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.

Dobbins High School

Governance	DISTRICT	Report Type	High
Address	2150 W. Lehigh Ave.	Enrollment	606
	Philadelphia, Pa 19132	Grade Range	'09-12'
Phone/Fax	215-227-4421 / 215-227-4944	Admissions Category	Citywide
Website	Www.Philasd.Org/Schools/Dobbins	Turnaround Model	N/A

Building/System FCI Tiers

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

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

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	**40.73%**	**$62,876,009**	**$154,372,757**
Building	40.76 %	$62,271,427	$152,789,263
Grounds	38.18 %	$604,582	$1,583,494

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$1,287,720
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$11,421,161
Windows (Shows functionality of exterior windows)	00.00 %	$0	$4,257,944
Exterior Doors (Shows condition of exterior doors)	38.37 %	$200,165	$521,700
Interior Doors (Classroom doors)	243.69 %	$2,862,352	$1,174,605
Interior Walls (Paint and Finishes)	33.69 %	$677,388	$2,010,738
Plumbing Fixtures	05.96 %	$588,044	$9,865,434
Boilers	10.87 %	$634,175	$5,832,415
Chillers/Cooling Towers	69.19 %	$5,290,965	$7,647,430
Radiators/Unit Ventilators/HVAC	37.58 %	$5,046,339	$13,429,861
Heating/Cooling Controls	136.47 %	$5,755,392	$4,217,333
Electrical Service and Distribution	132.57 %	$5,213,987	$3,933,053
Lighting	47.41 %	$5,136,758	$10,833,859
Communications and Security (Cameras, Pa System and Fire Alarm)	33.23 %	$1,348,507	$4,058,011

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

S406001;Dobbins

Final

Site Assessment Report

January 30, 2017

PARSONS

Table of Contents

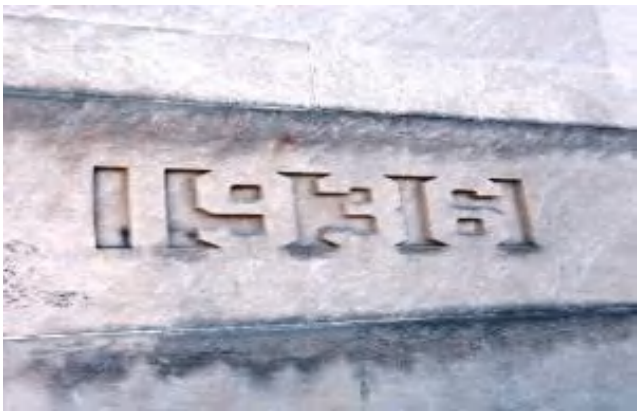
Site Executive Summary

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

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

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

Gross Area (SF):	312,395
Year Built:	1938
Last Renovation:	
Replacement Value:	$154,372,757
Repair Cost:	$62,876,008.68
Total FCI:	40.73 %
Total RSLI:	60.09 %



Description:

Facility Assessment
October 2015

School District of Philadelphia
Dobbins Technical School
2150 W Lehigh Ave.
Philadelphia, PA 19132

312,395 SF / 900 Students / LN 04

GENERAL

The Murrell Dobbins A.V.T. Vocational School or Dobbins Technical High School is one of the older schools in service to the Philadelphia communities originally constructed in 1937. The school is currently being run by the Philadelphia School System and is identified as B406001 and was originally designated as the Murrell Dobbins Vocational Public High School.

This facility is located at 2150 W Lehigh Ave., Philadelphia, PA. The late Gothic Revival design of the rectangular-shaped, concrete and steel-framed building includes brick facades with a concrete foundation.

The main entrance faces the Northern exterior facing West Lehigh Ave., drop off area. General parking is south of the school. This School serves students in grades 9 to 12 and has a basement with eight stories consisting of a total gross square footage of 312,395 GSF.

This school has several classrooms, a library, kitchen and student commons, two Gyms, Auditorium and cafeteria, with supporting administrative spaces. Science, vocational programs, Art Department, Print Shop, Sign Shop, Dobbins Cuisine, and clothing design programs.

Special note to the existing painting in the main lobby dedicated to those who provided a future through sacrifice. Other wall paintings are depicted to the local community and dedications to people who support the school.

The information for this report was collected during a site visit on October 26, 2015.

Mr. Mike Clark, Building Engineer, and Mr. Pat Ellinger, Building Engineer in Training, accompanied the assessment team on a tour of the school and provided detailed information on the building systems and maintenance history.

ARCHITECTURAL / STRUCTURAL SYSTEMS

The original foundations are sound, concrete constructed and well maintained. The basement walls are sound and appear to be in good condition. The superstructure is steel and wooden framed with masonry support. The overall concrete structure is in good condition and there were no issues that surfaced during the inspection therefore no recommendations are required at this time.

The floor construction is sound and in good condition. However, the two top floors are currently not in use. The floor systems on these two levels are currently a construction zone and being used by the contractors to compete the ongoing effort to restore exterior issues with this school.

The roofing system for this school is currently under construction. Most of the roof is currently in a state of construction with stored materials for the new roof and each level of the 14 level roof in a stage of construction. The roof over the 8th floor is the most complete at this date however with the ongoing work this effort is considered to be funded and underway. The cost model will reflect a 2015 installation date for this roof. With this in mind there are no recommendations required at this time.

There are two pitched asphalt shingle roofing systems over the Gyms respectably. The pitched roofing systems were reported to be included in this exterior renovation effort. There are no recommendations required for the pitched roofing systems at this time.

The exterior walls consist of a mix of concrete and brick finishes that are also currently under construction. During the time of the inspection several crews were conducting point and tuck efforts with masonry corrections that range the entire exterior. This work is expected to correct issues such as the damaged brick and mortar issues on all levels. There are no recommendations required for the exterior walls at this time.

The exterior windows are a part of the ongoing exterior efforts to restore this school. During the time of the inspection the 8th and 7th floors appeared to be complete and with the stored materials and crews present this work is expected to be completed this year. The cost model will reflect a 2015 installation date. The new windows are double pane aluminum framed weather tight applications. With the ongoing work there are no recommendations required for the exterior windows at this time.

The exterior doors are metal applications with metal frames. The exterior door system for this school is a very high traffic system. The doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade.

The loading dock door is an original wooden folding door that is damaged in several areas and no longer functional. This system is a very high traffic system and represents the only access for deliveries to the school. This door system is recommended to be removed and replaced with a modern overhead door system with safety and security considerations. This door is expected to be completed as part of other recommended corrections with the loading dock.

Special consideration for those that may be physically challenged was a main not factor in the last re-construction effort for this school (21st Street). The exterior ADA ramp on the southeastern exterior of the school is the only option the physically challenged has to enter the school. The path of travel is not very clear from that entrance of the school and from the access points. The interior path of travel is partially supported by three passenger elevators and one freight elevator, Interior access ramps, some door hardware,

hand rails and guard rails. However, the building has received limited upgrades and does not fully support a path of travel for those that may be physically challenged. Included in this report are modifications that allow for considerations to enhance the upgrades required to support the physically challenged.

There are several abandoned gang restrooms on the floors that are not being used and limited restroom access on the remaining floors. The restrooms are original and the marble, wooden or missing partitions show the excessive problems with the restrooms. These restrooms warrant unique renovations to restore the systems to modern operations options and service to the school. Accessibility legislation requires that goods, amenities, and services offered in buildings, such as restrooms, be generally accessible to all people. There are no compliant restrooms located in this school. A unisex, compliant restroom should be added on each of the eight floors. Recommended modifications include the construction of new single occupancy restrooms in existing academic areas to accommodate requirements. This involves adding two new partitions to enclose 50 square feet of area and installing a door with hardware, ceramic tile and plaster surfaces, suspended ceilings, plumbing fixtures, electrical fixtures, piping, HVAC equipment, and accessories for each new restroom. Also, the renovation of the existing restrooms and modification to new layouts and floor plans to support modern designs and requirements for ADA legislation.

Interior partitions include, polished brick walls on the lower levels and in the stairs, CMU, plaster and a few sections of drywall. The following recommendations are designed to support an interior renovation effort to be conducted only after this current exterior effort is completed.

There are several movable partitions that remain in classrooms. These wall systems are no longer used and in most cases cannot be used due to damage or wall modifications to support classroom needs. This deficiency provides a budgetary consideration to remove and replace the wall systems with universal removal of the existing movable partitions and upgrades to a permeate wall systems.

The corridor doors were compliant during the time of the construction of the school in 1937. However a large portion of the interior corridor exit stair doors are not code compliant. Several doors are typically metal in metal frames with transom lites or sidelights, glass glazing. The older doors are generally in poor condition considering the age of the application. To restore the door finishes, universal upgrades are required for the older door applications. Remove and replace original corridor door systems with new code compliant fire rated door system.

There are several transom lites and sidelights constructed into hallway wall systems. It is recommended that the lites and sidelights be removed and replaced with a fire rated wall construction. The deficiency provides a budgetary consideration to correct the hallway, transoms, lites and sidelights.

This schools science labs have had limited upgrades from the original construction with tables and some new shelving in limited areas. However, the current system is damaged in several areas from the demonstration desk, plumbing and safety requirements for classroom laboratory gas usage. The installation consists of an instruction demonstration desk with sink. Wall mounted storage cabinets and cabinets with sinks for student use. The system is showing signs of age and lack of maintenance such as broken sink fixtures missing cabinet doors and damaged shelves. This deficiency provides a budgetary consideration for the universal upgrade of the science teaching labs to include new counter tops, sink, cabinets, shelves and fixtures required to support a conducive level of education.

The support storage room near room 402 is overstocked with materials blocking exit paths and limiting access to the only eye wash station for the labs. Also, note that the only flammable storage cabinet is blocking the access point to the biology lab. Care should be taken to clean this room and allow access to the eye wash station and also to move the flammable storage cabinet to a new location allowing for proper ventilation.

Interior doors are typically wood in wood frames with glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames. A very few doors have been upgraded to modern standards. Doors are generally in poor condition considering the age of the application. Universal upgrades are required for the interior door systems, it is recommended that the interior doors system be removed and replaced with a new modern metal framed wooden door system with consideration for ADA compliance. This effort is expected to be completed as part of an overall interior effort and not an individual program.

Please note in several photos the interior doors egress paths have been blocked in the classrooms with either desk or cabinets. Although a deficiency to a system is not warranted care should be taken to ensure that egress paths are maintained and free of debris or stored materials.

Fittings include: chalkboards; marker boards; tack boards; interior signage; metal lockers; toilet accessories and wood/metal/marble toilet partitions; fixed storage shelving. The following recommendations are directed towards an interior renovation effort to be

initiated only after the exterior effort is complete.

The locker room locker system is beyond its expected life, several of the lockers are damaged and some of the doors are missing. The locker system is recommended for removal and replacement with a new system.

There are several tack boards in the hallways for student displays. The systems are damaged and beyond the expected service life for this application. Remove and replace tack boards is recommended.

The classroom chalk boards are original to the buildings construction. This system is damaged and beyond its expected life, universal upgrades are warranted. Remove and upgrade chalk boards to new marker board systems.

There is no directional signage and room signage is a custom design in places and scarce or painted with no consistency in others. Accessibility signage criteria have been established for the physically challenged. These include mounting heights, contrast and finish, raised and Braille characters and pictograms, and character proportions and heights. It is recommended that compliant signage be installed throughout the building.

Stair construction is concrete. Stair treads and landings are finished with concrete and metal nosings. Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

Interior wall finishes are typically marble, plaster, drywall, CMU or wall tile and brick. Other wall finishes include: ceramic tile at restrooms. The restroom finishes are included in the recommended upgrades for the gang restrooms deficiency included in this report. The remaining wall finishes are recommended for repair and in some cases universal upgrades. The following deficiencies are designed to support an overall interior effort.

While using similar materials, the interior finishes vary significantly from floor to floor and the condition of the finishes range from very poor to fair. There are several minor areas of wall damage that ranges from serious to minor. Although the school is on a cyclical program of renewal and each painted surface is renewed at years end this system is at the point in which repairs are necessary. Remove damaged wall finishes and repair areas then apply primer and paint finish.

Interior floor finishes consist of a polished concrete hallway and service floors with a brick flooring on the 8th floor. Other finishes include carpet in the Dobbins A.V.T.S. Alumni Room, wooden classroom and Gym floors, vinyl and ceramic floor tile in service and kitchen areas. Also, the vinyl 9x9 floor tile and battleship linoleum roll flooring in the Science Laboratories and classrooms that are suspect to contain Asbestos. The hallway on the first floor and the hallways that support the auditorium are a terrazzo finish. The following deficiencies are designed to be completed as part of an overall interior effort and only to be attempted after the ongoing exterior effort is complete.

Suspected asbestos containing materials (ACM) are believed to be limited to the original vinyl floor tile and mastic. While most of the finishes are currently sound and manageable in place, other areas such as the 7th and 8th floors have been abandoned and are damaged beyond use. Future renovation efforts should include provision to test and abate any and all ACM.

The Boy's and Girl's GYM floor finish is beyond its expected life cycle for this application. Recent repairs have eliminated the trip hazards however, there are areas that remain that warrant replacement. The floor is recommended for universal upgrade.

The wooden floor finish in the classrooms has served this school from the first day of school. The systems maintenance has been a priority each year as part of a cyclical program to either, sand, clean and resurface or wax as needed. Considering the age and current condition of the classroom wooden floor finish, removal and replacement is recommended.

The ceiling finish is a mix of 12 x 12 ceiling grid and glued, painted and 2 x 4 Acoustical tile finish. Ceilings have been repaired in several areas however there are areas of damage that are critical to the buildings condition. Several of the classrooms on the 7th and 8th floors have no ceiling as they have been removed with the expectation of construction. Other ceilings show the signs of the water infiltration issues that existed prior to the ongoing roof and point and tuck work. The ceiling finish is in poor to good condition with some consideration for the locations of the ceiling finishes. The ceiling finish is expected to require upgrades to support the recommended efforts in this report. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finishes to a new acoustical tile finish and repair plaster finishes. Considering the recommended mechanical and electrical

upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

The ceiling finish for this pod is a 12x12 glue on ceiling tile finish. The finish is damaged and several sections are missing and other sections are damaged from water stains. It is recommended that the ceiling finish be removed and replaced with an acoustical tile ceiling finish.

The present floor plan arrangement has the elevator lobbies opening up into the existing hall corridors. IBC 2000 states that elevators opening into a fire resistant corridor shall be provided with an elevator lobby at each floor containing such a corridor. The lobby should completely separate the elevators from the corridor with rated partitions. Elevator lobbies need to have at least one means of egress and contain smoke detectors. This deficiency recommends the construction of fire resistant barrier with automatically closing fire doors to be installed between the elevator lobbies and the corridors to provide the required separation and protection.

Institutional equipment includes: library equipment; stage equipment; instrumental equipment; A/V equipment; and laboratory equipment; gym equipment – basketball backstops, scoreboards, etc.. Other equipment includes kitchen equipment; loading dock bumpers/levelers. The following deficiencies are recommended as part of an effort to renovate the school.

The school's library equipment is currently abandoned and the system appears to be in good condition. The library is being used as a study hall the shelves and cabinets are original and in good condition. There are no recommendations for the library required at this time.

The stage equipment and instrumental equipment for the different labs such as, Drama, Design, Auto Shop, Plumbing Shop and Culinary are in different levels of occupation. The Drama, and Auto Shop areas are no longer in use however the equipment remains in place. The Cosmetology classrooms and Design classrooms are in use and in good condition. The Plumbing Shop is currently being used and is in fair condition as well. There are several recommendations in this report that reflect interior finishes and equipment that will enhance the shops conditions and ability to serve the students. Care should be taken to consider these special labs for upgrade as part of this recommended interior renovation effort.

Furnishings include: fixed casework; window shades/blinds; and fixed auditorium seating. The fixed seating for this school is from the original construction. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades for the fixed seating and furnishing of this school. Ensure that ADA requirements are followed with the new seating layout.

MECHANICAL SYSTEMS

PLUMBING- Plumbing fixtures are standard china commercial quality with wall mounted lavatories, urinals and water closets. Most lavatories have dual wheel handle faucets and urinals and water closets have recessed manual flush valves with lever operators. The fourth level has newer cosmetology classrooms with numerous hair washing sinks. The fourth level has science classrooms with some integral lab equipment sinks. Only the instructor's stations have gas and water utilities. Custodial closets have cast iron service sinks. There are double and triple porcelain drinking fountains with no refrigeration. The main kitchen waste and bakery waste is piped through grease traps above the floor at each location. Four Paloma instantaneous gas water heaters are in the basement mechanical room, each with a small inline circulating pump and type B gas vents. These units appear to be newer. There is a central end suction hot water circulating pump that is inoperable. There is no domestic water booster pump system, but two abandoned double suction pumps once provided pressure assist. A water softener is part of the domestic water system. Two duplex sump pumps in the mechanical room provide ground water removal, and one pump for each set is not functional. In the mechanical room is an open pit with two submerged pneumatic sewage ejector pumps discharging basement level sanitary and waste to the street level plumbing system. A dedicated air compressor powers these pumps. This system needs to be replaced with a standard enclosed duplex sewage ejector pump system.

Water piping has been replaced since the original installation with insulated copper, but may contain lead solder based on age. Sanitary, waste, vent and rainwater piping is original installation hub and spigot cast iron, with some hubless cast iron where additions or damage have occurred. The water service is a four inch line and meter from N. Twenty Second St. located in the basement mechanical room and includes a backflow preventer. There are two lines from the service line, one for the boilers and one to the building. Each of these two lines also has a backflow preventer. A six inch gas services is in a separate room near the basement mechanical room, connected at N. Twenty Second St.

Domestic water piping has exceeded the service life and should be replaced. Sanitary and waste cast iron piping should be inspected for damage and repaired or replaced as required. There are older plumbing fixtures on the unused seventh and eighth levels and the basement level, which have exceeded service life and should be replaced. The china drinking fountains should be replaced with

stainless steel dual level water coolers with integral refrigeration. The gang showers in the unused basement locker rooms should be replaced. Other plumbing fixtures appear to be newer and should have remaining service life of twenty years. The water heaters should be functional up to fifteen more years. A domestic booster pump system should be installed. The two duplex ground water pumps, the pneumatic sewage ejector pumps, and the hot water circulating pump should be replaced.

