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.

Hill-Freedman at Leeds School

Governance	DISTRICT	Report Type	Middlehigh
Address	1100 E. Mt. Pleasant Ave. Philadelphia, Pa 19150	Enrollment	662
		Grade Range	'06-12'
Phone/Fax	215-400-3530 / 215-400-3531	Admissions Category	Special Admit
Website	Www.Philasd.Org/Schools/Hill-Freedman	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	**42.89%**	**$36,470,031**	**$85,036,297**
Building	43.97 %	$35,552,652	$80,850,615
Grounds	21.92 %	$917,379	$4,185,682

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	00.00 %	$0	$1,894,252
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$7,366,379
Windows (Shows functionality of exterior windows)	34.58 %	$1,245,223	$3,600,743
Exterior Doors (Shows condition of exterior doors)	89.59 %	$218,576	$243,976
Interior Doors (Classroom doors)	201.94 %	$1,192,647	$590,589
Interior Walls (Paint and Finishes)	00.00 %	$0	$1,500,521
Plumbing Fixtures	01.33 %	$30,317	$2,274,862
Boilers	03.23 %	$101,394	$3,141,396
Chillers/Cooling Towers	67.94 %	$2,798,416	$4,118,980
Radiators/Unit Ventilators/HVAC	139.38 %	$10,082,284	$7,233,454
Heating/Cooling Controls	132.68 %	$3,013,756	$2,271,497
Electrical Service and Distribution	185.73 %	$3,031,322	$1,632,112
Lighting	48.82 %	$2,848,474	$5,835,222
Communications and Security (Cameras, Pa System and Fire Alarm)	03.52 %	$76,913	$2,185,684

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

S610001;Leeds

Final

Site Assessment Report

February 2, 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):	168,259
Year Built:	1953
Last Renovation:	
Replacement Value:	$85,036,297
Repair Cost:	$36,470,031.12
Total FCI:	42.89 %
Total RSLI:	57.79 %

Description:

Facility Assessment
October 2015

School District of Philadelphia
Morris E. Leeds Middle School / Philadelphia Military Academy at Leeds
1100 E Mount Pleasant Ave.
Philadelphia, PA 19150

168,259 SF / 1,126 Students / LN 06

GENERAL

The Morris E. Leeds Middle School or previously knows as Philadelphia Military Academy at Leeds or Philadelphia Military Academy at Leeds (PMA) is a military school in the Cedarbrook neighborhood of North Philadelphia is one of the older schools in service to the Philadelphia communities originally constructed in 1954. The school is currently being run by the Philadelphia School System and is identified as B610001 and was originally designated as the Morris E. Leeds Junior High School.

This facility is located at 1100 E Mount Pleasant Ave., Philadelphia, PA. The late modern design of the modified rectangular-shaped,

concrete and steel-framed building includes brick facades with a concrete foundation.

The main entrance faces the Northern exterior facing 1100 E Mount Pleasant Ave. drop off area. General parking is south of the school. This School building serves two different groups of students in grades 6 to 8, 9 to 12 and has three stories consisting of a total gross square footage of 168,259 GSF.

This school has several classrooms, a dedicated library Albert Session Memorial IMC , kitchen and student commons a dedicated technology room Chaka Fattah Technology Center, two Gyms, Auditorium and cafeteria, with supporting administrative spaces and Science, Art Department, Music Hall, orchestra stage and JROTC 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. Also note, the Auditorium has a painting of the school name sake Morris Evans Leeds.

The information for this report was collected during a site visit on October 31, 2015

Mr. Nate Jackson, Assistant Building Engineer, accompanied the assessment team on a tour of the school and provided detailed information on the building systems and maintenance history.

ARCHITECTURAL / STRUCTURAL SYSTEMS

Foundations are concrete and appear to be in good condition. The superstructure is steel framed with masonry support and likewise in good condition.

During the time of the inspection the entire roof was removed and in a construction stage of replacement. The new roofing system is expected to be completed soon and with this in mind there are no recommendations required at this time. The cost model will reflect a 2015 installation date.

The exterior brick and concrete façade is in good condition considering the age of the school. There were no issues that surfaced during the time of the inspection therefore no recommendations are required at this time. Most of the exterior windows have been upgraded from the original applications. As indicated in the photos several of the windows appear to be original. A majority of the window system is estimated to have been installed in the 1990's. Several of the windows no longer work and will require attention prior to an overall effort. Overall, the windows are in fair condition based on the year of installation or last renovation. The entire exterior window system is recommended to be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features.

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.

Special consideration for those that may be physically challenged was a main not factor in the last re-construction effort for this school. There is no exterior ADA ramp and limited options for 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 modification that allow for considerations to enhance the upgrades required to support the physically challenged.

Interior partitions include CMU, glazed block. This building has adequate exit pathways and no egress obstructions were noted during our building walk through. However the corridor doors on all floors are not fire rated and should be upgraded. Install new fire rated flush wood doors on all floor corridors. If the recommended lever hardware and room signage has not been implemented then these features should be incorporated into the work scope.

This schools science labs have been upgraded from the original construction. 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.

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.

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 doors are typically wood in wood or metal frames with glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames. Doors are generally in fair 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.

The interior carpet finish was installed approximately in 2000 and is in fair condition considering the age and high traffic conditions. This finish will exceeded its expected life within the next five years and is recommended for removal and replacement.

The floor finish for this school is a combination of carpet in the administrative area, tile in the kitchen and service line areas, a few wooden classrooms with vinyl tile hallways and stirs finishes and a vinyl tile classroom finish. The vinyl tile finish is a 9 x 9 application and is suspect to contain asbestos. This finish is recommended for upgrade to a new 12 x 12 vinyl tile application.

The Boy's and Girl's Gyms 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.

There is no elevator that services this school. Goods, services, and amenities offered in public buildings are generally required to be available to all persons. To assist those that may be physically challenged and to meet current accessibility legislation to provide wheelchair access to the upper floors of this facility, the installation of two new hydraulic elevators is recommended on the exterior elevation of the building or at another suitable location. The new installations should blend as much as possible with the overall appearance of this structure and include all required ADA features, such as audible jewels and gongs, an accessible control panel, etc.

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 boys and girls Gyms are the main sports areas for this school. The old Gyms are still used as either a student common area or practice court. The interior backboards and support equipment is beyond its service life. Damaged boards are recommended for removal and replacement.

The practice Gyms or Boy's and Girl's Gyms each have a single scoreboard that appears to be from the early 1950's. This deficiency provides a budgetary consideration for the removal and replacement of each scoreboard.

Furnishings include: fixed casework; window shades/blinds; and fixed auditorium seating.

The loading dock is from original construction and in poor condition. The loading dock system is recommended for upgrade to include new concrete work and railing replacement. This deficiency is expected to be completed as part of an effort to upgrade this area and should be coordinated with other loading dock projects.

The school stage has a stage curtain assembly that appears to be from the original construction. Modern applications are typically fire -proof applications with adjustable tracks and electric support for operation. The curtains are torn in a few section and the track is not functioning properly, overall the system is in poor condition. It is recommended that the curtain and track system be upgraded to a new system. Special care should be considered in regards to modern fire proofing for the new installation.

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. Lavatories have dual wheel handle faucets and urinals and water closets have recessed manual flush valves with lever operators or exposed flush valves. Custodial areas have cast iron service sinks. There are double china drinking fountains with no refrigeration in corridors. Science classrooms have some lab equipment with integral sinks. Domestic water is heated by three Paloma instantaneous gas water heaters in the mechanical room with small inline circulating pumps. There is no domestic water booster pump system. The water heaters are all partially dismantled and appear to be in bad condition. Two abandoned storage tanks with disconnected steam bundles are on the upper part of the mechanical room.

Water piping is insulated rigid copper tubing but may contain lead solder based on age. Sanitary, waste, vent and rainwater piping is original installation hub and spigot cast iron. Water service is a three inch line and meter into the mechanical room. The service has no backflow preventer assembly. A water softener is part of the system. There are two gas services. One is a six inch line into the mechanical room that has been disconnected that once served the boilers. The meter has been removed from this service. A second service from Lowber Ave. has the meter assembly outside the building in a fenced area, serving the kitchen and water heaters. There is a duplex sump pump for ground water removal, and one above floor grease trap in the kitchen for grease waste.

The water heaters should be replaced. The cast iron piping has exceeded the anticipated service life. Rainwater and vent piping should continue functioning, but the sanitary and waste piping should be inspected to determine condition and replace damaged portions. Domestic water supply piping should be replaced. Most plumbing fixtures appear to be less than fifteen years old and should be serviceable twenty more years. The china drinking fountains should be replaced with stainless water coolers with integral refrigeration.

HVAC-Heating is generated by three Burnham three hundred hp packaged fire tube low pressure steam gas/ oil fired boilers in the basement mechanical room, reportedly installed in 1996. One boiler was down for maintenance at the time of this survey. The boilers have Power Flame burners with separate oil pumps. The boilers are piped for gas and oil, but the main gas line in the mechanical room has been disconnected and the meter removed, so only oil is available. There is a Shipco triplex boiler feed pump/ condensate receiver in the mechanical room and a separate cast iron duplex condensate receiver in an adjacent room. There are combustion air louvers and dampers and a field fabricated rectangular insulated boiler vent into a brick chimney. Oil is stored in an underground oil storage tank, capacity and condition unknown. A duplex fuel oil pump system in an adjacent room provides circulation. Make up water is treated with a chemical system.

Classrooms, office area and IMC have older Nesbitt unit ventilators with steam coils, filters, blowers and motors, control valves and controls. Most corridors, gymnasium, toilet rooms and other areas requiring heat are served by exposed steam radiators with control valves and traps. Two third floor mechanical rooms house several air handling systems. One room above the gymnasium area contains five air handling units and three return or exhaust fans. The other room above the auditorium also contains five air handling units and four return or exhaust fans. The air handling units and return air fans serve the cafeteria, auditorium, both gyms and locker rooms. Exhaust fans serve toilet rooms, locker rooms, gyms and auditorium. This equipment is all older and not all units are functional.

There is no central air conditioning or separate system for any area, except there are window air conditioners for most spaces. The kitchen contains two wall canopy exhaust hoods and a faculty dining area with an island exhaust hood over a serving line. One of the two kitchen hoods has a fire suppression system and gas solenoid shut off valve.

Two control air compressors are in the mechanical room. Older pneumatic controls are mostly inoperable. A central remote control panel in the engineer’s office has switches for numerous fans and unit ventilator groups, most of which have been removed or blanked off.

The steam distribution piping and radiators are from original construction and should be replaced based on age and condition. The unit ventilators are beyond service life and should be replaced as part of the proposed HVAC renovation. The air handling equipment in the two third floor mechanical rooms has exceeded the service life and should be replaced. The boilers should have remaining service life of fifteen years.

FIRE PROTECTION - There are no sprinklers in this building.

ELECTRICAL SYSTEMS

Electrical Service-- The building is served by PECO Energy Company with two underground 4.16 kV services to utility-owned medium voltage switchgear containing a line circuit breaker and current transformer metering section for each service. Each 4.16 kV service supplies three (3) 167 kVA, 4.16 kV-120/240V, 1 phase transformers located in the transformer vault with the medium voltage switchgear. The transformer secondary feeders supply a double-ended 1600A, 208/120V switchboard with 1600A main circuit breakers and a 1200A tie-circuit breaker. There are nine (9) distribution sections with a total of 20 feeder circuit breakers that supply 33 panelboards located throughout the building. There is also a 600A distribution panelboard located on the wall opposite the double-ended switchboard. All of this service equipment is original to the 1953 construction and has exceeded its useful life expectancy. It is recommended that this equipment be replaced with a new 2500A, 208/120V, 3 phase, 4 wire, double-ended substation to supply existing and added building loads, and a 480/277V, 3 phase, 4 wire substation, sized to supply central air conditioning equipment and elevators.

Boiler Room Panelboard BR-1 is two sections, rated at 600A, and was installed in 1996 and has 11 years useful life remaining before replacement. Panelboard BR-2 is three sections, rated 600A, and has served its useful life. There are 32 panelboards that need to be replaced, including their feeder conductors. Panelboards are mainly located in corridors and in classrooms, many of which are knife blade, fusible type with exposed bus.

Receptacles-- Classrooms are provided with only a few duplex receptacles and should be provided with 6 to 8 additional receptacles using a surface metal raceway system. Existing wiring devices are also in poor condition, and should also be replaced. There are also a few locations where receptacles at sink locations are not ground-fault circuit-interrupting type, as required by the National Electrical Code. In general, all existing duplex receptacles and their branch circuit conductors throughout the building should be replaced due to their age and poor condition.

Lighting-- Most of the fluorescent lighting fixtures in the building are either stem or surface mounted or 4 foot fluorescent wraparound fixtures with either two (2) or four (4) lamps, including classrooms, corridors, offices, support spaces, and stairwells. There are some offices with lay-in grid ceilings that have 2x4 fluorescent grid troffers with acrylic lenses. The cafeteria is provided with 4x4 surface mounted, modular fluorescent fixtures with (8) T12 lamps, most in poor condition with exposed lamps.

Except for lighting fixtures in the First Floor corridor, restroom fixtures and four (4) science classrooms on the First Floor, all fluorescent fixtures have obsolete T12 lamps and need to be replaced with fixtures having T8 or T5 lamps. Also, most of the industrial fluorescent fixtures in the Boiler Room have T12 lamps. There are some fixtures with T8 lamps above the boilers.

