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.

Pennell School

Governance	DISTRICT	Report Type	Elementary
Address	1800 Nedro Ave.	Enrollment	410
	Philadelphia, Pa 19141	Grade Range	'00-05'
Phone/Fax	215-276-5267 / 215-549-4562	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Pennell	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	**60.92%**	**$21,901,496**	**$35,949,145**
Building	58.92 %	$20,247,599	$34,366,582
Grounds	104.51 %	$1,653,897	$1,582,563

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	89.59 %	$508,230	$567,300
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.00 %	$0	$2,602,081
Windows (Shows functionality of exterior windows)	132.07 %	$1,676,853	$1,269,669
Exterior Doors (Shows condition of exterior doors)	158.40 %	$161,922	$102,222
Interior Doors (Classroom doors)	424.14 %	$1,049,529	$247,448
Interior Walls (Paint and Finishes)	82.06 %	$677,388	$825,479
Plumbing Fixtures	04.77 %	$45,475	$953,133
Boilers	84.61 %	$1,113,599	$1,316,198
Chillers/Cooling Towers	65.60 %	$1,132,165	$1,725,791
Radiators/Unit Ventilators/HVAC	138.15 %	$4,187,043	$3,030,709
Heating/Cooling Controls	158.90 %	$1,512,330	$951,723
Electrical Service and Distribution	159.95 %	$1,093,818	$683,831
Lighting	51.89 %	$1,268,679	$2,444,871
Communications and Security (Cameras, Pa System and Fire Alarm)	49.55 %	$453,783	$915,769

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.

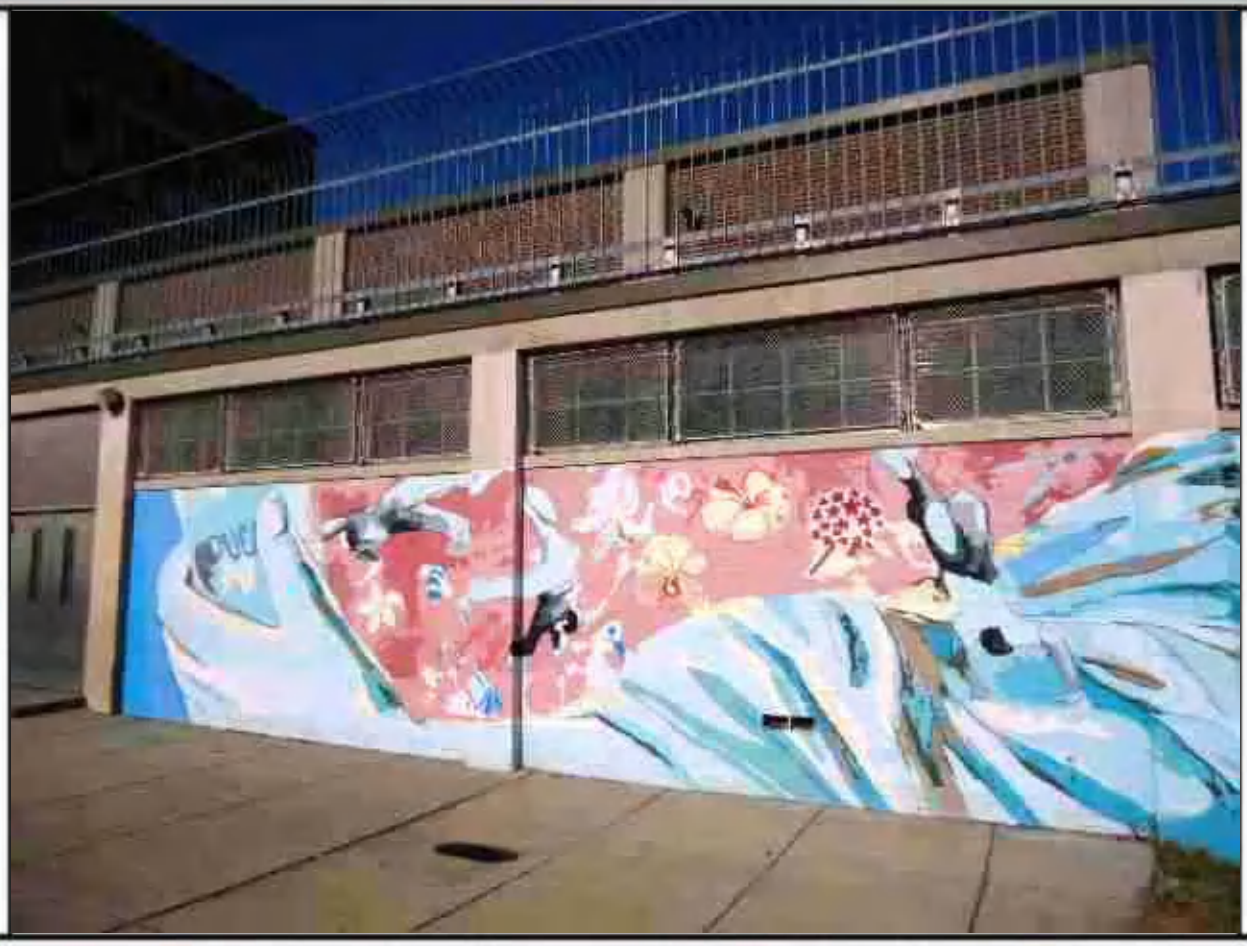
School District of Philadelphia

S634001;Pennell

Final

Site Assessment Report

January 31, 2017



PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	70,498
Year Built:	1927
Last Renovation:	
Replacement Value:	$35,949,145
Repair Cost:	$21,901,495.92
Total FCI:	60.92 %
Total RSLI:	62.01 %

Description:

Facility Assessment

December 2015

School District of Philadelphia

Joseph Pennell Elementary / Joseph Pennell School

1800 Nedro Ave.

Philadelphia, PA 19141

70,498 SF / 517 Students / LN 06

GENERAL

The Joseph Pennell is one of the older schools in service to the Philadelphia communities and has a dedication plaque in the library,

The Joseph Pennell Memorial Library. This historic school is identified as B634001 and was originally designated as the Joseph Pennell High School. This school was closed for a year between 2010 and 2012. Located at 1800 Nedro Avenue, Philadelphia, PA., the late Gothic Revival design of the E-shaped, concrete and steel-framed building includes brick facades with a concrete foundation. Constructed in 1926-1927 the school has had one addition to the west of the main building. This addition is currently being used as the Pre-K center.

As indicated in the Historical Register: "Joseph Pennell School is a historic school building located in the Belfield neighborhood of Philadelphia, Pennsylvania. It was designed by architect Irwin T. Catharine (1883-1944) and built in 1926-1927. It is a three-story brick building, nine bays wide with projecting end bays in the Late Gothic Revival-style. An addition was built in 1954. It is named for illustrator Joseph Pennell (1857-1926)." It was added to the National Register of Historic Places in 1988.

The main entrance faces the Northern exterior with general access from the parking area west of the main entrance. This School serves students in grades Pre-K to 8 and has a basement with three stories consisting of a total gross square footage of 70,498 GSF.

This school has several classrooms, a library, kitchen and student commons, Gyms, Auditorium and cafeteria, with supporting administrative spaces.

The information for this report was collected during a site visit on December 8, 2015.

Mr. Clyde Alford, Building Engineer, and Mr. Kevin Curry, Facilities Area Coordinator, accompanied the assessment team on a tour of the school and provided detailed information on the building systems and maintenance history. Mr. Jason Harris, Principal, also shared information about the school with the assessment team.

Architectural / Structural Systems

The exterior brick surfaces are generally in fair to good condition for their age. This schools exterior brick surface was recently included in the mural project for Philadelphia. It was reported that the repointing took place prior to the new exterior paintings. There were no issues with the exterior brick surface during the time of the inspection, therefor 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. Most of the doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The service doors on the roof have expired and failed compromising access to elevator rooms and tower rooms. The exterior door system, store front and service doors are recommended for upgrade.

In regards to the exterior doors at the main entrance please note the possible safety issue of a pinch point between the door and the stair. Care should be taken to address this minor safety issue. Several exit doors that are only used in an emergency. The doors open onto the sidewalks for proper egress. The egress path were not constructed with the physically challenged in mind as it requires one to traverse stairs or pads for egress. Care should be taken to ensure that the doors and concrete pads are reviewed for proper egress for those that may be physically challenged and also to remove any pinch points that exist from the pads being too short.

There are a number of roof sections and different roof elevations ranging from the main roof to the addition roof. Parapet heights, coping materials, and the height of the flashing also varies in different sections. The main roof is a built up application that was installed in the early 1990'S. The other built up roofs have not conclusive installation dates and have been seal coated several times to extend the life cycle of the application. During the time of the inspection it was reported that several leaks are active and a consistent repair program is consuming efforts to maintain the roof. Considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections. This deficiency is expected to be completed as part of an exterior effort coordinated with other recommendations included in this report.

Special consideration for those that may be physically challenged was not a main factor in the construction of the addition or the main building. Currently there is no compliant entrance at grade however, there is a partially complaint exterior ramp for access to the Eastern exterior entrance. The path of travel is not clear from the access points as the interior path of travel is limited in support. Several issues such as the lack of interior ramps, elevator, compliant signage, restrooms amities, compliant door hardware,

hand rails and guard rails to meet the needs of the physically challenged. The main building will require several upgrades to meet the needs of the physically challenged.

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

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

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

Interior doors are typically wood in wood frames with transom lites, sidelights, wired glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames at stairwells and exit ways. Doors are generally in good 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 hollow metal door system with consideration for ADA compliance.

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

The classroom chalk boards are covered with temporary white boards in several rooms. There are several classrooms with the original chalk boards. This system is beyond its expected life and universal upgrades are warranted. Remove and upgrade chalkboards 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.

There are painted walls, trim, and some painted ceilings in this building. Sections of the building, some textured concrete surfaces have been painted as well. The interior finishes are in fair to poor condition depending on the location of the finish. For example due to recent roof leaks over the auditorium several areas will require repair and repainting. Also, sections of the fifth floor are damaged due to neglect. This school will require an almost continuous program of renewal of the applied finishes to maintain an acceptable appearance. Cyclical painting should be considered for a standard approach to maintaining the quality of the interior finishes. It is recommended that all previously painted surfaces be repainted according to established cycles for this occupancy and use type. Minor repairs should be completed before work begins. The abandoned section of the fifth floor is expected to require major repairs and additional efforts to restore the finishes. This effort is expected to be coordinated with other mechanical electrical efforts in order to prevent overlapping efforts.

The marble wall finish that appears to be from the original construction. This finish is well maintained and there were no issues that surfaced during the time of the inspection, therefore no recommendations are required at this time.

The hallways, stair landings and mechanical spaces have a sealed concrete finish. The hallway concrete finish is diamond cut and placed as 24x24 inch sections. As indication in the photos most of the finish is in good condition. However what is not apparent in the photos is that several of the sections are lose and require re-grouting and in some places replacement. This deficiency provides a budgetary consideration for section by section repairs to the concrete floors and consideration for refinishing work once repairs are complete.

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.

This school has sections of 12x12 floor tile that represents upgrades and abatement of the 9x9 tile. In some cases the 12x12 was used to cover the wooden floor finish. However, suspected asbestos containing materials (ACM) are believed to be limited to the original vinyl floor tile and mastic. While currently sound and manageable in place, future renovation efforts should include provision

to test and abate any and all ACM.

The classrooms in this school have a wood floor finish that appears to be from original construction. Other sections of wood flooring is showing signs of age such as the effects of sanding and refinishing with yearly cleaning and waxing with some repairs. Most of the floor finish is in fair condition however, the finish is beyond its expected life cycle. It is recommended that the wooden floor finish be removed and replaced with an in kind finish.

The ceiling finish is a mix of 12 x 12 ceiling grid, painted and 2 x 4 Acoustical tile finish. Ceilings have been repaired in several areas and is in good condition considering the age of the application and the current condition of the school. The ceiling finish is expected to require upgrades to support the recommended mechanical electrical efforts in this report. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finish to a new acoustical tile finish. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

The 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 lever flush valves. Custodial areas have cast iron service sinks. There are some older china drinking fountains with no refrigeration. There are several domestic water heaters. One in the mechanical room is an AO Smith eighty five gallon gas unit with a small inline circulating pump installed in 1998. The kitchen has a fifty gallon Bradford White electric heater and the pod toilets have separate twenty gallon Bradford White electric heaters. There is a domestic water booster pump system with two vertical ten hp pumps. The system is reportedly not needed to maintain building pressure. A single end suction pump is piped to a sump for ground water removal. Kitchen waste is piped to an above floor grease trap.

Water piping has been replaced since the original installation with copper. Sanitary, waste, vent and rainwater piping is original installation hub and spigot cast iron. The building has two water services. One is a four inch line and meter from W. Nedro Ave. into the mechanical room and includes a backflow preventer. The other service is a three inch line with backflow preventer into the kitchen.

The water heaters should be serviceable for ten more years. 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. The domestic water piping has been replaced but may have lead solder based on age, and should be replaced based on appearance and condition. The plumbing fixtures were replaced in 1998 and should be serviceable twenty more years.

HVAC-Heating is generated by two Weil Mclain one hundred thirty five hp sectional cast iron low pressure steam oil fired boilers in the basement mechanical room. The boilers are older model 94 and reportedly installed in 1972. One unit has been inoperable for over a year and has leaks in the sections. Units have Power Flame burners and separate oil pumps. The burners were replaced in 2007. There is a duplex sump condensate receiver and a separate cast iron condensate receiver. There is a combustion air louver and dampers and a field fabricated uninsulated boiler vent into a brick chimney. Oil is stored in a ten thousand gallon underground oil storage tank in a paved area. A duplex fuel oil pump system in an adjacent room provides circulation.