HVAC-The building is heated by steam generated by four Weil Mclain Series 3 cast iron sectional boilers. The boilers are gas/oil fired one hundred sixty hp each, reportedly installed in 1994. Each unit has a Powerflame burner, separate oil pump and control panel, and is connected to a common factory fabricated vent system routed to an existing chimney. The boilers have code compliant gas trains. One boiler has been condemned and the other three are in fair condition. There are leaks in some headers and steam mains. Reportedly two will heat the building. There is an older horizontal condensate return tank and boiler feed unit with four pumps serving the boilers. Two ten thousand gallon oil storage tanks are underground, condition unknown. A duplex fuel oil pump system located in the mechanical room is not operational.

Classrooms and some other areas have Magic Aire unit ventilators installed around 1995 with steam coil, outside air damper, filter, blower and motor, control valve and controls. Steam radiation is located at entrances, toilet rooms, corridors, gym and other areas requiring heat. Control valves are mostly inoperable and reportedly eighty percent of traps were replaced in 2014. The seventh and eighth levels are abandoned and unoccupied with no system renovations.

An unused carpentry shop on the basement level has four inoperable heating and ventilating units suspended in the space. Three inoperable central house fan systems in the basement served the two gymnasiums, auditorium, locker rooms and other areas of the building. The auditorium has under seat air distribution devices. The cafeteria was served by a heating and ventilating unit in a sixth floor mechanical room near the freight elevator machine room. This unit is also inoperable. The main kitchen has two wall canopy hoods with a fan on the roof. The culinary school kitchen has a dishwasher exhaust hood and a canopy hood with fire suppression. The third level bakery has two heat removal hoods with an inline exhaust fan above, discharging to a wall louver. The boiler room has combustion air louvers with motorized dampers. There is no mechanical toilet exhaust system.

There is no central air conditioning. The building has several window air conditioners and a ductless split system for the IT room with the condensing unit mounted on the exterior wall.

Steam piping is insulated welded black steel with some leaks and some damaged insulation.

There are no central control systems. The unit ventilators have digital controls with room thermostats, but there is no building automation system or computer control terminal. There is a duplex controls air compressor in the mechanical room and old control panels, most of which are abandoned. The boilers are operated by the Powerflame control panels.

The unit ventilators have exceed the service life and do not comply with ventilation codes, and should be replaced. The boilers and steam system are in fair condition but should have remaining service life of fifteen years with increased maintenance. The condemned boiler should be replaced. The condensate/feed water system has exceeded the service and should be replaced.

FIRE PROTECTION- There are standpipes with hose valve connections and exterior fire department connection but no automatic sprinkler system.

ELECTRICAL SYSTEMS

Electrical Service--The building is served by PECO Energy Company. Two 5 kV services enter the transformer vault in the basement from the southwest side of the site. There are two 5 kV Westinghouse switches, each one feeding a bank of three oil-filled, 250 kVA, 2.4/4.16 kV-120/240V, single phase transformers that are mounted on the floor with exposed busing connections. There is also a separate 30 kVA, 2.4/4.16 kV-120/240V transformer that is fed from one of the services. The Building Engineer reported that the second service is no longer in use and has been disconnected by the utility. All of the equipment in the transformer vault has exceeded its useful life. With the addition of central air conditioning, consideration should be given to providing three (3) substations, with transformers having dual rated primary connections for 4.16 kV and 13.2 kV service. The estimate in this report includes replacement of utility line circuit breakers and metering cabinets and providing three (3) load interrupter switches, one serving each substation. Substations would be one (1) 2500 kVA, 3000A, 480/277V, 3 phase, 4 wire for air conditioning and larger mechanical equipment and two (2) 1000 kVA, 3000A, 208/120V, 3 phase, 4 wire to serve existing building loads. Step-down 480V-208V transformers could also be provided, as needed, to supply existing building loads from the 480V substation.

The Main Switchboard is an obsolete, exposed knife blade fusible switchboard located in Basement Mechanical Room 029 that has far exceeded its useful life and is a major safety concern with its exposed busing and no safeguards or protection for personnel. There is no manufacturer’s nameplate or identification on the switchboard. The entire switchboard needs to be replaced. Recommendation

would be to replace this equipment with the two (2) 1000 kVA, 3000A, 208/120V, 3 phase, 4 wire substations described above. A major upgrade and reconfiguration of the electrical service and distribution system is required for the increased load added by central air conditioning equipment.

Except for Panelboards HP1, HP2, HP3 and HP4, located in Basement Mechanical Room 029, and a few other panelboards that were added, all distribution panelboards and lighting and appliance panelboards have exceeded their useful life and need to be replaced. There are approximately five panelboards on each floor that have exceeded their useful life. Feeders within panelboards were observed to be wrapped with asbestos insulation. Abatement is required before panelboards are replaced.

Receptacles-- Generally, receptacles throughout the building are in poor condition. Many of the devices are not 3-wire grounding type and need to be replaced. Classrooms are not provided with an adequate quantity of receptacles. The recommendation is to replace all existing receptacles in classrooms and to add 6 to 8 duplex receptacles in each classroom using a surface metal raceway system. Computer rooms have floor mounted raceways with floor receptacles that are in poor condition. Consideration should be given to replacing floor outlets with tele/power poles to minimize possible tripping hazards.

The receptacles at sink locations, especially at lab tables in three science rooms, and in the kitchen and the culinary kitchen are not ground-fault circuit-interrupting (GFCI) type and need to be replaced with GFCI type to comply with NFPA 70, National Electrical Code (NEC) Article 210.8.

Due to the poor condition of most duplex receptacles, a building wide replacement of devices is recommended and included in this report.

Lighting—The Building Engineer reported that 85 percent of fluorescent lighting fixtures in the building have obsolete T12 lamps. Floors 7 and 8 are not used and are not accessible. The lighting fixtures in the Basement Boiler Room, IMC on Floor 4, and corridors on Floors 5 and 6 have been upgraded to T8 fixtures. All other areas have T12 lamps, including classrooms, auditorium, kitchen and cafeteria. A lighting system upgrade is recommended for all rooms having fixtures with T12 lamps.

Lighting fixtures in the classrooms and restrooms are pendant or surface mounted, 2 lamp, fluorescent wraparound fixtures with acrylic prismatic lenses. Typically, at least switches are used to control the lighting fixtures. Surface mounted 4x4 modular fluorescent fixtures are located in corridors. Corridor lighting fixtures are controlled by branch circuit breakers in panelboards. Rooms with suspended acoustical tile ceilings typically have 2x4 lay-in grid troffers.

The auditorium has a combination of approximately 140 2x4 fluorescent troffers with T12 lamps, 9 ceiling mounted chandeliers and 6 incandescent wall sconces, all of which have exceeded their useful life. The lighting control board for the stage and auditorium is obsolete and needs to be replaced.

The lighting fixtures in the girls and boys gymnasiums are recessed mercury vapor and have exceeded their useful life.

There are several rooms that still have incandescent lighting fixtures, including the transformer vault, fan rooms, and wall scones in the auditorium.

Exits to grade are illuminated by either wall mounted fixtures above the door or recessed fixtures in the canopies. Fixtures are in poor condition, with many damaged. All exterior building mounted fixtures at exit discharges should be replaced.

Fire Alarm System-- There is an original S.H. Couch Company 120 volt fire alarm control panel that is tied into a Simplex 4005 fire alarm control panel, both located in the Main Electrical Room (Mechanical Room 029). The fire alarm system does not meet current NFPA code or ADA requirements. There are no visual notification appliances anywhere within the building. Several manual pull stations are missing at locations required by code. Smoke detectors are provided in elevator lobbies and a FCI fire alarm control panels provided in the elevator machine rooms. The Building Engineer reports that half of the fire alarm gongs within the building are not functional. The system has exceeded its useful life and needs to be replaced with an addressable fire alarm system to meet current NFPA codes and ADA requirements.

Telephone/LAN--The telephone service demarcation point is located in the Basement electrical closet located near 21st Street. A telephone is provided in each classroom. Data outlets have been added in classrooms. Wireless access points are provided in the classrooms, gymnasium, auditorium and other rooms for Wi-Fi coverage throughout the school. Intermediate data hubs are provided in computer classrooms and the IMC.

Intercom/Paging/Sound Systems-- The paging system is accessed through the telephone system. There are clock/speaker assemblies in classrooms and ceiling recessed speakers in corridors. Horn type speaker are located in the gyms, cafeteria, and building exterior.

The paging system equipment is located in the Main Distribution Frame (MDF) room, located in the Main Office on Floor 2. The system has Avaya 250W paging amplifiers. The auditorium also has a separate sound system with Peavey IPA 75T amplifier and cabinet located on stage right, and speakers mounted on each side of the stage. The system was reported to not be in working order and needs to be replaced. A Portable sound system with wireless microphone is used as a substitute sound system.

Clock and Program System-- There is Sapling wireless GPS clock system. Sapling wireless GPS, battery operated clocks are provided throughout the school.

Television System-- The television system is obsolete and no longer used. However, wall mounted television sets are still located in classrooms. It is recommended that the television sets be removed.

Video Surveillance and Security Systems-- There are a total of 25 interior video surveillance cameras that are mainly located in corridors. There are no exterior surveillance cameras for the site. It is recommended that that exterior cameras be added, especially to cover entrances and the parking lot. There are two 16 channel digital video recorders (DVR's) and two monitors located in School Police Room 109. There is no Aiphone video intercom system at the visitor entrance.

Magnetic door contacts are provided on exterior doors and security motion sensors provided in corridors.

Emergency Power System--There is a Kohler 45 kW/45 kVA, 120/240, 1 phase, 3 wire standby generator, automatic transfer switch, and plug-in fusible panelboard located in the Main Electrical Room (Mechanical Room 029) have exceeded their useful life and need to be replaced. The emergency power system should be sized to provide standby power for all four elevators.

Emergency Lighting System / Exit Lighting-- Emergency egress and exit lighting is supplied from the plug-in fusible emergency lighting panelboard. Building staff reports that emergency lighting is inadequate. The system has reached the end of its useful life and needs to be replaced. Exit signs are also at end of life or damaged and need to be replaced with LED exit signs.

Lightning Protection System-- There is a lightning protection system that was installed when the roof was recently replaced. It is in good condition.

Conveying Systems-- The building has three (3) passenger elevators and one (1) freight elevator. Elevators are by F. S. Payne Company and have reached the end of their useful life and need to be upgraded.

GROUNDS

Paved driveways and parking lots are concrete pads that range from a 10x10 to a 20x20 application. The concrete pads are in poor condition.

The parking area has ADA parking with approved curb cuts for access to the sidewalks that lead to the main entrance. However, the ADA ramp faces the 21st street entrance and the parking lots are in poor condition, the harsh environmental conditions associated with snow removal have taken its toll on the concrete surface. Also, there is no marked path of ingress to the main ADA entrance. This deficiency provides a budgetary consideration for a parking lot renewal program that includes all aspects of the current ADA legislation. Universal upgrades are recommended.

The sidewalk system is original to the buildings construction. There are a several areas of cracking concrete but no tripping hazards. The sidewalk system is expected to expire in the near future. Removal of the entire system is recommended. Universal upgrades are required and should include all aspects of current ADA legislation.

The trash dumpster is located in the parking lot open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area is necessary for the safety of the students and the general public. Construction of a secure lockable dumpster area is recommended.

The loading dock is located just off the parking area between the dumpsters. The existing recommendation to enclose and move the dumpsters to a new location is related to this effort. After the dumpster correction is complete it is recommended that the loading dock area be clearly marked and safety barriers be placed to protect pedestrian traffic and mitigate possible issues related to loading and unloading materials and supplies.

This school has a perimeter fence surrounding the parking / playground area. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the fence is in fair condition. This fence system is recommended to be removed and replaced with a new system within the next five to ten years.

The chain link fence that separates the connecting city park and the school is damaged in several areas providing access to the parking area and to the entrances of the school. This deficiency provides a budgetary consideration to repair and replace sections of the fence.

There are several sections of the exterior concrete pads near the 21st street side of the school that have sank into the soil indicating a collapsed field drain. This appears to be obvious from the length of the depression from the man hole cover at street side to the entire path leading back to the basement level mechanical area. This deficiency provides a budgetary consideration to remove and replace this entire section and replace the existing concrete pads.

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The general landscaping is in good condition and consists of a small turfed area that is being used as a construction lay down area during the time of the inspection and a small turfed section west of the school. Considering the ongoing construction and the general landscaping being used as a construction lay down area, no recommendations are required considering that the site is expected to be returned to service after construction is complete.

Site Lighting-- Other than for the building mounted lighting fixtures at the exit discharges, there are no other site lighting fixtures.

Site Video Surveillance System-- There are no exterior video surveillance cameras on the building. It is recommended that six (6) exterior cameras be added to provide coverage for all sides of the building.

RECOMMENDATIONS

- Replace auditorium seating
- Remove and replace suspended acoustic ceilings
- Repair and resurface plaster ceilings
- Remove and replace wood flooring
- Upgrade Gym Flooring
- Remove and replace VCT
- Repair and repaint all interior walls
- Replace inadequate or install proper stair railing
- Replace missing or damaged signage
- Replace blackboards with marker boards
- Remove and replace tackboards
- Remove and replace lockers
- Remove and replace interior doors
- Remodel existing classroom for lab use
- Remove non-rated interior glass panels and replace with studs, gypsum board, paint
- Install fire rated walls and door where required
- Remove folding wood partitions; replace with metal studs and gypsum board painted
- Build new gang restroom to meet code or occupant needs
- Build fire resistant elevator lobby to comply with fire separation requirements - each floor
- Remove and replace overhead door
- Remove and replace exterior doors
- Repair collapse field drain
- Repair chain link fence
- Repair steel perimeter fence
- Construct secure dumpster area
- Loading dock upgrade
- Remove and replace sidewalks
- Parking lot upgrade
- Replace the existing unit ventilators with new units designed for quiet operation and equipped with hot water and chilled water coils, hydronic control valves with digital controls and integral heat exchangers to provide code required fresh air quantities. Connect to new chilled and hot water piping systems and building automation control system.
- Remove the existing window air conditioning units and install air-cooled chillers on the roof with chilled water distribution piping, pumps, chemical treatment and controls located in a mechanical room on the basement level. Total cooling capacity

900 tons.

- Install complete NFPA wet pipe automatic sprinkler system and standpipes. If required provide fire pump and jockey pump with controller.
- Replace unit for auditorium with new central station air handling unit with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and existing ductwork.
- Replace unit for cafeteria with new central station air handling unit with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and existing duct work.
- Install new direct digital control system and building automation system with remote computer control capability and graphics package.
- Inspect old cast iron sanitary piping including camera observation and replace damaged sections.
- Replace domestic hot and cold water piping including valves, fittings, hangars and insulation.
- Provide new domestic water booster pump system with two pumps, pressure tank, and controls. Connect to main domestic water line.
- Replace the steam boiler that has been condemned with new low pressure steam cast iron sectional boiler. Connect to piping systems, gas flue and controls. Include electrical connection.
- Replace units for two gymnasiums with two new central station air handling units with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and new duct work.
- Install new mechanical toilet exhaust systems for toilet rooms and locker rooms with inline fans, louvers, ductwork, and air distribution devices. Include controls and electrical connections.
- Replace four pump condensate receiver/boiler feed system with new similar unit. Include electrical connection and controls.
- Replace existing inoperable duplex fuel oil pump system. Include electrical connection and controls.
- Replace two duplex groundwater sump pumps with two new pump system. Include electrical connections.
- Replace two pneumatic sewage ejector pumps with standard electric duplex sewage ejector sump pump system. Include electrical connection.
- Replace older plumbing fixtures on levels seven and eight and the basement level including water closets, lavatories and urinals. Include fittings and trim.
- Replace china drinking fountains with dual level stainless steel water cooler with integral refrigeration. Include fittings and trim.
- Replace inoperable hot water circulating pump.
- Replace medium voltage switchgear and transformers in the transformer vault. Provide new utility line circuit breakers and metering cabinets and load interrupter switches to feed three (3) substations. Provide substation sized for air conditioning equipment and larger mechanical loads. Estimated size is 2500 kVA, 3000A, 480/277V, 3 phase, 4 wire.
- Replace existing obsolete main switchboard with knife blade switches in the Main Electrical Room with two (2) substations fed from load interrupter switches in the transformer vault. Estimated size is 1000 kVA, 3000A 208/120V, 3 phase, 4 wire.
- Replace 400A distribution panelboard BR1, 800A distribution panelboards BR (two sections) and approximately 46 panelboards located throughout the building, including their feeder conductors.
- Abate asbestos wrapped cables within panelboard enclosures for 46 panelboards.
- Provide building wide replacement of all wiring devices. Provide ground-fault circuit-interrupting receptacles at locations required by code (estimate 4 receptacles and 2 switches per 1000 SF).
- Provide an allowance to add 6 to 8 duplex receptacles in each classroom using a surface metal raceway system (total of 60 classrooms).
- Replace all fluorescent lighting lightings that have T12 lamps with fixates having T8 lamps (Classrooms 91,800 SF, Mechanical/Storage 49,050 SF, All other spaces 123,650 SF for a total of 264,500 SF).
- Replace approximately 140 2x4 fluorescent troffers, 9 ceiling mounted chandeliers and 6 incandescent wall sconces in the auditorium.
- Replace lighting control dimmer board for the stage and auditorium lighting system.
- Replace a total of (40) 400W and (16) 250W mercury vapor lighting fixtures in the girls and boys gymnasiums with LED lighting fixtures.
- Replace all exterior building mounted lighting fixtures at exit discharges (total of 8 fixtures). Replace with six (6) fixtures.
- Replace fire alarm system with an addressable fire alarm system.
- Replace 75 watt sound system in the auditorium.
- Replace standby generator system, including automatic transfer switch and emergency panelboard. Size system to provide standby power for all four elevators (estimate 250 kW).
- Replace all exit signage in the building with vandal-resistant LED exit signs (estimate 135 exit signs).
- Provide elevator upgrade/modernization for three (3) passenger and (1) freight electric traction elevators.

Site Assessment Report - S406001;Dobbins

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 4 / Tm 1
Status:	Accepted by SDP	Team:	Tm 1
Site ID:	S406001		

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.