Surface mounted, 4 foot vapor-tight fluorescent fixtures are provided in the kitchen and locker rooms.

Lighting in classrooms is controlled by multiple light switches; there are no occupancy sensors for lighting control.

Each of the two gymnasiums are provide with 20 surface mounted mercury vapor industrial type lighting fixtures that have reached the end of their useful life and should be replaced with LED fixtures for energy efficiency and reduced maintenance cost.

The auditorium is illuminated with (42) 750W incandescent downlights and (11) incandescent cylindrical wall sconces with up/down lighting. There are also incandescent downlights located at the entrances to the auditorium. The fixtures have served their useful life and need to be replaced with LED downlights and wall sconces for energy efficiency and reduced maintenance.

There are six (6) downlights in front of the stage. The stage has shallow dome incandescent worklights and four (4) rows of theatrical batten lighting fixtures. Replacement of stage lighting is recommended. There is dimmer control board that controls lighting in the auditorium and theatrical stage lighting. The dimmer board has exceeded its useful life expectancy, is now obsolete, and needs to be replaced.

In general, lighting system replacement is recommended throughout the building, except for those few areas that have already been upgraded.

Exterior lighting fixtures are located at exit discharges, except at exit discharge from Stairway No. 5. Fixtures are surface mounted under the canopies or wall mounted above the door. Wall mounted fixtures are mercury vapor. All fixtures at exit discharges should be replaced with LED type fixtures.

Fire Alarm System-- The fire alarm system is a Simplex 4100U TrueAlert panel located in the Boiler Room. The system consists of pull stations and audible/visual notification appliances throughout the building, including restrooms and classrooms. There are some multiple occupancy rooms that do not have notification appliances. An allowance for adding 15 audible/visual notification appliances is included in this report. There are also a few smoke detectors located in corridors and heat detectors in the kitchen. A remote annunciator panel is located at the main entrance by the auditorium. The system was reported to be less than 10 years old and is

expected to have 10 years remaining life before replacement.

Telephone/LAN--The telephone demarcation point is located in the telephone room in the northeast wing on the Ground Floor. The Main Distribution Frame (MDF) is located on the Second Floor. There are Intermediate Distribution Frames (IDF) on the Ground and First Floors.

A telephone and data outlet is provided in each classroom. Wireless access points are provided in classrooms, offices, auditorium, gymnasiums and other areas for Wi-Fi service throughout the entire school.

Intercom/Paging/Sound Systems-- The paging system is accessed through the telephone system. Paging amplifiers are located in MDF Room to provide paging interface with the telephone system. There is a separate paging zone for each of the floors. Each classroom has a wall mounted paging speaker. There are also wall mounted paging speakers in the corridors, auditorium and cafeteria. Horn type speakers are provided in the gymnasiums and on the exterior of the building. This paging system is expected to have a remaining useful life of 8 to 10 years.

There is an Aiphone intercom station at the visitor entrance that communicates with the Main Office. There is no permanent sound system in the auditorium. A portable system is used.

Clock and Program System-- The Main Office on the First Floor has a Simplex Time Control Center for the separate program system for each floor. The wall mounted speakers in classrooms and corridors are used for program changes. The Assistant Building Engineer reported that the clock system is not functional. It is recommended that all clocks be replaced with battery operated synchronized clocks controlled by a wireless GPS master clock system.

Television System-- There is no television system. Overhead projectors are provided in some classrooms.

Video Surveillance and Security Systems-- There are video surveillance cameras that provide coverage of corridors, stairwells and site. The video surveillance system is monitored in School Police Room 142. There are also monitors in the Principal's office on the Second Floor in the Main Office. These rooms were not accessible. Information as to equipment quantities and age of system was not available. Hence, no recommendations are recorded for the video surveillance system.

Security motion sensors are provided in corridors on the Ground Floor and in the Main Offices. Magnetic door contacts are provided on some doors. A security system keypad is located in the corridor at the south end of the Ground Floor.

Emergency Power System-- There is a Kohler 30 kW/37.5 kVA, 208/120V, 3 phase, 4 wire, natural gas fueled standby generator located in the Boiler Room. The generator feeds a plug-in fusible type emergency lighting panelboard through a Zenith automatic transfer switch (ATS). It was observed at the time of this assessment that the feeder connection from the generator to the ATS was disconnected. Upon loss of utility service, the standby power source would not be available, and there would be no emergency lighting in the building. Immediate corrective action to restore the standby power source to full operation is required. The generator, ATS and emergency lighting panelboard is also recommended to be replaced. Consideration should be given to increasing the generator size to supply the elevators with standby power.

Emergency Lighting System / Exit Lighting-- Emergency egress and exit lighting fixtures are served from the emergency lighting panelboard. It was observed that many of the exit signs that were damaged, in poor condition, or not illuminated. All exit signs should be replaced with LED type.

Lightning Protection System –Other than for the tall stack, which is protected by air terminals, there is no lightning protection system for this building.

Conveying Systems-- The building does not have an elevator. Refer to the Architectural / Structural Systems narrative section for recommendations.

GROUNDS

Pedestrian pavements are concrete pavers in like new condition in several area and other original sections are in very good condition. On the western section of the site there are two water stations that appear to be solar driven. OVUSPTEAM units are connected to the fence and provide water to the near young trees planted along the sidewalk. Other landscaping is mainly near the front of the school and consist of mature trees and turfed areas. There were no issues that surfaced during the time of the inspection therefore no recommendations are required at this time.

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 parking play area has no assigned parking and limited markers for approved activity areas. No curb cuts for access to the sidewalks that lead to the ADA main entrance. The parking play lot is in fair condition, the harsh environmental conditions associated with snow removal have taken its toll on the asphalt surface. Also, there is no marked path of ingress to the main entrance. This project provides a budgetary consideration for a play, parking lot renewal program that includes all aspects of the current ADA legislation. Asphalt removal and replacement is recommended.

The trash dumpster is located near the southwestern fence open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area are recommended.

Site Lighting-- There no lighting for the paved parking and play area. It is recommended that site lighting poles with floodlighting fixtures be provided to illuminate the site. Site lighting should be time clock controlled.

Site video surveillance system--Exterior cameras are located at the corners of the building to provide coverage of the parking and paved play areas.

RECOMMENDATIONS

- Replace auditorium seating
- Replace auditorium seating
- Upgrade loading dock
- Install new scoreboard
- Install Gym Backstops
- Install new wooden Gym floor
- Upgrade vinyl flooring
- Install new carpet
- Upgrade and Replace stair railing
- Signage upgrade
- Replace chalkboards
- Replace tack boards
- Replace interior doors
- Remove and upgrade science labs
- Upgrade corridor doors
- Upgrade exterior doors
- Upgrade exterior windows
- Add elevators
- Upgrade site fence
- Remove and replace parking lots
- Build dumpster area
- Provide a four hundred eighty ton chilled water system with air cooled package chillers on the roof with pumps, piping and controls. Connect to new unit ventilators and air handling units. Include controls and electrical connections.
- Install NFPA wet pipe automatic sprinkler system in entire building, including fire service, piping sprinkler heads, standpipes and fire pump if required.
- Inspect old cast iron sanitary piping including camera observation and replace damaged sections.
- Provide a new central station air handling unit for the auditorium 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.
- Install new direct digital control system and building automation system with remote computer control capability and graphics package.
- Provide a new central station air handling unit for each of the two gymnasiums and two locker rooms (total four) 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.
- Provide a new central station air handling unit for the cafeteria 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.
- Replace domestic water supply piping with insulated rigid copper tubing. Include hangers, valves and supports.
- Replace condensate return/ boiler feed pump system with new duplex pump unit.
- Install approved backflow preventer assembly in existing three inch domestic water service line.
- 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.
- Replace china drinking fountains with stainless steel water coolers.
- Replace three existing instantaneous water heaters with new similar units.
- Replace six utility exhaust fans in two third floor mechanical rooms.
- Remove service entrance equipment, including utility medium voltage switchgear, six (6) 167 kVA transformers and the double -ended 1600A, 208/120V, 3 phase, 4wire Main Switchboard. Replace with new utility switchgear, a double-ended 750 kVA, 2500A, 208/120V, 3 phase, 4 wire substation, and a 750 kVA, 1200A, 480/277V, 3 phase, 4 wire substation for central air conditioning equipment and elevator loads.
- Replace the 600A distribution panelboard in Main Electrical Room and 32 panelboards located throughout the building, including replacing feeder conductors.
- Provide surface metal raceway system with 6 to 8 duplex receptacles in each of 46 classrooms.
- Replace all existing duplex receptacles in classrooms and throughout the building with new devices due to their age and condition. (estimate 310 duplex receptacles to be replaced).
- Replace fluorescent lighting system and branch circuit wiring throughout the building, including: classrooms and IMC (51,740 SF); cafeteria, kitchen, offices, corridors and support areas (67,253 SF); and mechanical spaces (16,115 SF).
- Replace (40) surface mounted mercury vapor industrial type lighting fixtures in the two gymnasiums with LED type fixtures, including replacement of lighting branch circuit wiring.
- In the auditorium, replace (42) 750 watt incandescent downlights, (11) incandescent wall sconces and (2) downlights in the entrances with LED downlights and wall sconces.
- Replace theatrical lighting fixtures and worklights on stage and downlights in front of stage.
- Replace dimming control board for stage and auditorium lighting system.
- Replace all lighting fixtures on the exterior of the building at exit discharges. Add one (1) lighting fixture at exit discharge from Stairway No. 5.
- Provide allowance for adding (15) audible/visual fire alarm notification appliances in multiple occupancy rooms that do not have devices.
- Remove all clocks and provide wireless GPS clock system with battery operated synchronized clocks (estimate 85 clocks).
- Remove existing 30 kW standby generator system equipment and replace with generator sized for all emergency egress and exit lighting and addition of hydraulic elevators (estimated size is 200 kW).
- Replace all exit signs with LED exit signs (estimate 90 exit signs).
- Provide five (5) site lighting poles with multiple LED floodlighting fixtures per pole to illuminate paved play and parking areas on the north and west side of the site.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 4 / Tm 1
Status:	Accepted by SDP	Team:	Tm 1
Site ID:	S610001		

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.

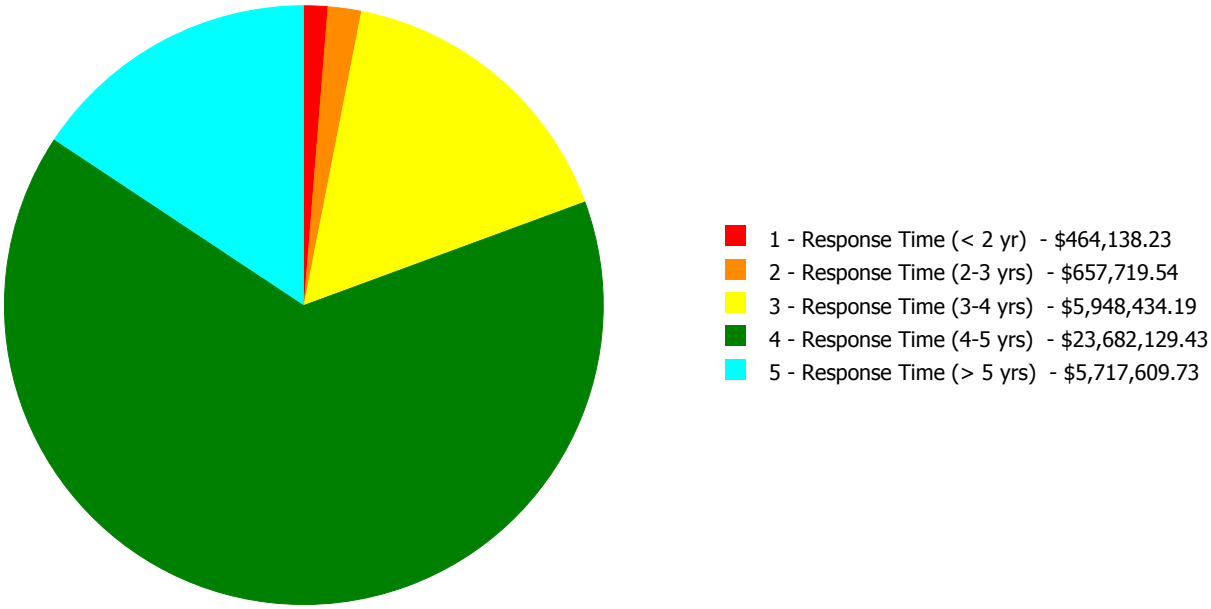
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	38.00 %	0.00 %	$0.00
B10 - Superstructure	39.93 %	0.00 %	$0.00
B20 - Exterior Enclosure	35.65 %	13.06 %	$1,463,798.45
B30 - Roofing	100.00 %	0.00 %	$0.00
C10 - Interior Construction	16.86 %	80.27 %	$3,314,552.52
C20 - Stairs	38.00 %	13.13 %	$31,138.92
C30 - Interior Finishes	62.50 %	31.22 %	$2,203,397.30
D10 - Conveying	105.71 %	386.70 %	$995,503.49
D20 - Plumbing	64.88 %	46.44 %	$1,566,065.64
D30 - HVAC	86.23 %	85.46 %	$15,995,850.08
D40 - Fire Protection	92.47 %	177.49 %	$2,407,019.38
D50 - Electrical	73.24 %	65.69 %	$6,497,150.74
E10 - Equipment	34.29 %	9.26 %	$247,952.52
E20 - Furnishings	30.00 %	231.65 %	$830,222.87
G20 - Site Improvements	37.63 %	24.21 %	$779,043.09
G40 - Site Electrical Utilities	98.41 %	14.30 %	$138,336.12
Totals:	**57.79 %**	**42.89 %**	**$36,470,031.12**

