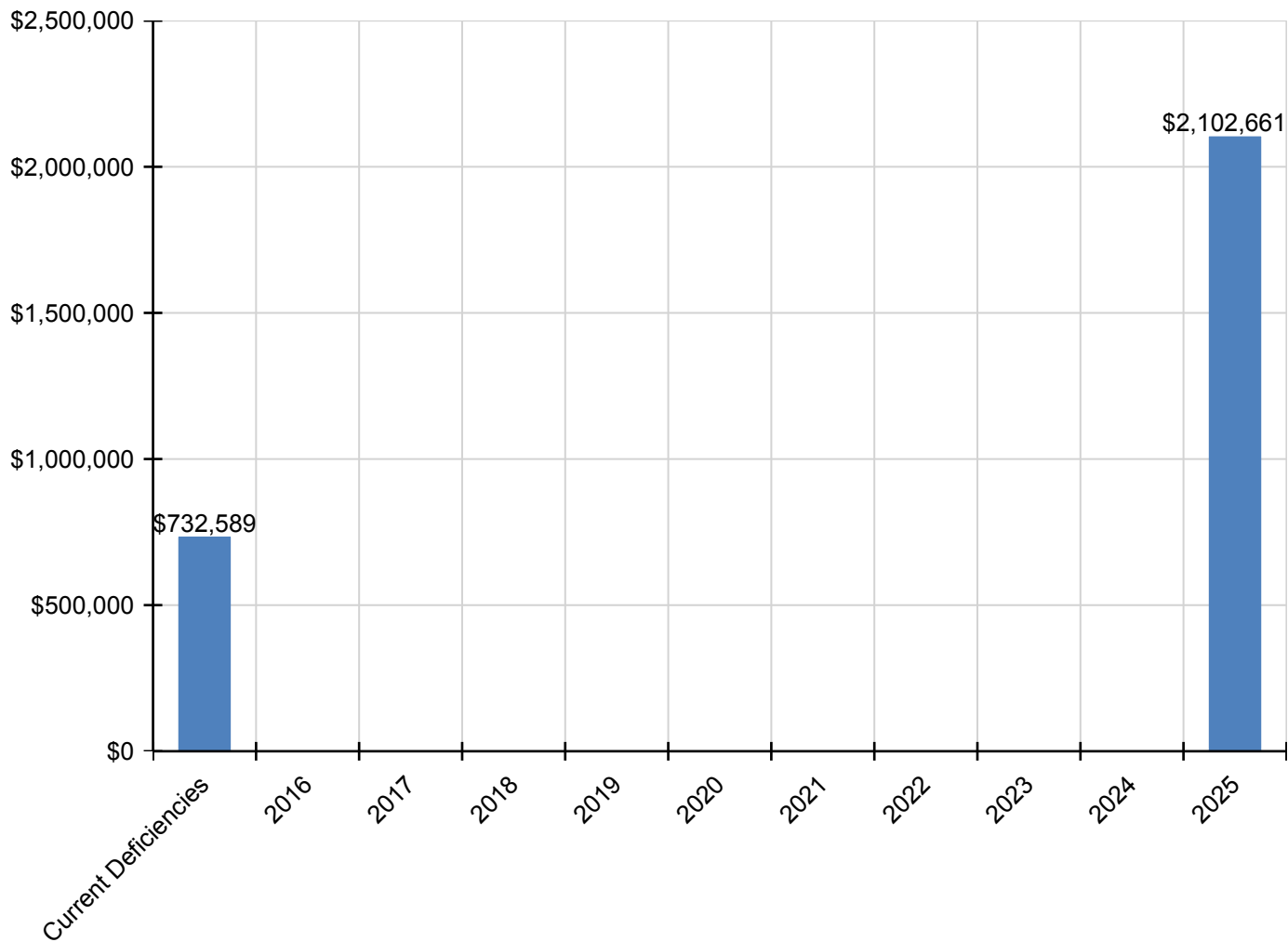
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$732,589	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,102,661	\$2,835,250
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	\$178,856	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$178,856
G2030 - Pedestrian Paving	\$186,112	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$186,112
G2040 - Site Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,052,538	\$1,052,538
G2050 - Landscaping & Irrigation	\$15,957	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,957
G40 - Site Electrical Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4020 - Site Lighting	\$119,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$864,239	\$983,979
G4030 - Site Communications & Security	\$231,924	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$185,884	\$417,808