Some original building classrooms have unit ventilators with steam coils. Other spaces are heated by exposed steam radiators with pneumatic control valves and traps. There are two house fan systems in the basement that provided heat and ventilation through a central duct system and vertical shafts, which are now inoperable. The auditorium has radiators and unit ventilators and no air distribution. The two classroom pod addition has Nesbitt unit ventilators.

There is no central air conditioning or separate system for any area, except there are a few window air conditioners and a ductless split system for the IT room, with an exterior wall mounted condensing unit. There is no kitchen hood or cooking. There is a mechanical toilet exhaust system in the original building with three roof fans and one in the attic. Toilet rooms in the pod toilets have

small wall fans.

There are older pneumatic controls that are inoperable but no central controls or automation system.

The boilers are in bad condition and have exceeded the service life. Both are recommended to be replaced. The steam piping and radiators are from original construction and should be replaced based on age and condition. The piping insulation in the mechanical room is in bad condition and some steam valves are leaking. The condensate return and boiler feed system has exceeded service life and should be replaced. The unit ventilators are in bad condition and should be replaced.

FIRE PROTECTION- There are no sprinklers in this building. The fire stair has a dry standpipe with exterior fire department connection.

ELECTRICAL SYSTEMS

Electrical Service-- The building is served by PECO Energy Company with underground 120/240V, 2 phase, 5 wire service routed from an overhead line along W. Nedro Avenue through a current transformer cabinet to a 600A service entrance disconnect switch in Mechanical Room 020. The service entrance switch supplies a 600A, 120/240V, 2 phase, 5 wire, two section, knife blade fusible type panelboard with exposed busing in Room 020, which feeds panelboards on each floor.

There is a knife blade, fusible type panelboard with exposed busing located adjacent to the current transformer cabinet. There are two 100A panelboards, seven (7) motor controllers for mechanical equipment and a 25 kVA phase change transformer in Mechanical Room 020. There is a 75 kVA phase change transformer in Boiler Room 001 that feeds the 225A Boiler Room Panelboard.

All of this service and distribution equipment has served its useful life. Replacement is recommended within the next 2 to 3 years. Consideration should be given to replacing the 600A, 120/240V, 2 phase, 5 wire service with a 208/120V, 3 phase, 4 wire service, with a 1000 kVA packaged unit substation, consisting of a load interrupter switch, transformer and 3000A Main Switchboard to serve existing loads with capacity for central air conditioning equipment, a hydraulic elevator addition, and a fire pump (if required). Also, replace the panelboards and motor controllers in Mechanical Room 020 and Boiler Room 001, as noted above, and nine (9) panelboards throughout the building. The phase change transformers would not be required when the service is replaced.

Based on panelboards installed in other schools in this same time period, feeder conductors within the panelboard enclosures may be wrapped with asbestos insulation. An allowance is included in this report to abate asbestos wrapped feeder conductors in nine (9) panelboards. Abatement is required before panelboards are replaced.

The separate building that houses the two kindergarten classrooms is served by an 120/240V, 1 phase overhead service drop by PECO Energy Company to a pole located on the north side of the building. Service is routed underground to a 200A service entrance disconnecting means in the north classroom and feeds a 200A panelboard. There is also a panelboard in the second classroom. Both panelboards in the two kindergarten classrooms were installed in 2000 and have a remaining useful life of 15 years.

Receptacles-- Classrooms are provided with very few duplex receptacles. An additional 6 to 8 duplex receptacles should be provided in 31 classrooms using surface metal raceway. Due to the age of the wiring devices, all duplex receptacles in the building should be replaced with new devices and branch circuit wiring. An estimated 140 duplex receptacles are included for replacement.

Lighting-- Lighting fixtures in the basement, stairwells, restrooms and areas without ceilings are typically surface mounted 2x4 modular fluorescent or wraparound fixtures with acrylic prismatic lenses. Corridors, classrooms, IMC and other rooms with lay-in grid acoustical ceiling tile (ACT) have 2x4 recessed fluorescent grid troffers. Except for restrooms, all fluorescent fixtures have obsolete T12 lamps and have served their useful life. Lighting in classrooms is controlled by two wall switches; there are no occupancy sensors for lighting control.

The gymnasium is illuminated with (24) 8 foot, strip fixtures with (4) T12 lamps and wire guards. These fixtures are showing their age and should be replaced within the next 3 to 4 years. Lighting is controlled by multiple wall switches.

The auditorium is illuminated with (20) pendant mounted incandescent fixtures that are beyond their useful life and no longer in style. Replacement with pendant fixtures using LED lamps is recommended for energy efficiency and reduced maintenance cost. There are eight (8) surface mounted prismatic lens fixtures along the walls used for emergency lighting. These fixtures should be replaced with LED type, or completely removed if the pendant LED replacement fixtures is used for emergency lighting.

The platform in the auditorium has two (2) rows of theatrical batten lighting and two (2) surface mounted globe type worklights. There is no dimming system for the platform and auditorium. Lighting is controlled by branch circuit breakers in the panelboards on the platform. Replacement of theatrical lighting and worklights is recommended in 3 to 4 years.

Shallow dome incandescent fixtures are located in the Basement mechanical room and Boiler Room.

Except for two exit discharges, exterior wall mounted lighting fixtures are located above or adjacent to the exterior doors. Fixtures at the Visitor Entrance are in good condition; all other fixtures are in poor condition or damaged. Floodlighting fixtures are wall mounted to illuminate play and parking areas. These fixtures are showing signs of their age; replacement is recommended within 4 years.

Fire Alarm System-- The fire alarm system is an obsolete 120V wired system that includes only manual pull stations and bell notification appliances. The fire alarm control panel (FACP) is located in the Basement. Pull station mounting heights exceed ADA requirements. There are no visual notification appliances in the building. The entire fire alarm system needs to be replaced with an addressable type to meet current NFPA codes and ADA requirements.

Telephone/LAN--The demarcation point is located in Boiler Room 001. The Main Distribution Frame (MDF) and telephone distribution system is located in Room 205A. The room was locked and not accessible at the time of this assessment. A telephone is provided in each classroom. Hard wired data outlets are also provided in classrooms. Wireless access points are provided in classrooms, IMC, offices, auditorium and gymnasium for Wi-Fi service throughout the entire school.

Intercom/Paging/Sound Systems-- The paging system is accessed through the telephone system. The paging amplifier is located in MDF Room 205A to provide paging interface with the telephone system. Recessed ceiling speakers are located in the corridors and classrooms. The obsolete wall mounted speakers in the corridors have been abandoned in place.

Wall mounted speakers are located in the auditorium and gymnasium. This system is estimated to have a remaining useful life of 8 to10 years.

The sound system for the auditorium was reported by the Building Engineer as not functional. A portable sound system is used. The Visitor Entrance has an Aiphone intercom station with communication to the Main Office.

Clock and Program System--The program system controller is located in the Main Office. It is beyond its useful service life; replacement is recommended within 2 years. Ceiling or wall mounted speakers are provided throughout the building for paging and program. Clocks or clock/speaker assemblies are provided in classrooms, auditorium, gymnasium and offices but are not operational. 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 in this school.

Video Surveillance and Security Systems-- The video surveillance equipment cabinet is located in Room 104 and consists of one (1) 16 channel digital video recorder (DVR), a transceiver hub and one (1) monitor. There is also one (1) monitor in the Main Office. There are a total of 15 video surveillance cameras, including four (4) exterior cameras. Cameras were reported to be near end of their life and need to be replaced. There are no cameras located in corridors on Floors 1, 2 and 3. An allowance is included in this report to add two (2) cameras on each of Floors 1, 2 and 3, and add one (1) DVR, and to replace existing video surveillance cameras, DVR and monitors.

Some exterior and stairwell doors are provided with magnetic door contacts. A security keypad is located at the Visitor Entrance to arm/disarm the system.

Emergency Power System-- The standby power system consists of a Kohler 10 kW/10 kVA, 120/240V, 1 phase standby generator, a 75A Zenith automatic transfer switch and a 100A emergency panelboard. The system is beyond its service life. The generator replacement should be sized with capacity to supply a hydraulic elevator addition.

Emergency Lighting System / Exit Lighting-- Emergency egress lighting and exit lighting is supplied by the standby emergency generator. Exit signs are generally in poor condition; recommend replacement of all exit signs with LED type.

The two kindergarten classrooms in the separate building are not served with emergency power from the main school building. Provide an allowance to add four (4) battery-operated emergency lighting units and three (3) battery type exit signs.

Lightning Protection System--There is a lightning protection system with aluminum air terminals and roof conductors for the highest roof level of this building.

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

recommendations.

GROUNDS

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

The trash dumpster is located south of the main building enclosed by site fencing but open to students. The exterior services are not protected. Upgrades to protect the exterior services and trash area is necessary for the safety of the students and the general public. Construction of a secure lockable dumpster area is recommended.

This school has a perimeter fence surrounding the service parking and loading dock 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.

This school has limited landscaping with a few mature trees and small sections of turf. The landscaping is in good condition and is on a program of renewal. There were no issues that surfaced during the time of the inspection therefore no projects or recommendations are required at this time.

Site Lighting-- Site lighting is provided by wall mounted floodlighting fixtures mounted at the roof level that are aimed to illuminate the site and paved play areas. Replacement of site lighting is covered in the Electrical Systems narrative. There are no site lighting poles on the site.

Site video surveillance system--There are four (4) exterior cameras located on the building for video coverage of the site. This report includes replacement of all four (4) exterior cameras.

RECOMMENDATIONS

- Replace auditorium seating
- Remove and replace stage curtain
- Remove and replace suspended acoustic ceilings
- Clean and reseal concrete floors
- Remove and replace wood flooring
- Remove VAT and replace with VCT
- Remove and replace carpet
- Repair and repaint all interior walls
- Replace inadequate or install proper stair railing
- Replace missing or damaged signage
- Remove and replace tack boards
- Remove and replace interior doors
- Remove and replace folding partitions
- Remove non-rated interior glass panels
- Install fire rated walls and door where required
- Remove and Replace Built Up Roof
- Remove and replace exterior doors
- Remove and replace aluminum windows
- Remove and replace metal picket fence
- Build secure trash dumpster enclosure
- Remove and replace concrete sidewalk or paving
- Provide a two hundred ton air cooled package chiller on the roof with pumps, piping and controls. Connect to new fan coil units and air handling units.
- 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.
- Replace domestic hot and cold water pipe, fittings, valves, hangers and insulation.
- Replace older drinking fountains. Include fittings and trim.
- 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 the cafeteria/ gymnasium 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 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 two existing boilers with new cast iron sectional boilers.
- Replace boiler feed system. Connect to make up water line and include electrical connections.
- Remove the 600A, 120/240V, 2 phase, 5 wire service disconnecting means, metering cabinet and 600A Main Panelboards and provide a 1000 kVA packaged unit substation with 3000A, 208/120V, 3 phase, 4 wire main switchboard with main circuit breaker and feeder circuit breakers to serve the existing building loads and added central air conditioning equipment, an elevator addition, and a fire pump (if required).
- Replace seven (7) individual motor controllers, eleven (11) 120/240V, 1 phase panelboards and one (1) 225A, 208/120V, 3 phase panelboards in the building, including their feeders. Remove the 25 kVA and 75 kVA phase change transformers.
- Provide an allowance for abatement of asbestos wrapped feeder conductors within panelboard enclosures for nine (9) panelboards.
- Provide surface metal raceway system with 6 to 8 duplex receptacles in each of 31 classrooms.
- Replace all existing duplex receptacles throughout the building with new devices due to their age and condition (estimate 140 duplex receptacles to be replaced).
- Replace fluorescent lighting systems and branch circuit wiring throughout the building, except in restrooms where fixtures have been upgraded with T8 lamps (classrooms and library 26,473 SF; Mechanical and storage 8,574 SF; Administration, Support, and Circulation 24,129 SF).
- Replace (24) 8 foot, 4 lamp fluorescent lighting fixtures in the gymnasium.
- Replace (20) pendant mounted incandescent fixtures in the auditorium with pendant mounted LED fixtures. Replace (8) wall mounted prismatic lens fixtures used for emergency lighting with decorative LED type fixtures.
- Replace two (2) rows of theatrical batten lighting and two (2) worklights on the auditorium platform.
- Replace exterior lighting fixtures at exit discharges and building mounted floodlighting fixtures with LED fixtures (estimate 6 wall fixtures and 8 floodlights).
- Replace fire alarm system with an addressable type system meeting current NFPA Codes and ADA requirements.
- Replace non-functional sound system equipment for the auditorium.
- Replace program system master controller in the Main Office.
- Remove all clocks and provide wireless GPS clock system with battery operated synchronized clocks.
- Replace video surveillance system equipment, including (1) 16 channel digital video recorder (DVR), a transceiver hub, two (2) monitors and 11 interior cameras. Add one (1) DVR in the video equipment cabinet and two (2) cameras on each of Floors 1, 2 and 3.
- Replace standby generator system, including 10 kW generator, 75A automatic transfer switch and emergency panelboard. Size generator system with capacity to supply a hydraulic elevator addition (estimated size is 60 kW).
- Replace all exit signs with LED type (estimate 38 exit signs).
- Since the separate building with the two kindergarten classrooms is not served with emergency power from the main school building, provide four (4) battery-operated emergency lighting units and three (3) battery type exit signs.
- Replace all four (4) building mounted exterior video surveillance cameras.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 5 / Tm 1
Status:	Accepted by SDP	Team:	Tm 1
Site ID:	S634001		

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.