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)
B610001;Leeds	168,259	43.97	$464,138.23	$76,303.72	$5,948,434.19	$23,346,166.04	$5,717,609.73
G610001;Grounds	222,400	21.92	$0.00	$581,415.82	$0.00	$335,963.39	$0.00
Total:		**42.89**	**$464,138.23**	**$657,719.54**	**$5,948,434.19**	**$23,682,129.43**	**$5,717,609.73**

Deficiencies By Priority



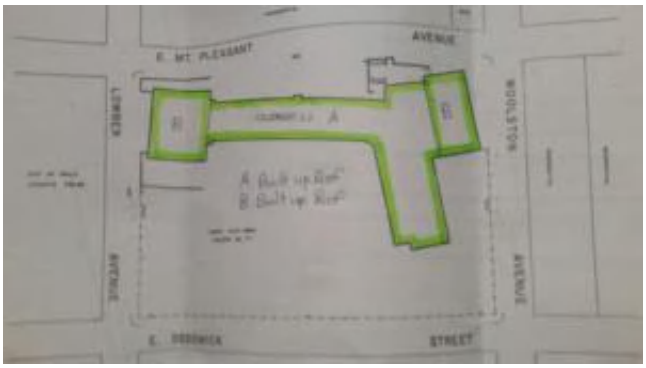
Budget Estimate Total: $36,470,031.12

Executive Summary

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

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

Function:	Middle Secondary
Gross Area (SF):	168,259
Year Built:	1953
Last Renovation:	
Replacement Value:	$80,850,615
Repair Cost:	$35,552,651.91
Total FCI:	43.97 %
Total RSLI:	58.11 %



Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B610001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S610001		

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	38.00 %	0.00 %	$0.00
B10 - Superstructure	39.93 %	0.00 %	$0.00
B20 - Exterior Enclosure	35.65 %	13.06 %	$1,463,798.45
B30 - Roofing	100.00 %	0.00 %	$0.00
C10 - Interior Construction	16.86 %	80.27 %	$3,314,552.52
C20 - Stairs	38.00 %	13.13 %	$31,138.92
C30 - Interior Finishes	62.50 %	31.22 %	$2,203,397.30
D10 - Conveying	105.71 %	386.70 %	$995,503.49
D20 - Plumbing	64.88 %	46.44 %	$1,566,065.64
D30 - HVAC	86.23 %	85.46 %	$15,995,850.08
D40 - Fire Protection	92.47 %	177.49 %	$2,407,019.38
D50 - Electrical	73.24 %	65.69 %	$6,497,150.74
E10 - Equipment	34.29 %	9.26 %	$247,952.52
E20 - Furnishings	30.00 %	231.65 %	$830,222.87
Totals:	**58.11 %**	**43.97 %**	**$35,552,651.91**

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.

Site Assessment Report - B610001;Leeds

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$23.16	S.F.	168,259	100	1953	2053		38.00 %	0.00 %	38			$3,896,878
A1030	Slab on Grade	$5.17	S.F.	168,259	100	1953	2053		38.00 %	0.00 %	38			$869,899
B1010	Floor Construction	$85.94	S.F.	168,259	100	1953	2053		38.00 %	0.00 %	38			$14,460,178
B1020	Roof Construction	$9.26	S.F.	50,086	100	2015	2115		100.00 %	0.00 %	100			$463,796
B2010	Exterior Walls	$43.78	S.F.	168,259	100	1953	2053		38.00 %	0.00 %	38			$7,366,379
B2020	Exterior Windows	$21.40	S.F.	168,259	40	1953	1993	2027	30.00 %	34.58 %	12		$1,245,222.75	$3,600,743
B2030	Exterior Doors	$1.45	S.F.	168,259	25	1953	1978	2027	48.00 %	89.59 %	12		$218,575.70	$243,976
B3010105	Built-Up	$37.76	S.F.	50,086	20	2015	2035		100.00 %	0.00 %	20			$1,891,247
B3020	Roof Openings	$0.06	S.F.	50,086	30	2015	2045		100.00 %	0.00 %	30			$3,005
C1010	Partitions	$17.91	S.F.	168,259	100	1953	2053	2027	12.00 %	64.64 %	12		$1,948,027.02	$3,013,519
C1020	Interior Doors	$3.51	S.F.	168,259	40	1953	1993	2027	30.00 %	201.94 %	12		$1,192,646.78	$590,589
C1030	Fittings	$3.12	S.F.	168,259	40	1953	1993	2027	30.00 %	33.12 %	12		$173,878.72	$524,968
C2010	Stair Construction	$1.41	S.F.	168,259	100	1953	2053		38.00 %	13.13 %	38		$31,138.92	$237,245
C3010230	Paint & Covering	$13.21	S.F.	100,000	10	1990	2000	2027	120.00 %	0.00 %	12			$1,321,000
C3010232	Wall Tile	$2.63	S.F.	68,259	30	1953	1983	2027	40.00 %	0.00 %	12			$179,521
C3020411	Carpet	$7.30	S.F.	3,000	10	2000	2010	2027	120.00 %	153.30 %	12		$33,572.29	$21,900
C3020412	Terrazzo & Tile	$75.52	S.F.	5,000	50	1953	2003	2027	24.00 %	0.00 %	12			$377,600
C3020413	Vinyl Flooring	$9.68	S.F.	140,259	20	1953	1973	2027	60.00 %	134.05 %	12		$1,820,000.16	$1,357,707
C3020414	Wood Flooring	$22.27	S.F.	12,000	25	1953	1978	2027	48.00 %	130.90 %	12		$349,824.85	$267,240
C3020415	Concrete Floor Finishes	$0.97	S.F.	5,000	50	1953	2003	2027	24.00 %	0.00 %	12			$4,850
C3030	Ceiling Finishes	$20.97	S.F.	168,259	25	1953	1978	2027	48.00 %	0.00 %	12			$3,528,391
D1010	Elevators and Lifts	$1.53	S.F.	168,259	35	1953	1988	2052	105.71 %	386.70 %	37		$995,503.49	$257,436
D2010	Plumbing Fixtures	$13.52	S.F.	168,259	35	2000	2035		57.14 %	1.33 %	20		$30,316.76	$2,274,862
D2020	Domestic Water Distribution	$1.68	S.F.	168,259	25	1953	1978	2042	108.00 %	284.96 %	27		$805,509.31	$282,675
D2030	Sanitary Waste	$2.52	S.F.	168,259	30	1953	1983	2047	106.67 %	172.22 %	32		$730,239.57	$424,013
D2040	Rain Water Drainage	$2.32	S.F.	168,259	30	1953	1983	2025	33.33 %	0.00 %	10			$390,361
D3020	Heat Generating Systems	$18.67	S.F.	168,259	35	1996	2031		45.71 %	3.23 %	16		$101,394.17	$3,141,396
D3030	Cooling Generating Systems	$24.48	S.F.	168,259	30			2047	106.67 %	67.94 %	32		$2,798,415.62	$4,118,980
D3040	Distribution Systems	$42.99	S.F.	168,259	25	1953	1978	2042	108.00 %	139.38 %	27		$10,082,284.22	$7,233,454
D3050	Terminal & Package Units	$11.60	S.F.	168,259	20				0.00 %	0.00 %				$1,951,804
D3060	Controls & Instrumentation	$13.50	S.F.	168,259	20	1953	1973	2037	110.00 %	132.68 %	22		$3,013,756.07	$2,271,497
D4010	Sprinklers	$7.05	S.F.	168,259	35	1953	1988	2052	105.71 %	202.91 %	37		$2,407,019.38	$1,186,226
D4020	Standpipes	$1.01	S.F.	168,259	35				0.00 %	0.00 %				$169,942
D5010	Electrical Service/Distribution	$9.70	S.F.	168,259	30	1953	1983	2047	106.67 %	185.73 %	32		$3,031,321.70	$1,632,112
D5020	Lighting and Branch Wiring	$34.68	S.F.	168,259	20	1953	1973	2027	60.00 %	48.82 %	12		$2,848,473.63	$5,835,222
D5030	Communications and Security	$12.99	S.F.	168,259	15	1953	1968	2027	80.00 %	3.52 %	12		$76,913.46	$2,185,684
D5090	Other Electrical Systems	$1.41	S.F.	168,259	30	1953	1983	2047	106.67 %	227.80 %	32		$540,441.95	$237,245
E1020	Institutional Equipment	$4.82	S.F.	168,259	35	1953	1988	2027	34.29 %	26.91 %	12		$218,237.20	$811,008
E1090	Other Equipment	$11.10	S.F.	168,259	35	1953	1988	2027	34.29 %	1.59 %	12		$29,715.32	$1,867,675
E2010	Fixed Furnishings	$2.13	S.F.	168,259	40	1953	1993	2027	30.00 %	231.65 %	12		$830,222.87	$358,392
								Total	**58.11 %**	**43.97 %**			**$35,552,651.91**	**$80,850,615**

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: Painted CMU wall finish 59%
Tile or ceramic wall finish 41%

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

Note: Carpet 1%
Tile 3%
Vinyl 85%
Wood 8%
Concrete 3%

System: D1010 - Elevators and Lifts — This system contains no images

Note: There are no existing elevators in this building.

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

Note: There are six (6) 167 kV, 4.16 kV-120/240V, 1 phase utility company 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:	**$35,552,652**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$577,074**	**$36,129,726**
*** 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	$1,245,223	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,245,223**
B2030 - Exterior Doors	$218,576	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$218,576**
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**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$1,948,027	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,948,027**
C1020 - Interior Doors	$1,192,647	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,192,647**
C1030 - Fittings	$173,879	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$173,879**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$31,139	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,139**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

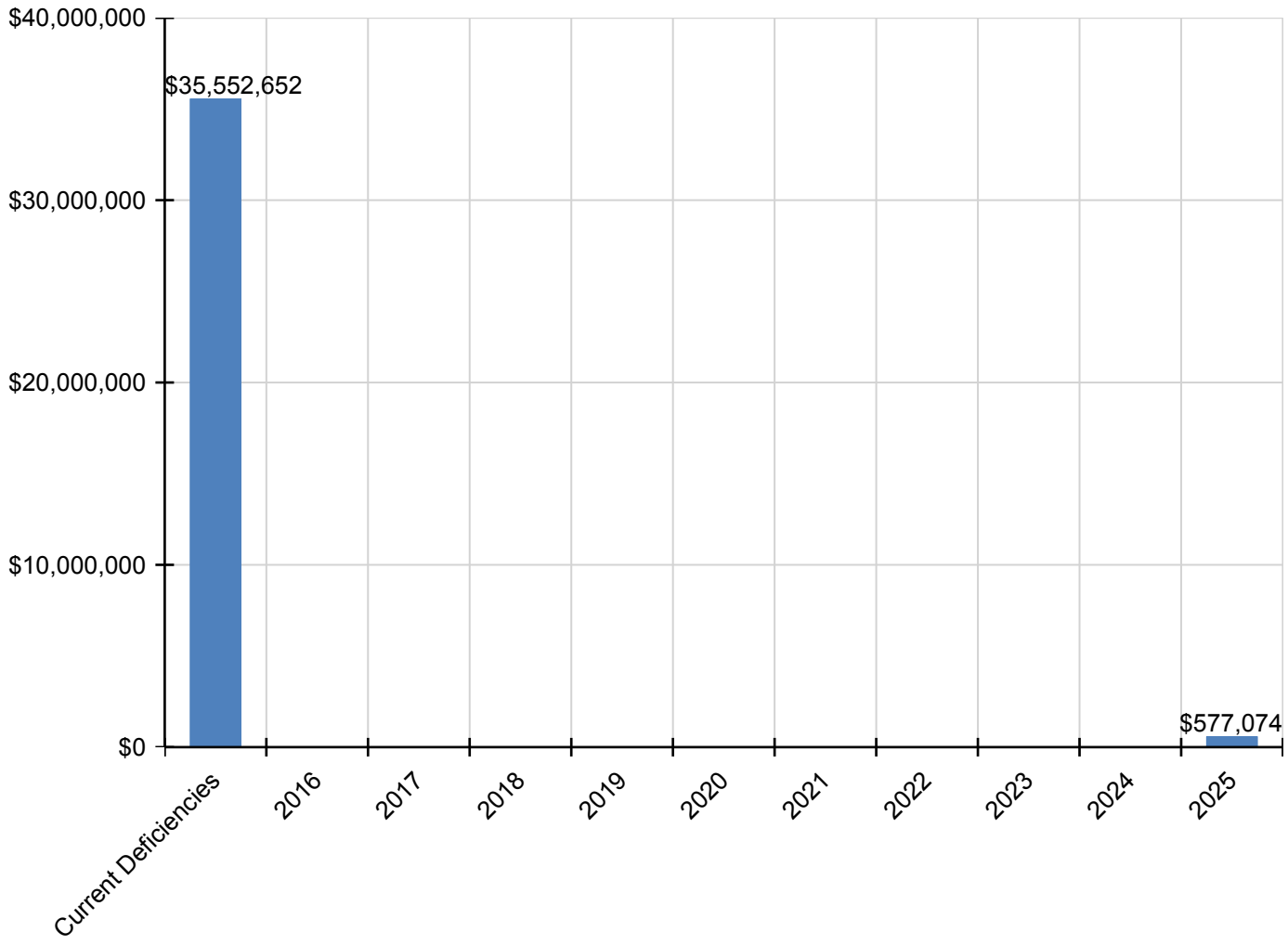
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$33,572	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$33,572**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$1,820,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,820,000**
C3020414 - Wood Flooring	$349,825	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$349,825**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$995,503	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$995,503**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$30,317	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$30,317**
D2020 - Domestic Water Distribution	$805,509	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$805,509**
D2030 - Sanitary Waste	$730,240	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$730,240**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$577,074	**$577,074**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$101,394	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$101,394**
D3030 - Cooling Generating Systems	$2,798,416	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,798,416**
D3040 - Distribution Systems	$10,082,284	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$10,082,284**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$3,013,756	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,013,756**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$2,407,019	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,407,019**
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	$3,031,322	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,031,322**
D5020 - Lighting and Branch Wiring	$2,848,474	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,848,474**
D5030 - Communications and Security	$76,913	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$76,913**
D5090 - Other Electrical Systems	$540,442	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$540,442**
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	$218,237	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$218,237**
E1090 - Other Equipment	$29,715	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$29,715**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$830,223	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$830,223**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

