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.

Lawton School

Governance	DISTRICT	Report Type	Elementary
Address	6101 Jackson St.	Enrollment	752
	Philadelphia, Pa 19135	Grade Range	'00-05'
Phone/Fax	215-335-5659 / 215-335-5325	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Lawton	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	**10.35%**	**$4,130,380**	**$39,902,141**
Building	10.57 %	$4,124,735	$39,027,410
Grounds	00.65 %	$5,645	$874,731

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	02.23 %	$40,266	$1,807,344
Exterior Walls (Shows condition of the structural condition of the exterior facade)	00.09 %	$2,506	$2,947,485
Windows (Shows functionality of exterior windows)	00.00 %	$0	$1,438,207
Exterior Doors (Shows condition of exterior doors)	15.40 %	$17,826	$115,791
Interior Doors (Classroom doors)	54.67 %	$153,236	$280,295
Interior Walls (Paint and Finishes)	10.09 %	$102,170	$1,012,578
Plumbing Fixtures	61.06 %	$659,227	$1,079,653
Boilers	00.00 %	$0	$1,490,912
Chillers/Cooling Towers	00.00 %	$0	$1,954,875
Radiators/Unit Ventilators/HVAC	00.00 %	$0	$3,433,009
Heating/Cooling Controls	00.00 %	$0	$1,078,056
Electrical Service and Distribution	00.00 %	$0	$774,603
Lighting	12.30 %	$340,767	$2,769,406
Communications and Security (Cameras, Pa System and Fire Alarm)	00.00 %	$0	$1,037,329

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

S733001;Lawton

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):	76,856
Year Built:	1973
Last Renovation:	2008
Replacement Value:	$39,902,141
Repair Cost:	$4,130,379.83
Total FCI:	10.35 %
Total RSLI:	80.20 %

Description:

Facility Condition Assessment
December 2015

School District of Philadelphia
Henry Lawton Elementary School
6101 Jackson Street
Philadelphia, PA 19135

79,856 sf / 855 students / LN 07

Henry Lawton Elementary School is located at 6101 Jackson Street. The main entrance faces Hawley Street. The original building, Element 1 was constructed in 1973. Element 2 was constructed some time around 1995 and the final addition was constructed in 2007-8. The size of the school is now 79,856 square feet; it is 1 and 2 stories tall. There is no basement in this building. Mechanical/electrical equipment is located in a small room on the first floor in Element 1; a depressed roof adjacent to the gymnasium has an air handler for the gym. All mechanical equipment for the new addition is on the roof of the addition. The exterior of Elements 1 and 2 consist of flat precast concrete columns and wall panels with exposed aggregate, creating a simple, clean

appearance. The 2008 addition is constructed of beige and brown brick. Tom Weicker, the Building Engineer, accompanied the team during the building inspection.

At the time of the inspection, the Team met with Principal Arnetta Imes, who expressed the following concerns. Plumbing drains back up into the building. The air-conditioning system is not working properly; Room 222 always feels damp. Condensate pans above the ceilings flood and drip onto ceilings. The kitchen electrical service is problematic causing frequent electrical overloads. There are no external security cameras; door security controllers do not work properly. Not all windows have security screens; one is broken due to the lack of screens. The elevator has frequent breakdowns.

ARCHITECTURAL/STRUCTURAL SYSTEMS

Foundations were not seen. There is no basement, therefore no walls below grade could be seen. Grading around the building is generally flat. Footings at the bottom of the foundations were not seen and their construction type or condition could not be ascertained.

Ground floor slabs are good condition, with some minor floor tile cracks and joint separation observed. Unfinished slabs in the mechanical area and loading door area need to be cleaned and resealed. Upper floor slabs are constructed of precast concrete planks, exposed to view as first floor ceilings in most locations. There were a few locations where small cracks were observed in corridors across vinyl tile flooring in ground floor slabs. In the area of the Kindergartens in the new addition, the concrete slab is buckling slightly causing a slight lump across the corridor.