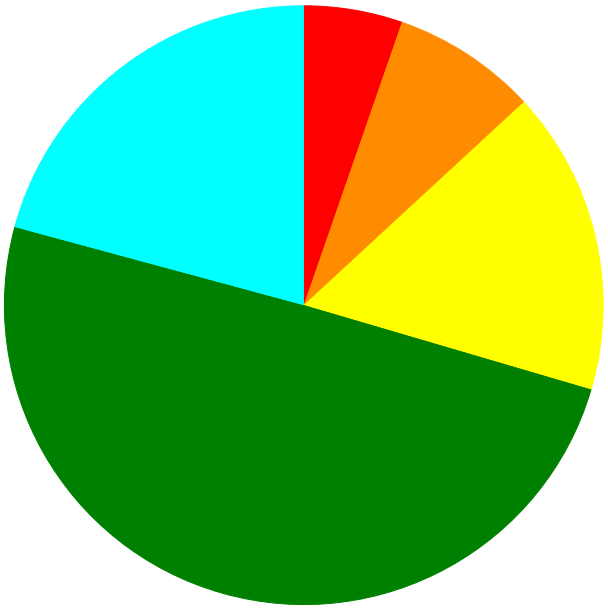
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	32.65 %	46.27 %	$1,838,774.92
B30 - Roofing	75.00 %	89.59 %	$508,230.16
C10 - Interior Construction	35.11 %	84.85 %	$1,468,002.13
C20 - Stairs	37.00 %	169.88 %	$168,862.80
C30 - Interior Finishes	45.09 %	82.31 %	$3,226,419.88
D10 - Conveying	106.67 %	0.00 %	$0.00
D20 - Plumbing	62.06 %	52.00 %	$748,559.58
D30 - HVAC	96.30 %	101.31 %	$7,945,137.16
D40 - Fire Protection	92.47 %	177.49 %	$1,008,506.78
D50 - Electrical	107.16 %	71.41 %	$2,959,061.59
E10 - Equipment	34.29 %	0.00 %	$0.00
E20 - Furnishings	30.00 %	250.43 %	$376,044.09
G20 - Site Improvements	40.47 %	127.78 %	$1,628,617.45
G40 - Site Electrical Utilities	151.15 %	8.21 %	$25,279.38
Totals:	**62.01 %**	**60.92 %**	**$21,901,495.92**

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)
B634001;Pennell	70,498	58.92	$1,163,975.54	$1,431,571.61	$3,568,721.51	$10,875,578.47	$3,207,751.96
G634001;Grounds	70,800	104.51	$0.00	$281,588.05	$25,279.38	$0.00	$1,347,029.40
Total:		**60.92**	**$1,163,975.54**	**$1,713,159.66**	**$3,594,000.89**	**$10,875,578.47**	**$4,554,781.36**

Deficiencies By Priority



- 1 - Response Time (< 2 yr) - $1,163,975.54
- 2 - Response Time (2-3 yrs) - $1,713,159.66
- 3 - Response Time (3-4 yrs) - $3,594,000.89
- 4 - Response Time (4-5 yrs) - $10,875,578.47
- 5 - Response Time (> 5 yrs) - $4,554,781.36

Budget Estimate Total: $21,901,495.92

Executive Summary

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

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

Function:	Elementary School
Gross Area (SF):	70,498
Year Built:	1927
Last Renovation:	
Replacement Value:	$34,366,582
Repair Cost:	$20,247,599.09
Total FCI:	58.92 %
Total RSLI:	62.01 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B634001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S634001		

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	37.00 %	0.00 %	$0.00
A20 - Basement Construction	37.00 %	0.00 %	$0.00
B10 - Superstructure	37.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	32.65 %	46.27 %	$1,838,774.92
B30 - Roofing	75.00 %	89.59 %	$508,230.16
C10 - Interior Construction	35.11 %	84.85 %	$1,468,002.13
C20 - Stairs	37.00 %	169.88 %	$168,862.80
C30 - Interior Finishes	45.09 %	82.31 %	$3,226,419.88
D10 - Conveying	106.67 %	0.00 %	$0.00
D20 - Plumbing	62.06 %	52.00 %	$748,559.58
D30 - HVAC	96.30 %	101.31 %	$7,945,137.16
D40 - Fire Protection	92.47 %	177.49 %	$1,008,506.78
D50 - Electrical	107.16 %	71.41 %	$2,959,061.59
E10 - Equipment	34.29 %	0.00 %	$0.00
E20 - Furnishings	30.00 %	250.43 %	$376,044.09
Totals:	**62.01 %**	**58.92 %**	**$20,247,599.09**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$18.40	S.F.	70,498	100	1927	2027	2052	37.00 %	0.00 %	37			$1,297,163
A1030	Slab on Grade	$7.73	S.F.	70,498	100	1927	2027	2052	37.00 %	0.00 %	37			$544,950
A2010	Basement Excavation	$6.55	S.F.	70,498	100	1927	2027	2052	37.00 %	0.00 %	37			$461,762
A2020	Basement Walls	$12.70	S.F.	70,498	100	1927	2027	2052	37.00 %	0.00 %	37			$895,325
B1010	Floor Construction	$75.10	S.F.	70,498	100	1927	2027	2052	37.00 %	0.00 %	37			$5,294,400
B1020	Roof Construction	$13.88	S.F.	15,000	100	1927	2027	2052	37.00 %	0.00 %	37			$208,200
B2010	Exterior Walls	$36.91	S.F.	70,498	100	1927	2027	2052	37.00 %	0.00 %	37			$2,602,081
B2020	Exterior Windows	$18.01	S.F.	70,498	40	1984	2024		22.50 %	132.07 %	9		$1,676,853.31	$1,269,669
B2030	Exterior Doors	$1.45	S.F.	70,498	25	1984	2009	2027	48.00 %	158.40 %	12		$161,921.61	$102,222
B3010105	Built-Up	$37.76	S.F.	15,000	20	2010	2030		75.00 %	89.73 %	15		$508,230.16	$566,400
B3020	Roof Openings	$0.06	S.F.	15,000	20	2010	2030		75.00 %	0.00 %	15			$900
C1010	Partitions	$17.91	S.F.	70,498	100	1927	2027	2052	37.00 %	21.64 %	37		$273,193.05	$1,262,619
C1020	Interior Doors	$3.51	S.F.	70,498	40	1927	1967	2027	30.00 %	424.14 %	12		$1,049,529.17	$247,448
C1030	Fittings	$3.12	S.F.	70,498	40	1927	1967	2027	30.00 %	66.05 %	12		$145,279.91	$219,954
C2010	Stair Construction	$1.41	S.F.	70,498	100	1927	2027	2052	37.00 %	169.88 %	37		$168,862.80	$99,402
C3010230	Paint & Covering	$13.21	S.F.	60,498	10	2010	2020		50.00 %	84.76 %	5		$677,387.70	$799,179
C3010232	Wall Tile	$2.63	S.F.	10,000	30	1927	1957	2027	40.00 %	0.00 %	12			$26,300
C3020411	Carpet	$7.30	S.F.	2,000	10	2015	2025		100.00 %	153.30 %	10		$22,381.52	$14,600

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System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
C3020412	Terrazzo & Tile	$75.52	S.F.	8,000	50	1927	1977	2027	24.00 %	0.00 %	12			$604,160
C3020413	Vinyl Flooring	$9.68	S.F.	10,000	20	1927	1947	2027	60.00 %	156.68 %	12		$151,666.68	$96,800
C3020414	Wood Flooring	$22.27	S.F.	40,000	25	1927	1952	2027	48.00 %	130.90 %	12		$1,166,082.84	$890,800
C3020415	Concrete Floor Finishes	$0.97	S.F.	10,000	50	1927	1977	2027	24.00 %	23.78 %	12		$2,306.72	$9,700
C3030	Ceiling Finishes	$20.97	S.F.	70,498	25	1990	2015	2027	48.00 %	81.62 %	12		$1,206,594.42	$1,478,343
D1010	Elevators and Lifts	$1.53	S.F.	70,498	30	1927	1957	2047	106.67 %	0.00 %	32			$107,862
D2010	Plumbing Fixtures	$13.52	S.F.	70,498	35	1998	2033		51.43 %	4.77 %	18		$45,475.14	$953,133
D2020	Domestic Water Distribution	$1.68	S.F.	70,498	25	1927	1952	2042	108.00 %	301.63 %	27		$357,238.94	$118,437
D2030	Sanitary Waste	$2.90	S.F.	70,498	25	1927	1952	2042	108.00 %	169.16 %	27		$345,845.50	$204,444
D2040	Rain Water Drainage	$2.32	S.F.	70,498	30	1927	1957	2025	33.33 %	0.00 %	10			$163,555
D3020	Heat Generating Systems	$18.67	S.F.	70,498	35	1972	2007	2052	105.71 %	84.61 %	37		$1,113,599.43	$1,316,198
D3030	Cooling Generating Systems	$24.48	S.F.	70,498	30			2047	106.67 %	65.60 %	32		$1,132,165.18	$1,725,791
D3040	Distribution Systems	$42.99	S.F.	70,498	25	1927	1952	2042	108.00 %	138.15 %	27		$4,187,042.60	$3,030,709
D3050	Terminal & Package Units	$11.60	S.F.	70,498	20				0.00 %	0.00 %				$817,777
D3060	Controls & Instrumentation	$13.50	S.F.	70,498	20	1927	1947	2037	110.00 %	158.90 %	22		$1,512,329.95	$951,723
D4010	Sprinklers	$7.05	S.F.	70,498	35			2052	105.71 %	202.91 %	37		$1,008,506.78	$497,011
D4020	Standpipes	$1.01	S.F.	70,498	35				0.00 %	0.00 %				$71,203
D5010	Electrical Service/Distribution	$9.70	S.F.	70,498	30	1927	1957	2047	106.67 %	159.95 %	32		$1,093,817.57	$683,831
D5020	Lighting and Branch Wiring	$34.68	S.F.	70,498	20	1927	1947	2037	110.00 %	51.89 %	22		$1,268,679.23	$2,444,871
D5030	Communications and Security	$12.99	S.F.	70,498	15	1927	1942	2030	100.00 %	49.55 %	15		$453,782.74	$915,769
D5090	Other Electrical Systems	$1.41	S.F.	70,498	30	1927	1957	2047	106.67 %	143.64 %	32		$142,782.05	$99,402
E1020	Institutional Equipment	$4.82	S.F.	70,498	35	1927	1962	2027	34.29 %	0.00 %	12			$339,800
E1090	Other Equipment	$11.10	S.F.	70,498	35	1927	1962	2027	34.29 %	0.00 %	12			$782,528
E2010	Fixed Furnishings	$2.13	S.F.	70,498	40	1927	1967	2027	30.00 %	250.43 %	12		$376,044.09	$150,161
								Total	**62.01 %**	**58.92 %**			**$20,247,599.09**	**$34,366,582**

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 Plaster surface 70%
Brick, Marble 30%

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

Note: Carpet 2%
Terrazzo tile 7%
Vinyl 14%
Wood 57%
Concrete 14%

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

Note: There is no existing elevator in this building.

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

Note: There are three (3) secondary phase changer transformers rated 240V-208/120V, 3 phase wire, as follows:
(2) 25 kVA
(1) 75 kVA

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:	**$20,247,599**	**$0**	**$0**	**$0**	**$0**	**$1,019,113**	**$0**	**$0**	**$0**	**$1,822,293**	**$263,369**	**$23,352,374**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A10 - Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A20 - Basement Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2010 - Basement Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2020 - Basement Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2020 - Exterior Windows	$1,676,853	$0	$0	$0	$0	$0	$0	$0	$0	$1,822,293	$0	**$3,499,147**
B2030 - Exterior Doors	$161,922	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$161,922**
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	$508,230	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$508,230**
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	$273,193	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$273,193**
C1020 - Interior Doors	$1,049,529	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,049,529**
C1030 - Fittings	$145,280	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$145,280**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