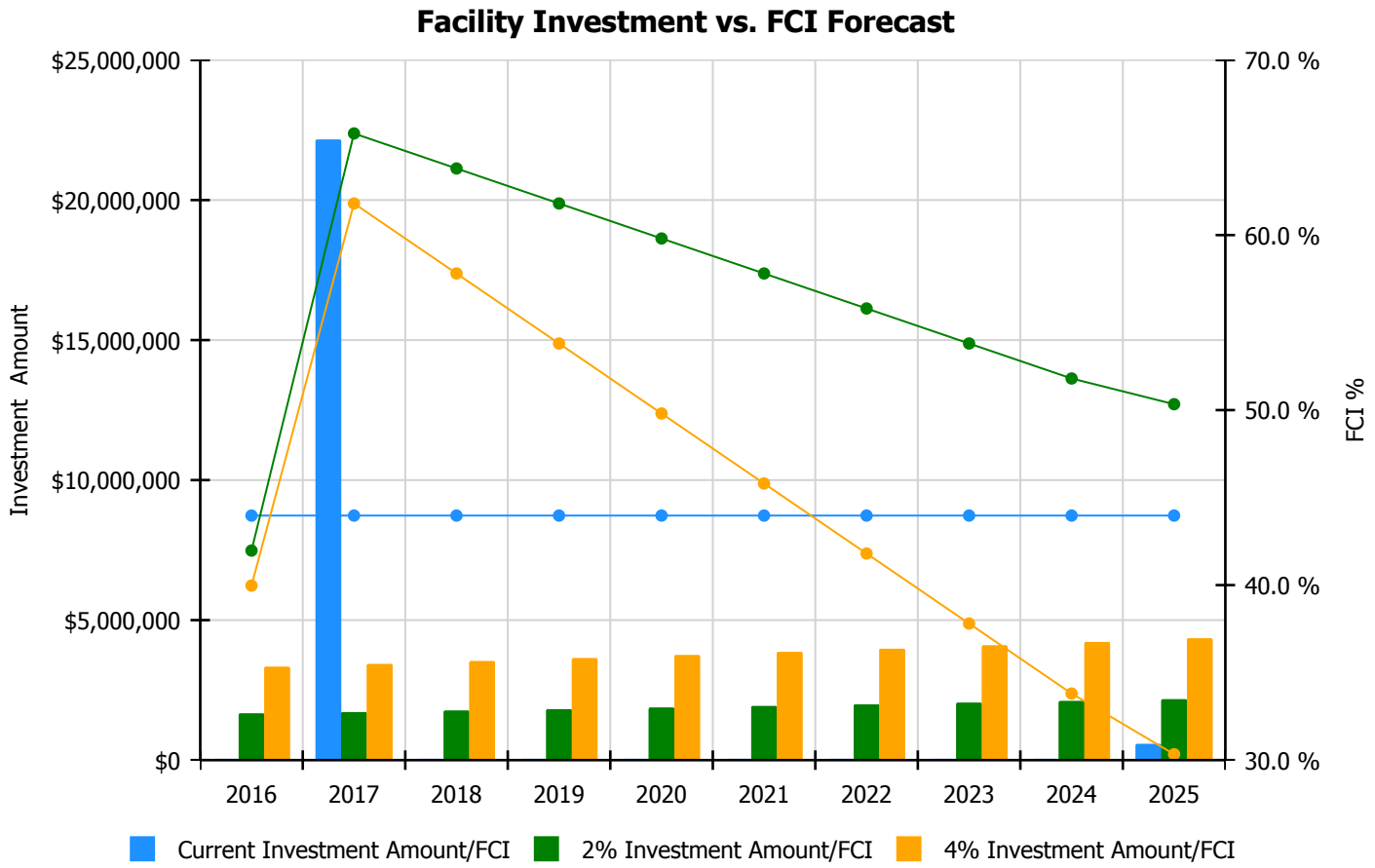
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

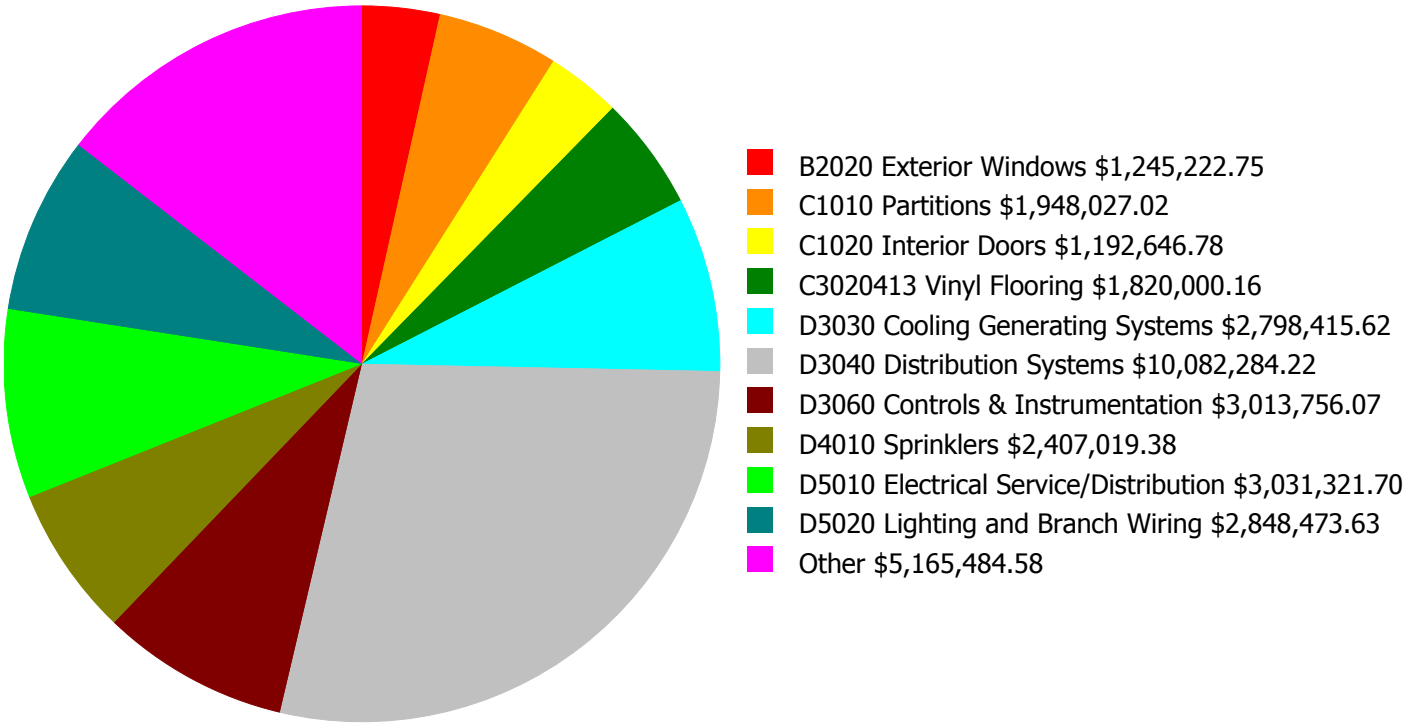
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 43.97%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$1,665,523.00	41.97 %	$3,331,045.00	39.97 %
2017	$22,157,102	$1,715,488.00	65.81 %	$3,430,977.00	61.81 %
2018	$0	$1,766,953.00	63.81 %	$3,533,906.00	57.81 %
2019	$0	$1,819,962.00	61.81 %	$3,639,923.00	53.81 %
2020	$0	$1,874,560.00	59.81 %	$3,749,121.00	49.81 %
2021	$0	$1,930,797.00	57.81 %	$3,861,595.00	45.81 %
2022	$0	$1,988,721.00	55.81 %	$3,977,442.00	41.81 %
2023	$0	$2,048,383.00	53.81 %	$4,096,766.00	37.81 %
2024	$0	$2,109,834.00	51.81 %	$4,219,669.00	33.81 %
2025	$577,074	$2,173,129.00	50.34 %	$4,346,259.00	30.34 %
Total:	**$22,734,176**	**$19,093,350.00**		**$38,186,703.00**	

Deficiency Summary by System

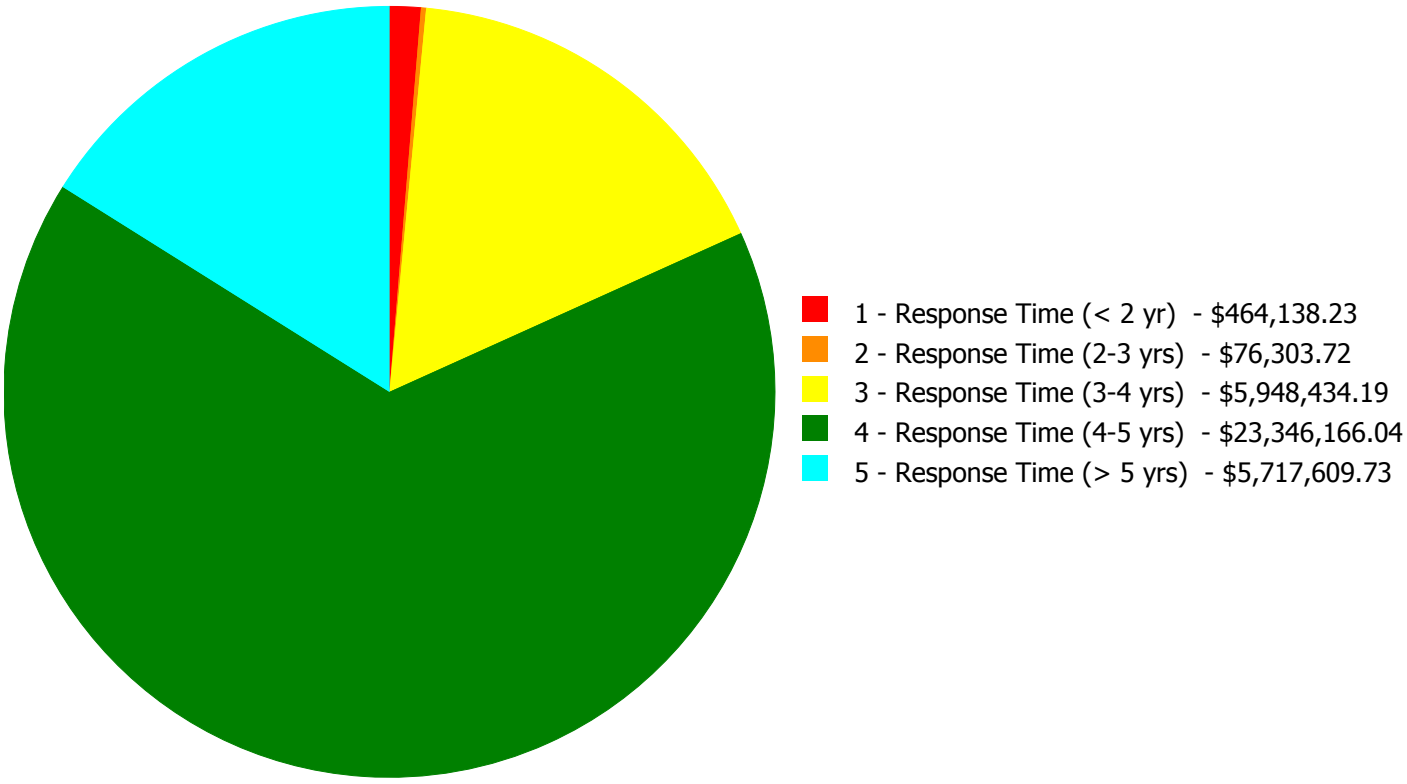
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $35,552,651.91