** Indicates non-renewable system*

Forecasted Sustainment Requirement

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

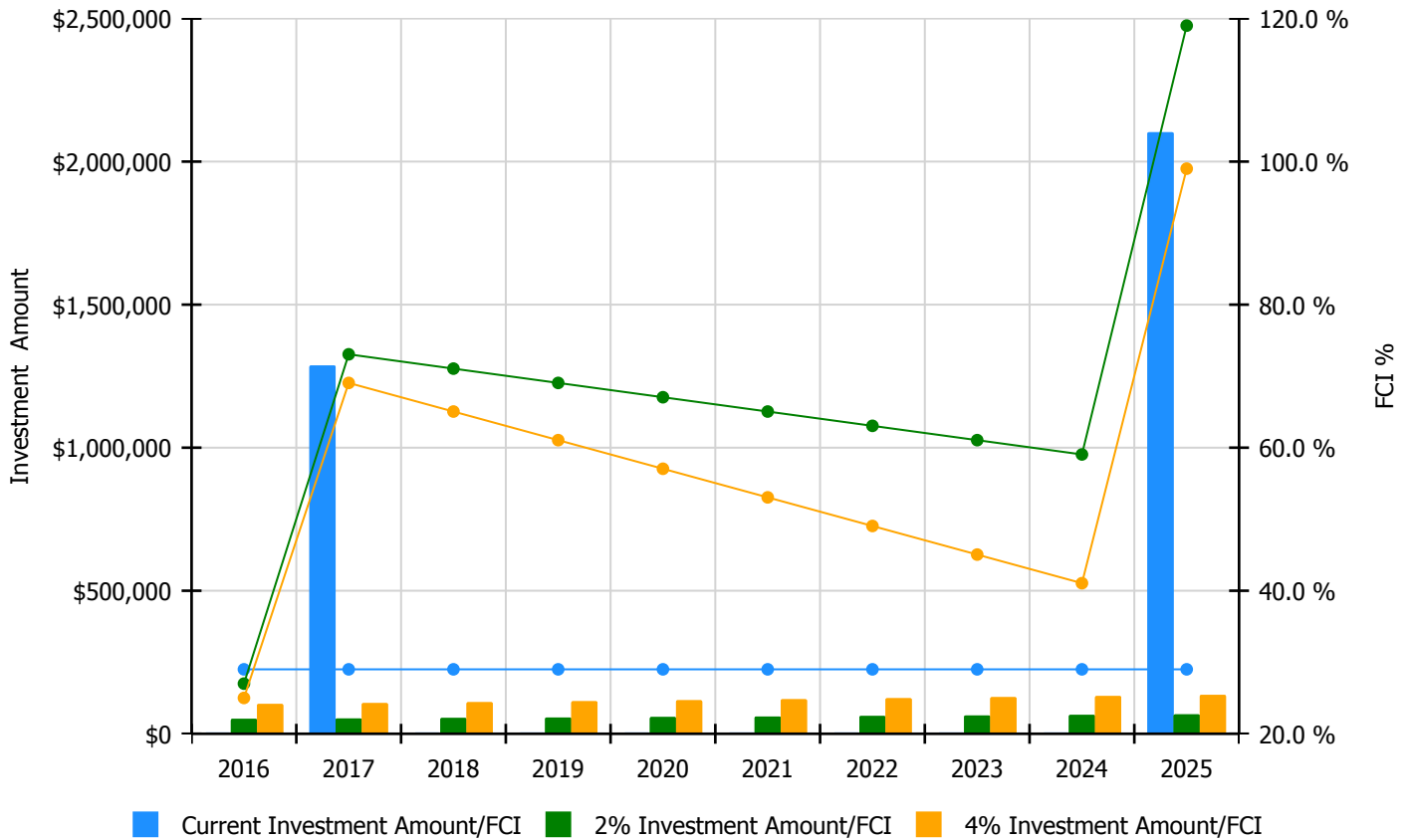


10 Year FCI Forecast by Investment Scenario

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

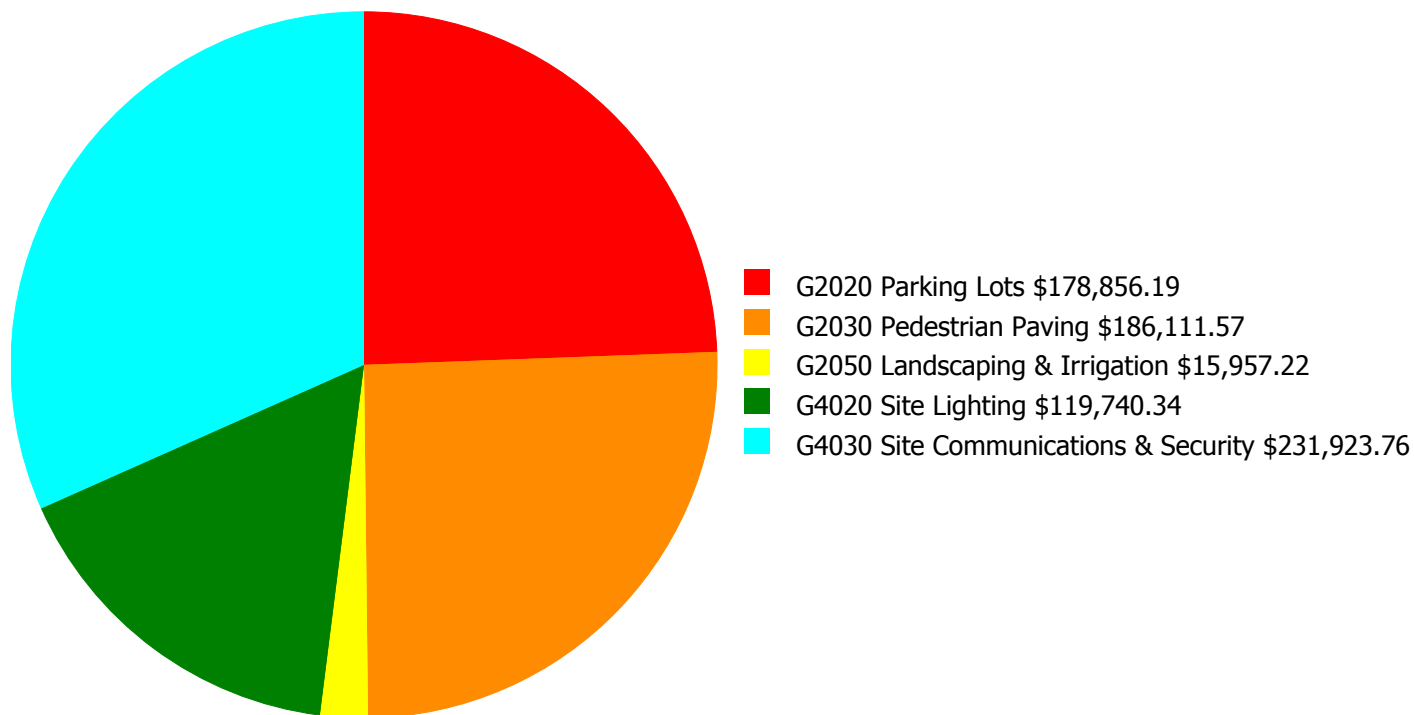
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 29.01%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$52,021.00	27.01 %	\$104,042.00	25.01 %
2017	\$1,287,132	\$53,582.00	73.05 %	\$107,163.00	69.05 %
2018	\$0	\$55,189.00	71.05 %	\$110,378.00	65.05 %
2019	\$0	\$56,845.00	69.05 %	\$113,690.00	61.05 %
2020	\$0	\$58,550.00	67.05 %	\$117,100.00	57.05 %
2021	\$0	\$60,307.00	65.05 %	\$120,613.00	53.05 %
2022	\$0	\$62,116.00	63.05 %	\$124,232.00	49.05 %
2023	\$0	\$63,979.00	61.05 %	\$127,959.00	45.05 %
2024	\$0	\$65,899.00	59.05 %	\$131,797.00	41.05 %
2025	\$2,102,661	\$67,876.00	119.01 %	\$135,751.00	99.01 %
Total:	\$3,389,792	\$596,364.00		\$1,192,725.00	