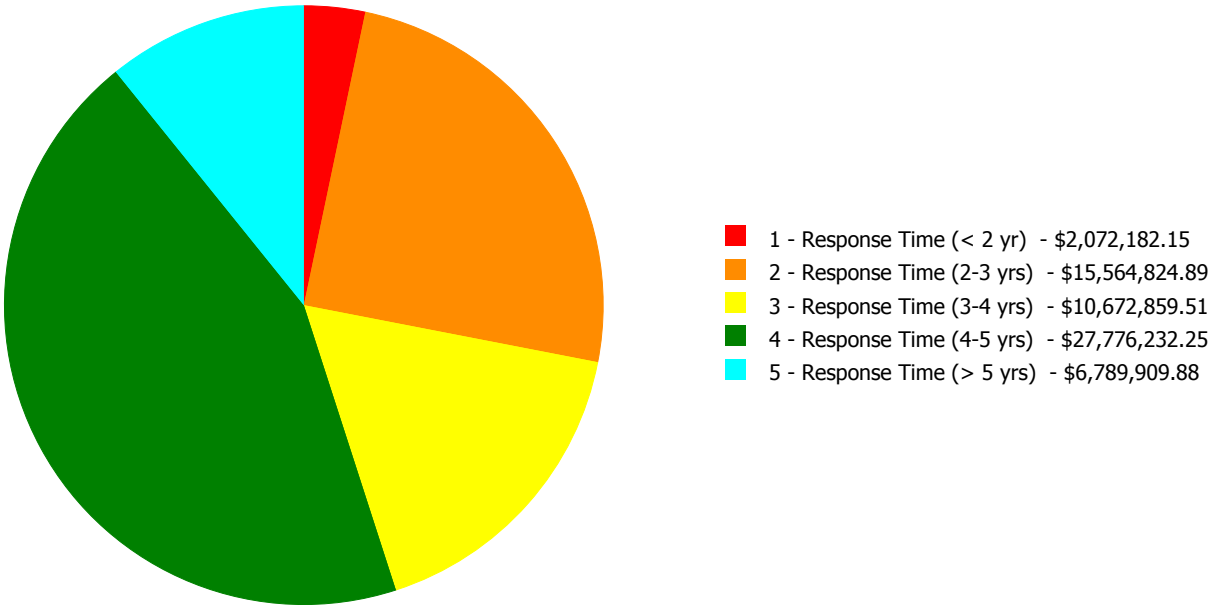
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	23.00 %	0.00 %	$0.00
B10 - Superstructure	23.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	42.50 %	1.24 %	$200,164.55
B30 - Roofing	100.00 %	0.00 %	$0.00
C10 - Interior Construction	18.22 %	205.43 %	$14,638,642.52
C20 - Stairs	12.00 %	249.12 %	$844,314.00
C30 - Interior Finishes	52.32 %	42.37 %	$6,108,868.76
D10 - Conveying	60.00 %	124.88 %	$1,962,222.72
D20 - Plumbing	73.56 %	29.04 %	$3,688,975.22
D30 - HVAC	98.41 %	53.74 %	$16,726,871.41
D40 - Fire Protection	105.71 %	147.48 %	$4,468,950.65
D50 - Electrical	102.92 %	63.27 %	$12,188,755.99
E10 - Equipment	34.88 %	5.79 %	$90,802.49
E20 - Furnishings	60.00 %	203.31 %	$1,352,858.27
G20 - Site Improvements	48.10 %	57.19 %	$604,582.10
G40 - Site Electrical Utilities	56.67 %	0.00 %	$0.00
Totals:	**60.09 %**	**40.73 %**	**$62,876,008.68**

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)
B406001;Dobbins	312,395	40.76	$2,072,182.15	$15,426,299.72	$10,672,859.51	$27,310,175.32	$6,789,909.88
G406001;Grounds	90,600	38.18	$0.00	$138,525.17	$0.00	$466,056.93	$0.00
Total:		**40.73**	**$2,072,182.15**	**$15,564,824.89**	**$10,672,859.51**	**$27,776,232.25**	**$6,789,909.88**

Deficiencies By Priority



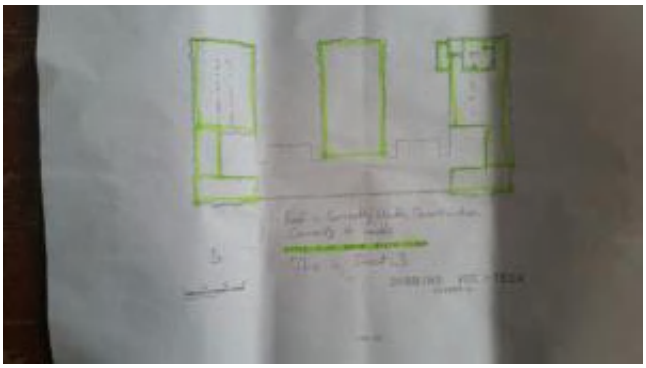
Budget Estimate Total: $62,876,008.68

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:	CTE
Gross Area (SF):	312,395
Year Built:	1938
Last Renovation:	
Replacement Value:	$152,789,263
Repair Cost:	$62,271,426.58
Total FCI:	40.76 %
Total RSLI:	60.19 %



Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B406001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S406001		

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	23.00 %	0.00 %	$0.00
B10 - Superstructure	23.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	42.50 %	1.24 %	$200,164.55
B30 - Roofing	100.00 %	0.00 %	$0.00
C10 - Interior Construction	18.22 %	205.43 %	$14,638,642.52
C20 - Stairs	12.00 %	249.12 %	$844,314.00
C30 - Interior Finishes	52.32 %	42.37 %	$6,108,868.76
D10 - Conveying	60.00 %	124.88 %	$1,962,222.72
D20 - Plumbing	73.56 %	29.04 %	$3,688,975.22
D30 - HVAC	98.41 %	53.74 %	$16,726,871.41
D40 - Fire Protection	105.71 %	147.48 %	$4,468,950.65
D50 - Electrical	102.92 %	63.27 %	$12,188,755.99
E10 - Equipment	34.88 %	5.79 %	$90,802.49
E20 - Furnishings	60.00 %	203.31 %	$1,352,858.27
Totals:	**60.19 %**	**40.76 %**	**$62,271,426.58**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$26.24	S.F.	312,395	100	1938	2038		23.00 %	0.00 %	23			$8,197,245
A1030	Slab on Grade	$15.51	S.F.	312,395	100	1938	2038		23.00 %	0.00 %	23			$4,845,246
B1010	Floor Construction	$92.20	S.F.	312,395	100	1938	2038		23.00 %	0.00 %	23			$28,802,819
B1020	Roof Construction	$48.22	S.F.	34,000	100	1938	2038		23.00 %	0.00 %	23			$1,639,480
B2010	Exterior Walls	$36.56	S.F.	312,395	100	1938	2038		23.00 %	0.00 %	23			$11,421,161
B2020	Exterior Windows	$13.63	S.F.	312,395	40	2015	2055		100.00 %	0.00 %	40			$4,257,944
B2030	Exterior Doors	$1.67	S.F.	312,395	25	1990	2015		0.00 %	38.37 %	0		$200,164.55	$521,700
B3010105	Built-Up	$37.76	S.F.	30,000	20	2015	2035		100.00 %	0.00 %	20			$1,132,800
B3010140	Shingle & Tile	$38.73	S.F.	4,000	30	2015	2045		100.00 %	0.00 %	30			$154,920
C1010	Partitions	$14.93	S.F.	312,395	100	1938	2038	2027	12.00 %	213.09 %	12		$9,938,634.25	$4,664,057
C1020	Interior Doors	$3.76	S.F.	312,395	40	1938	1978	2027	30.00 %	243.69 %	12		$2,862,352.27	$1,174,605
C1030	Fittings	$4.12	S.F.	312,395	40	1938	1978	2027	30.00 %	142.78 %	12		$1,837,656.00	$1,287,067
C2010	Stair Construction	$10.83	S.F.	31,295	100	1938	2038	2027	12.00 %	249.12 %	12		$844,314.00	$338,925
C3010230	Paint & Covering	$13.21	S.F.	112,395	10	1938	1948	2027	120.00 %	45.62 %	12		$677,387.70	$1,484,738
C3010232	Wall Tile	$2.63	S.F.	200,000	30	1938	1968	2027	40.00 %	0.00 %	12			$526,000
C3020411	Carpet	$7.30	S.F.	1,000	10	2015	2025		100.00 %	0.00 %	10			$7,300
C3020412	Terrazzo & Tile	$75.52	S.F.	25,697	30	1938	1968	2023	26.67 %	0.00 %	8			$1,940,637
C3020413	Vinyl Flooring	$9.68	S.F.	25,697	20	1938	1958	2027	60.00 %	48.31 %	12		$120,175.32	$248,747

Site Assessment Report - B406001;Dobbins

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 $
C3020414	Wood Flooring	$22.27	S.F.	160,000	25	1938	1963	2027	48.00 %	107.99 %	12		$3,848,073.37	$3,563,200
C3020415	Concrete Floor Finishes	$0.97	S.F.	100,000	50	1938	1988	2027	24.00 %	0.00 %	12			$97,000
C3030	Ceiling Finishes	$20.97	S.F.	312,395	25	1938	1963	2027	48.00 %	22.34 %	12		$1,463,232.37	$6,550,923
D1010	Elevators and Lifts	$5.03	S.F.	312,395	20	1938	1958	2027	60.00 %	124.88 %	12		$1,962,222.72	$1,571,347
D2010	Plumbing Fixtures	$31.58	S.F.	312,395	35	2000	2035	2040	71.43 %	5.96 %	25		$588,044.32	$9,865,434
D2020	Domestic Water Distribution	$2.90	S.F.	312,395	25	1938	1963	2042	108.00 %	178.03 %	27		$1,612,830.76	$905,946
D2030	Sanitary Waste	$2.90	S.F.	312,395	25	1938	1963	2042	108.00 %	164.26 %	27		$1,488,100.14	$905,946
D2040	Rain Water Drainage	$3.29	S.F.	312,395	30	1938	1968	2025	33.33 %	0.00 %	10			$1,027,780
D3020	Heat Generating Systems	$18.67	S.F.	312,395	35	1994	2029	2035	57.14 %	10.87 %	20		$634,174.88	$5,832,415
D3030	Cooling Generating Systems	$24.48	S.F.	312,395	30			2047	106.67 %	69.19 %	32		$5,290,964.77	$7,647,430
D3040	Distribution Systems	$42.99	S.F.	312,395	25	1938	1963	2042	108.00 %	37.58 %	27		$5,046,339.41	$13,429,861
D3050	Terminal & Package Units	$11.60	S.F.		20				0.00 %	0.00 %				$0
D3060	Controls & Instrumentation	$13.50	S.F.	312,395	20	1938	1958	2037	110.00 %	136.47 %	22		$5,755,392.35	$4,217,333
D4010	Sprinklers	$8.71	S.F.	312,395	35			2052	105.71 %	164.24 %	37		$4,468,950.65	$2,720,960
D4020	Standpipes	$0.99	S.F.	312,395	35	1938	1973	2052	105.71 %	0.00 %	37			$309,271
D5010	Electrical Service/Distribution	$12.59	S.F.	312,395	30	1938	1968	2047	106.67 %	132.57 %	32		$5,213,987.06	$3,933,053
D5020	Lighting and Branch Wiring	$34.68	S.F.	312,395	20	1938	1958	2037	110.00 %	47.41 %	22		$5,136,757.64	$10,833,859
D5030	Communications and Security	$12.99	S.F.	312,395	15	1938	1953	2027	80.00 %	33.23 %	12		$1,348,507.28	$4,058,011
D5090	Other Electrical Systems	$1.41	S.F.	312,395	30	1938	1968	2047	106.67 %	111.13 %	32		$489,504.01	$440,477
E1020310	Theater and Stage Equipment, EACH	$0.29	Ea.	312,395	20	1938	1958	2037	110.00 %	100.23 %	22		$90,802.49	$90,595
E1020720	Laboratory Equipment, S.F.	$2.90	S.F.	20,000	20	1990	2010	2021	30.00 %	0.00 %	6			$58,000
E1020810	Medical Equipment, S.F.	$3.58	S.F.	5,000	15	1990	2005	2021	40.00 %	0.00 %	6			$17,900
E1030110	Vehicular Service Equipment, S.F.	$3.78	S.F.	5,000	25	1990	2015	2021	24.00 %	0.00 %	6			$18,900
E1090360	Food Service Equipment, S.F.	$6.78	S.F.	5,000	15	1990	2005	2021	40.00 %	0.00 %	6			$33,900
E1090620	Mechanical & Manufacturing Equipment, S.F.	$6.49	S.F.	5,000	20	1990	2010	2021	30.00 %	0.00 %	6			$32,450
E1090620	School Equipment, S.F.	$4.84	S.F.	272,000	20	1938	1958	2021	30.00 %	0.00 %	6			$1,316,480
E2010	Fixed Furnishings	$2.13	S.F.	312,395	20	1938	1958	2027	60.00 %	203.31 %	12		$1,352,858.27	$665,401
								Total	**60.19 %**	**40.76 %**			**$62,271,426.58**	**$152,789,263**

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: Polish Brick / Marble 65%
Painted Plaster 30%
Exposed no finish 5%

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

Note: Carpet 1%
Terrazzo Tile 8%
Vinyl 8%
Wood 51%
Concrete 32%

System: D5010 - Electrical Service/Distribution — This system contains no images

Note: There are six (6) 250 kVA, 4.16 kV-120/240V, 1 phase, 3 wire service transformers and no secondary transformers.

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:	**$62,271,427**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,940,804**	**$0**	**$2,704,175**	**$0**	**$1,530,167**	**$68,446,573**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A10 - Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$200,165	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$200,165**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$9,938,634	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$9,938,634**
C1020 - Interior Doors	$2,862,352	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,862,352**
C1030 - Fittings	$1,837,656	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,837,656**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$844,314	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$844,314**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

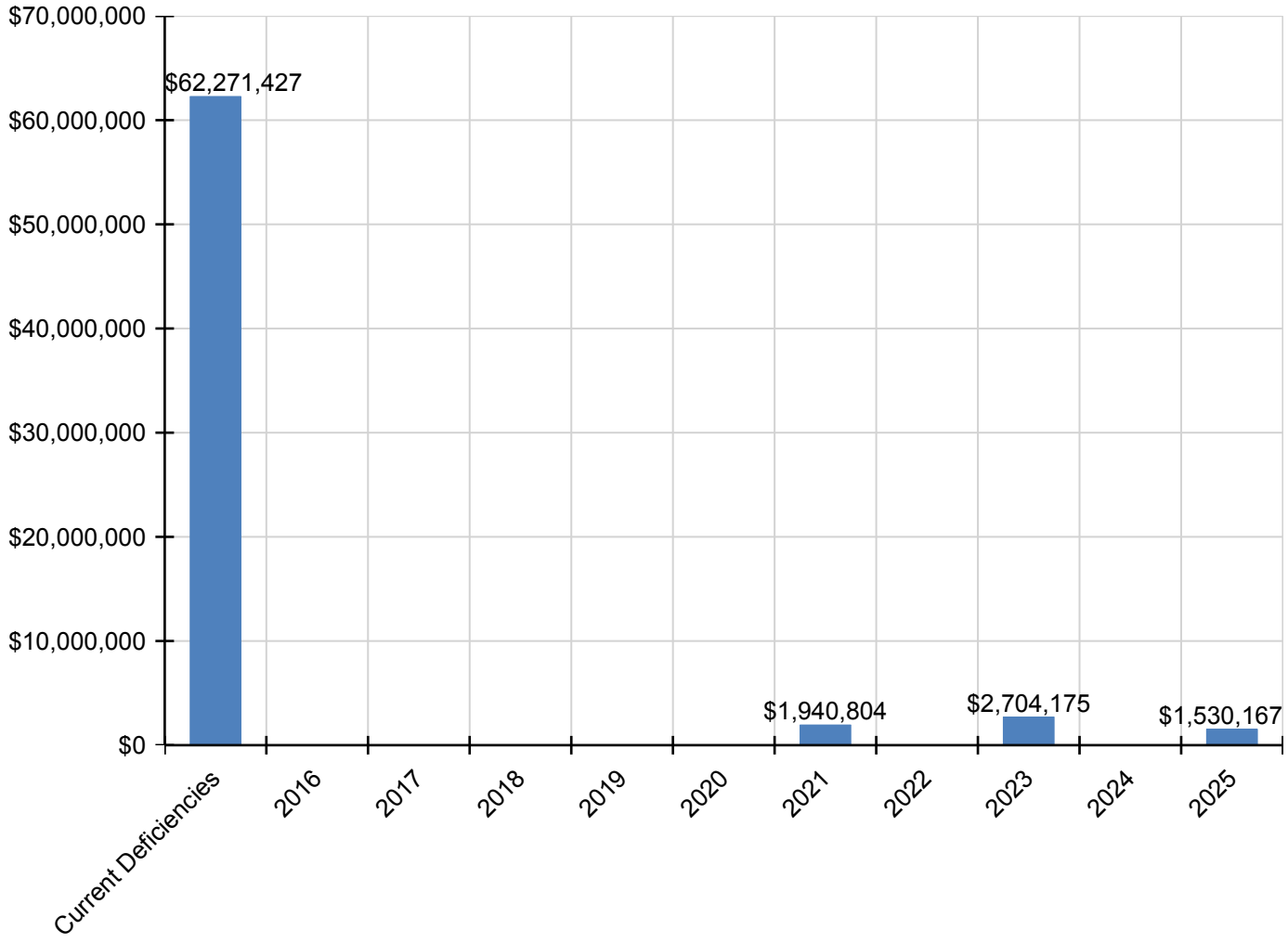
C3010230 - Paint & Covering	$677,388	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$677,388**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,792	**$10,792**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$2,704,175	$0	$0	**$2,704,175**
C3020413 - Vinyl Flooring	$120,175	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$120,175**
C3020414 - Wood Flooring	$3,848,073	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,848,073**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$1,463,232	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,463,232**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$1,962,223	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,962,223**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$588,044	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$588,044**
D2020 - Domestic Water Distribution	$1,612,831	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,612,831**
D2030 - Sanitary Waste	$1,488,100	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,488,100**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,519,375	**$1,519,375**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$634,175	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$634,175**
D3030 - Cooling Generating Systems	$5,290,965	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,290,965**
D3040 - Distribution Systems	$5,046,339	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,046,339**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$5,755,392	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,755,392**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$4,468,951	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,468,951**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$5,213,987	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,213,987**
D5020 - Lighting and Branch Wiring	$5,136,758	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,136,758**
D5030 - Communications and Security	$1,348,507	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,348,507**
D5090 - Other Electrical Systems	$489,504	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$489,504**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020310 - Theater and Stage Equipment, EACH	$90,802	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$90,802**
E1020720 - Laboratory Equipment, S.F.	$0	$0	$0	$0	$0	$0	$76,181	$0	$0	$0	$0	**$76,181**
E1020810 - Medical Equipment, S.F.	$0	$0	$0	$0	$0	$0	$23,511	$0	$0	$0	$0	**$23,511**
E1030 - Vehicular Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1030110 - Vehicular Service Equipment, S.F.	$0	$0	$0	$0	$0	$0	$24,824	$0	$0	$0	$0	**$24,824**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090360 - Food Service Equipment, S.F.	$0	$0	$0	$0	$0	$0	$44,526	$0	$0	$0	$0	**$44,526**
E1090620 - Mechanical & Manufacturing Equipment, S.F.	$0	$0	$0	$0	$0	$0	$42,622	$0	$0	$0	$0	**$42,622**
E1090620 - School Equipment, S.F.	$0	$0	$0	$0	$0	$0	$1,729,141	$0	$0	$0	$0	**$1,729,141**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$1,352,858	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,352,858**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