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: $35,552,651.91

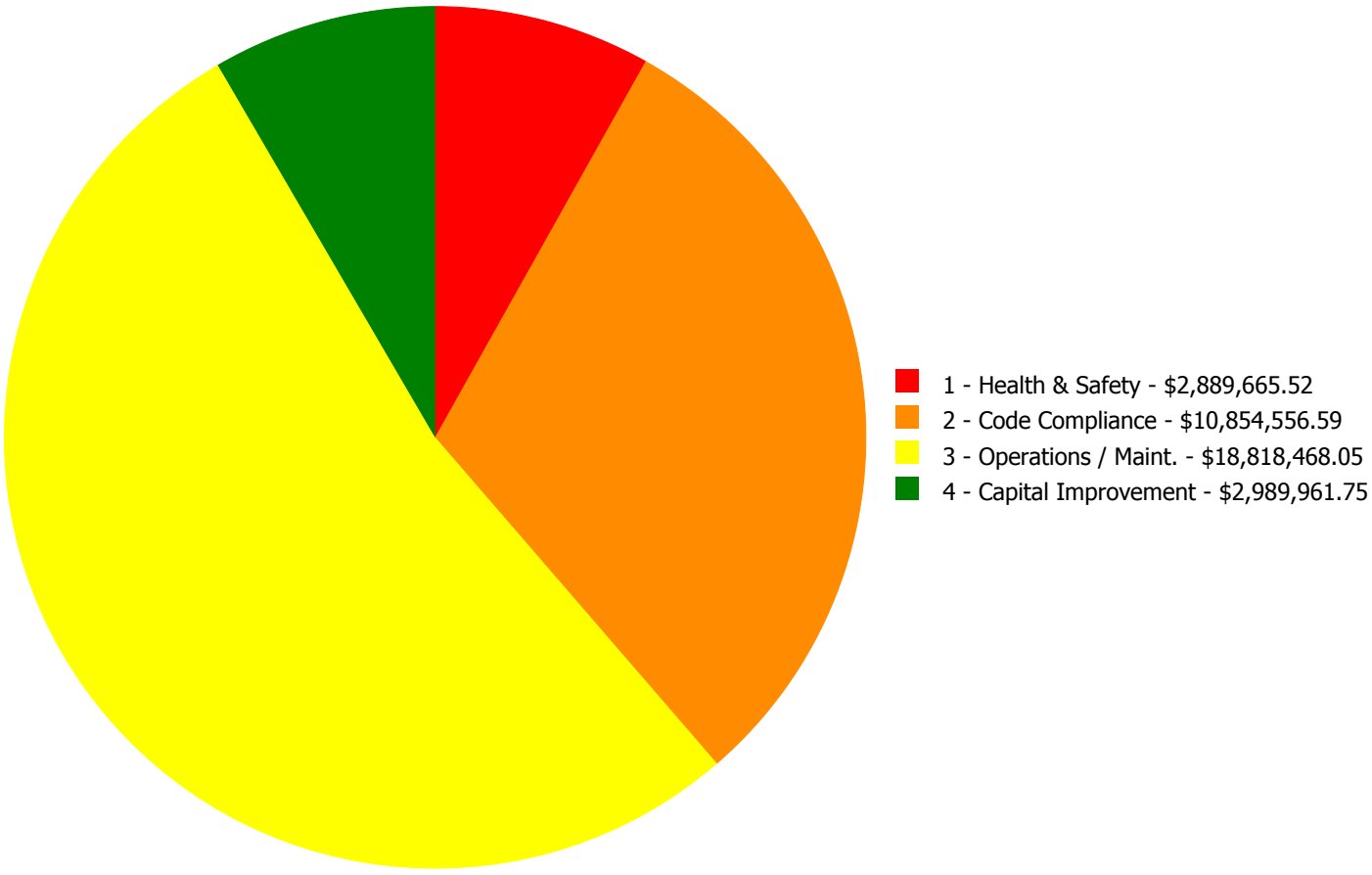
Deficiency By Priority Investment Table

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
B2020	Exterior Windows	$0.00	$0.00	$0.00	$1,245,222.75	$0.00	$1,245,222.75
B2030	Exterior Doors	$0.00	$0.00	$0.00	$218,575.70	$0.00	$218,575.70
C1010	Partitions	$0.00	$0.00	$184,281.60	$1,763,745.42	$0.00	$1,948,027.02
C1020	Interior Doors	$0.00	$0.00	$0.00	$1,192,646.78	$0.00	$1,192,646.78
C1030	Fittings	$0.00	$0.00	$0.00	$173,878.72	$0.00	$173,878.72
C2010	Stair Construction	$0.00	$0.00	$31,138.92	$0.00	$0.00	$31,138.92
C3020411	Carpet	$0.00	$0.00	$0.00	$0.00	$33,572.29	$33,572.29
C3020413	Vinyl Flooring	$0.00	$0.00	$0.00	$0.00	$1,820,000.16	$1,820,000.16
C3020414	Wood Flooring	$0.00	$0.00	$0.00	$349,824.85	$0.00	$349,824.85
D1010	Elevators and Lifts	$0.00	$0.00	$0.00	$0.00	$995,503.49	$995,503.49
D2010	Plumbing Fixtures	$0.00	$0.00	$0.00	$30,316.76	$0.00	$30,316.76
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$805,509.31	$0.00	$805,509.31
D2030	Sanitary Waste	$0.00	$0.00	$0.00	$730,239.57	$0.00	$730,239.57
D3020	Heat Generating Systems	$0.00	$0.00	$0.00	$101,394.17	$0.00	$101,394.17
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$2,798,415.62	$2,798,415.62
D3040	Distribution Systems	$0.00	$0.00	$0.00	$10,082,284.22	$0.00	$10,082,284.22
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$3,013,756.07	$0.00	$3,013,756.07
D4010	Sprinklers	$0.00	$0.00	$0.00	$2,407,019.38	$0.00	$2,407,019.38
D5010	Electrical Service/Distribution	$0.00	$0.00	$3,031,321.70	$0.00	$0.00	$3,031,321.70
D5020	Lighting and Branch Wiring	$0.00	$0.00	$2,656,927.50	$191,546.13	$0.00	$2,848,473.63
D5030	Communications and Security	$0.00	$0.00	$26,256.56	$50,656.90	$0.00	$76,913.46
D5090	Other Electrical Systems	$464,138.23	$76,303.72	$0.00	$0.00	$0.00	$540,441.95
E1020	Institutional Equipment	$0.00	$0.00	$0.00	$148,119.03	$70,118.17	$218,237.20
E1090	Other Equipment	$0.00	$0.00	$0.00	$29,715.32	$0.00	$29,715.32
E2010	Fixed Furnishings	$0.00	$0.00	$18,507.91	$811,714.96	$0.00	$830,222.87
	Total:	$464,138.23	$76,303.72	$5,948,434.19	$23,346,166.04	$5,717,609.73	$35,552,651.91

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: $35,552,651.91

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: D5090 - Other Electrical Systems

Location: Boiler Room

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Replace standby generator system

Qty: 1.00

Unit of Measure: Ea.

Estimate: $464,138.23

Assessor Name: System

Date Created: 01/19/2016

Notes: Remove existing 30 kW standby generator system equipment and replace with generator sized for all emergency egress and exit lighting and addition of hydraulic elevators (estimated size is 200 kW).

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

System: D5090 - Other Electrical Systems

Location: Building wide

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace Emergency/Exit Lighting

Qty: 90.00

Unit of Measure: Ea.

Estimate: $76,303.72

Assessor Name: System

Date Created: 01/19/2016

Notes: Replace all exit signs with LED exit signs (estimate 90 exit signs).

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

System: C1010 - Partitions

Location: Stairs

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 40.00

Unit of Measure: S.F.

Estimate: $184,281.60

Assessor Name: System

Date Created: 11/01/2015

Notes: This building has adequate exit pathways and no egress obstructions were noted during our building walk through. However the corridor doors on all floors are not fire rated and should be upgraded. Install new fire rated flush wood doors on all floor corridors. If the recommended lever hardware and room signage has not been implemented then these features should be incorporated into the work scope.

System: C2010 - Stair Construction

Location: Stairs

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 2,000.00

Unit of Measure: L.F.

Estimate: $31,138.92

Assessor Name: System

Date Created: 11/01/2015

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: D5010 - Electrical Service/Distribution

Location: Transformer Vault

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace unit substation

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,830,479.01

Assessor Name: System

Date Created: 01/18/2016

Notes: Remove service entrance equipment, including utility medium voltage switchgear, six (6) 167 kVA transformers and the double-ended 1600A, 208/120V, 3 phase, 4wire Main Switchboard. Replace with new utility switchgear, a double-ended 750 kVA, 2500A, 208/120V, 3 phase, 4 wire substation, and a 750 kVA, 1200A, 480/277V, 3 phase, 4 wire substation for central air conditioning equipment and elevator loads.

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: 33.00

Unit of Measure: Ea.

Estimate: $1,200,842.69

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace the 600A distribution panelboard in Main Electrical Room and 32 panelboards located throughout the building, including replacing feeder conductors.

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: 135,108.00

Unit of Measure: S.F.

Estimate: $2,213,314.00

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace fluorescent lighting system and branch circuit wiring throughout the building, including: classrooms and IMC (51,740 SF); cafeteria, kitchen, offices, corridors and support areas (67,253 SF); and mechanical spaces (16,115 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: 40.00
Unit of Measure: Ea.
Estimate: $142,776.83
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace (40) surface mounted mercury vapor industrial type lighting fixtures in the two gymnasiums with LED type fixtures, including replacement of lighting branch circuit wiring.

System: D5020 - Lighting and Branch Wiring

Location: Classrooms and building wide
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace Wiring Device
Qty: 310.00
Unit of Measure: Ea.
Estimate: $121,000.69
Assessor Name: System
Date Created: 01/18/2016

Notes: Replace all existing duplex receptacles in classrooms and throughout the building with new devices due to their age and condition. (estimate 310 duplex receptacles to be replaced).

System: D5020 - Lighting and Branch Wiring

Location: Stage

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace lighting fixtures

Qty: 10.00

Unit of Measure: Ea.

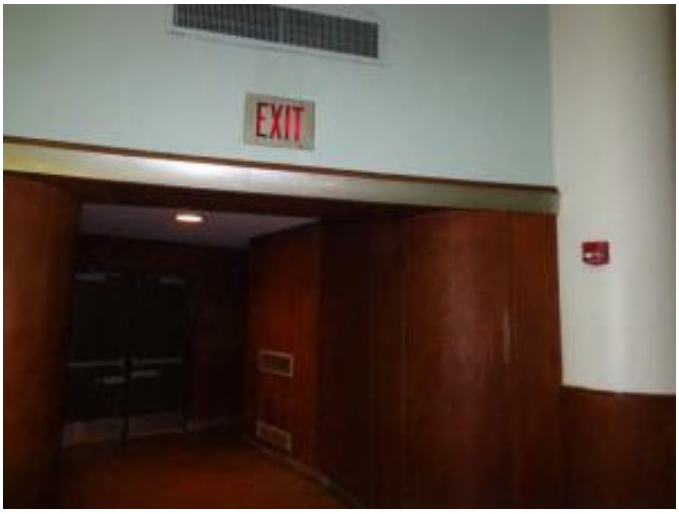
Estimate: $99,316.31

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace theatrical lighting fixtures and worklights on stage and downlights in front of stage.

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: 57.00

Unit of Measure: Ea.

Estimate: $68,432.21

Assessor Name: System

Date Created: 01/18/2016

Notes: In the auditorium, replace (42) 750 watt incandescent downlights, (11) incandescent wall sconces and (2) downlights in the entrances with LED downlights and wall sconces.

System: D5020 - Lighting and Branch Wiring

Location: Exit discharges

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace lighting fixtures

Qty: 9.00

Unit of Measure: Ea.

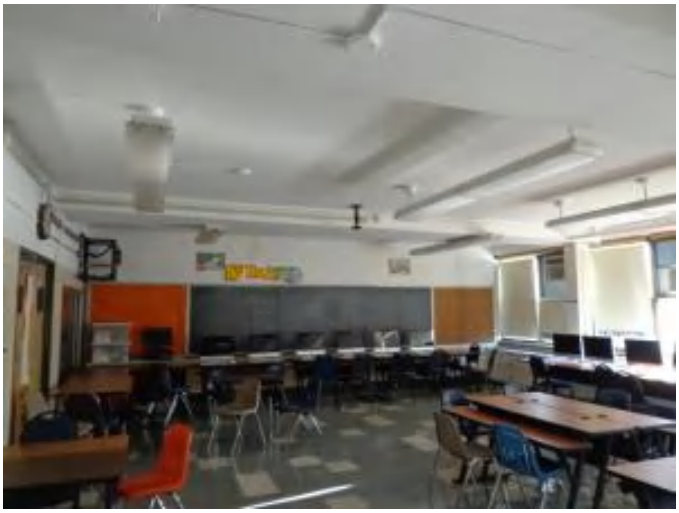
Estimate: $12,087.46

Assessor Name: System

Date Created: 01/18/2016

Notes: Replace all lighting fixtures on the exterior of the building at exit discharges. Add one (1) lighting fixture at exit discharge from Stairway No. 5.