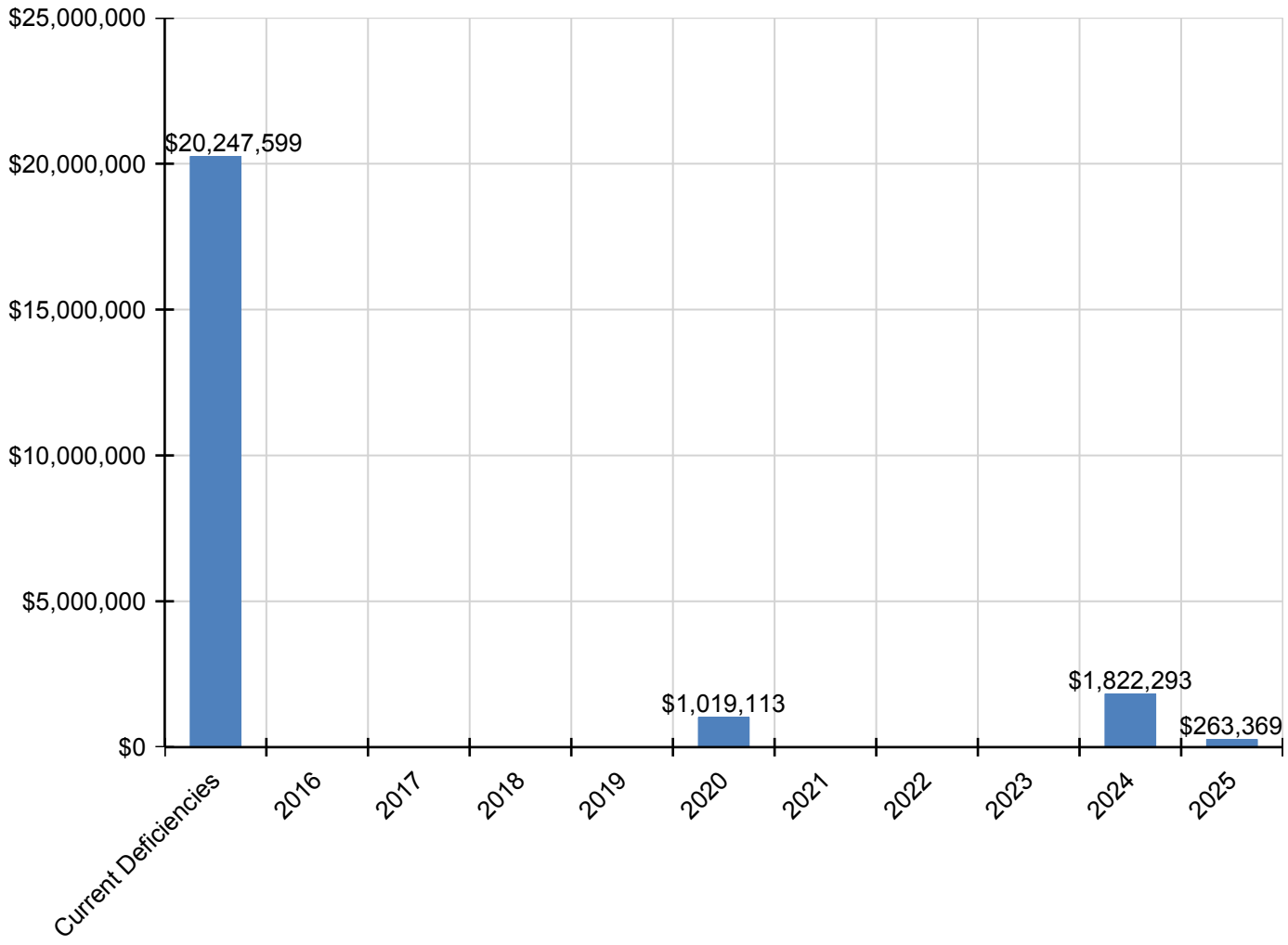
C2010 - Stair Construction	$168,863	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$168,863**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$677,388	$0	$0	$0	$0	$1,019,113	$0	$0	$0	$0	$0	**$1,696,501**
C3010232 - 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	$22,382	$0	$0	$0	$0	$0	$0	$0	$0	$0	$21,583	**$43,965**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$151,667	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$151,667**
C3020414 - Wood Flooring	$1,166,083	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,166,083**
C3020415 - Concrete Floor Finishes	$2,307	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,307**
C3030 - Ceiling Finishes	$1,206,594	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,206,594**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$45,475	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$45,475**
D2020 - Domestic Water Distribution	$357,239	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$357,239**
D2030 - Sanitary Waste	$345,846	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$345,846**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$241,785	**$241,785**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$1,113,599	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,113,599**
D3030 - Cooling Generating Systems	$1,132,165	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,132,165**
D3040 - Distribution Systems	$4,187,043	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,187,043**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,512,330	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,512,330**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,008,507	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,008,507**
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	$1,093,818	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,093,818**
D5020 - Lighting and Branch Wiring	$1,268,679	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,268,679**
D5030 - Communications and Security	$453,783	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$453,783**

D5090 - Other Electrical Systems	$142,782	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$142,782**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$376,044	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$376,044**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

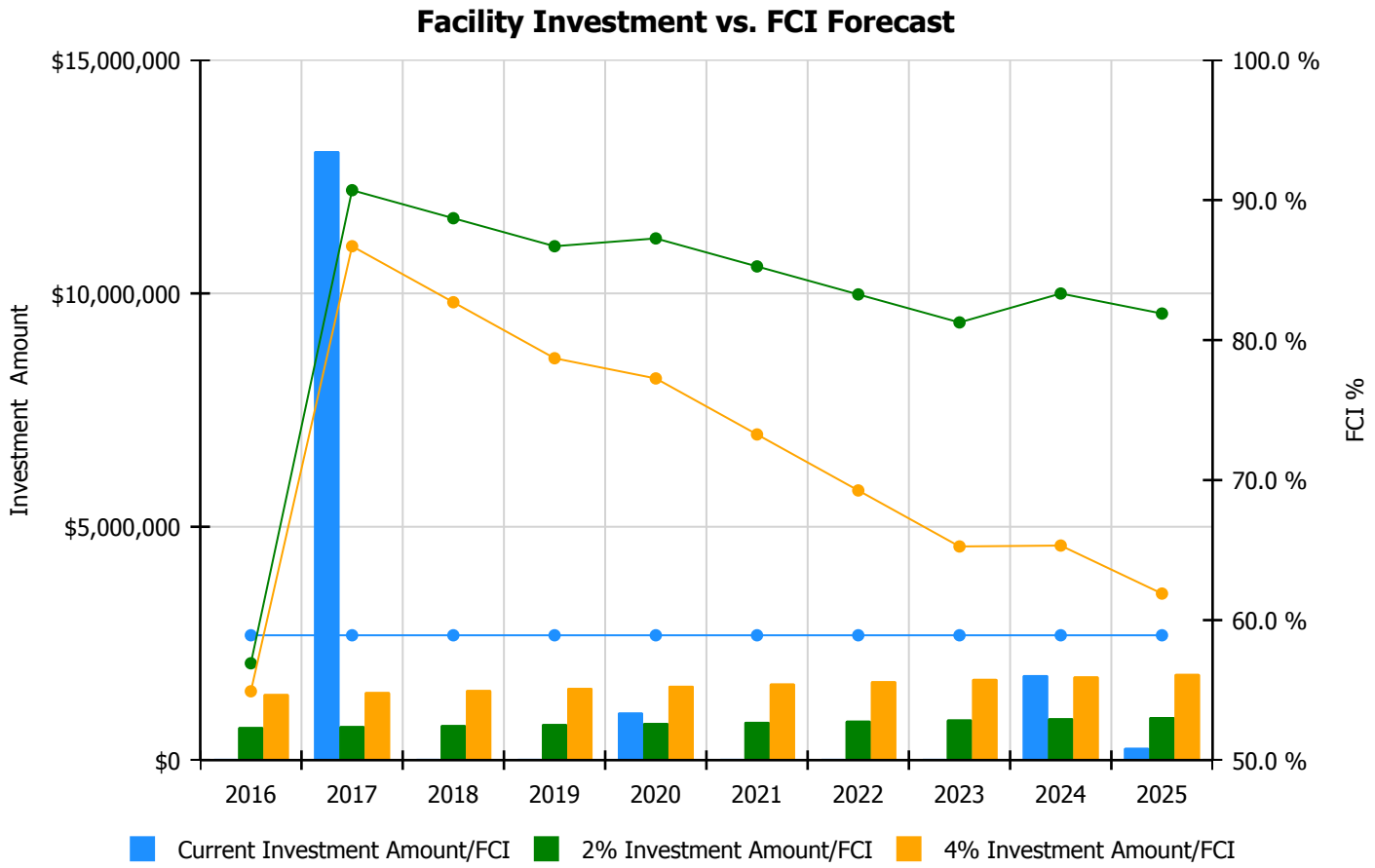
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

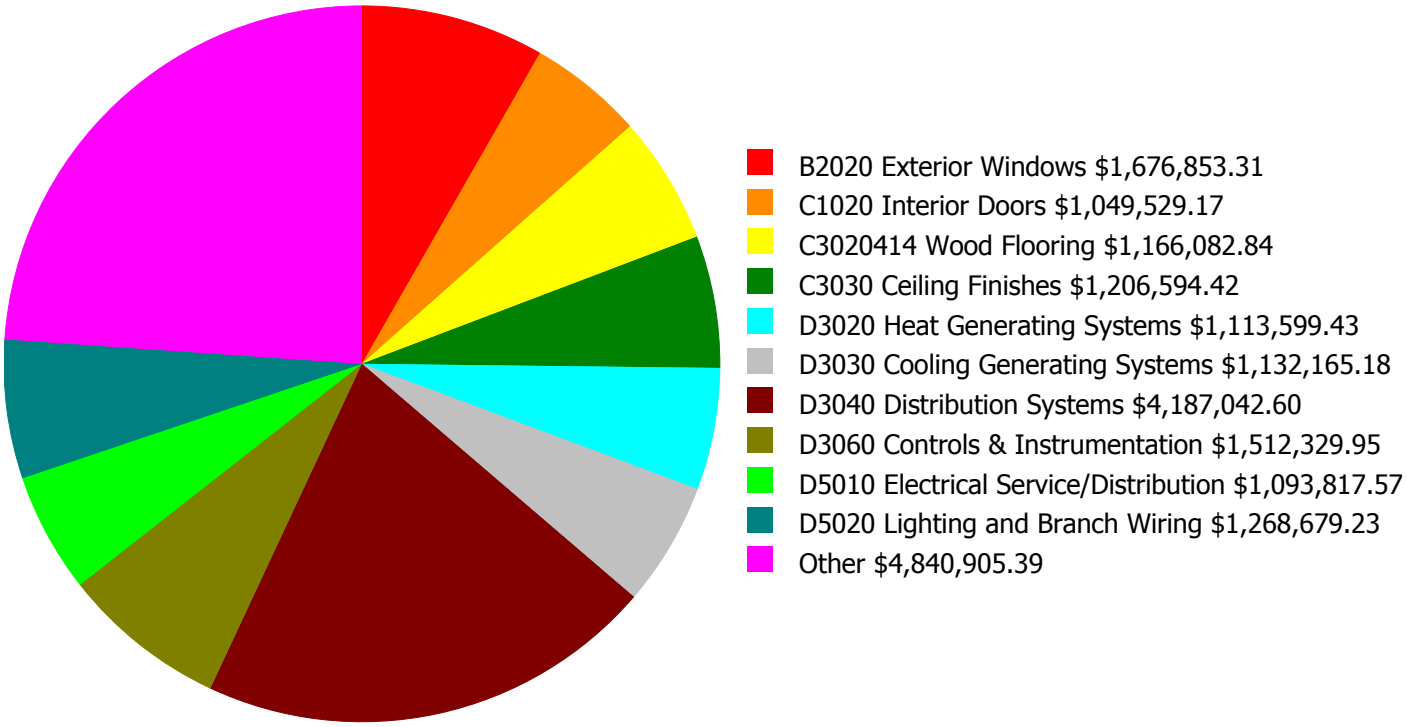
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 58.92%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$707,952.00	56.92 %	$1,415,903.00	54.92 %
2017	$13,047,272	$729,190.00	90.70 %	$1,458,380.00	86.70 %
2018	$0	$751,066.00	88.70 %	$1,502,132.00	82.70 %
2019	$0	$773,598.00	86.70 %	$1,547,196.00	78.70 %
2020	$1,019,113	$796,806.00	87.26 %	$1,593,612.00	77.26 %
2021	$0	$820,710.00	85.26 %	$1,641,420.00	73.26 %
2022	$0	$845,331.00	83.26 %	$1,690,662.00	69.26 %
2023	$0	$870,691.00	81.26 %	$1,741,382.00	65.26 %
2024	$1,822,293	$896,812.00	83.32 %	$1,793,624.00	65.32 %
2025	$263,369	$923,716.00	81.89 %	$1,847,432.00	61.89 %
Total:	**$16,152,047**	**$8,115,872.00**		**$16,231,743.00**	

Deficiency Summary by System

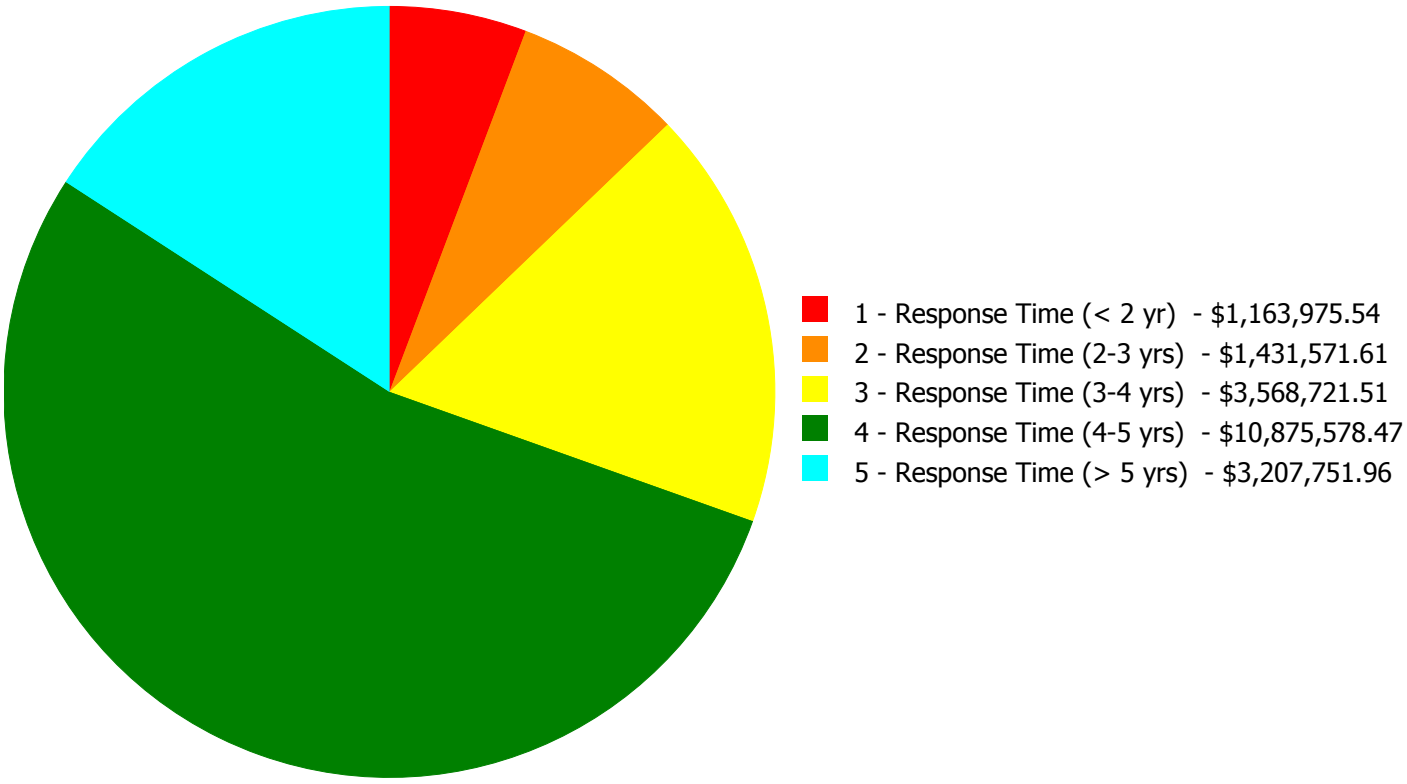
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $20,247,599.09