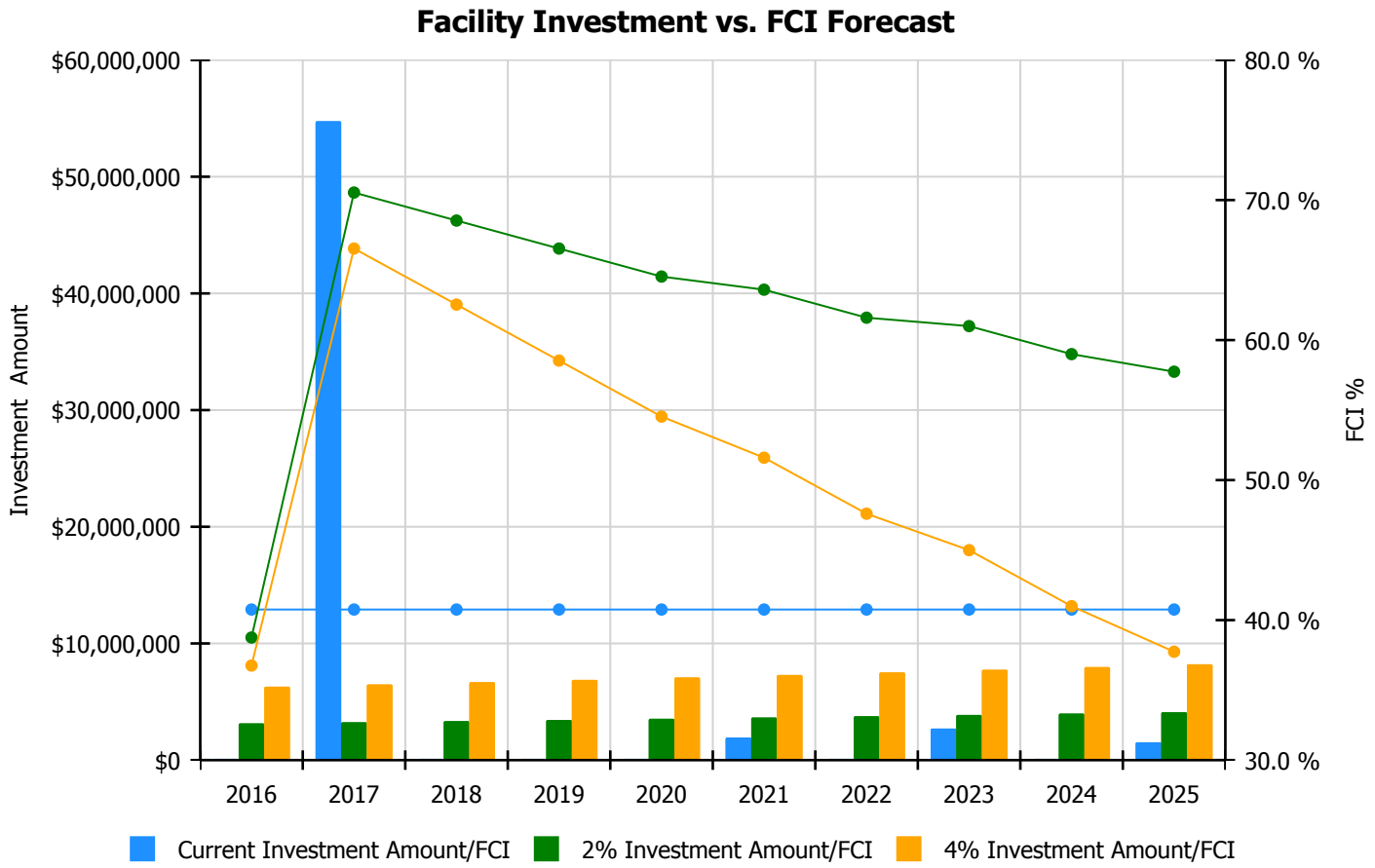
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

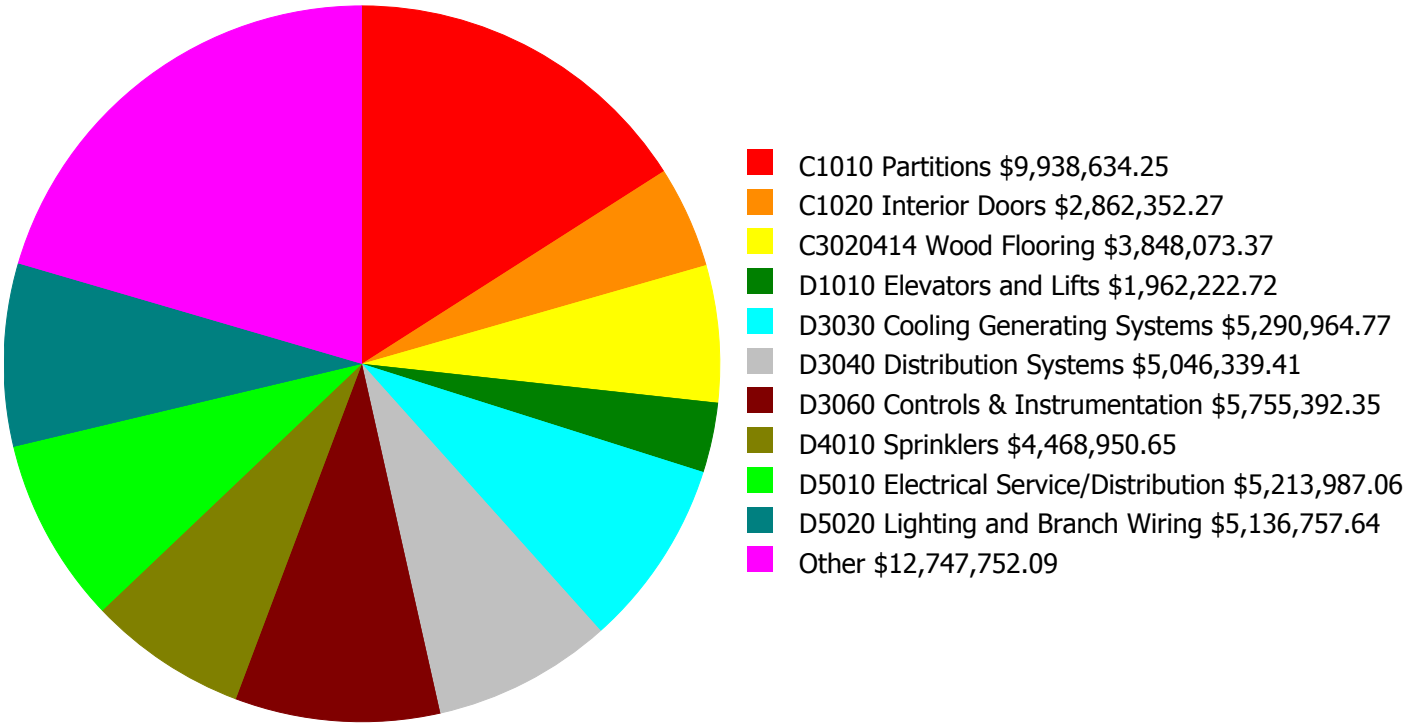
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 40.76%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$3,147,459.00	38.76 %	$6,294,918.00	36.76 %
2017	$54,754,548	$3,241,883.00	70.54 %	$6,483,765.00	66.54 %
2018	$0	$3,339,139.00	68.54 %	$6,678,278.00	62.54 %
2019	$0	$3,439,313.00	66.54 %	$6,878,626.00	58.54 %
2020	$0	$3,542,493.00	64.54 %	$7,084,985.00	54.54 %
2021	$1,940,804	$3,648,767.00	63.60 %	$7,297,535.00	51.60 %
2022	$0	$3,758,230.00	61.60 %	$7,516,461.00	47.60 %
2023	$2,704,175	$3,870,977.00	61.00 %	$7,741,955.00	45.00 %
2024	$0	$3,987,107.00	59.00 %	$7,974,213.00	41.00 %
2025	$1,530,167	$4,106,720.00	57.74 %	$8,213,440.00	37.74 %
Total:	**$60,929,695**	**$36,082,088.00**		**$72,164,176.00**	

Deficiency Summary by System

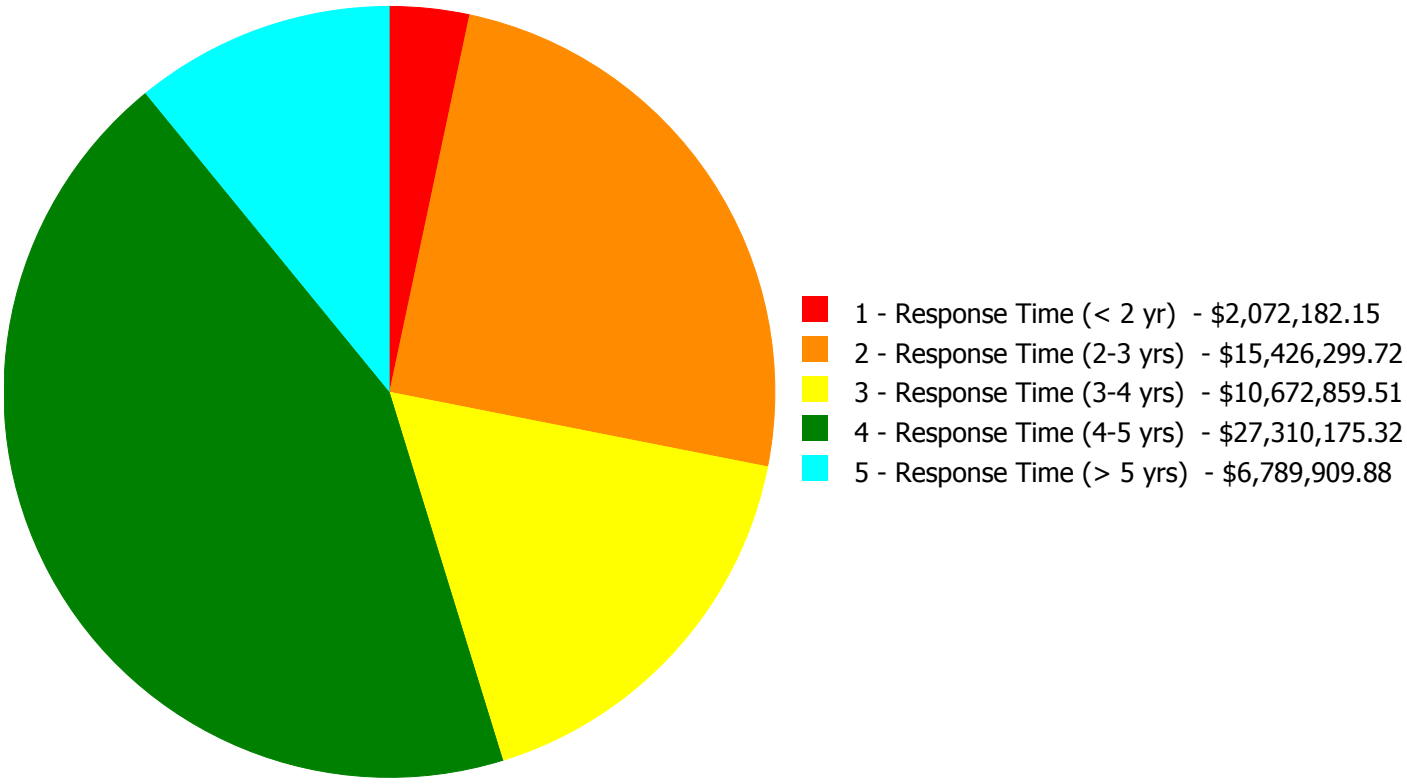
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $62,271,426.58

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: $62,271,426.58

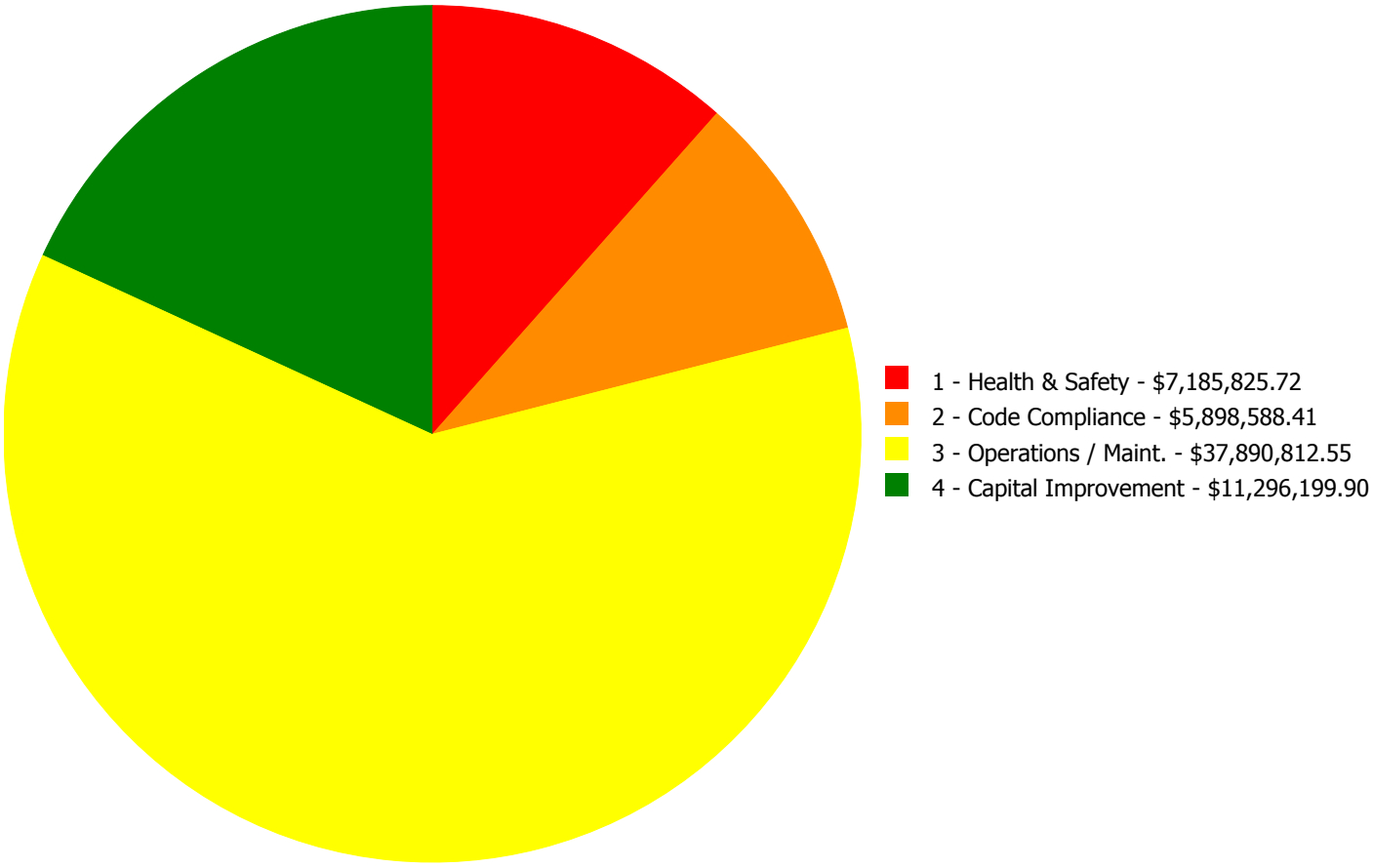
Deficiency By Priority Investment Table

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
B2030	Exterior Doors	$0.00	$18,018.13	$0.00	$182,146.42	$0.00	$200,164.55
C1010	Partitions	$333,367.70	$7,730,123.64	$0.00	$1,875,142.91	$0.00	$9,938,634.25
C1020	Interior Doors	$0.00	$2,862,352.27	$0.00	$0.00	$0.00	$2,862,352.27
C1030	Fittings	$0.00	$0.00	$275,292.84	$63,418.05	$1,498,945.11	$1,837,656.00
C2010	Stair Construction	$0.00	$844,314.00	$0.00	$0.00	$0.00	$844,314.00
C3010230	Paint & Covering	$0.00	$677,387.70	$0.00	$0.00	$0.00	$677,387.70
C3020413	Vinyl Flooring	$0.00	$0.00	$120,175.32	$0.00	$0.00	$120,175.32
C3020414	Wood Flooring	$0.00	$0.00	$0.00	$3,848,073.37	$0.00	$3,848,073.37
C3030	Ceiling Finishes	$0.00	$1,463,232.37	$0.00	$0.00	$0.00	$1,463,232.37
D1010	Elevators and Lifts	$0.00	$0.00	$1,962,222.72	$0.00	$0.00	$1,962,222.72
D2010	Plumbing Fixtures	$0.00	$0.00	$0.00	$588,044.32	$0.00	$588,044.32
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$1,612,830.76	$0.00	$1,612,830.76
D2030	Sanitary Waste	$0.00	$0.00	$0.00	$1,488,100.14	$0.00	$1,488,100.14
D3020	Heat Generating Systems	$0.00	$0.00	$506,102.63	$128,072.25	$0.00	$634,174.88
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$5,290,964.77	$5,290,964.77
D3040	Distribution Systems	$0.00	$0.00	$0.00	$5,046,339.41	$0.00	$5,046,339.41
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$5,755,392.35	$0.00	$5,755,392.35
D4010	Sprinklers	$0.00	$0.00	$0.00	$4,468,950.65	$0.00	$4,468,950.65
D5010	Electrical Service/Distribution	$1,738,814.45	$0.00	$3,475,172.61	$0.00	$0.00	$5,213,987.06
D5020	Lighting and Branch Wiring	$0.00	$0.00	$4,333,893.39	$802,864.25	$0.00	$5,136,757.64
D5030	Communications and Security	$0.00	$1,341,367.60	$0.00	$7,139.68	$0.00	$1,348,507.28
D5090	Other Electrical Systems	$0.00	$489,504.01	$0.00	$0.00	$0.00	$489,504.01
E1020310	Theater and Stage Equipment, EACH	$0.00	$0.00	$0.00	$90,802.49	$0.00	$90,802.49
E2010	Fixed Furnishings	$0.00	$0.00	$0.00	$1,352,858.27	$0.00	$1,352,858.27
	Total:	$2,072,182.15	$15,426,299.72	$10,672,859.51	$27,310,175.32	$6,789,909.88	$62,271,426.58

Deficiency Summary by Category

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



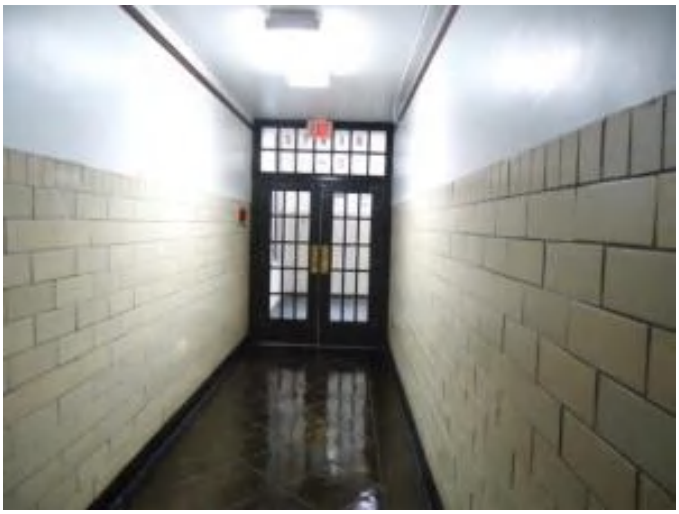
Budget Estimate Total: $62,271,426.58

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: C1010 - Partitions



Location: Stairs

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Install fire rated walls and door where required - insert number of doors

Qty: 80.00

Unit of Measure: S.F.