System: D5030 - Communications and Security



Location: Various rooms

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Add fire alarm device

Qty: 15.00

Unit of Measure: Ea.

Estimate: $26,256.56

Assessor Name: System

Date Created: 01/19/2016

Notes: Provide allowance for adding (15) audible/visual fire alarm notification appliances in multiple occupancy rooms that do not have devices.

System: E2010 - Fixed Furnishings

Location: Stage

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $18,507.91

Assessor Name: System

Date Created: 11/01/2015

Notes: The school stage has a stage curtain assembly that appears to be from the original construction. Modern applications are typically fire-proof applications with adjustable tracks and electric support for operation. The curtains are torn in a few section and the track is not functioning properly, overall the system is in poor condition. It is recommended that the curtain and track system be upgraded to a new system. Special care should be considered in regards to modern fire proofing for the new installation.

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

System: B2020 - Exterior Windows

Location: Exterior Elevation

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 350.00

Unit of Measure: Ea.

Estimate: $1,245,222.75

Assessor Name: System

Date Created: 11/01/2015

Notes: Most of the exterior windows have been upgraded from the original applications. As indicated in the photos several of the windows appear to be original. A majority of the window system is estimated to have been installed in the 1990's. Several of the windows no longer work and will require attention prior to an overall effort. Overall, the windows are in fair condition based on the year of installation or last renovation. The entire exterior window system is recommended to be replaced with units that retain their dimensions and profiles, but that incorporate updated energy-efficient features.

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: 24.00

Unit of Measure: Ea.

Estimate: $218,575.70

Assessor Name: System

Date Created: 11/01/2015

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 Rooms

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.

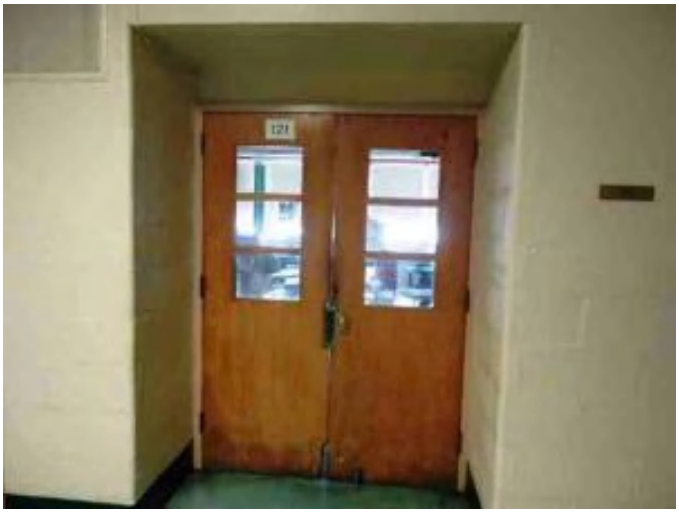
Estimate: $1,763,745.42

Assessor Name: System

Date Created: 11/01/2015

Notes: This schools science labs have been upgraded from the original construction. 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: C1020 - Interior Doors



Location: Classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 250.00

Unit of Measure: Ea.

Estimate: $1,192,646.78

Assessor Name: System

Date Created: 11/01/2015

Notes: Interior doors are typically wood in wood or metal frames with glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames. Doors are generally in fair 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.

System: C1030 - Fittings

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 300.00

Unit of Measure: Ea.

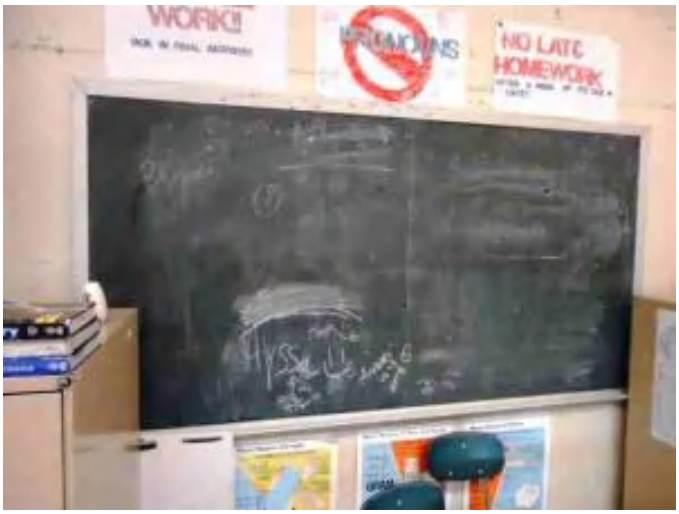
Estimate: $81,273.74

Assessor Name: System

Date Created: 11/01/2015

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: C1030 - Fittings



Location: Classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 100.00

Unit of Measure: Ea.

Estimate: $68,823.21

Assessor Name: System

Date Created: 11/01/2015

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: 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: 30.00

Unit of Measure: Ea.

Estimate: $23,781.77

Assessor Name: System

Date Created: 11/01/2015

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: Gym

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: 11/01/2015

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: 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: 4.00

Unit of Measure: Ea.

Estimate: $30,316.76

Assessor Name: System

Date Created: 02/04/2016

Notes: Replace china drinking fountains with stainless steel water coolers.

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 (150 KSF)

Qty: 168,259.00

Unit of Measure: S.F.

Estimate: $697,781.81

Assessor Name: System

Date Created: 02/04/2016

Notes: Replace domestic water supply piping with insulated rigid copper tubing. Include hangers, valves and supports.

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 instantaneous water heater

Qty: 3.00

Unit of Measure: Ea.

Estimate: $73,420.64

Assessor Name: System

Date Created: 02/04/2016

Notes: Replace three existing instantaneous water heaters with new similar units.

System: D2020 - Domestic Water Distribution

Location: mechanical room

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Provide 3" reduced pressure back flow preventer

Qty: 1.00

Unit of Measure: Ea.

Estimate: $34,306.86

Assessor Name: System

Date Created: 02/04/2016

Notes: Install approved backflow preventer assembly in existing three inch domestic water service line.

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. (+200KSF)

Qty: 168,259.00

Unit of Measure: S.F.

Estimate: $730,239.57

Assessor Name: System

Date Created: 02/04/2016

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

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: 02/04/2016

Notes: Replace condensate return/ boiler feed pump system with new duplex pump unit.

System: D3040 - Distribution Systems

Location: classrooms, offices, IMC

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: 168,259.00

Unit of Measure: S.F.

Estimate: $8,116,673.06

Assessor Name: System

Date Created: 02/04/2016

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: auditorium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace HVAC unit for Auditorium (800 seat).

Qty: 889.00

Unit of Measure: Seat

Estimate: $454,527.17

Assessor Name: System

Date Created: 02/04/2016

Notes: Provide a new central station air handling unit for the auditorium 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.

System: D3040 - Distribution Systems

Location: cafeteria
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 4 - Response Time (4-5 yrs)
Correction: Replace HVAC unit for Cafeteria (850)
Qty: 1,166.00
Unit of Measure: Student
Estimate: $317,387.97
Assessor Name: System
Date Created: 02/04/2016

Notes: Provide a new central station air handling unit for the cafeteria 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.

System: D3040 - Distribution Systems

Location: third floor mechanical
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Replace utility set exhaust fan (5 HP)
Qty: 6.00
Unit of Measure: Ea.
Estimate: $283,794.54
Assessor Name: System
Date Created: 02/04/2016

Notes: Replace six utility exhaust fans in two third floor mechanical rooms.

System: D3040 - Distribution Systems

Location: gymnasiums

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $227,475.37

Assessor Name: System

Date Created: 02/04/2016

Notes: Provide a new central station air handling unit for each of the two gymnasiums and two locker rooms (total four) 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.

System: D3040 - Distribution Systems

Location: gymnasiums

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $227,475.37

Assessor Name: System

Date Created: 02/04/2016

Notes: Provide a new central station air handling unit for each of the two gymnasiums and two locker rooms (total four) 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.

System: D3040 - Distribution Systems

Location: locker room

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $227,475.37

Assessor Name: System

Date Created: 02/04/2016

Notes: Provide a new central station air handling unit for each of the two gymnasiums and two locker rooms (total four) 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.

System: D3040 - Distribution Systems

Location: locker room

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 6,000.00

Unit of Measure: S.F.

Estimate: $227,475.37

Assessor Name: System

Date Created: 02/04/2016

Notes: Provide a new central station air handling unit for each of the two gymnasiums and two locker rooms (total four) 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.

System: D3060 - Controls & Instrumentation

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (150KSF)

Qty: 168,259.00

Unit of Measure: S.F.

Estimate: $3,013,756.07

Assessor Name: System

Date Created: 02/04/2016

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: 168,259.00

Unit of Measure: S.F.

Estimate: $2,407,019.38

Assessor Name: System

Date Created: 02/04/2016

Notes: Install NFPA wet pipe automatic sprinkler system in entire building, including fire service, piping sprinkler heads, standpipes and fire pump if required.

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: 1,380.00

Unit of Measure: L.F.

Estimate: $191,546.13

Assessor Name: System

Date Created: 01/18/2016

Notes: Provide surface metal raceway system with 6 to 8 duplex receptacles in each of 46 classrooms.

System: D5030 - Communications and Security

Location: Building wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Provide wireless GPS clock system

Qty: 1.00

Unit of Measure: LS

Estimate: $50,656.90

Assessor Name: System

Date Created: 01/19/2016

Notes: Remove all clocks and provide wireless GPS clock system with battery operated synchronized clocks (estimate 85 clocks).

System: E1020 - Institutional Equipment

Location: Stage

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Replace dimmer control board

Qty: 1.00

Unit of Measure: Ea.

Estimate: $148,119.03

Assessor Name: System

Date Created: 01/18/2016

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

System: E1090 - Other Equipment

Location: Loading Dock

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Loading dock equipment - remove and replace dock leveler - delete the pipe bollards if not needed

Qty: 1.00

Unit of Measure: Ea.

Estimate: $29,715.32

Assessor Name: System

Date Created: 11/01/2015

Notes: The loading dock is from original construction and in poor condition. The loading dock system is recommended for upgrade to include new concrete work and railing replacement. This deficiency is expected to be completed as part of an effort to upgrade this area and should be coordinated with other loading dock projects.

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: 900.00

Unit of Measure: Ea.

Estimate: $811,714.96

Assessor Name: System

Date Created: 11/01/2015

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: C3020411 - Carpet

Location: Conference Room and Admin Area

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace carpet

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $33,572.29

Assessor Name: System

Date Created: 11/01/2015

Notes: The interior carpet finish was installed approximately in 2000 and is in fair condition considering the age and high traffic conditions. This finish will exceeded its expected life within the next five years and is recommended for removal and replacement.

System: C3020413 - Vinyl Flooring

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 120,000.00

Unit of Measure: S.F.

Estimate: $1,820,000.16

Assessor Name: System

Date Created: 11/01/2015

Notes: The floor finish for this school is a combination of carpet in the administrative area, tile in the kitchen and service line areas, a few wooden classrooms with vinyl tile hallways and stirs finishes and a vinyl tile classroom finish. The vinyl tile finish is a 9 x 9 application and is suspect to contain asbestos. This finish is recommended for upgrade to a new 12 x 12 vinyl tile application.

System: D1010 - Elevators and Lifts

Location: Building Wide

Distress: Accessibility

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Add interior hydraulic elevator - 3 floors - adjust the electrical run lengths to hook up the elevator

Qty: 2.00

Unit of Measure: Ea.

Estimate: $995,503.49

Assessor Name: System

Date Created: 11/01/2015

Notes: There is no elevator that services this school. Goods, services, and amenities offered in public buildings are generally required to be available to all persons. To assist those that may be physically challenged and to meet current accessibility legislation to provide wheelchair access to the upper floors of this facility, the installation of two new hydraulic elevators is recommended on the exterior elevation of the building or at another suitable location. The new installations should blend as much as possible with the overall appearance of this structure and include all required ADA features, such as audible jewels and gongs, an accessible control panel, etc.

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. (+150KSF)

Qty: 168,259.00

Unit of Measure: S.F.

Estimate: $2,798,415.62

Assessor Name: System

Date Created: 02/04/2016

Notes: Provide a four hundred eighty ton chilled water system with air cooled package chillers on the roof with pumps, piping and controls. Connect to new unit ventilators and air handling units. Include controls and electrical connections.

System: E1020 - Institutional Equipment

Location: Gym

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace or install basketball backstop and hoop - pick the appropriate style of backstop

Qty: 8.00

Unit of Measure: Ea.

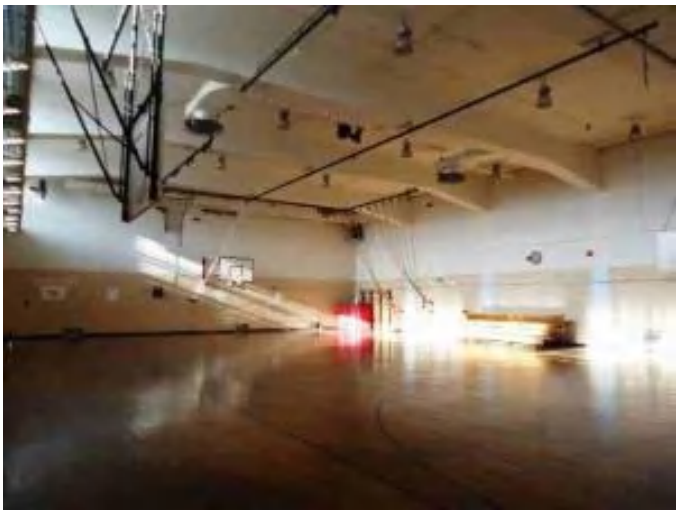
Estimate: $60,587.28

Assessor Name: System

Date Created: 11/01/2015

Notes: The boys and girls Gyms are the main sports areas for this school. The old Gyms are still used as either a student common area or practice court. The interior backboards and support equipment is beyond its service life. Damaged boards are recommended for removal and replacement.