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: $20,247,599.09

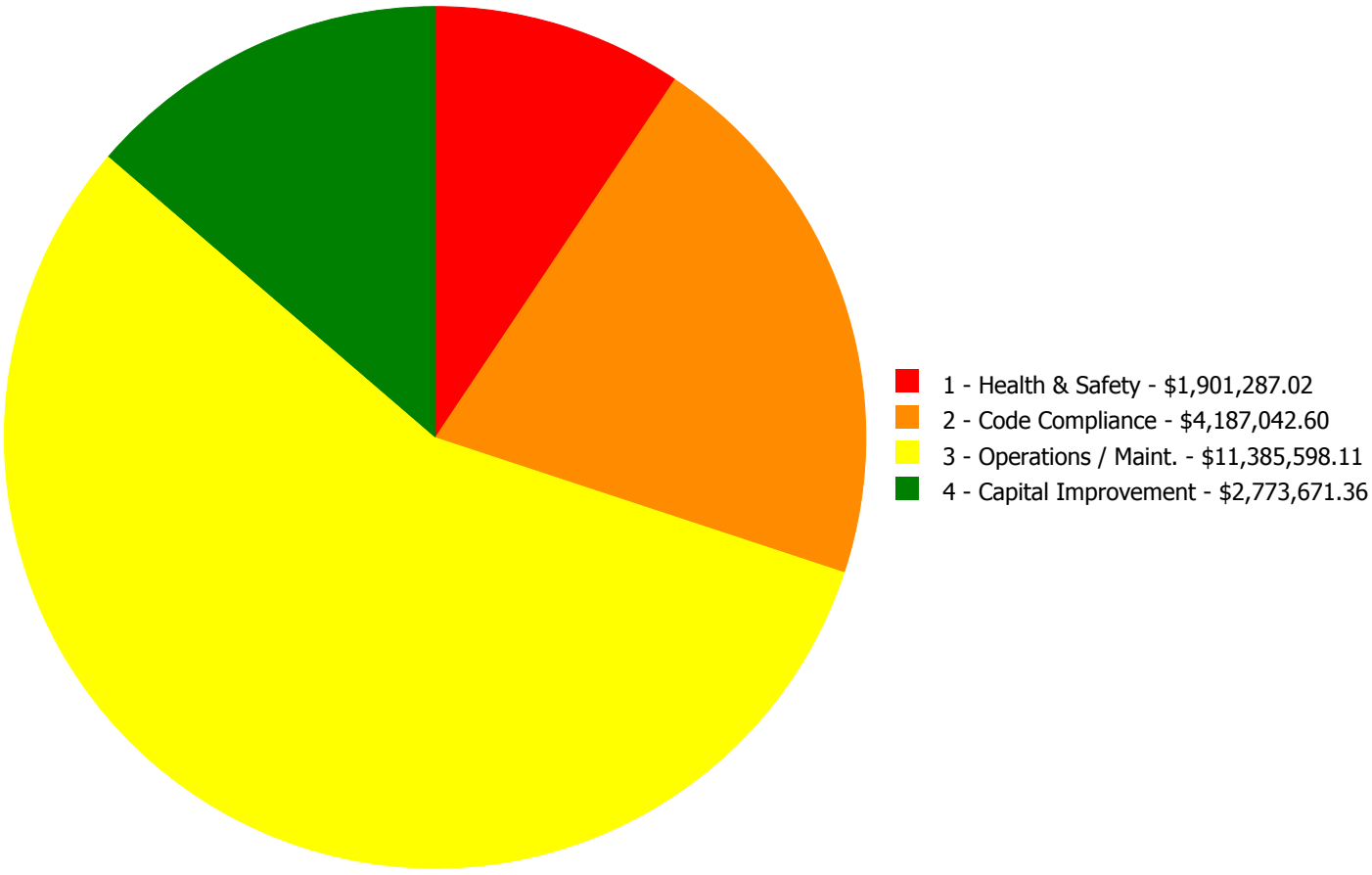
Deficiency By Priority Investment Table

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	$1,676,853.31	$0.00	$1,676,853.31
B2030	Exterior Doors	$0.00	$0.00	$0.00	$161,921.61	$0.00	$161,921.61
B3010105	Built-Up	$0.00	$0.00	$0.00	$0.00	$508,230.16	$508,230.16
C1010	Partitions	$126,106.58	$80,247.98	$66,838.49	$0.00	$0.00	$273,193.05
C1020	Interior Doors	$0.00	$1,049,529.17	$0.00	$0.00	$0.00	$1,049,529.17
C1030	Fittings	$0.00	$7,927.26	$69,624.53	$67,728.12	$0.00	$145,279.91
C2010	Stair Construction	$0.00	$0.00	$168,862.80	$0.00	$0.00	$168,862.80
C3010230	Paint & Covering	$0.00	$0.00	$677,387.70	$0.00	$0.00	$677,387.70
C3020411	Carpet	$0.00	$22,381.52	$0.00	$0.00	$0.00	$22,381.52
C3020413	Vinyl Flooring	$0.00	$151,666.68	$0.00	$0.00	$0.00	$151,666.68
C3020414	Wood Flooring	$0.00	$0.00	$0.00	$1,166,082.84	$0.00	$1,166,082.84
C3020415	Concrete Floor Finishes	$0.00	$2,306.72	$0.00	$0.00	$0.00	$2,306.72
C3030	Ceiling Finishes	$0.00	$0.00	$0.00	$0.00	$1,206,594.42	$1,206,594.42
D2010	Plumbing Fixtures	$0.00	$0.00	$0.00	$45,475.14	$0.00	$45,475.14
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$357,238.94	$0.00	$357,238.94
D2030	Sanitary Waste	$0.00	$0.00	$0.00	$345,845.50	$0.00	$345,845.50
D3020	Heat Generating Systems	$1,012,205.26	$0.00	$0.00	$101,394.17	$0.00	$1,113,599.43
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,132,165.18	$1,132,165.18
D3040	Distribution Systems	$0.00	$0.00	$0.00	$4,187,042.60	$0.00	$4,187,042.60
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$1,512,329.95	$0.00	$1,512,329.95
D4010	Sprinklers	$0.00	$0.00	$0.00	$1,008,506.78	$0.00	$1,008,506.78
D5010	Electrical Service/Distribution	$17,329.16	$0.00	$1,076,488.41	$0.00	$0.00	$1,093,817.57
D5020	Lighting and Branch Wiring	$0.00	$0.00	$1,073,509.83	$195,169.40	$0.00	$1,268,679.23
D5030	Communications and Security	$0.00	$0.00	$403,792.63	$49,990.11	$0.00	$453,782.74
D5090	Other Electrical Systems	$8,334.54	$102,230.39	$32,217.12	$0.00	$0.00	$142,782.05
E2010	Fixed Furnishings	$0.00	$15,281.89	$0.00	$0.00	$360,762.20	$376,044.09
	Total:	$1,163,975.54	$1,431,571.61	$3,568,721.51	$10,875,578.47	$3,207,751.96	$20,247,599.09

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:



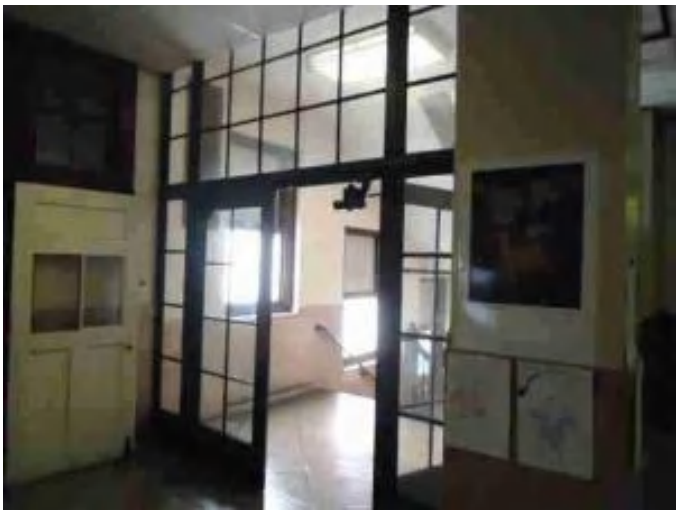
Budget Estimate Total: $20,247,599.09

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: C1010 - Partitions



Location: Stairs

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

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

Qty: 24.00

Unit of Measure: S.F.

Estimate: $126,106.58

Assessor Name: System

Date Created: 02/15/2016

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

System: D3020 - Heat Generating Systems

Location: mechanical room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace boiler, cast iron sectional (150 HP)

Qty: 2.00

Unit of Measure: Ea.

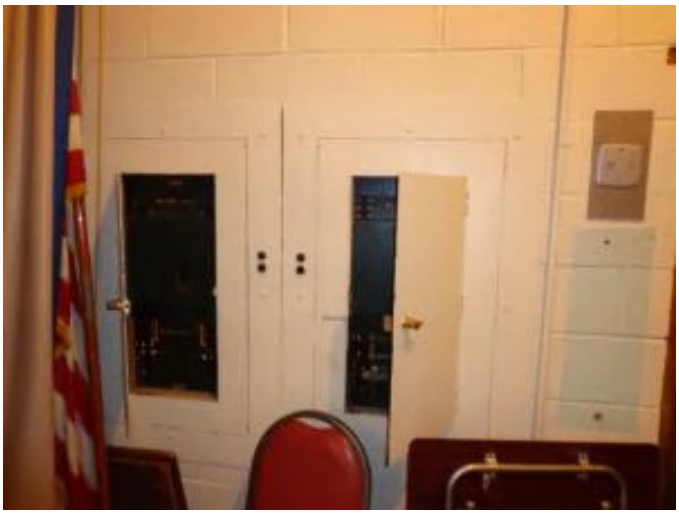
Estimate: $1,012,205.26

Assessor Name: System

Date Created: 02/11/2016

Notes: Replace two existing boilers with new cast iron sectional boilers.

System: D5010 - Electrical Service/Distribution



Location: Building wide

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

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

Qty: 9.00

Unit of Measure: Ea.

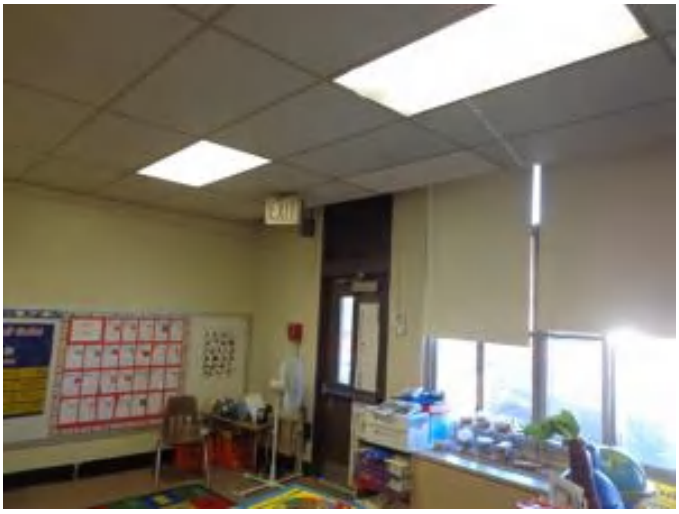
Estimate: $17,329.16

Assessor Name: System

Date Created: 02/01/2016

Notes: Provide an allowance for abatement of asbestos wrapped feeder conductors within panelboard enclosures for nine (9) panelboards.

System: D5090 - Other Electrical Systems



Location: Kindergarten classroom building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Add Emergency/Exit Lighting

Qty: 7.00

Unit of Measure: Ea.

Estimate: $8,334.54

Assessor Name: System

Date Created: 02/01/2016

Notes: Since the separate building with the two kindergarten classrooms is not served with emergency power from the main school building, provide four (4) battery-operated emergency lighting units and three (3) battery type exit signs.

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

System: C1010 - Partitions

Location: Building Wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 3,000.00

Unit of Measure: S.F.

Estimate: $80,247.98

Assessor Name: System

Date Created: 02/15/2016

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

System: C1020 - Interior Doors

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 220.00

Unit of Measure: Ea.

Estimate: $1,049,529.17

Assessor Name: System

Date Created: 02/15/2016

Notes: Interior doors are typically wood in wood frames with transom lites, sidelights, wired glass glazing. Other interior doors include wooden glass pane doors with original wooden pane frames, hollow metal in hollow metal frames at stairwells and exit ways. Doors are generally in good 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 hollow metal door system with consideration for ADA compliance.

System: C1030 - Fittings

Location: Hallways

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace tackboards - select size

Qty: 10.00

Unit of Measure: Ea.

Estimate: $7,927.26

Assessor Name: System

Date Created: 02/15/2016

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

System: C3020411 - Carpet

Location: Office

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace carpet

Qty: 2,000.00

Unit of Measure: S.F.

Estimate: $22,381.52

Assessor Name: System

Date Created: 02/15/2016

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: Health Hazard / Risk

Category: 1 - Health & Safety

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

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

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $151,666.68

Assessor Name: System

Date Created: 02/15/2016

Notes: This school has sections of 12x12 floor tile that represents upgrades and abatement of the 9x9 tile. In some cases the 12x12 was used to cover the wooden floor finish. However, suspected asbestos containing materials (ACM) are believed to be limited to the original vinyl floor tile and mastic. While currently sound and manageable in place, future renovation efforts should include provision to test and abate any and all ACM.

System: C3020415 - Concrete Floor Finishes

Location: Hallways

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Clean and reseal concrete floors

Qty: 600.00

Unit of Measure: S.F.