Estimate: $333,367.70

Assessor Name: System

Date Created: 10/27/2015

Notes: The corridor doors were compliant during the time of the construction of the school in 1937. However a large portion of the interior corridor, exit stair doors are not code compliant. Several doors are typically metal in metal frames with transom lites or sidelights, glass glazing. The older doors are generally in poor condition considering the age of the application. To restore the door finishes, universal upgrades are required for the older door applications. Remove and replace original corridor door systems with new code compliant fire rated door system.

System: D5010 - Electrical Service/Distribution

Location: Mechanical Room 029

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,650,243.20

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace existing obsolete main switchboard with knife blade switches in the Main Electrical Room with two (2) substations fed from load interrupter switches in the transformer vault. Estimated size is 1000 kVA, 3000A 208/120V, 3 phase, 4 wire.

System: D5010 - Electrical Service/Distribution

Location: Building wide

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Remove asbestos from electrical panel - based on approximately 20 SF

Qty: 46.00

Unit of Measure: Ea.

Estimate: $88,571.25

Assessor Name: System

Date Created: 01/22/2016

Notes: Abate asbestos wrapped cables within panelboard enclosures for 46 panelboards.

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

System: B2030 - Exterior Doors

Location: Loading Dock

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace overhead door - pick the closest type and size and add for the operator if required

Qty: 1.00

Unit of Measure: Ea.

Estimate: $18,018.13

Assessor Name: System

Date Created: 10/27/2015

Notes: The loading dock door is an original wooden folding door that is damaged in several areas and no longer functional. This system is a very high traffic system and represents the only access for deliveries to the school. This door system is recommended to be removed and replaced with a modern overhead door system with safety and security considerations. This door is expected to be completed as part of other recommended corrections with the loading dock.

System: C1010 - Partitions

Location: Restrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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: 32.00

Unit of Measure: Ea.

Estimate: $6,744,128.02

Assessor Name: System

Date Created: 10/27/2015

Notes: There are several abandoned gang restrooms on the floors that are not being used and limited restroom access on the remaining floors. The restrooms are original and the marble, wooden or missing partitions show the excessive problems with the restrooms. These restrooms warrant unique renovations to restore the systems to modern operations options and service to the school. Accessibility legislation requires that goods, amenities, and services offered in buildings, such as restrooms, be generally accessible to all people. There are no compliant restrooms located in this school. A unisex, compliant restroom should be added on each of the eight floors. Recommended modifications include the construction of new single occupancy restrooms in existing academic areas to accommodate requirements. This involves adding two new partitions to enclose 50 square feet of area and installing a door with hardware, ceramic tile and plaster surfaces, suspended ceilings, plumbing fixtures, electrical fixtures, piping, HVAC equipment, and accessories for each new restroom. Also, the renovation of the existing restrooms and modification to new layouts and floor plans to support modern designs and requirements for ADA legislation.

System: C1010 - Partitions

Location: Elevator

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Build fire resistant elevator lobby to comply with fire separation requirements - each floor

Qty: 24.00

Unit of Measure: Ea.

Estimate: $852,249.00

Assessor Name: System

Date Created: 10/27/2015

Notes: The present floor plan arrangement has the elevator lobbies opening up into the existing hall corridors. IBC 2000 states that elevators opening into a fire resistant corridor shall be provided with an elevator lobby at each floor containing such a corridor. The lobby should completely separate the elevators from the corridor with rated partitions. Elevator lobbies need to have at least one means of egress and contain smoke detectors. This deficiency recommends the construction of fire resistant barrier with automatically closing fire doors to be installed between the elevator lobbies and the corridors to provide the required separation and protection.

System: C1010 - Partitions

Location: Building Wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Remove non-rated interior glass panels and replace with studs, gypsum board, paint (E) wall

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $133,746.62

Assessor Name: System

Date Created: 10/27/2015

Notes: There are several transom lites and sidelights constructed into hallway wall systems. It is recommended that the lites and sidelights be removed and replaced with a fire rated wall construction. The deficiency provides a budgetary consideration to correct the hallway, transoms, lites and sidelights.

System: C1020 - Interior Doors

Location: Classroom Door System

Distress: Damaged

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: 600.00

Unit of Measure: Ea.

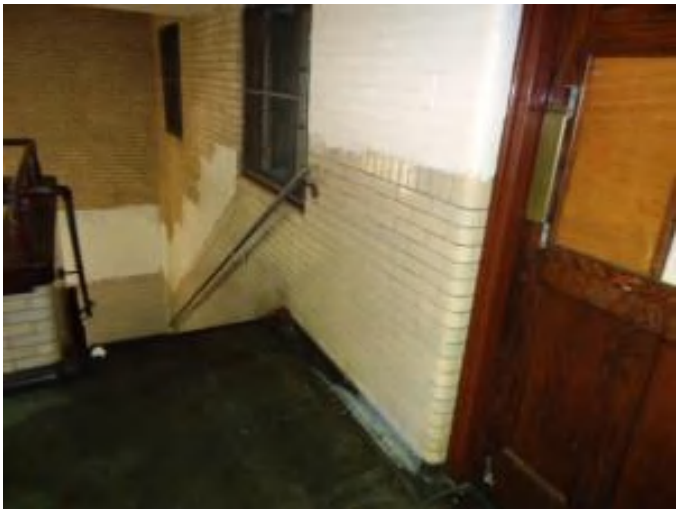
Estimate: $2,862,352.27

Assessor Name: System

Date Created: 10/27/2015

Notes: Interior doors are typically wood in wood frames with glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames. A very few doors have been upgraded to modern standards. Doors are generally in poor condition considering the age of the application. Universal upgrades are required for the interior door systems, it is recommended that the interior doors system be removed and replaced with a new modern metal framed wooden door system with consideration for ADA compliance. This effort is expected to be completed as part of an overall interior effort and not an individual program.

System: C2010 - Stair Construction



Location: Stiars

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 5,000.00

Unit of Measure: L.F.

Estimate: $844,314.00

Assessor Name: System

Date Created: 10/27/2015

Notes: Current requirements for stairs indicate that they have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread/riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future efforts should include comprehensive stair railing removal and replacement upgrades.

System: C3010230 - Paint & Covering

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 100,000.00

Unit of Measure: S.F.

Estimate: $677,387.70

Assessor Name: System

Date Created: 10/27/2015

Notes: While using similar materials, the interior finishes vary significantly from floor to floor and the condition of the finishes range from very poor to fair. There are several minor areas of wall damage that ranges from serious to minor. Although the school is on a cyclical program of renewal and each painted surface is renewed at years end this system is at the point in which repairs are necessary. Remove damaged wall finishes and repair areas then apply primer and paint finish

System: C3030 - Ceiling Finishes

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair and resurface plaster ceilings - 2 coats plaster

Qty: 100,000.00

Unit of Measure: S.F.

Estimate: $1,312,408.07

Assessor Name: System

Date Created: 10/27/2015

Notes: The ceiling finish is a mix of 12 x 12 ceiling grid and glued, painted and 2 x 4 Acoustical tile finish. Ceilings have been repaired in several areas however there are areas of damage that are critical to the buildings condition. Several of the classrooms on the 7th and 8th floors have no ceiling as they have been removed with the expectation of construction. Other ceilings show the signs of the water infiltration issues that existed prior to the ongoing roof and point and tuck work. The ceiling finish is in poor to good condition with some consideration for the locations of the ceiling finishes. The ceiling finish is expected to require upgrades to support the recommended efforts in this report. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finishes to a new acoustical tile finish and repair plaster finishes. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

System: C3030 - Ceiling Finishes

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $150,824.30

Assessor Name: System

Date Created: 10/27/2015

Notes: The ceiling finish for this pod is a 12x12 glue on ceiling tile finish. The finish is damaged and several sections are missing and other sections are damaged from water stains. It is recommended that the ceiling finish be removed and replaced with an acoustical tile ceiling finish.

System: D5030 - Communications and Security

Location: Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace fire alarm system

Qty: 312,395.00

Unit of Measure: S.F.

Estimate: $1,341,367.60

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace fire alarm system with an addressable fire alarm system.

System: D5090 - Other Electrical Systems

Location: Mechanaical Room 209
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace standby generator system
Qty: 1.00
Unit of Measure: Ea.
Estimate: $375,048.44
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace standby generator system, including automatic transfer switch and emergency panelboard. Size system to provide standby power for all four elevators (estimate 250 kW).

System: D5090 - Other Electrical Systems

Location: Building wide
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Replace Emergency/Exit Lighting
Qty: 135.00
Unit of Measure: Ea.
Estimate: $114,455.57
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace all exit signage in the building with vandal-resistant LED exit signs (estimate 135 exit signs).

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

System: C1030 - Fittings

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace blackboards with marker boards - pick the appropriate size and insert the quantities

Qty: 400.00

Unit of Measure: Ea.

Estimate: $275,292.84

Assessor Name: System

Date Created: 10/27/2015

Notes: The classroom chalk boards are original to the buildings construction. This system is damaged and beyond its expected life, universal upgrades are warranted. Remove and upgrade chalk boards to new marker board systems.

System: C3020413 - Vinyl Flooring

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace VCT

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $120,175.32

Assessor Name: System

Date Created: 10/27/2015

Notes: Suspected asbestos containing materials (ACM) are believed to be limited to the original vinyl floor tile and mastic. While most of the finishes are currently sound and manageable in place, other areas such as the 7th and 8th floors have been abandoned and are damaged beyond use. Future renovation efforts should include provision to test and abate any and all ACM.

System: D1010 - Elevators and Lifts

Location: Elevator Machine Rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Elevator - 4 to 6 stop electric traction - add to the estimate for the number of stops over 4

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,962,222.72

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide elevator upgrade/modernization for three (3) passenger and (1) freight electric traction elevators.

System: D3020 - Heat Generating Systems

Location: mechanical 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: 1.00

Unit of Measure: Ea.

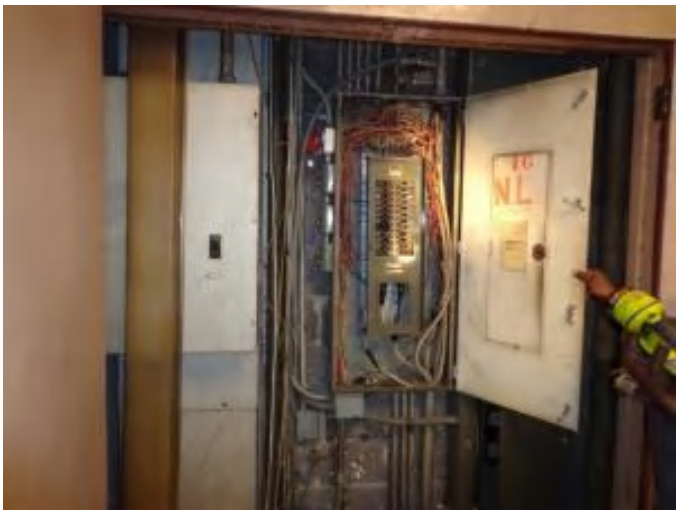
Estimate: $506,102.63

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace the steam boiler that has been condemned with new low pressure steam cast iron sectional boiler. Connect to piping systems, gas flue and controls. Include electrical connection.

System: D5010 - Electrical Service/Distribution



Location: Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Panelboard

Qty: 49.00

Unit of Measure: Ea.

Estimate: $1,901,960.92

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace 400A distribution panelboard BR1, 800A distribution panelboards BR (two sections) and approximately 46 panelboards located throughout the building, including their feeder conductors. Include abatement for asbestos wrapped cables within panelboard enclosures.

System: D5010 - Electrical Service/Distribution

Location: Basement Transformer Vault

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Service Transformer, Add Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,573,211.69

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace medium voltage switchgear and transformers in the transformer vault. Provide new utility line circuit breakers and metering cabinets and load interrupter switches to feed three (3) substations. Provide substation sized for air conditioning equipment and larger mechanical loads. Estimated size is 2500 kVA, 3000A, 480/277V, 3 phase, 4 wire.

System: D5020 - Lighting and Branch Wiring

Location: Building wide
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Lighting Fixtures (SF)
Qty: 264,500.00
Unit of Measure: S.F.
Estimate: $4,028,558.66
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace all fluorescent lighting lightings that have T12 lamps with fixates having T8 lamps (Classrooms 91,800 SF, Mechanical/Storage 49,050 SF, All other spaces 123,650 SF for a total of 264,500 SF).

System: D5020 - Lighting and Branch Wiring

Location: Gymnasiums
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace lighting fixtures
Qty: 56.00
Unit of Measure: Ea.
Estimate: $159,449.12
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace a total of (40) 400W and (16) 250W mercury vapor lighting fixtures in the girls and boys gymnasiums with LED lighting fixtures.

System: D5020 - Lighting and Branch Wiring

Location: Auditorium
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace lighting fixtures
Qty: 155.00
Unit of Measure: Ea.
Estimate: $136,322.82
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace approximately 140 2x4 fluorescent troffers, 9 ceiling mounted chandeliers and 6 incandescent wall sconces in the auditorium.

System: D5020 - Lighting and Branch Wiring

Location: Exterior Building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace lighting fixtures
Qty: 6.00
Unit of Measure: Ea.
Estimate: $9,562.79
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace all exterior building mounted lighting fixtures at exit discharges (total of 8 fixtures). Replace with six (6) fixtures.

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

System: B2030 - Exterior Doors

Location: Exterior Elevation

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior doors - per leaf

Qty: 20.00

Unit of Measure: Ea.

Estimate: $182,146.42

Assessor Name: System

Date Created: 10/27/2015

Notes: The exterior doors are metal applications with metal frames. The exterior door system for this school is a very high traffic system. The doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The exterior door system, store front and service doors are recommended for upgrade.

System: C1010 - Partitions

Location: Science Labs

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remodel existing classroom for lab use - approx 900 GSF - with chemical storage room, 15 tables + instructors table

Qty: 5.00

Unit of Measure: Ea.

Estimate: $1,763,745.42

Assessor Name: System

Date Created: 10/27/2015

Notes: This schools science labs have had limited upgrades from the original construction with tables and some new shelving in limited areas. However, the current system is damaged in several areas from the demonstration desk, plumbing and safety requirements for classroom laboratory gas usage. The installation consist of an instruction demonstration desk with sink. Wall mounted storage cabinets and cabinets with sinks for student use. The system is showing signs of age and lack of maintenance such as broken sink fixtures missing cabinet doors and damaged shelves. This deficiency provides a budgetary consideration for the universal upgrade of the science teaching labs to include new counter tops, sink, cabinets, shelves and fixtures required to support a conducive level of education.

System: C1010 - Partitions

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove folding wood partitions; replace with metal studs and gypsum board painted

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $111,397.49

Assessor Name: System

Date Created: 10/27/2015

Notes: There are several movable partitions that remain in classrooms. These wall systems are no longer used and in most cases cannot be used due to damage or wall modifications to support classroom needs. This deficiency provides a budgetary consideration to remove and replace the wall systems with universal removal of the existing movable partitions and upgrades to a permeate wall systems.

System: C1030 - Fittings

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace tackboards - select size

Qty: 80.00

Unit of Measure: Ea.

Estimate: $63,418.05

Assessor Name: System

Date Created: 10/27/2015

Notes: There are several tack boards in the hallways for student displays. The systems are damaged and beyond the expected service life for this application. Remove and replace tack boards is recommended.

System: C3020414 - Wood Flooring

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace wood flooring

Qty: 120,000.00

Unit of Measure: S.F.

Estimate: $3,498,248.52

Assessor Name: System

Date Created: 10/27/2015

Notes: The wooden floor finish in the classrooms has served this school from the first day of school. The systems maintenance has been a priority each year as part of a cyclical program to either, sand, clean and resurface or wax as needed. Considering the age and current condition of the classroom wooden floor finish, removal and replacement is recommended.