System: E1020 - Institutional Equipment



Location: Gym

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace or install new scoreboard - pick the appropriate scoreboard

Qty: 2.00

Unit of Measure: Ea.

Estimate: $9,530.89

Assessor Name: System

Date Created: 11/01/2015

Notes: The practice Gyms or Boy's and Girl's Gyms each have a single scoreboard that appears to be from the early 1950's. This deficiency provides a budgetary consideration for the removal and replacement of each scoreboard.

Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D3020 Heat Generating Systems	Boiler, packaged scotch marine, fire tube, gross output, #2 oil, 15 PSI steam, 10,044 MBH, 300 H.P.	1.00	Ea.	mechanical room	burnham	3l30050gopf	24039		35	1996	2031	$186,539.00	$205,192.90
D3020 Heat Generating Systems	Boiler, packaged scotch marine, fire tube, gross output, #2 oil, 15 PSI steam, 10,044 MBH, 300 H.P.	1.00	Ea.	mechanical room	burnham	3l30050gopf	24040		35	1996	2031	$186,539.00	$205,192.90
D3020 Heat Generating Systems	Boiler, packaged scotch marine, fire tube, gross output, #2 oil, 15 PSI steam, 10,044 MBH, 300 H.P.	1.00	Ea.	mechanical room	burnham	3l30050gopf	24041		35	1996	2031	$186,539.00	$205,192.90
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 600 A, 1 stories, 25' horizontal	2.00	Ea.	Boiler Room 015	Cutler Hammer	Type PRL3A	NA		30			$18,536.85	$40,781.07
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 600 A, 1 stories, 25' horizontal	3.00	Ea.	Boiler Room 015	Penn Panel & Box Company	NLAB-24-4L	B5364851		30			$18,536.85	$61,171.61
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 600 A, 1 stories, 25' horizontal	1.00	Ea.	Main Electrical Room	Penn Panel & Box Company		C776196		30			$18,536.85	$20,390.54
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 1600 A	9.00	Ea.	Main Electrical Room	Penn Panel & Box Company	NA	NA		30			$40,458.15	$400,535.69
												Total:	**$1,138,457.61**

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):	222,400
Year Built:	1953
Last Renovation:	
Replacement Value:	$4,185,682
Repair Cost:	$917,379.21
Total FCI:	21.92 %
Total RSLI:	51.68 %

Description:

Attributes:

General Attributes:

Bldg ID:	S610001	Site ID:	S610001

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	37.63 %	24.21 %	$779,043.09
G40 - Site Electrical Utilities	98.41 %	14.30 %	$138,336.12
Totals:	**51.68 %**	**21.92 %**	**$917,379.21**

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	$7.65	S.F.	30,000	30	1953	1983	2027	40.00 %	184.85 %	12		$424,227.18	$229,500
G2030	Pedestrian Paving	$11.52	S.F.	166,900	40	1953	1993	2027	30.00 %	0.00 %	12			$1,922,688
G2040	Site Development	$4.36	S.F.	222,400	25	1953	1978	2027	48.00 %	36.59 %	12		$354,815.91	$969,664
G2050	Landscaping & Irrigation	$3.78	S.F.	25,500	15	1953	1968	2027	80.00 %	0.00 %	12			$96,390
G4020	Site Lighting	$3.58	S.F.	222,400	30	1953	1983	2047	106.67 %	17.37 %	32		$138,336.12	$796,192
G4030	Site Communications & Security	$0.77	S.F.	222,400	20	1953	1973	2027	60.00 %	0.00 %	12			$171,248
								Total	**51.68 %**	**21.92 %**			**$917,379.21**	**$4,185,682**

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.

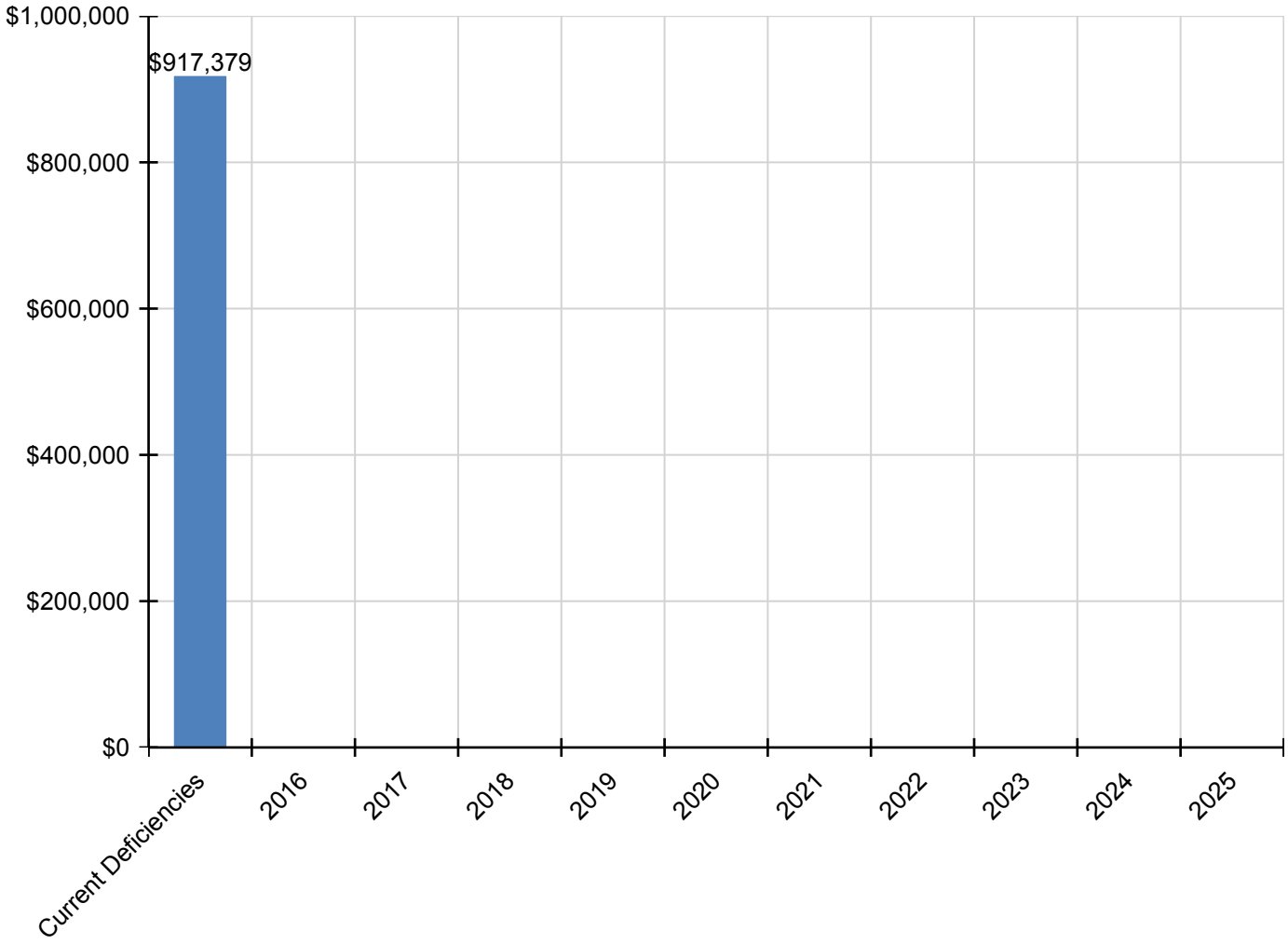
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$917,379**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$917,379**
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	$424,227	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$424,227**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040 - Site Development	$354,816	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$354,816**
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	$138,336	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$138,336**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

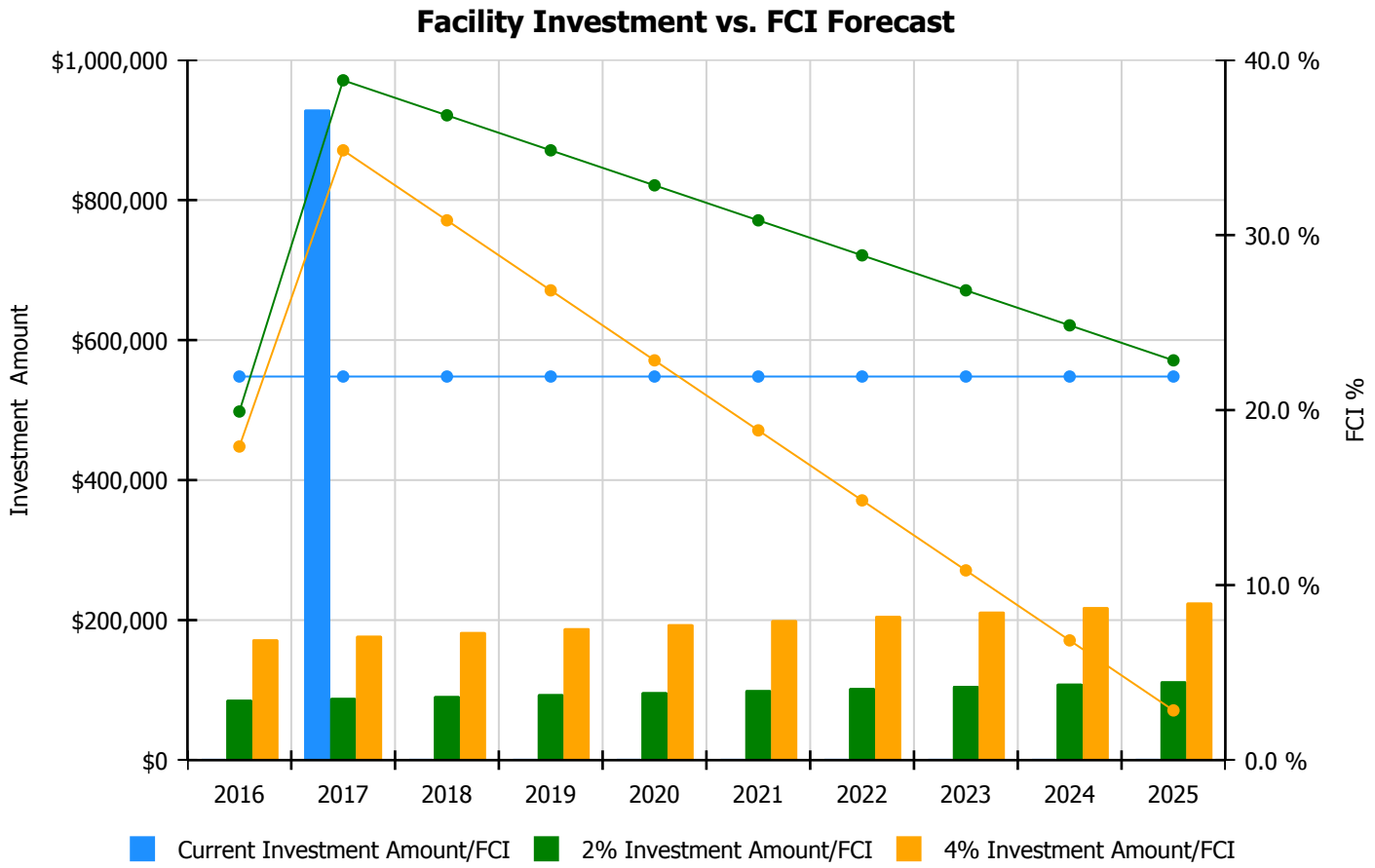
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