Estimate: $2,306.72

Assessor Name: System

Date Created: 02/15/2016

Notes: The hallways, stair landings and mechanical spaces have a sealed concrete finish. The hallway concrete finish is diamond cut and placed as 24x24 inch sections. As indication in the photos most of the finish is in good condition. However what is not apparent in the photos is that several of the sections are lose and require re-grouting and in some places replacement. This deficiency provides a budgetary consideration for section by section repairs to the concrete floors and consideration for refinishing work once repairs are complete.

System: D5090 - Other Electrical Systems

Location: Mechanical Room 020

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace standby generator system

Qty: 1.00

Unit of Measure: Ea.

Estimate: $102,230.39

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace standby generator system, including 10 kW generator, 75A automatic transfer switch and emergency panelboard. Size generator system with capacity to supply a hydraulic elevator addition (estimated size is 60 kW).

System: E2010 - Fixed Furnishings

Location: Stage

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $15,281.89

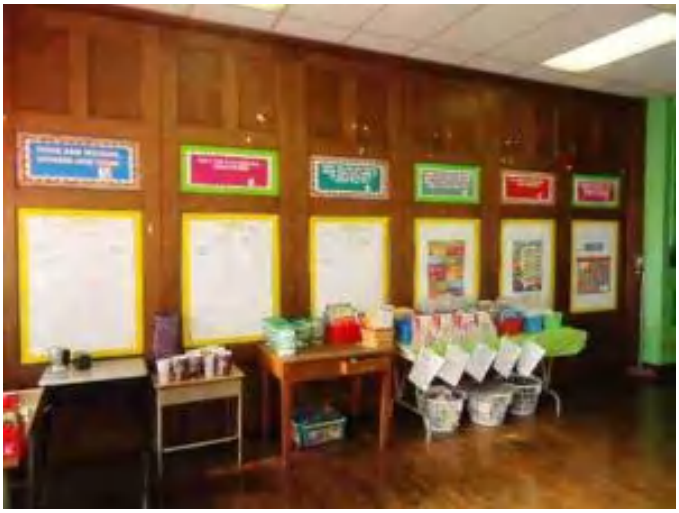
Assessor Name: System

Date Created: 02/15/2016

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 3 - Response Time (3-4 yrs):

System: C1010 - Partitions



Location: Classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 3,000.00

Unit of Measure: S.F.

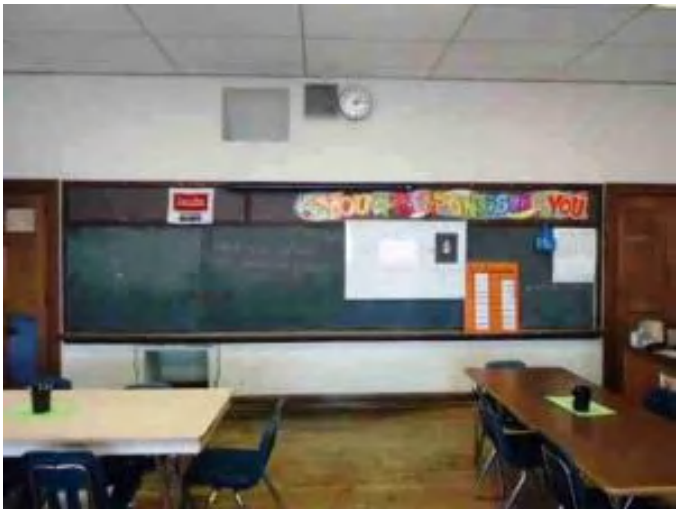
Estimate: $66,838.49

Assessor Name: System

Date Created: 02/15/2016

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

System: C1030 - Fittings



Location: Classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 60.00

Unit of Measure: Ea.

Estimate: $69,624.53

Assessor Name: System

Date Created: 02/15/2016

Notes: The classroom chalk boards are covered with temporary white boards in several rooms. There are several classrooms with the original chalk boards. This system is beyond its expected life and universal upgrades are warranted. Remove and upgrade chalkboards to new marker board systems.

System: C2010 - Stair Construction

Location: Stairs

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

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

Qty: 1,000.00

Unit of Measure: L.F.

Estimate: $168,862.80

Assessor Name: System

Date Created: 02/15/2016

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

System: C3010230 - Paint & Covering

Location: Building Wide

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 100,000.00

Unit of Measure: S.F.

Estimate: $677,387.70

Assessor Name: System

Date Created: 02/15/2016

Notes: There are painted walls, trim, and some painted ceilings in this building. Sections of the building, some textured concrete surfaces have been painted as well. The interior finishes are in fair to poor condition depending on the location of the finish. For example due to recent roof leaks over the auditorium several areas will require repair and repainting. Also, sections of the fifth floor are damaged due to neglect. This school will require an almost continuous program of renewal of the applied finishes to maintain an acceptable appearance. Cyclical painting should be considered for a standard approach to maintaining the quality of the interior finishes. It is recommended that all previously painted surfaces be repainted according to established cycles for this occupancy and use type. Minor repairs should be completed before work begins. The abandoned section of the fifth floor is expected to require major repairs and additional efforts to restore the finishes. This effort is expected to be coordinated with other mechanical electrical efforts in order to prevent overlapping efforts.

System: D5010 - Electrical Service/Distribution

Location: Mechanical Room 020

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: $729,997.51

Assessor Name: System

Date Created: 02/01/2016

Notes: Remove the 600A, 120/240V, 2 phase, 5 wire service disconnecting means, metering cabinet and 600A Main Panelboards and provide a 1000 kVA packaged unit substation with 3000A, 208/120V, 3 phase, 4 wire main switchboard with main circuit breaker and feeder circuit breakers to serve the existing building loads and added central air conditioning equipment, an elevator addition, and a fire pump (if required).

System: D5010 - Electrical Service/Distribution

Location: Mechanical Room 020 and Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Panelboard

Qty: 12.00

Unit of Measure: Ea.

Estimate: $346,490.90

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace seven (7) individual motor controllers, eleven (11) 120/240V, 1 phase panelboards and one (1) 225A, 208/120V, 3 phase panelboards in the building, including their feeders. Remove the 25 kVA and 75 kVA phase change transformers.

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: 59,176.00

Unit of Measure: S.F.

Estimate: $948,998.42

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace fluorescent lighting systems and branch circuit wiring throughout the building, except in restrooms where fixtures have been upgraded with T8 lamps (classrooms and library 26,473 SF; Mechanical and storage 8,574 SF; Administration, Support, and Circulation 24,129 SF).

System: D5020 - Lighting and Branch Wiring

Location: Gymnasium
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace lighting fixtures
Qty: 24.00
Unit of Measure: Ea.
Estimate: $62,470.89
Assessor Name: System
Date Created: 02/01/2016

Notes: Replace (24) 8 foot, 4 lamp fluorescent lighting fixtures in the gymnasium.

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: 28.00
Unit of Measure: Ea.
Estimate: $37,034.38
Assessor Name: System
Date Created: 02/01/2016

Notes: Replace (20) pendant mounted incandescent fixtures in the auditorium with pendant mounted LED fixtures. Replace (8) wall mounted prismatic lens fixtures used for emergency lighting with decorative LED type fixtures.

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: 14.00

Unit of Measure: Ea.

Estimate: $25,006.14

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace exterior lighting fixtures at exit discharges and building mounted floodlighting fixtures with LED fixtures (estimate 6 wall fixtures and 8 floodlights).

System: D5030 - Communications and Security

Location: Building wide

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Replace fire alarm system

Qty: 70,498.00

Unit of Measure: S.F.

Estimate: $324,950.61

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace fire alarm system with an addressable type system meeting current NFPA Codes and ADA requirements.

System: D5030 - Communications and Security

Location: Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Video Surveillance System

Qty: 17.00

Unit of Measure: Ea.

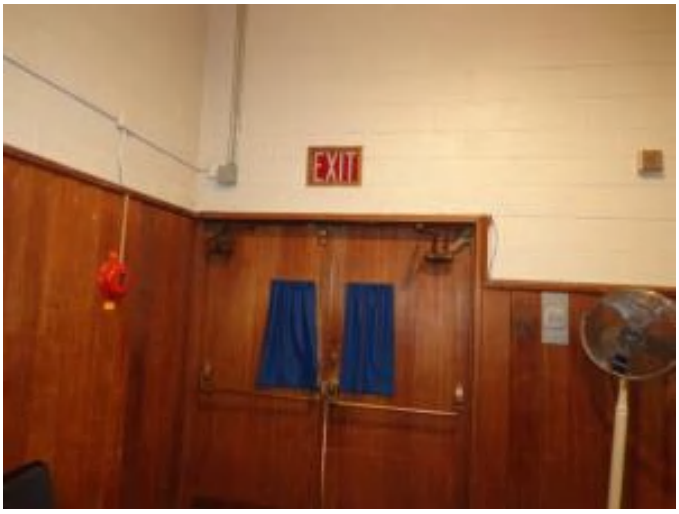
Estimate: $78,842.02

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace video surveillance system equipment, including (1) 16 channel digital video recorder (DVR), a transceiver hub, two (2) monitors and 11 interior cameras. Add one (1) DVR in the video equipment cabinet and two (2) cameras on each of Floors 1, 2 and 3.

System: D5090 - Other Electrical Systems



Location: Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Emergency/Exit Lighting

Qty: 38.00

Unit of Measure: Ea.

Estimate: $32,217.12

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace all exit signs with LED type (estimate 38 exit signs).

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

System: B2020 - Exterior Windows

Location: Building Wide

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: 280.00

Unit of Measure: Ea.

Estimate: $1,676,853.31

Assessor Name: System

Date Created: 02/15/2016

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: 20.00

Unit of Measure: Ea.

Estimate: $161,921.61

Assessor Name: System

Date Created: 02/15/2016

Notes: The exterior doors are metal applications with metal frames. The exterior door system for this school is a very high traffic system. Most of the doors are in fair condition but are aging at a faster rate than expected based on traffic and condition. The service doors on the roof have expired and failed compromising access to elevator rooms and tower rooms. The exterior door system, store front and service doors are recommended for upgrade.

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: 250.00

Unit of Measure: Ea.

Estimate: $67,728.12

Assessor Name: System

Date Created: 02/15/2016

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: C3020414 - Wood Flooring

Location: Classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace wood flooring

Qty: 40,000.00

Unit of Measure: S.F.

Estimate: $1,166,082.84

Assessor Name: System

Date Created: 02/15/2016

Notes: The classrooms in this school have a wood floor finish that appears to be from original construction. Other sections of wood flooring is showing signs of age such as the effects of sanding and refinishing with yearly cleaning and waxing with some repairs. Most of the floor finish is in fair condition however, the finish is beyond its expected life cycle. It is recommended that the wooden floor finish be removed and replaced with an in kind finish.

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: 6.00

Unit of Measure: Ea.

Estimate: $45,475.14

Assessor Name: System

Date Created: 02/11/2016

Notes: Replace older drinking fountains. Include fittings and trim.

System: D2020 - Domestic Water Distribution

Location: entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water piping (75 KSF)

Qty: 70,498.00

Unit of Measure: S.F.

Estimate: $357,238.94

Assessor Name: System

Date Created: 02/11/2016

Notes: Replace domestic hot and cold water pipe, fittings, valves, hangers and insulation.

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. (+50KSF)

Qty: 70,498.00

Unit of Measure: S.F.

Estimate: $345,845.50

Assessor Name: System

Date Created: 02/11/2016

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: 02/11/2016

Notes: Replace boiler feed system. Connect to make up water line and include electrical connections.

System: D3040 - Distribution Systems

Location: classrooms

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: 70,498.00

Unit of Measure: S.F.

Estimate: $3,400,762.11

Assessor Name: System

Date Created: 02/11/2016

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: Install HVAC unit for Auditorium (200 seat).

Qty: 350.00

Unit of Measure: Seat

Estimate: $498,899.53

Assessor Name: System

Date Created: 02/11/2016

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/ gymnasium

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 5,000.00

Unit of Measure: S.F.

Estimate: $287,380.96

Assessor Name: System

Date Created: 02/11/2016

Notes: Provide a new central station air handling unit for the cafeteria/ gymnasium 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: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 70,498.00

Unit of Measure: S.F.

Estimate: $1,512,329.95

Assessor Name: System

Date Created: 02/11/2016

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: 70,498.00

Unit of Measure: S.F.

Estimate: $1,008,506.78

Assessor Name: System

Date Created: 02/11/2016

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: 930.00

Unit of Measure: L.F.

Estimate: $129,176.23

Assessor Name: System

Date Created: 02/01/2016

Notes: Provide surface metal raceway system with 6 to 8 duplex receptacles in each of 31 classrooms.

System: D5020 - Lighting and Branch Wiring

Location: Building wide

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Wiring Device

Qty: 140.00

Unit of Measure: Ea.

Estimate: $36,851.98

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace all existing duplex receptacles throughout the building with new devices due to their age and condition (estimate 140 duplex receptacles to be replaced).

System: D5020 - Lighting and Branch Wiring

Location: Auditorium platform

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace lighting fixtures

Qty: 4.00

Unit of Measure: Ea.

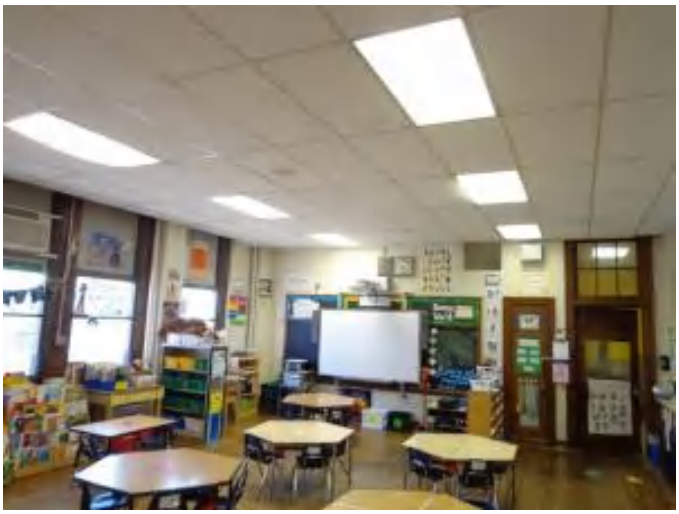
Estimate: $29,141.19

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace two (2) rows of theatrical batten lighting and two (2) worklights on the auditorium platform.