Deficiency Summary by System

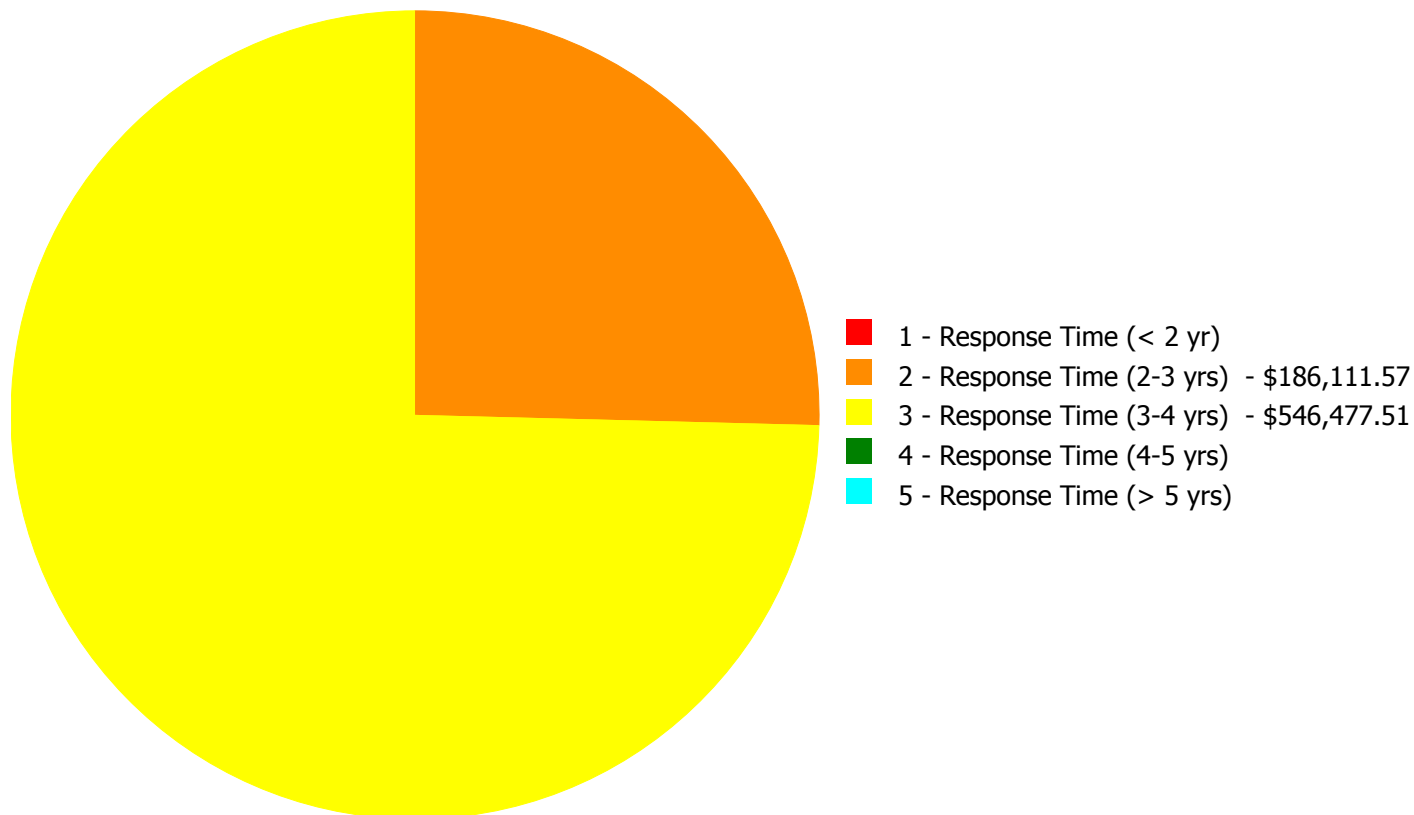
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: \$732,589.08