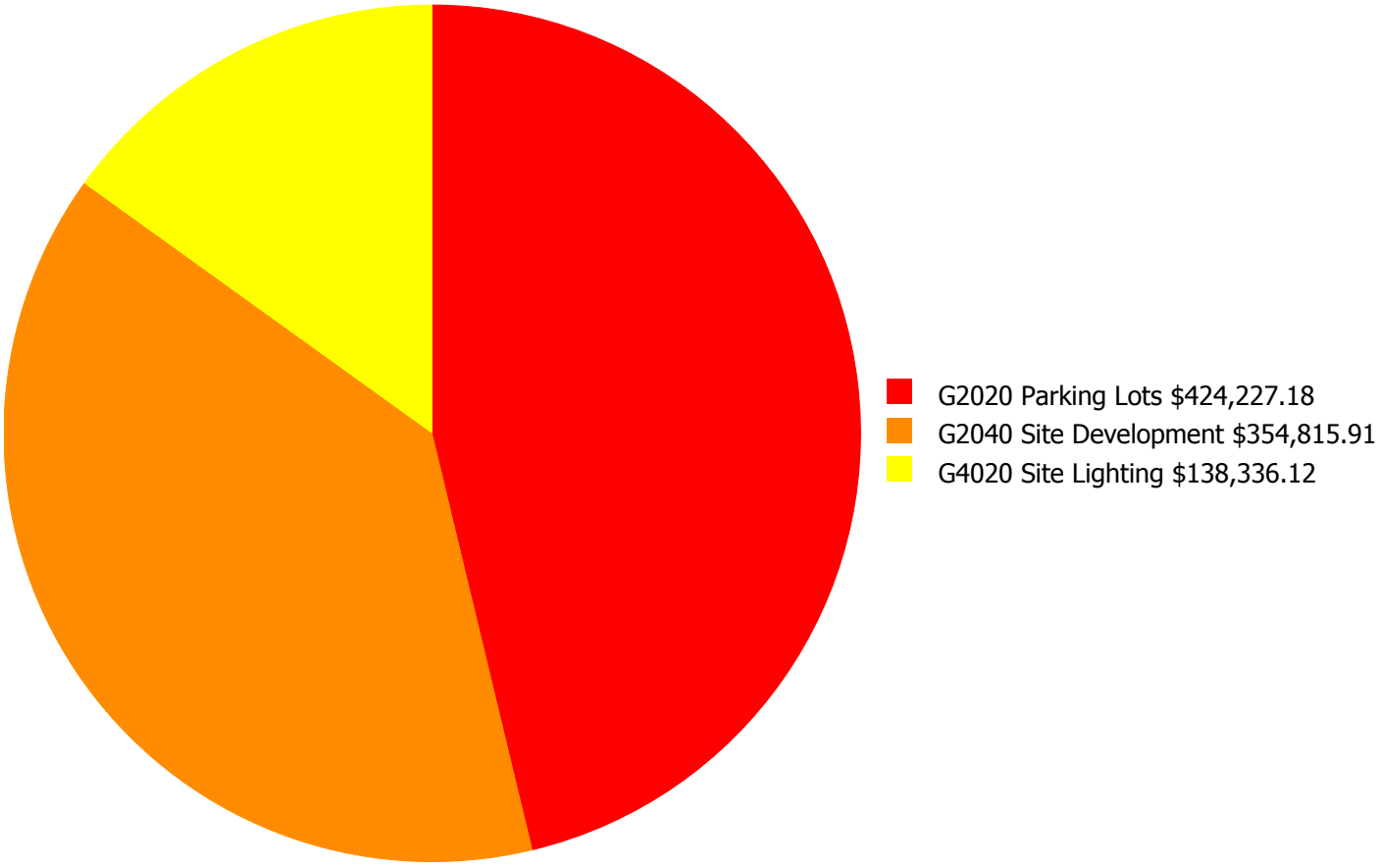
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 21.92%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$86,225.00	19.92 %	$172,450.00	17.92 %
2017	$929,148	$88,812.00	38.84 %	$177,624.00	34.84 %
2018	$0	$91,476.00	36.84 %	$182,952.00	30.84 %
2019	$0	$94,220.00	34.84 %	$188,441.00	26.84 %
2020	$0	$97,047.00	32.84 %	$194,094.00	22.84 %
2021	$0	$99,958.00	30.84 %	$199,917.00	18.84 %
2022	$0	$102,957.00	28.84 %	$205,914.00	14.84 %
2023	$0	$106,046.00	26.84 %	$212,092.00	10.84 %
2024	$0	$109,227.00	24.84 %	$218,455.00	6.84 %
2025	$0	$112,504.00	22.84 %	$225,008.00	2.84 %
Total:	**$929,148**	**$988,472.00**		**$1,976,947.00**	

Deficiency Summary by System

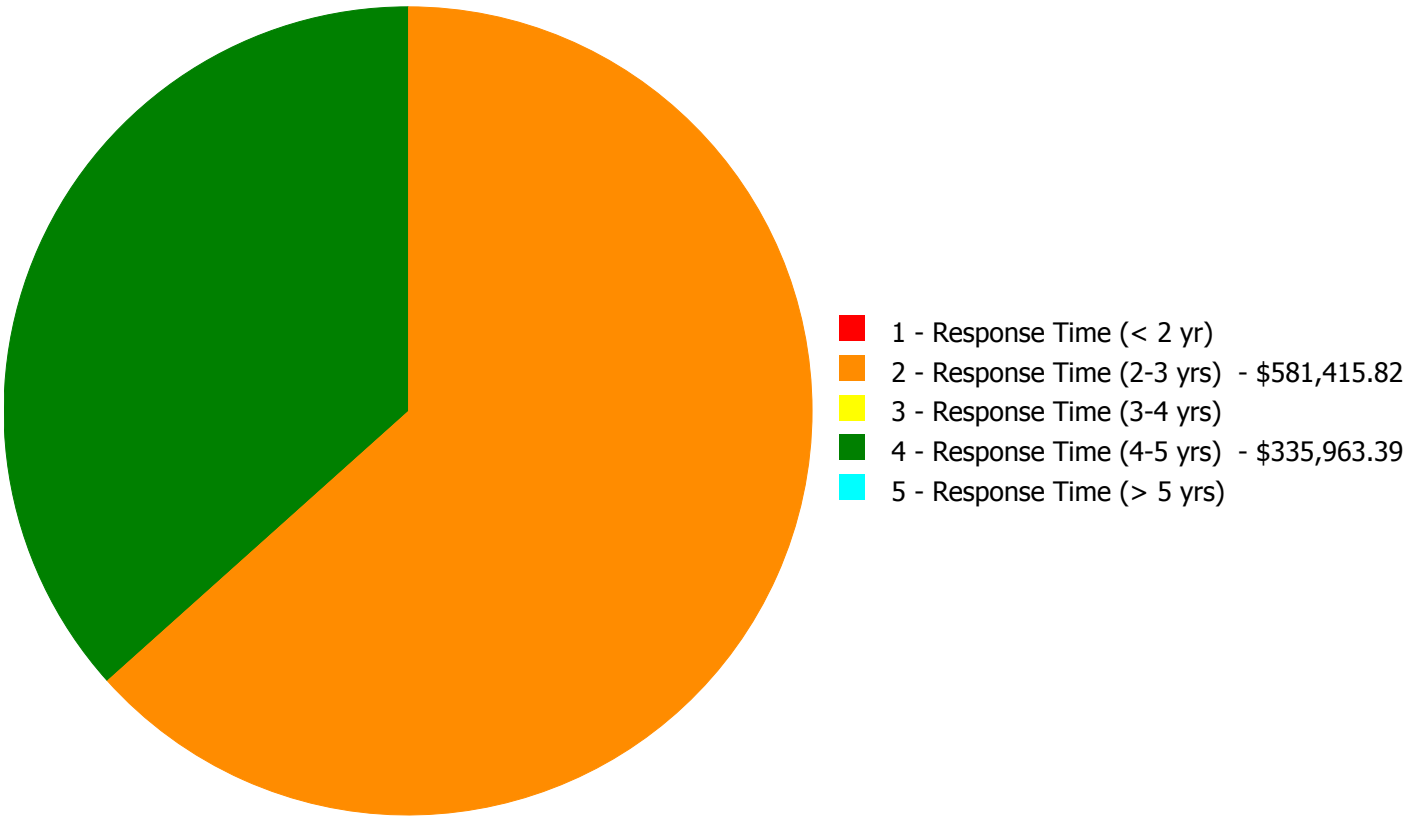
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $917,379.21

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: $917,379.21

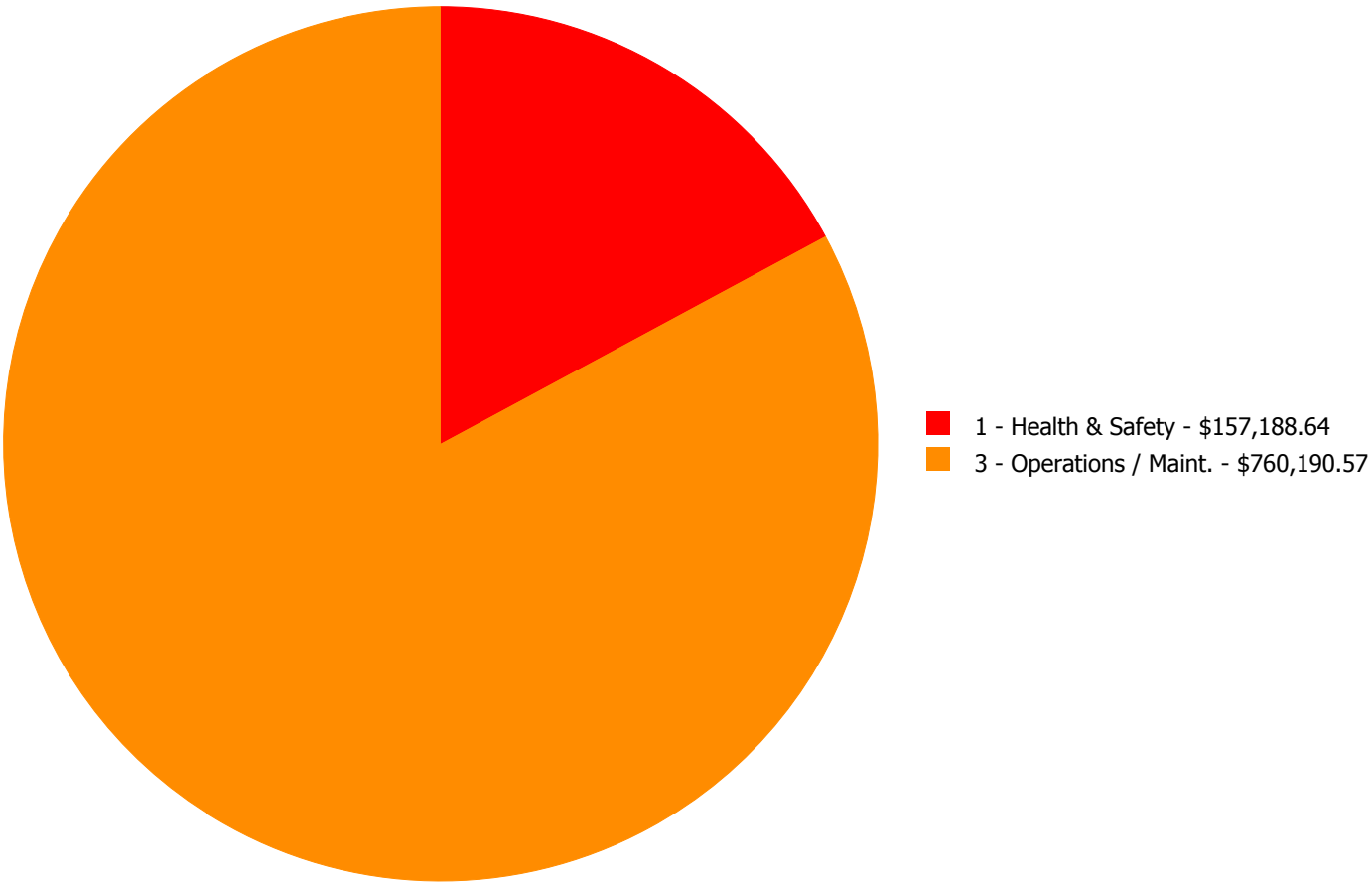
Deficiency By Priority Investment Table

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	$424,227.18	$0.00	$0.00	$0.00	$424,227.18
G2040	Site Development	$0.00	$18,852.52	$0.00	$335,963.39	$0.00	$354,815.91
G4020	Site Lighting	$0.00	$138,336.12	$0.00	$0.00	$0.00	$138,336.12
	Total:	$0.00	$581,415.82	$0.00	$335,963.39	$0.00	$917,379.21

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: $917,379.21

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: G2020 - Parking Lots

Location: Site
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Remove and replace AC paving parking lot
Qty: 30,000.00
Unit of Measure: S.F.
Estimate: $424,227.18
Assessor Name: Gerald Petric
Date Created: 11/01/2015

Notes: The parking play area has no assigned parking and limited markers for approved activity areas. No curb cuts for access to the sidewalks that lead to the ADA main entrance. The parking play lot is in fair condition, the harsh environmental conditions associated with snow removal have taken its toll on the asphalt surface. Also, there is no marked path of ingress to the main entrance. This project provides a budgetary consideration for a play, parking lot renewal program that includes all aspects of the current ADA legislation. Asphalt removal and replacement is recommended.

System: G2040 - Site Development

Location: Site
Distress: Health Hazard / Risk
Category: 1 - Health & Safety
Priority: 2 - Response Time (2-3 yrs)
Correction: Build secure trash dumpster enclosure
Qty: 1.00
Unit of Measure: Ea.
Estimate: $18,852.52
Assessor Name: Gerald Petric
Date Created: 11/01/2015

Notes: The trash dumpster is located near the southwestern fence open to the students and to the public. The exterior services are not protected. Upgrades to protect the exterior services and trash area are recommended.

System: G4020 - Site Lighting

Location: Site

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Site Lighting - pole mounted - select the proper light and pole

Qty: 5.00

Unit of Measure: Ea.

Estimate: $138,336.12

Assessor Name: Gerald Petric

Date Created: 01/19/2016

Notes: Provide five (5) site lighting poles with multiple LED floodlighting fixtures per pole to illuminate paved play and parking areas on the north and west side of the site.

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

System: G2040 - Site Development

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace chain link fence - 8' high

Qty: 3,000.00

Unit of Measure: L.F.

Estimate: $335,963.39

Assessor Name: Gerald Petric

Date Created: 11/01/2015

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.

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