System: D5030 - Communications and Security



Location: Building wide
Distress: Beyond Service Life
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: $26,623.00
Assessor Name: System
Date Created: 02/01/2016

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

System: D5030 - Communications and Security

Location: Auditorium
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Sound System
Qty: 1.00
Unit of Measure: LS
Estimate: $12,718.37
Assessor Name: System
Date Created: 02/01/2016

Notes: Replace non-functional sound system equipment for the auditorium.

System: D5030 - Communications and Security

Location: Main Office

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace clock/program system

Qty: 1.00

Unit of Measure: Ea.

Estimate: $10,648.74

Assessor Name: System

Date Created: 02/01/2016

Notes: Replace program system master controller in the Main Office.

Priority 5 - Response Time (> 5 yrs):

System: B3010105 - Built-Up

Location: Roof

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and Replace Built Up Roof

Qty: 15,000.00

Unit of Measure: S.F.

Estimate: $508,230.16

Assessor Name: System

Date Created: 02/15/2016

Notes: There are a number of roof sections and different roof elevations ranging from the main roof to the addition roof. Parapet heights, coping materials, and the height of the flashing also varies in different sections. The main roof is a built up application that was installed in the early 1990'S. The other built up roofs have not conclusive installation dates and have been seal coated several times to extend the life cycle of the application. During the time of the inspection it was reported that several leaks are active and a consistent repair program is consuming efforts to maintain the roof. Considering the age and condition of the roofing systems, universal upgrades are recommended. Remove and replace all roof sections.

System: C3030 - Ceiling Finishes

Location: Ceiling

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 80,000.00

Unit of Measure: S.F.

Estimate: $1,206,594.42

Assessor Name: System

Date Created: 02/15/2016

Notes: The ceiling finish is a mix of 12 x 12 ceiling grid, painted and 2 x 4 Acoustical tile finish. Ceilings have been repaired in several areas and is in good condition considering the age of the application and the current condition of the school. The ceiling finish is expected to require upgrades to support the recommended mechanical electrical efforts in this report. This deficiency provides a budgetary consideration for removal and replacement of the current ceiling finish to a new acoustical tile finish. Considering the recommended mechanical and electrical upgrades this effort should be completed as part of an overall renewal program for the school. No work should be considered until after the recommended exterior efforts are complete.

System: 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. (+75KSF)

Qty: 70,498.00

Unit of Measure: S.F.

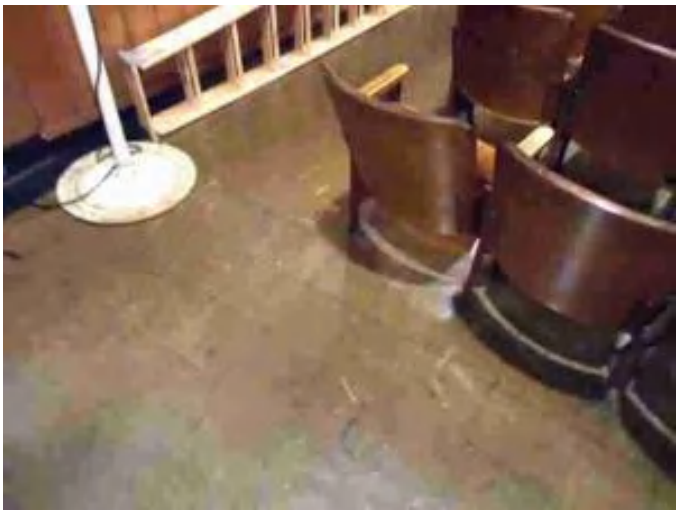
Estimate: $1,132,165.18

Assessor Name: System

Date Created: 02/11/2016

Notes: Provide a two hundred ton air cooled package chiller on the roof with pumps, piping and controls. Connect to new fan coil units and air handling units.

System: E2010 - Fixed Furnishings



Location: Auditorium

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 400.00

Unit of Measure: Ea.

Estimate: $360,762.20

Assessor Name: System

Date Created: 02/15/2016

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.

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, gas/oil combination, cast iron, steam, gross output, 4650 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	mechanical room	weil mclain	bhlg1994			35	1972	2007	$112,258.50	$246,968.70
D5010 Electrical Service/Distribution	Panelboard, 4 wire w/conductor & conduit, NQOD, 120/208 V, 600 A, 1 stories, 25' horizontal	2.00	Ea.	Mechanical Room 020	Pelham Electrical Mfg. Corp.	NA	NA		30			$18,536.85	$40,781.07
												Total:	**$287,749.77**

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):	70,800
Year Built:	1927
Last Renovation:	
Replacement Value:	$1,582,563
Repair Cost:	$1,653,896.83
Total FCI:	104.51 %
Total RSLI:	62.01 %

Description:

Attributes:

General Attributes:

Bldg ID:	S634001	Site ID:	S634001

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	40.47 %	127.78 %	$1,628,617.45
G40 - Site Electrical Utilities	151.15 %	8.21 %	$25,279.38
Totals:	**62.01 %**	**104.51 %**	**$1,653,896.83**

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.	15,900	30	1927	1957	2027	40.00 %	0.00 %	12			$121,635
G2030	Pedestrian Paving	$11.52	S.F.	46,500	40	1927	1967	2027	30.00 %	49.05 %	12		$262,735.53	$535,680
G2040	Site Development	$8.27	S.F.	70,800	25	1927	1952	2027	48.00 %	233.28 %	12		$1,365,881.92	$585,516
G2050	Landscaping & Irrigation	$3.78	S.F.	8,400	15	1927	1942	2027	80.00 %	0.00 %	12			$31,752
G4020	Site Lighting	$3.58	S.F.	70,800	20	1927	1947	2047	160.00 %	0.00 %	32			$253,464
G4030	Site Communications & Security	$0.77	S.F.	70,800	20	1927	1947	2037	110.00 %	46.37 %	22		$25,279.38	$54,516
								Total	**62.01 %**	**104.51 %**			**$1,653,896.83**	**$1,582,563**

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.

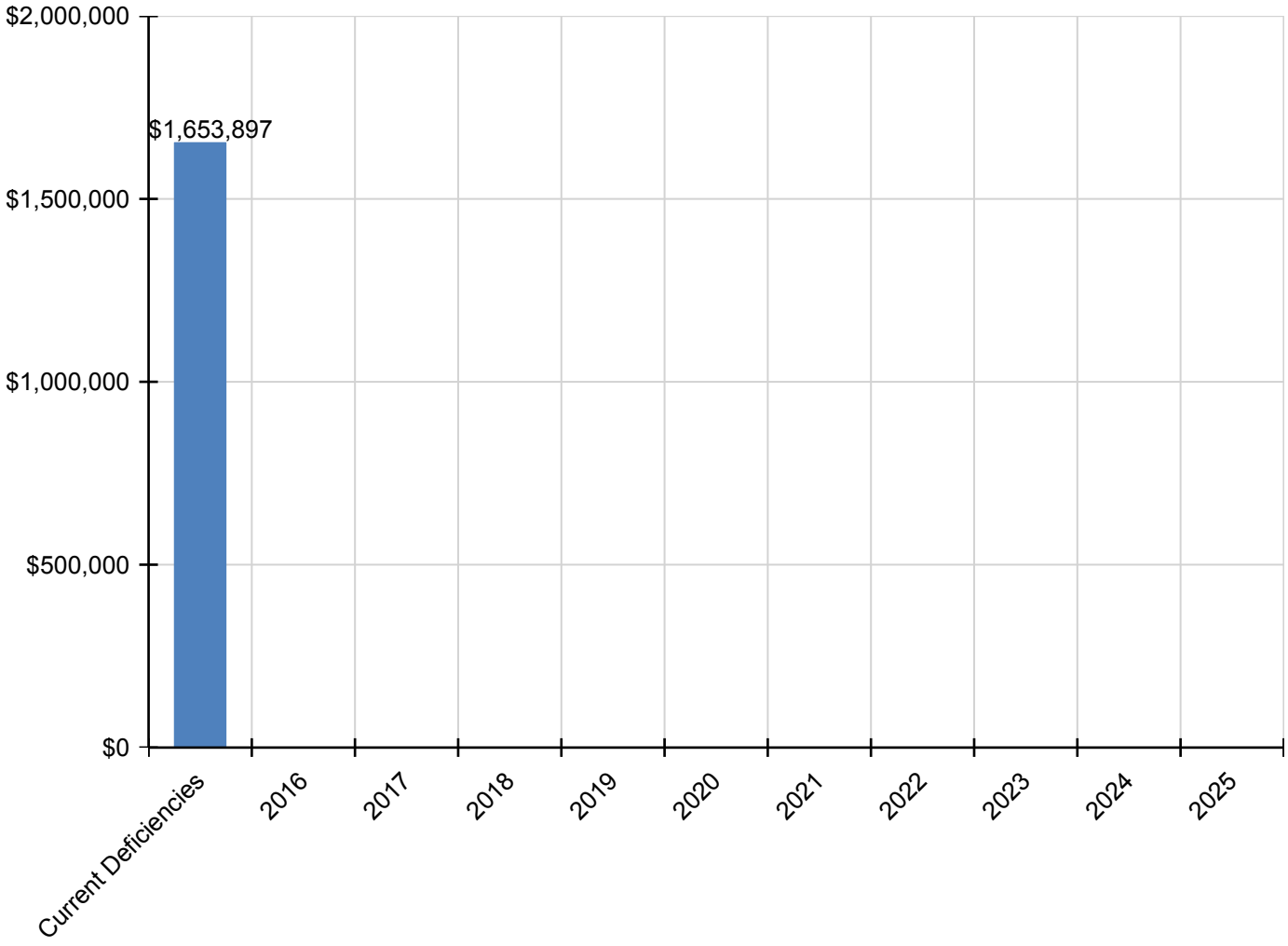
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$1,653,897**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,653,897**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$262,736	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$262,736**
G2040 - Site Development	$1,365,882	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,365,882**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$25,279	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$25,279**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

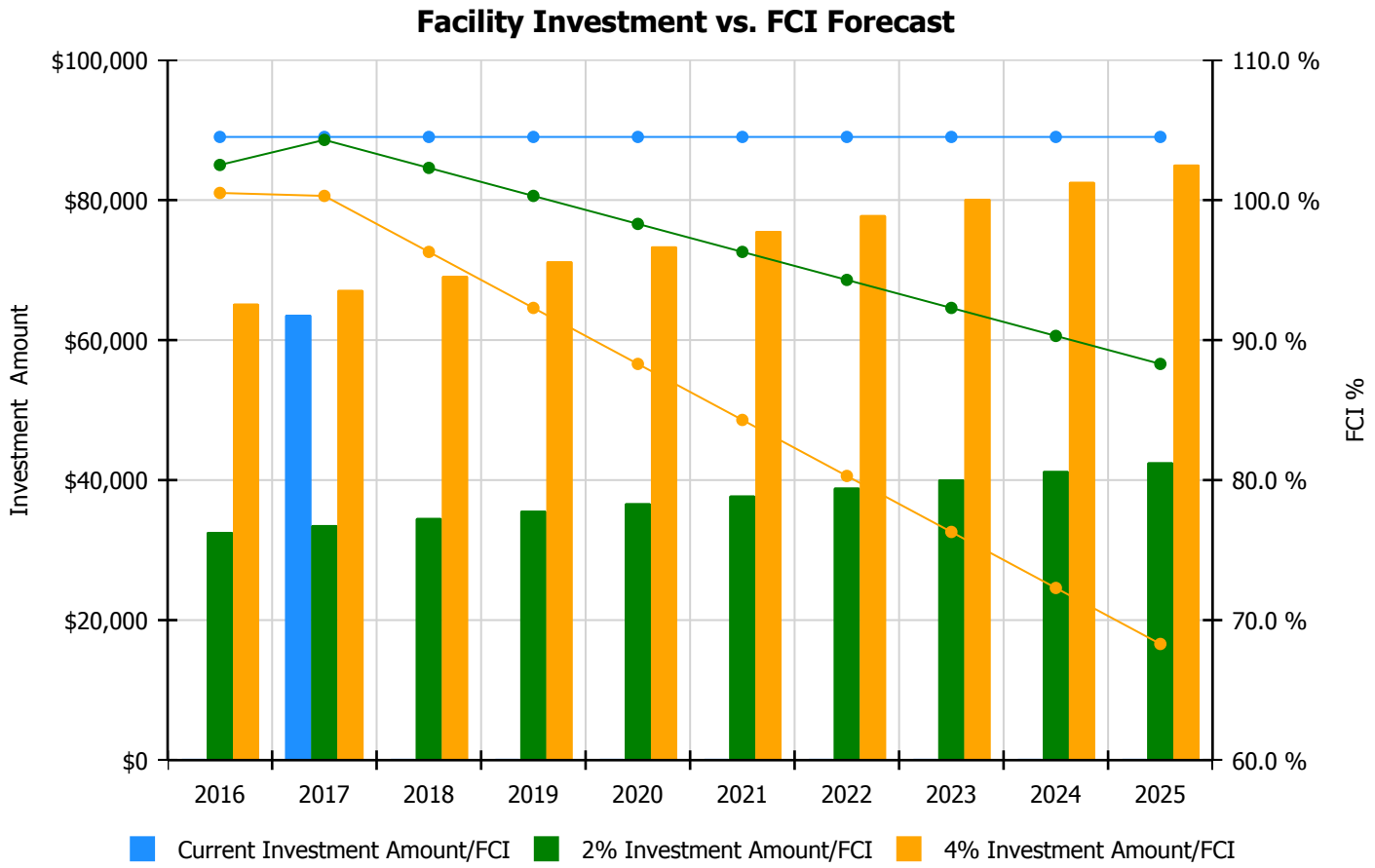
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