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: \$732,589.08

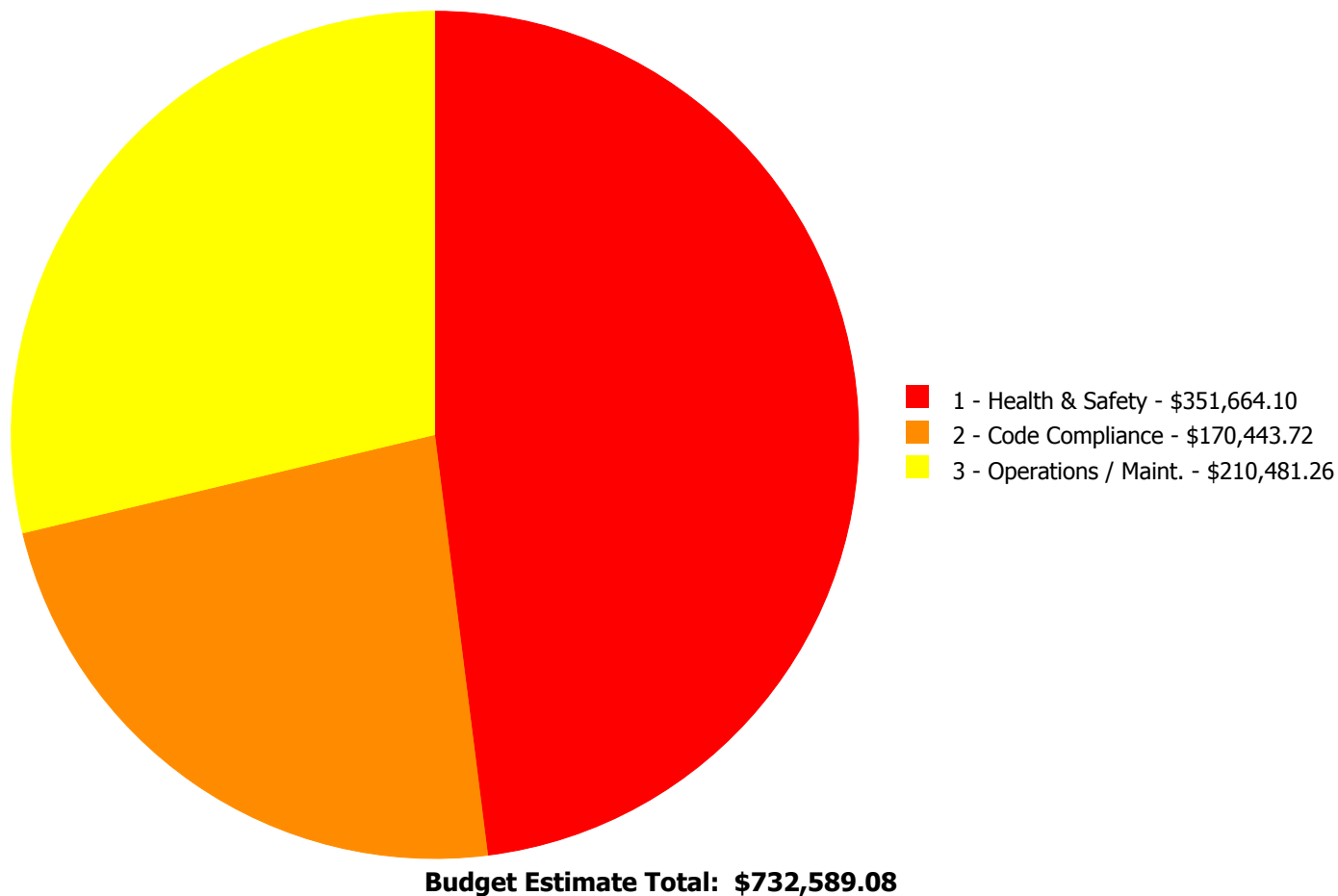
Deficiency By Priority Investment Table

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	\$0.00	\$178,856.19	\$0.00	\$0.00	\$178,856.19
G2030	Pedestrian Paving	\$0.00	\$186,111.57	\$0.00	\$0.00	\$0.00	\$186,111.57
G2050	Landscaping & Irrigation	\$0.00	\$0.00	\$15,957.22	\$0.00	\$0.00	\$15,957.22
G4020	Site Lighting	\$0.00	\$0.00	\$119,740.34	\$0.00	\$0.00	\$119,740.34
G4030	Site Communications & Security	\$0.00	\$0.00	\$231,923.76	\$0.00	\$0.00	\$231,923.76
	Total:	\$0.00	\$186,111.57	\$546,477.51	\$0.00	\$0.00	\$732,589.08

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:



Deficiency Details by Priority

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

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

System: G2030 - Pedestrian Paving



Location: Front Entrance

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to 84" rise - per LF of ramp - figure 1 LF of ramp per inch of rise

Qty: 72.00

Unit of Measure: L.F.

Estimate: \$170,443.72

Assessor Name: Ann Buerger Linden

Date Created: 01/21/2016

Notes: The public entrance to the building is not accessible. Provide ramps.

System: G2030 - Pedestrian Paving



Location: Outside north end of building

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior egress stairway - per flight

Qty: 1.00

Unit of Measure: Flight

Estimate: \$15,667.85

Assessor Name: Craig Anding

Date Created: 01/21/2016

Notes: The exterior stairs between the upper playground and the lower level exit nearest the library are in poor condition with many chipped nosings. Replacement is recommended.

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

System: G2020 - Parking Lots



Location: Parking lot/playgrounds

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace AC paving parking lot

Qty: 12,600.00

Unit of Measure: S.F.

Estimate: \$178,856.19

Assessor Name: Craig Anding

Date Created: 01/21/2016

Notes: Asphalt parking lots and playgrounds are in poor condition with cracked and settled asphalt, creating tripping hazards. Inlet grate at storm sewer is damaged. Provide a driveway entrance at Wynnefied Avenue to facilitate deliveries.

System: G2050 - Landscaping & Irrigation



Location: Exteriors