System: C3020414 - Wood Flooring

Location: Gyms

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace wood flooring

Qty: 12,000.00

Unit of Measure: S.F.

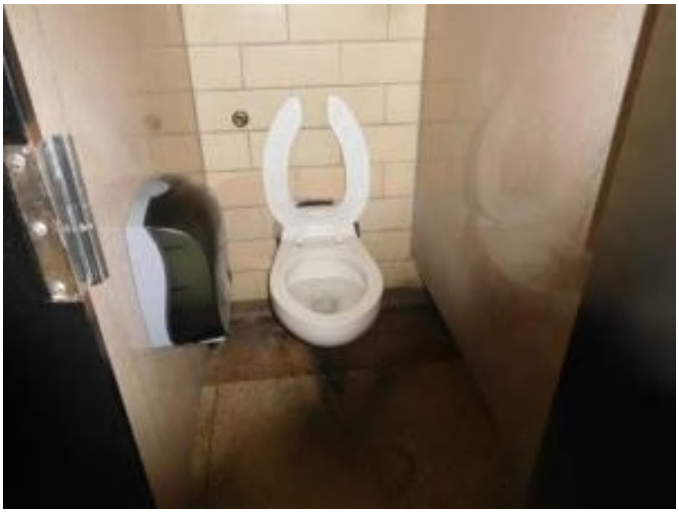
Estimate: $349,824.85

Assessor Name: System

Date Created: 10/27/2015

Notes: The Boy's and Girl's GYM floor finish is beyond its expected life cycle for this application. Recent repairs have eliminated the trip hazards however, there are areas that remain that warrant replacement. The floor is recommended for universal upgrade.

System: D2010 - Plumbing Fixtures



Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace water closet - quantify additional units

Qty: 36.00

Unit of Measure: Ea.

Estimate: $268,637.32

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace older plumbing fixtures on levels seven and eight and the basement level including water closets, lavatories and urinals. Include fittings and trim.

System: D2010 - Plumbing Fixtures

Location: corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 16.00

Unit of Measure: Ea.

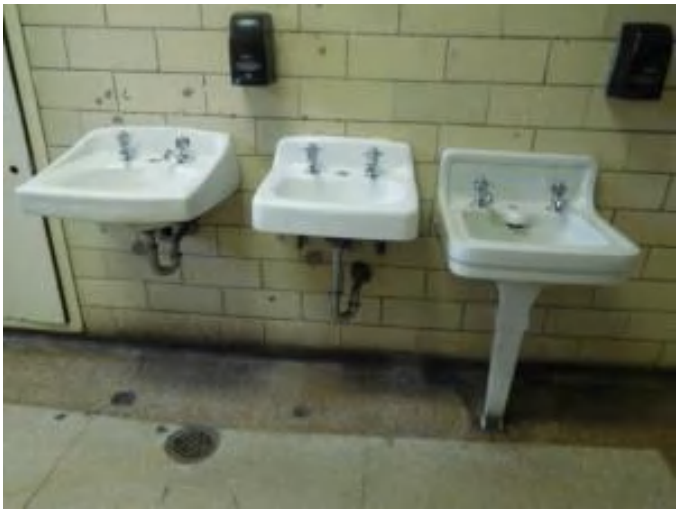
Estimate: $121,267.04

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace china drinking fountains with dual level stainless steel water cooler with integral refrigeration. Include fittings and trim.

System: D2010 - Plumbing Fixtures



Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 24.00

Unit of Measure: Ea.

Estimate: $91,464.30

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace older plumbing fixtures on levels seven and eight and the basement level including water closets, lavatories and urinals. Include fittings and trim.

System: D2010 - Plumbing Fixtures

Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace wall hung urinals

Qty: 24.00

Unit of Measure: Ea.

Estimate: $79,658.00

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace older plumbing fixtures on levels seven and eight and the basement level including water closets, lavatories and urinals. Include fittings and trim.

System: D2010 - Plumbing Fixtures

Location: toilet rooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace shower valve and shower head including disruption and replacement of finishes

Qty: 12.00

Unit of Measure: Ea.

Estimate: $27,017.66

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace older plumbing fixtures on levels seven and eight and the basement level including water closets, lavatories and urinals. Include fittings and trim.

System: D2020 - Domestic Water Distribution

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water piping (350 KSF)

Qty: 312,395.00

Unit of Measure: S.F.

Estimate: $1,540,281.39

Assessor Name: System

Date Created: 01/19/2016

Notes: Replace domestic hot and cold water piping including valves, fittings, hangars and insulation.

System: D2020 - Domestic Water Distribution

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $50,533.86

Assessor Name: System

Date Created: 01/19/2016

Notes: Provide new domestic water booster pump system with two pumps, pressure tank, and controls. Connect to main domestic water line.

System: D2020 - Domestic Water Distribution

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water circulation pump (to 1 HP)

Qty: 1.00

Unit of Measure: Ea.

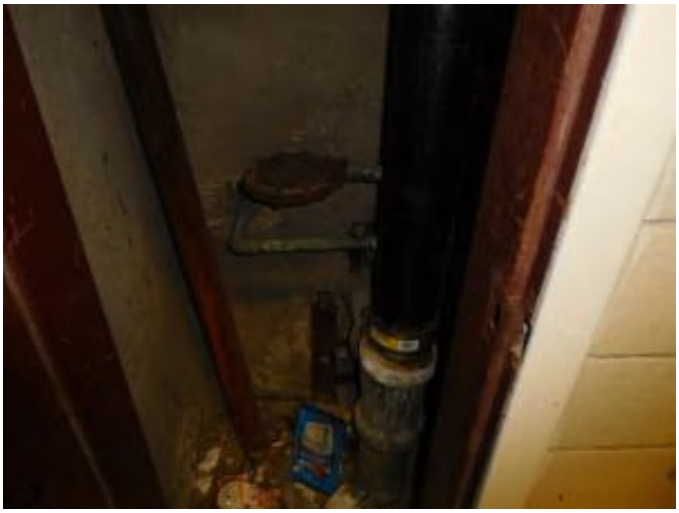
Estimate: $22,015.51

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace inoperable hot water circulating pump

System: D2030 - Sanitary Waste



Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Inspect sanitary waste piping and replace damaged sections. (+300KSF)

Qty: 312,395.00

Unit of Measure: S.F.

Estimate: $1,372,614.50

Assessor Name: System

Date Created: 01/19/2016

Notes: Inspect old cast iron sanitary piping including camera observation and replace damaged sections.

System: D2030 - Sanitary Waste

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace sanitary sewage ejector pit and pumps. (48" dia.)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $61,371.91

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace two duplex groundwater sump pumps with two new pump system. Include electrical connections.

System: D2030 - Sanitary Waste

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace sanitary sewage ejector pit and pumps. (60" dia.)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $54,113.73

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace two pneumatic sewage ejector pumps with standard electric duplex sewage ejector sump pump system. Include electrical connection.

System: D3020 - Heat Generating Systems

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace boiler feed pump (duplex) and surge tank

Qty: 1.00

Unit of Measure: Ea.

Estimate: $101,394.17

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace four pump condensate receiver/boiler feed system with new similar unit. Include electrical connection and controls.

System: D3020 - Heat Generating Systems

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace fuel oil pumps

Qty: 1.00

Unit of Measure: Ea.

Estimate: $26,678.08

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace existing inoperable duplex fuel oil pump system. Include electrical connection and controls.

System: D3040 - Distribution Systems

Location: entire building

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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: 312,395.00

Unit of Measure: S.F.

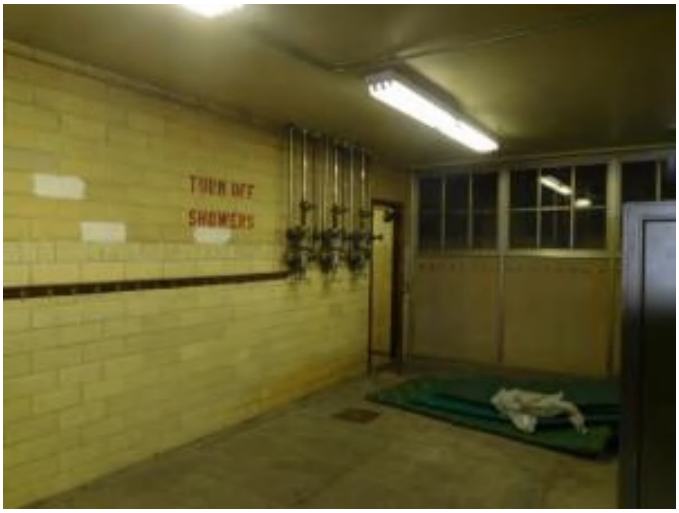
Estimate: $2,894,351.11

Assessor Name: System

Date Created: 01/19/2016

Notes: Replace the existing unit ventilators with new units designed for quiet operation and equipped with hot water and chilled water coils, hydronic control valves with digital controls and integral heat exchangers to provide code required fresh air quantities. Connect to new chilled and hot water piping systems and building automation control system.

System: D3040 - Distribution Systems



Location: toilet and locker rooms

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Provide inline centrifugal fan and wall outlet louver for restroom exhaust (8 plbg fixtures)

Qty: 18.00

Unit of Measure: Ea.

Estimate: $485,483.76

Assessor Name: System

Date Created: 01/20/2016

Notes: Install new mechanical toilet exhaust systems for toilet rooms and locker rooms with inline fans, louvers, ductwork, and air distribution devices. Include controls and electrical connections.

System: D3040 - Distribution Systems

Location: cafeteria

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 900.00

Unit of Measure: Pr.

Estimate: $460,540.87

Assessor Name: System

Date Created: 01/19/2016

Notes: Replace unit for cafeteria with new central station air handling unit with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and existing duct work.

System: D3040 - Distribution Systems

Location: auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 800.00

Unit of Measure: Seat

Estimate: $447,414.96

Assessor Name: System

Date Created: 01/19/2016

Notes: Replace unit for auditorium with new central station air handling unit with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and existing ductwork.

System: D3040 - Distribution Systems

Location: gymnasiums

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 6,000.00

Unit of Measure: Ea.

Estimate: $344,860.27

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace units for two gymnasiums with two new central station air handling units with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and new duct work.

System: D3040 - Distribution Systems

Location: gymnasiums

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 6,000.00

Unit of Measure: Ea.

Estimate: $344,860.27

Assessor Name: System

Date Created: 01/20/2016

Notes: Replace units for two gymnasiums with two new central station air handling units with hot and chilled water coils, filters, outside and return air dampers, hydronic valves and controls, blower and motor. Connect to hot and chilled water systems, control system and new duct work.

System: D3040 - Distribution Systems

Location: toilet and locker rooms

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Provide inline centrifugal fan and wall outlet louver for restroom exhaust (4 plbg fixtures)

Qty: 4.00

Unit of Measure: Ea.

Estimate: $68,828.17

Assessor Name: System

Date Created: 01/20/2016

Notes: Install new mechanical toilet exhaust systems for toilet rooms and locker rooms with inline fans, louvers, ductwork, and air distribution devices. Include controls and electrical connections.

System: D3060 - Controls & Instrumentation

Location: entire building

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace pneumatic controls with DDC (350KSF)

Qty: 312,395.00

Unit of Measure: S.F.

Estimate: $5,755,392.35

Assessor Name: System

Date Created: 01/19/2016

Notes: Install new direct digital control system and building automation system with remote computer control capability and graphics package.

System: D4010 - Sprinklers

Location: entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Install a fire protection sprinkler system

Qty: 312,395.00

Unit of Measure: S.F.

Estimate: $4,468,950.65

Assessor Name: System

Date Created: 01/19/2016

Notes: Install complete NFPA wet pipe automatic sprinkler system and standpipes. If required provide fire pump and jockey pump with controller.

System: D5020 - Lighting and Branch Wiring

Location: Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace wiring devices - receptacles and switches

Qty: 312,395.00

Unit of Measure: S.F.

Estimate: $553,021.47

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide building wide replacement of all wiring devices. Provide ground-fault circuit-interrupting receptacles at locations required by code (estimate 4 receptacles and 2 switches per 1000 SF).

System: D5020 - Lighting and Branch Wiring

Location: Classrooms

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Provide surface raceway system and wiring devices

Qty: 1,800.00

Unit of Measure: L.F.

Estimate: $249,842.78

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide an allowance to add 6 to 8 duplex receptacles in each classroom using a surface metal raceway system (total of 60 classrooms).

System: D5030 - Communications and Security

Location: Auditorium stage

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Sound System

Qty: 1.00

Unit of Measure: LS

Estimate: $7,139.68

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace 75 watt sound system in the auditorium.

System: E1020310 - Theater and Stage Equipment, EACH

Location: Stage

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace dimmer control board

Qty: 1.00

Unit of Measure: Ea.

Estimate: $90,802.49

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace lighting control dimmer board for the stage and auditorium lighting system.

System: E2010 - Fixed Furnishings

Location: Auditorium

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 1,500.00

Unit of Measure: Ea.

Estimate: $1,352,858.27

Assessor Name: System

Date Created: 10/27/2015

Notes: The fixed seating for this school is from the original construction. The systems are in fair condition considering the age and usage. This project provides a budgetary consideration for universal upgrades for the fixed seating and furnishing of this school. Ensure that ADA requirements are followed with the new seating layout.

Priority 5 - Response Time (> 5 yrs):

System: C1030 - Fittings

Location: Building Wide
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Remove and replace lockers - select size
Qty: 2,000.00
Unit of Measure: Ea.
Estimate: $1,309,306.38
Assessor Name: System
Date Created: 10/27/2015

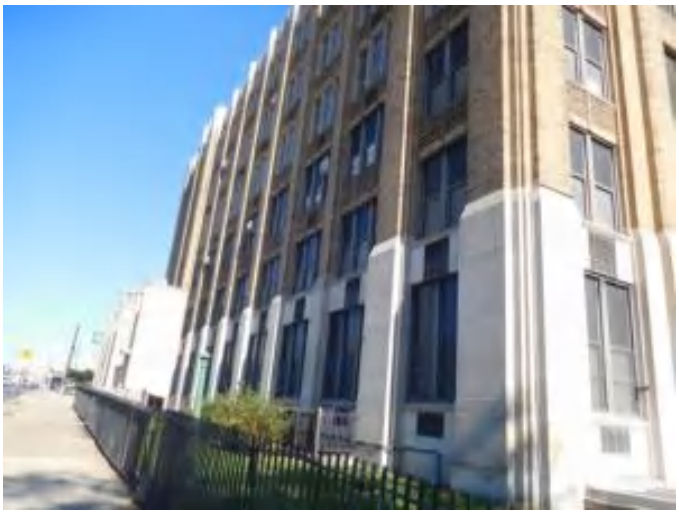
Notes:

System: C1030 - Fittings

Location: Building Wide
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Replace missing or damaged signage - insert the number of rooms
Qty: 700.00
Unit of Measure: Ea.
Estimate: $189,638.73
Assessor Name: System
Date Created: 10/27/2015

Notes: There is no directional signage and room signage is a custom design in places and scarce or painted with no consistency in others. Accessibility signage criteria have been established for the physically challenged. These include mounting heights, contrast and finish, raised and Braille characters and pictograms, and character proportions and heights. It is recommended that compliant signage be installed throughout the building.

System: D3030 - Cooling Generating Systems



Location:	roof, mechanical room
Distress:	Inadequate
Category:	4 - Capital Improvement
Priority:	5 - Response Time (> 5 yrs)
Correction:	Install chilled water system with distribution piping and pumps. (+350KSF)
Qty:	312,395.00
Unit of Measure:	S.F.
Estimate:	$5,290,964.77
Assessor Name:	System
Date Created:	01/19/2016

Notes: Remove the existing window air conditioning units and install air-cooled chillers on the roof with chilled water distribution piping, pumps, chemical treatment and controls located in a mechanical room on the basement level. Total cooling capacity 900 tons.

Equipment Inventory

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

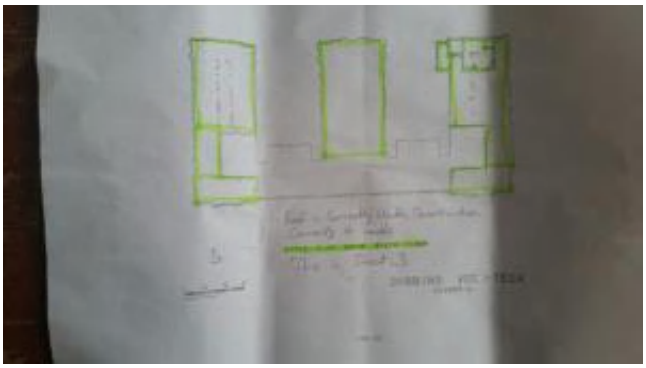
Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D1010 Elevators and Lifts	Traction geared elevators, freight, 8000 lb, 5 floors, 50 FPM class'B'	1.00	Ea.	Elevator #4 Machine Room		Amtech	NA		30	1996	2026	$234,780.00	$258,258.00
D1010 Elevators and Lifts	Traction geared elevators, passenger, 5000 lb, 15 floors, 350 FPM	3.00	Ea.	Elevator #3 - East wing	F. S. Payne Co.	NA			30	1995	2025	$420,000.00	$1,386,000.00
D1010 Elevators and Lifts	Traction geared elevators, passenger, 5000 lb, 15 floors, 350 FPM	3.00	Ea.	Elevator #2 - Center wing	F. S. Payne Co.	NA	506-24		30	1995	2025	$420,000.00	$1,386,000.00
D1010 Elevators and Lifts	Traction geared elevators, passenger, 5000 lb, 15 floors, 350 FPM	3.00	Ea.	Elevator #1 - West wing	F. S. Payne Co.	NA			30	1995	2025	$420,000.00	$1,386,000.00
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, steam, gross output, 5660 MBH, includes standard controls and insulated jacket, packaged	4.00	Ea.	mechanical room	weil mclain	series 3 2694			35	1994	2029	$115,609.50	$508,681.80
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 400 kVA & above w/CLF fuses, 4.8 kV, 600 amp, NEMA 1	2.00	Ea.	Basement Transformer Vault	Westinghouse	NA			30			$38,502.00	$84,704.40
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 400 A, 1 stories, 25' horizontal	1.00	Ea.	Boiler Room	Siemens	S3			30			$12,109.50	$13,320.45
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 2000 A	6.00	Ea.	Main Electrical Room	Not Marked	NA			30			$47,537.55	$313,747.83
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 800 A	2.00	Ea.	Boiler Room	Square D	I-Line HCW	Cat. No. 3262 -8		30			$21,766.05	$47,885.31
D5010 Electrical Service/Distribution	Transformer, oil-filled, single phase 13.8 kV primary, 120/240 V secondary, 167 kVA, residential distribution type, pole mounted	6.00	Ea.	Basement Transformer Vault	Kuhlman Transformer	NA	X2-29515		30			$10,184.40	$67,217.04
												Total:	**$5,451,814.83**

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):	90,600
Year Built:	1938
Last Renovation:	
Replacement Value:	$1,583,494
Repair Cost:	$604,582.10
Total FCI:	38.18 %
Total RSLI:	50.95 %



Description:

Attributes:

General Attributes:

Bldg ID:	S406001	Site ID:	S406001

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	48.10 %	57.19 %	$604,582.10
G40 - Site Electrical Utilities	56.67 %	0.00 %	$0.00
Totals:	**50.95 %**	**38.18 %**	**$604,582.10**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2020	Parking Lots	$8.50	S.F.	20,400	30	1938	1968	2027	40.00 %	121.37 %	12		$210,463.08	$173,400
G2030	Pedestrian Paving	$12.30	S.F.	23,000	40	1938	1978	2027	30.00 %	46.44 %	12		$131,367.76	$282,900
G2040	Site Development	$4.36	S.F.	90,600	25	1938	1963	2027	48.00 %	66.52 %	12		$262,751.26	$395,016
G2050	Landscaping & Irrigation	$4.36	S.F.	47,200	15	1938	1953	2027	80.00 %	0.00 %	12			$205,792
G4020	Site Lighting	$4.84	S.F.	90,600	30	1938	1968	2032	56.67 %	0.00 %	17			$438,504
G4030	Site Communications & Security	$0.97	S.F.	90,600	30	1938	1968	2032	56.67 %	0.00 %	17			$87,882
								Total	**50.95 %**	**38.18 %**			**$604,582.10**	**$1,583,494**

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.