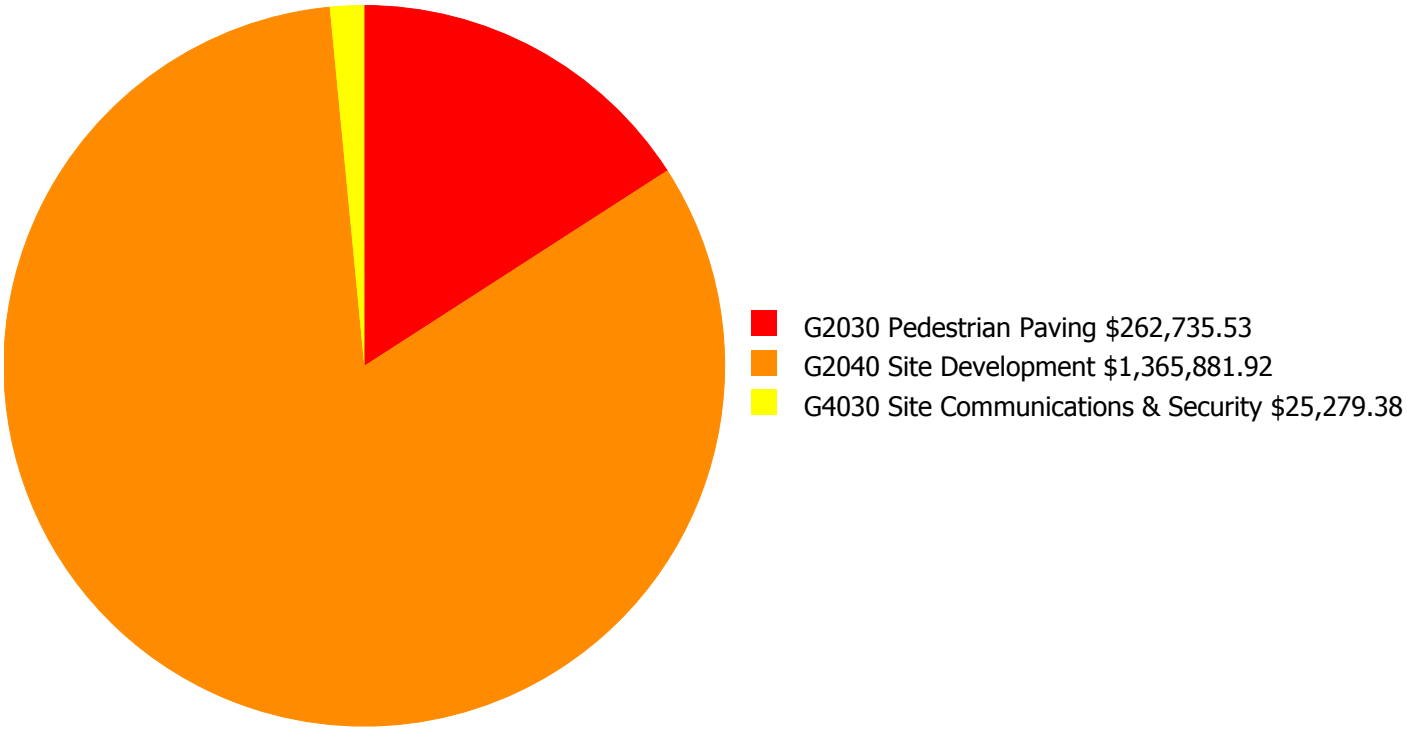
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 104.51%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$32,601.00	102.51 %	$65,202.00	100.51 %
2017	$63,620	$33,579.00	104.30 %	$67,158.00	100.30 %
2018	$0	$34,586.00	102.30 %	$69,172.00	96.30 %
2019	$0	$35,624.00	100.30 %	$71,248.00	92.30 %
2020	$0	$36,692.00	98.30 %	$73,385.00	88.30 %
2021	$0	$37,793.00	96.30 %	$75,587.00	84.30 %
2022	$0	$38,927.00	94.30 %	$77,854.00	80.30 %
2023	$0	$40,095.00	92.30 %	$80,190.00	76.30 %
2024	$0	$41,298.00	90.30 %	$82,595.00	72.30 %
2025	$0	$42,537.00	88.30 %	$85,073.00	68.30 %
Total:	**$63,620**	**$373,732.00**		**$747,464.00**	

Deficiency Summary by System

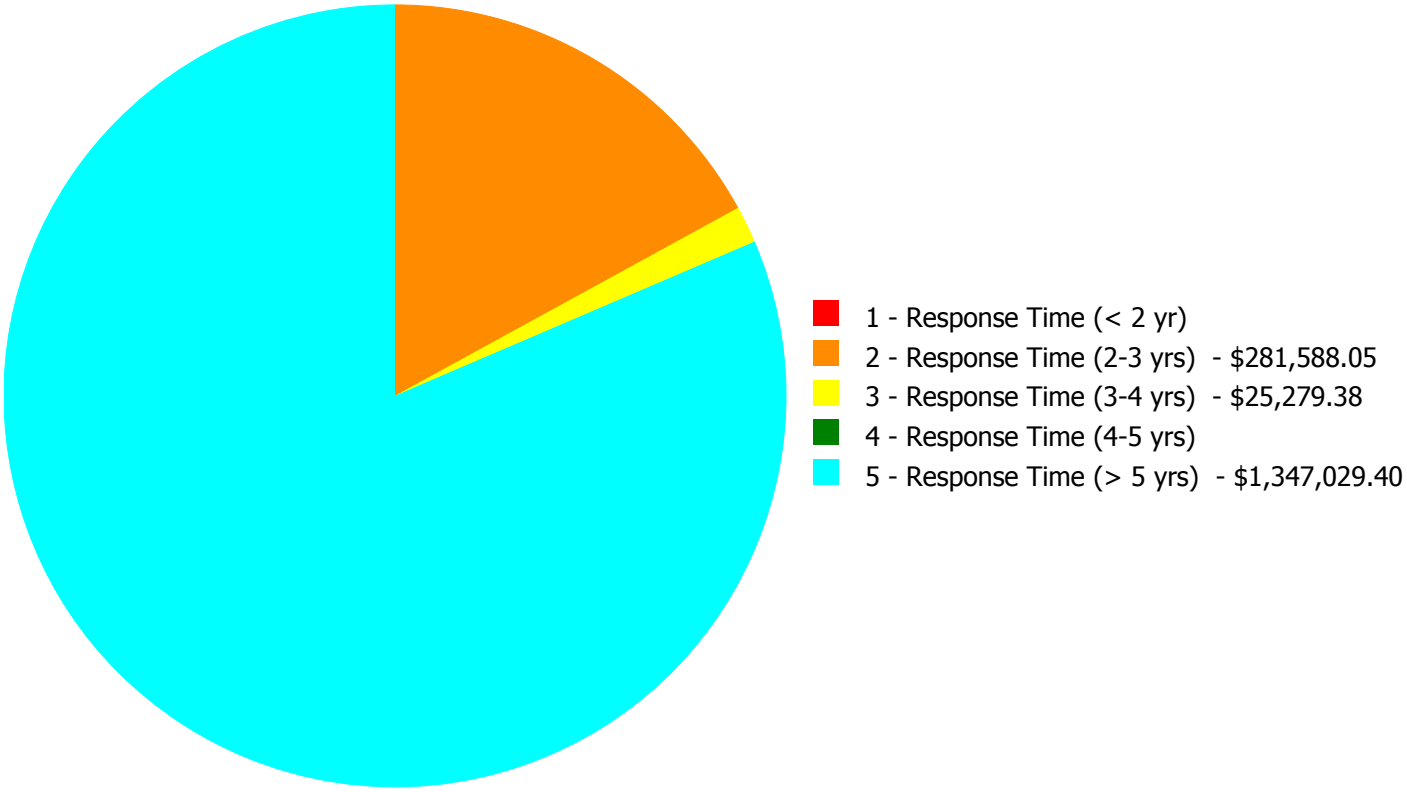
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $1,653,896.83

Deficiency Summary by Priority

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



Budget Estimate Total: $1,653,896.83

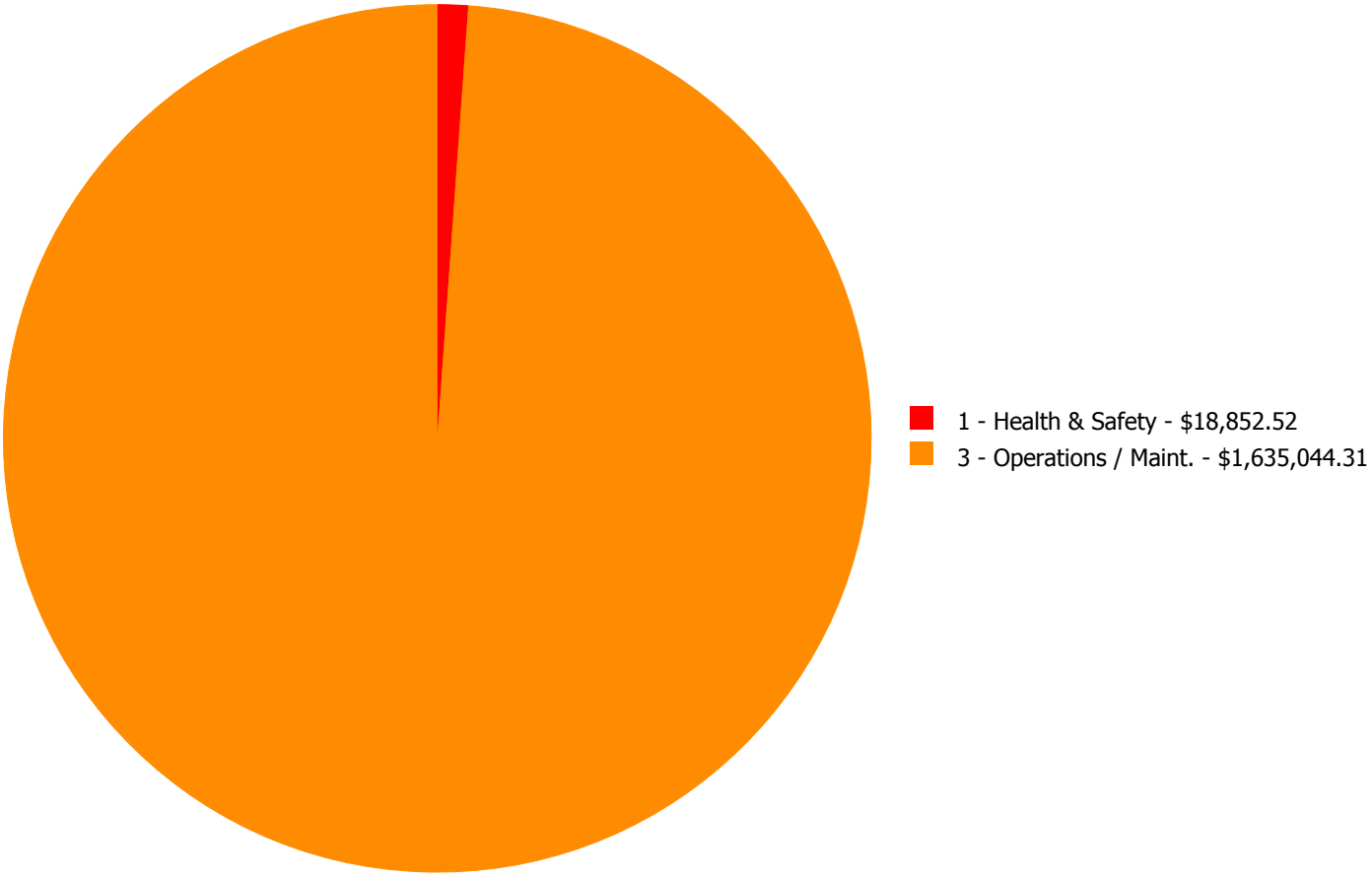
Deficiency By Priority Investment Table

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
G2030	Pedestrian Paving	$0.00	$262,735.53	$0.00	$0.00	$0.00	$262,735.53
G2040	Site Development	$0.00	$18,852.52	$0.00	$0.00	$1,347,029.40	$1,365,881.92
G4030	Site Communications & Security	$0.00	$0.00	$25,279.38	$0.00	$0.00	$25,279.38
	Total:	$0.00	$281,588.05	$25,279.38	$0.00	$1,347,029.40	$1,653,896.83

Deficiency Summary by Category

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



Budget Estimate Total: $1,653,896.83

Deficiency Details by Priority

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

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

System: G2030 - Pedestrian Paving

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

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

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

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $262,735.53

Assessor Name: Craig Anding

Date Created: 02/15/2016

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

Date Created: 02/15/2016

Notes: The trash dumpster is located south of the main building enclosed by site fencing but open to students. The exterior services are not protected. Upgrades to protect the exterior services and trash area is necessary for the safety of the students and the general public. Construction of a secure lockable dumpster area is recommended.

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

System: G4030 - Site Communications & Security

Location: Site

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace video surveillance camera

Qty: 4.00

Unit of Measure: Ea.

Estimate: $25,279.38

Assessor Name: Craig Anding

Date Created: 02/01/2016

Notes: Replace all four (4) building mounted exterior video surveillance cameras.

Priority 5 - Response Time (> 5 yrs):

System: G2040 - Site Development

Location: Site

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Remove and replace metal picket fence - input number of gates

Qty: 8,000.00

Unit of Measure: L.F.

Estimate: $1,347,029.40

Assessor Name: Craig Anding

Date Created: 02/15/2016

Notes: This school has a perimeter fence surrounding the service parking and loading dock 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