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

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

Correction: Remove and replace tree

Qty: 8.00

Unit of Measure: Ea.

Estimate: \$15,957.22

Assessor Name: Ann Buerger Linden

Date Created: 01/21/2016

Notes: Vegetation close to the building drops leaves and other debris on roofs, scours roofs, and climbs walls, all affecting the building envelope integrity. Vegetation close to the building is also a security concern. Remove large trees, shrubs, and vines encroaching on the building. Replace with dwarf varieties.

System: G4020 - Site Lighting



Location: Outdoor
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Site Lighting - pole mounted - select the proper light and pole
Qty: 4.00
Unit of Measure: Ea.
Estimate: \$119,740.34
Assessor Name: Ann Buerger Linden
Date Created: 01/18/2016

Notes: Provide pole mounted floodlight fixtures. Approximate 4

System: G4030 - Site Communications & Security



Location: Outdoor
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Video Surveillance System
Qty: 20.00
Unit of Measure: Ea.
Estimate: \$231,923.76
Assessor Name: Ann Buerger Linden
Date Created: 01/18/2016

Notes: Provide outdoor surveillance CCTV cameras. Approximate 20 CCTV cameras

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

Site Assessment Report - S428001;Gompers

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

Site Assessment Report - S428001;Gompers

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

Site Assessment Report - S428001;Gompers

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.

Site Assessment Report - S428001;Gompers

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

Site Assessment Report - S428001;Gompers

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

Site Assessment Report - S428001;Gompers

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.

Site Assessment Report - S428001;Gompers

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	Photovoltaic system

Site Assessment Report - S428001;Gompers

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

Site Assessment Report - S428001;Gompers

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

Site Assessment Report - S428001;Gompers

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