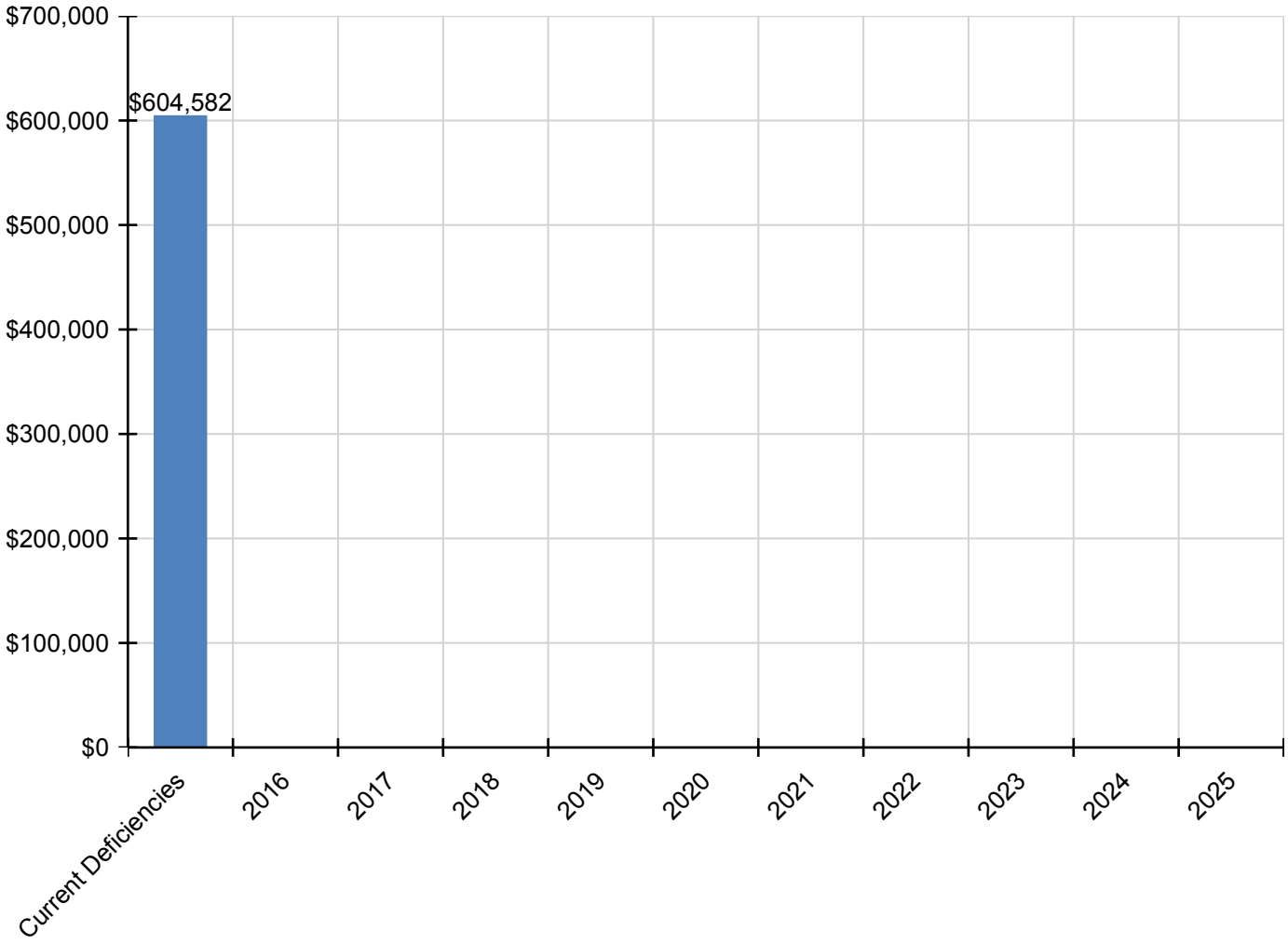
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$604,582**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$604,582**
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**
G2020 - Parking Lots	$210,463	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$210,463**
G2030 - Pedestrian Paving	$131,368	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$131,368**
G2040 - Site Development	$262,751	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$262,751**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

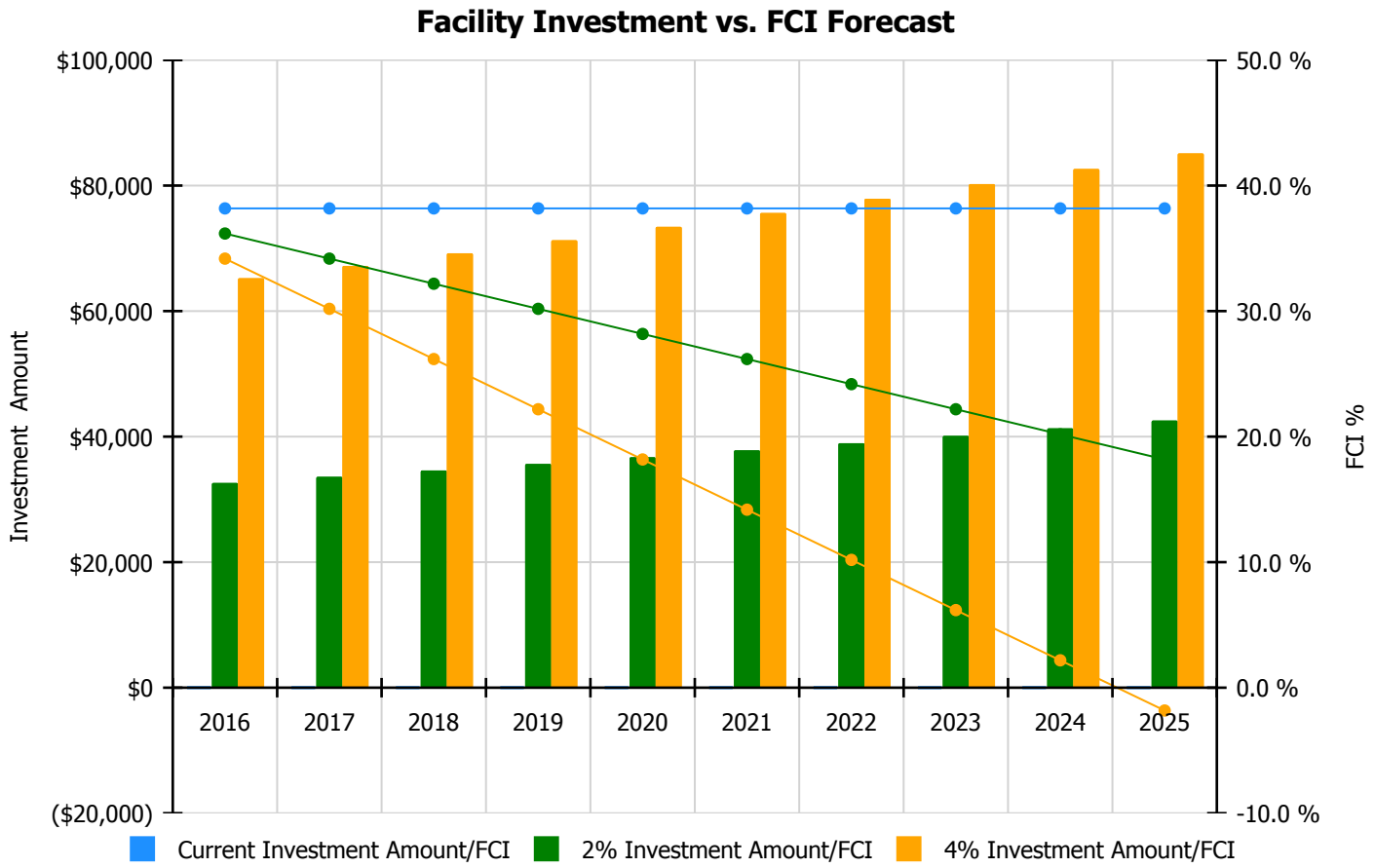
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

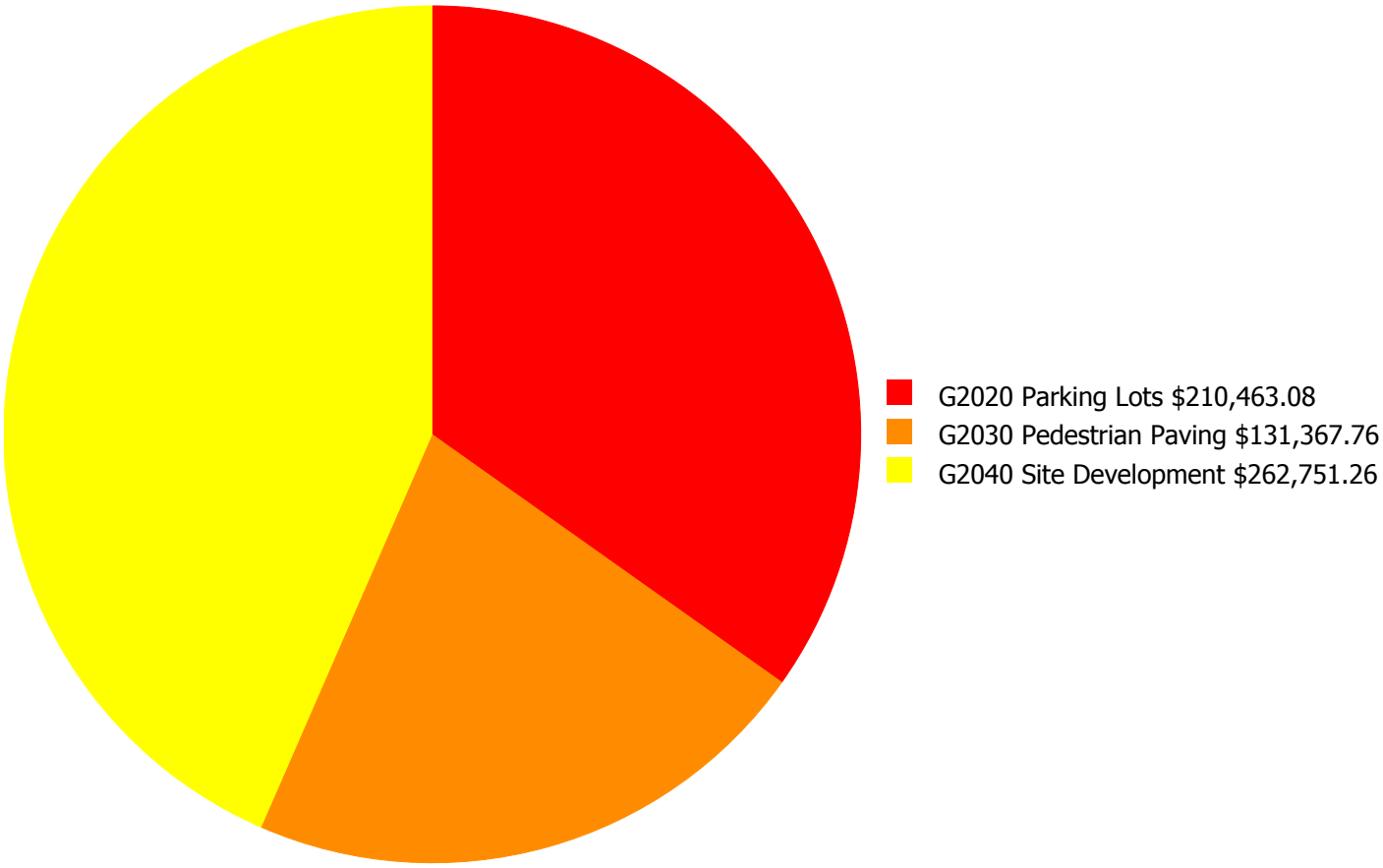
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 38.18%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$32,620.00	36.18 %	$65,240.00	34.18 %
2017	$0	$33,599.00	34.18 %	$67,197.00	30.18 %
2018	$0	$34,607.00	32.18 %	$69,213.00	26.18 %
2019	$0	$35,645.00	30.18 %	$71,289.00	22.18 %
2020	$0	$36,714.00	28.18 %	$73,428.00	18.18 %
2021	$0	$37,815.00	26.18 %	$75,631.00	14.18 %
2022	$0	$38,950.00	24.18 %	$77,900.00	10.18 %
2023	$0	$40,118.00	22.18 %	$80,237.00	6.18 %
2024	$0	$41,322.00	20.18 %	$82,644.00	2.18 %
2025	$0	$42,562.00	18.18 %	$85,123.00	-1.82 %
Total:	**$0**	**$373,952.00**		**$747,902.00**	

Deficiency Summary by System

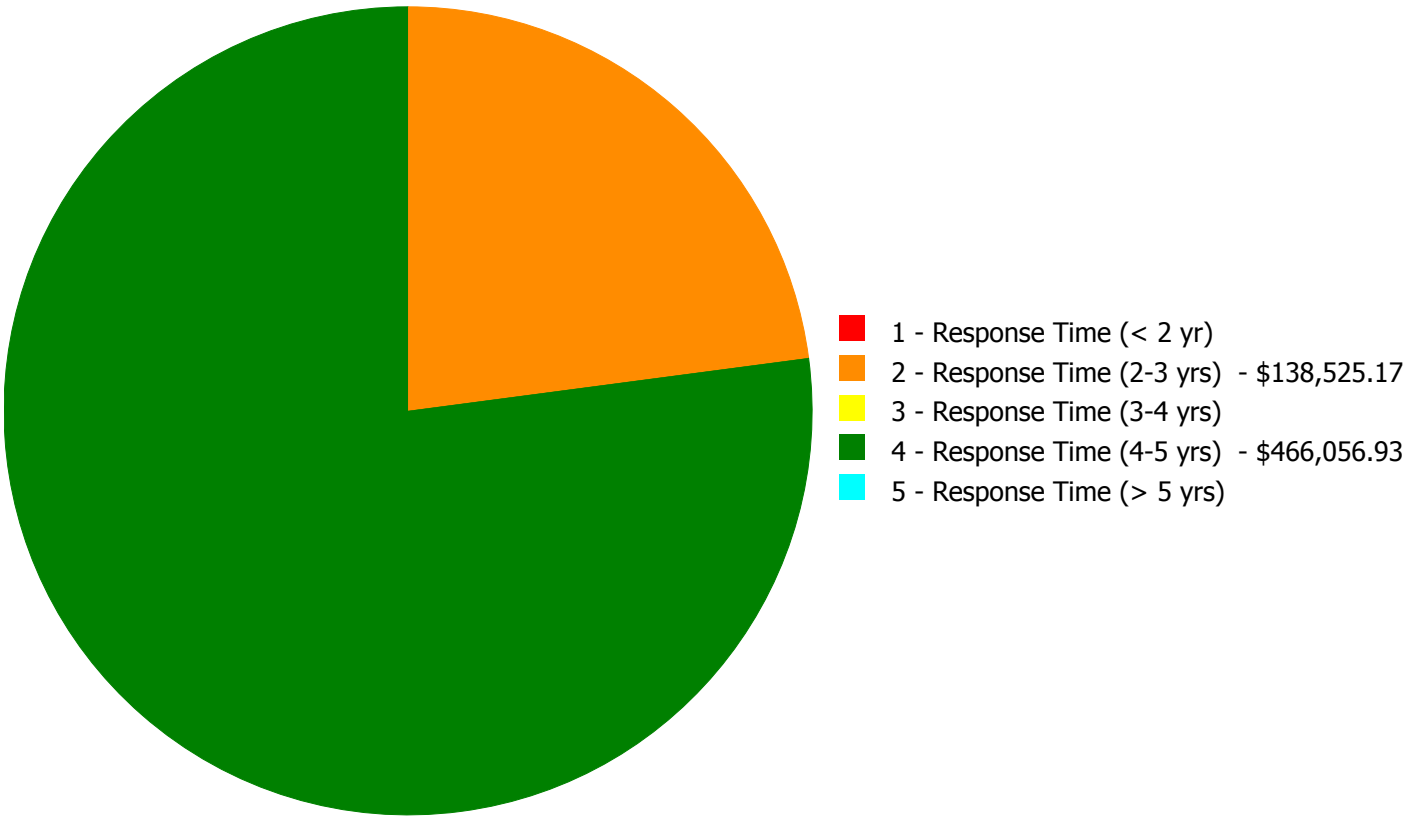
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $604,582.10