Roof construction in Elements 1 and 2 is composed of flat concrete planks spanning across beams or loadbearing walla. The entire roof deck is flat with minimum overall slope and gradual pitch to roof drains. Drainage is adequate on all roofs. Since there is a minimal height gravel stop (no parapet) on all but 2 roofs, there is no need for overflow drains or pipes on those roofs; if all roof drains are clogged, roof water simply runs over the edge of the roof with little accumulation. The lowered roof on Element 1 adjacent to the gym has two roof drains near each other, which seems to keep that roof free of water; one roof drain basin is slightly higher than the other indicating it serves as the overflow drain. The lowered roof over the new 1 story section of the new addition has two regular roof drains and two overflow roof drains, which empty to spouts facing Lardner Street; if water is emptying out of those spouts, it means the roof drains are clogged and need cleaning. All roof were not clogged and were relatively clear of debris.

Exterior walls of Elements 1 and 2 are constructed of rectangular precast concrete panels flanking large 2 story window panels; rectangular, two story tall, cast in place concrete columns separate the precast panels. All concrete panels are in good condition with surface spalling observed in only one location, near the corner of Larner and Jackson Streets. Wall panels have some aggregate exposed to create texture. Joints at columns are in fair condition with some joints separating and caulking failing. A small upper section of the walls is cantilevered approximately 2 ft. beyond the second floor walls with a plaster soffit. No major gaps were seen along panels from the outside. The new addition is constructed of beige and brown brick. Joints are in good condtion. Lintels over brick openings protrude beyond the face of the brick wall, which is unusual, but is not causing cracking or staining of brickwork below at this time. The loading dock walls in the new addition, facing Lardner Street has been damaged by graffiti. The inspection team was told that a homeless person lives in the loading dock area.

Exterior windows were completely replaced in the old building with the construction of the new addition. The new window system consists of clear anodized aluminum frames with insulated glazing and small operating units. Small windows are easily opened and closed. The units provide good thermal insulation and ample daylight into classrooms. First floor windows have integral bug/security screens. No operational issues were reported. Univents in the exterior window units in old classrooms have been replaced with newer units that are somewhat smaller than the original units. After installing the smaller unit, exposed gaps in the exterior wall were blanked off with thin sheets of metal having no insulation. A finished layer of insulation and gypsum board needs to be added to the gaps left by the new smaller units, to prevent cold drafts and condensation on the inside of the metal panels during winter. The only window problem occurs in the new addition, related to the ease with which parents could walk up the Dittman Street driveway and look into the Kindergarten corridor windows (facing Benner Street), distracting children during the school day. Teachers applied opaque material to the windows to prevent parents from looking in during the school day; window shades or solid spandrel material would provide a more permanent and cleaner solution to this problem. Coincidentally, the outside piece of insulated glass is broken in this glazing unit.

Most exterior doors used as stairway, toilet room or mechanical area exits are constructed of painted steel frames and flush hollow metal door units. They are in good condition with mimimal dents and scratches; paint is worn and should be reapplied. Entrance doors are glass and stainless steel framed units with two sidelites. Door hardware was replaced in 2008 with the construction of the new addition; all seemed to be in good operation.

Roof covering consists of a fully adhered asphalt membrane sheet system with light grey granules embedded in the surface. It appears as if the roof over Element 1 and 2 were replaced when the new addition was constructed, making the roof system less than

10 years old. There were no soft areas and only 2 small areas of ponding at the time of inspection. The overall pitch of the roof appears to be less than the code required 2% slope, however no leaks were reported or seen that could be attributed to the roof. (Leaks seen were known to be caused by excessive air conditioning condensation.) An expansion joint across the Element 1-2 roof appeared to have been recently repaired, but looked to be water tight. It appears as if roof drains are periodically inspected and cleaned to minimize clogging. There were mechanical equipment clearance code violations observed. Some of the new condensing units located on new roof #1 are less than 10 feet away from the drop down to the gymnasium roof and some are too close to the edge of the roof #2 near the playground. A guard rail 42" tall or mechanical connectors for use of safety straps need to be provided to eliminate this dangerous condition.