Deficiency Summary by Priority

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



Budget Estimate Total: $604,582.10

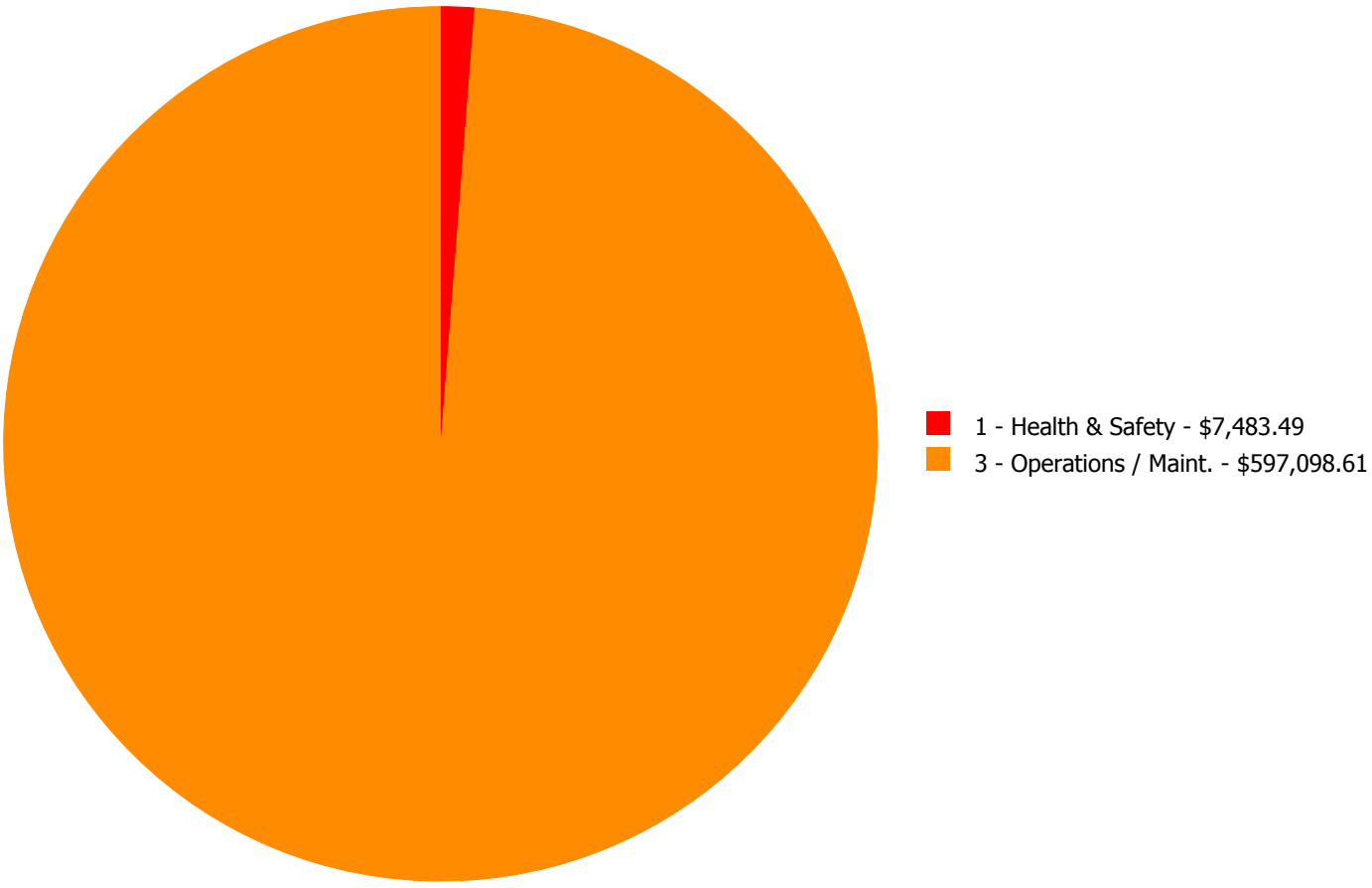
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2020	Parking Lots	$0.00	$0.00	$0.00	$210,463.08	$0.00	$210,463.08
G2030	Pedestrian Paving	$0.00	$0.00	$0.00	$131,367.76	$0.00	$131,367.76
G2040	Site Development	$0.00	$138,525.17	$0.00	$124,226.09	$0.00	$262,751.26
	Total:	$0.00	$138,525.17	$0.00	$466,056.93	$0.00	$604,582.10

Deficiency Summary by Category

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



Budget Estimate Total: $604,582.10

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: G2040 - Site Development

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace chain link fence - 8' high

Qty: 685.00

Unit of Measure: L.F.

Estimate: $76,711.64

Assessor Name: Hayden Collins

Date Created: 10/27/2015

Notes: The chain link fence that separates the connecting city park and the school is damaged in several areas providing access to the parking area and to the entrances of the school. This deficiency provides a budgetary consideration to repair and replace sections of the fence.

System: G2040 - Site Development

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Repair drepressed areas in parking or pedestrian paving caused by subrade subsidence - per SF base on approximately 100 SF or more

Qty: 2,000.00

Unit of Measure: S.F.

Estimate: $61,813.53

Assessor Name: Hayden Collins

Date Created: 10/27/2015

Notes: There are several sections of the exterior concrete pads near the 21st street side of the school that have sank into the soil indicating a collapsed field drain. This appears to be obvious from the length of the depression from the man hole cover at street side to the entire path leading back to the basement level mechanical area. This deficiency provides a budgetary consideration to remove and replace this entire section and replace the existing concrete pads.

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

System: G2020 - Parking Lots

Location: Parking Lot

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace concrete paving

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $210,463.08

Assessor Name: Hayden Collins

Date Created: 10/27/2015

Notes: The parking area has ADA parking with approved curb cuts for access to the sidewalks that lead to the main entrance. However, the ADA ramp faces the 21st street entrance and the parking lots are in poor condition, the harsh environmental conditions associated with snow removal have taken its toll on the concrete surface. Also, there is no marked path of ingress to the main ADA entrance. This deficiency provides a budgetary consideration for a parking lot renewal program that includes all aspects of the current ADA legislation. Universal upgrades are recommended.

System: G2030 - Pedestrian Paving

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace concrete paving - pedestrian or parking - 8" concrete thickness

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $131,367.76

Assessor Name: Hayden Collins

Date Created: 10/27/2015

Notes: The sidewalk system is original to the buildings construction. There are a several areas of cracking concrete but no tripping hazards. The sidewalk system is expected to expire in the near future. Removal of the entire system is recommended. Universal upgrades are required and should include all aspects of current ADA legislation.

System: G2040 - Site Development

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 1,500.00

Unit of Measure: L.F.

Estimate: $97,890.08

Assessor Name: Hayden Collins

Date Created: 10/27/2015

Notes: This school has a perimeter fence surrounding the parking / playground area. The fence has several areas of repairs and the mounting post are damaged in several areas, overall the fence is in fair condition. This fence system is recommended to be removed and replaced with a new system within the next five to ten years.

System: G2040 - Site Development

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Build secure trash dumpster enclosure

Qty: 1.00

Unit of Measure: Ea.

Estimate: $18,852.52

Assessor Name: Hayden Collins

Date Created: 10/27/2015

Notes: The trash dumpster is located in the parking lot open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area is necessary for the safety of the students and the general public. Construction of a secure lockable dumpster area is recommended.

System: G2040 - Site Development

Location: Loading Dock

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Add safety barriers and guide lines at parking and loading dock areas

Qty: 1.00

Unit of Measure: Ea.

Estimate: $7,483.49

Assessor Name: Craig Anding

Date Created: 10/27/2015

Notes: The loading dock is located just off the parking area between the dumpsters. The existing recommendation to enclose and move the dumpsters to a new location is related to this effort. After the dumpster correction is complete it is recommended that the loading dock area be clearly marked and safety barriers be placed to protect pedestrian traffic and mitigate possible issues related to loading and unloading materials and supplies.

Equipment Inventory

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

No data found for this asset

Glossary

ABMA	American Boiler Manufacturers Association http://www.abma.com/
ACEEE	American Council for an Energy-Efficient Economy
ACGIH	American Council of Governmental and Industrial Hygienists
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFTC	After Tax Cash Flow
AGA	American Gas Association
AHU	Air Handling Unit
Amp	Ampere
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASD	Adjustable Speed Drive
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers Inc.
ASME	American Society of Mechanical Engineers
Assessment	Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality.
ATS	After Tax Savings
AW	Annual worth
BACNET	Building Automation Control Network
BAS	Building Automation System
BCR	Benefit Cost Ratio
BEP	Business Energy Professional (AEE)
BF	Ballast Factor
BHP	Boiler Horsepower (boilers)
BHP	Brake Horsepower (motors)
BLCC	Building Life Cycle Cost analysis program (FEMP)
BOCA	Building Officials and Code Administrators
BTCF	Before Tax Cash Flow

BTS	Before Tax Savings
Btu	British thermal unit
Building Addition	An area space or component of a building added to a building after the original building's year built date.
CAA	Clean Air Act
CAAA-90	Clean Air Act Amendments of 1990
CABO	Council of American Building Officials
CAC	Conventional Air Conditioning
CADDET	Center for the Analysis and Dissemination of Demonstrated Energy Technologies
Calculated Next Renewal	The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system.
Capital Renewal	Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection.
CDD	Cooling Degree Days
CDGP	Certified Distributed Generation Professional
CEC	California Energy Commission
CEM	Certified Energy Manager
CEP	Certified Energy Procurement Professional
CFC	Chlorofluorocarbon
CFD	Cash Flow Diagram
CFL	Compact Fluorescent Light
CFM cfm	Cubic Feet per Minute
CHP	Combined Heat and Power (a.k.a. cogeneration)
CHW	Chilled Water
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
COP	Coefficient of Performance
Cp	Heat Capacity of Material
CPUC	California Public Utility Commission
CRI	Color Rendering Index
CRT	Cathode Ray Tube VDT HMI

CTC	Competitive Transition Charge
Cu	Coefficient of Utilization
Current Replacement Value (CRV)	CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.
Cv	Value Coefficient
CWS	Chilled Water System
D d	Distance (usually feet)
DB	Dry Bulb
DCV	Demand Control Ventilation
DD	Degree Day
DDB	Double Declining Balance
DDC	Direct Digital Controls
Deferred maintenance	Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.
Deficiency	A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose.
Delta	Difference
Delta P	Pressure Difference
Delta T	Temperature Difference
DG	Distributed Generation
DOE	Department of Energy
DP	Dew Point
DR	Demand Response
DX	Direct Expansion Air Conditioner
EA	Energy Audit
EBITDA	Earnings before Interest Taxes Depreciation and Amortization
ECI	Energy Cost Index
ECM	Energy Conservation Measure
ECO	Energy Conservation Opportunity
ECPA	Energy Conservation and Production Act
ECR	Energy Conservation Recommendation
ECS	Energy Control System

EER	Energy Efficiency Ratio
EERE	Energy Efficiency and Renewable Energy division of US DOE
EIA	Energy Information Agency
EIS	Energy Information System
EMCS	Energy Management Computer System
EMO	Energy Management Opportunity
EMP	Energy Management Project
EMR	Energy Management Recommendation
EMS	Energy Management System
Energy Utilization Index (EUI)	EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot.
EO	Executive Order
EPA	Environmental Protection Agency
EPACT	Energy Policy Act of 1992
EPCA	Energy Production and Conservation Act of 1975
EPRI	Electric Power Research Institute
EREN	Efficiency and Renewable Energy (Division of USDOE)
ERV	Energy Recovery Ventilator
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
EUI	Energy Use Index
EWG	Exempt Wholesale Generators
Extended Facility Condition Index (EFCI)	EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value.
f	Frequency
F	Fahrenheit
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Condition Assessment (FCA)	FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process.
Facility Condition Index (FCI)	FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

FC	Footcandle
FCA	Fuel Cost Adjustment
FEMIA	Federal Energy Management Improvement Act of 1988
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FESR	Fuel Energy Savings Ratio
FLA	Full Load Amps
FLF	Facility Load Factor (usually monthly)
FLRPM	Full Load Revolutions per Minute
FMS	Facility Management System
FPM fpm	Feet per Minute (velocity)
FSEC	Florida Solar Energy Center
Ft	Foot
GPM gpm	Gallons per Minute
GRI	Gas Research Institute
Gross Square Feet (GSF)	The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall.
GUI	Graphical User Interface
H h	Enthalpy Btu/lb
HCFC	Hydrochlorofluorocarbons
HDD	Heating Degree days
HFC	Hydrofluorocarbons
HHV	Higher Heating Value
HID	High Intensity Discharge (lamp)
HMI	Human Machine Interface
HMMI	Human Man Machine Interface
HO	High Output (lamp)
HP Hp hp	Horsepower
HPS	High Pressure Sodium (lamp)
HR	Humidity Ratio
Hr hr	Hour

HRU	Heat Recovery Unit
HVAC	Heating Ventilation and Air-Conditioning
Hz	Hertz
I	Intensity (lumen output of lamp)
I i	Interest rate or Discount rate
IAQ	Indoor Air Quality
ICA	International Cogeneration Alliance
ICBO	International Conference of Buildings Officials
ICC	International Code Council
ICP	Institutional Conservation Program
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
Install year	The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system?s Current Replacement Value (CRV) was replaced).
IRP	Integrated Resource Planning
IRR	Internal Rate of Return
ISO	Independent System Operator
ITA	Independent Tariff Administrator
k	Kilo multiple of thousands in SI system
K	Kelvins (color temperature of lamp)
K k	Thermal Conductivity of Material
KVA	Kilovolt Ampere
KVAR	Kilovolt Ampere Reactive
kW	kiloWatt
kWh	kiloWatt hour
L	Length (usually feet)
LCC	Life Cycle Costing
LDC	Local Distribution Company
LEED	Leadership in Energy and Environmental Design
LEED EB	LEED for Existing Buildings

LEED NC	LEED for new construction
LF	Load Factor
LHV	Lower Heating Value
Life cycle	The period of time that a building or site system or element can be expected to adequately serve its intended function.
LPS	Low Pressure Sodium (lamp)
Lu	Lumen Output of a Lamp or Fixture
M	Mega multiple of millions in SI system
M&V	Measurement and Verification
MACRS	Modified Accelerated Cost Recovery System
MARR	Minimum Attractive Rate of Return
Mbtu	Thousand Btu
MCF	Thousand Cubic Feet (usually of gas)
MEC	Model Energy Code
Mm	Multiple of Thousands in I/P System
MMBtu	Million Btu
MMCS	Maintenance Management Computer System
MMI	Man Machine Interface
MMS	Maintenance Management System
MSE 2000	Management System for Energy 2000 (ANSI Georgia Tech Univ)
MW	MegaWatt
MWH MWh	MegaWatt hour
NAAQS	National Ambient Air Quality Standards
NAESCO	National Association of Energy Service Companies
NAIMA	North American Insulation Manufacturers Association
NEA	National Energy Act of 1978
NECPA	National Energy Conservation Policy Act
NEMA	National Electrical Manufacturer's Association
NERC	North American Electric Reliability Council
Next Renewal	The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor?s visual inspection.

NFPA	National Fire Protection Association
NGPA	National Gas Policy Act of 1978
NLRPM	No Load Revolutions per Minute (speed)
Nn	Equipment or Project lifetime in economic analysis
NOPR	Notice of Proposed Rule Making from FERC
NOx	Nitrogen Oxide Compounds
NPV	Net present value in economic analysis
NREL	National Renewable Energy Laboratory
NUG	Non-Utility Generator
O&M	Operation and Maintenance
OA	Outside Air
ODP	Ozone Depletion Potential
OPAC	Off-Peak Air Conditioning
P	Present value in economic analysis
PBR	Performance Based Rates
PEA	Preliminary Energy Audit
PF	Power Factor
PID	Proportional plus integral plus derivative (control system)
PM	Portfolio Manager in Energy Star rating system
PM	Preventive Maintenance
PoolCo	Power Pool Company or Organization
POU	Point of Use
PQ	Power Quality
PSC	Public Service Commission
PSIA psia	Pounds per square inch absolute (pressure)
PSIG psig	Pounds per square inch gauge (pressure)
PUC	Public Utility Commission
PUHCA	Public Utilities Holding Company Act of 1935
PURPA	Public Utilities Regulatory Policies of 1978
PV	Photovotaic system

PV	Present Value
PW	Present Worth
PX	Power Exchange
q	Rate of heat flow in Btu per hour
Q	Heat load due to conduction using degree days
QF	Qualifying Facility
R	Electrical resistance
R	Thermal Resistance
RC	Remote controller
RCR	Room Cavity Ratio
RCRA	Resource Conservation and Recovery Act
Remaining Service Life (RSL)	RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date.
Remaining Service Life Index (RSLI)	RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100
REMR	Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition
Renewal Schedule	A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal.
RH	Relative Humidity
RLA	Running Load Amps
RMS	Root Mean Square
RO	Reverse Osmosis
ROI	Return on Investment
RPM	Revolutions Per Minute
RTG	Regional Transmission Group
RTO	Regional Transmission Organization
RTP	Real Time Pricing
SBCCI	Southern Building Code Congress International
SC	Scheduling Coordinator
SC	Shading Coefficient
SCADA	Supervisory Control and Data Acquisition Systems

SEER	Seasonal Energy Efficiency Ratio
SHR	Sensible Heat Ratio
Site	The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility.
Soft Cost	An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses.
SOx	Sulfur Oxide Compounds
SP	Static Pressure
SP SPB	Simple Payback
SPP	Simple Payback Period
SPP	Small Power Producers
STR	Stack Temperature Rise
SV	Specific Volume
System	System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II.
T	Temperature
T	Tubular (lamps)
TAA	Technical Assistance Audit
TCP/IP	Transmission Control Protocol/Internet Protocol
TES	Thermal Energy Storage
THD	Total Harmonic Distortion
TOD	Time of Day
TOU	Time of Use
TQM	Total Quality Management
TransCo	Transmission Company
U	Thermal Conductance
UDC	Utility Distribution Company
UL	Underwriters Laboratories
UNIFORMAT II	The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings.
USGBC	US Green Building Council
v	Specific Volume

V	Volts Voltage
V	Volume
VAV	Variable Air Volume
VDT	Video Display Terminal
VFD	Variable Frequency Drive
VHO	Very High Output
VSD	Variable Speed Drive
W	Watts
W	Width
WB	Wet bulb
WH Wh	Watt Hours
Year built	The year that a building or addition was originally built based on substantial completion or occupancy.
Z	Electrical Impedance