Partitions in all spaces are constructed of concrete block. There are no vision panels in any of the old building corridor walls, preserving a fire-rated construction which is required by today's codes in a non-sprinklered Educational building. Six classrooms on the second floor of the old building have the original folding wood partitions that permitted the creation of 2 oversized classrooms. These partitions are not easy to operate and are no longer opened, however in their closed position, they have whiteboards attached, are good classroom dividers and do not need to be replaced. All stairways, toilet rooms, the cafetorium, gym, and school offices are also constructed of concrete block and are in fair condition with surface damages to painted finishes. Exterior walls of classrooms, gym, and cafetorium are the insides of the precast concrete wall panels. Corridors walls in the new building have recesses for doors and have glass sidelites adjacent to classroom doors, letting daylight into the corridors. There are also windows at the ends of the corridors in the new addition, letting in daylight. The main entrance to the school has no vestibule, allowing huge amounts of cold air to enter the building when doors are opened in winter; hot air is allowed in when weather is warm. A vestibule wall with a pair of doors should be constructed.

Interior classroom and office doors in the original building are the original solid core wood with hollow metal door frames. They have narrow lite wired glass and closers as required of a fire rated door and lever locksets that can be locked from the inside to provide security lockdown. Doors are damaged and worn and should be properly prepared and painted with a sold paint to improve their appearance. Stairway doors are newer (not original) flush steel doors and frames with panic hardware and closers. Most doors frames are in good condition as they were probably installed when the addition was constructed, but could use a new coat of paint. Interior doors in mechanical rooms are the same type of wood doors in steel frames as the classroom doors in and are similarly worn; they should be replaced with hollow metal doors or repainted like the classroom doors. Doors in the new addition are solid oak doors with full height wired glass divided sitelites in hollow metal frames. These code-compliant doors have closers and lever handle security locksets. Frames are scratched on edges in many rooms and should be repainted. Stairway doors are solid wood with narrow lite vision panels, closers, panic hardware on push sides and lever handles on pull sides.

Interior fittings/hardware in the old building classrooms include black slate chalkboards, cork bulletin boards, and cubbies along walls. Most classrooms have smartboards. Toilet room partitions are mostly solid plastic partitions; at least one toilet room has the original steel toilet partitions, which are surprisingly in good condition. Toilet room accessories (toilet paper dispensers, soap, paper towel or dryers, grab bars, door latches) seem to be mostly in place and operating. There some partially accessible toilet rooms in the old building that have grab bars and open space around toilets; there are other toilet rooms with combination sink-toilet compartments not equipped with grab bars; sinks and urinals do not comply with ADA guidelines. The new addition as fully accessible toilet rooms complete with plastic partitions, accessible accessories, and all the proper clearances on both floors, satisfying the accessibility requirement.

Stair construction in the new addition and the old building consists of concrete filled steel treads with steel nosings, steel risers, and steel stringers. Handrails are 32" height with 42" guards on open sides of stairways and 42" guards at the top of stair runs. Balustrade is a wire mesh inlay that complies with 4" maximum spacing required today. Even though all other stair and railing criteria are satisfied, the minimum handrail height is 34"; this should be reviewed with a local code official to see if it is necessary to raise the handrail height, in light of all other components in compliance. Handrails need to be repainted, but the other parts of the stairway construction are in good condition. The guard railings in Stairways A and B in the old building are 32" high along the glazing at the intermediate platforms; guards need to be extended to be 42" high to protect the gap and the glass.

Wall finishes in the old building classrooms, cafetorium, gymnasium, and stairways are painted concrete block interior walls and painted interior surface of precast concrete panels on the exterior walls. Many walls have stains and marks; some exterior walls have been caulked but have not been painted, leaving the caulking exposed and unsightly. All walls in the old building classrooms, gymnasium, and cafetorium need to be repainted. Toilet room walls and corridor walls are painted block in fair condition. There is no entrance vestibule at the main front visitor and student entry doors into the old building on Jackson Street. The doors open up into the main school lobby and corridor, which admits large amounts of cold air into the building during winter. There seems to be enough space in the entrance area to allow for the creation of a vestibule, which would trap the cold air blast admitted to the building when doors are opened during winter. Construction of a lobby vestibule is recommended. Wall finishes in the new addition are painted block in all rooms and corridors, in good condition.

Floor finish in classrooms, corridors, and stairway landings in the new addition are 12" x 12" VCT (vinyl composition tile) glued to the

concrete slab; this finish is in good condition. VCT is also used in all classrooms and corridors in the old building. The VCT in the old building classrooms is worn, dirty and damaged; corridors are in better condition with some dirt accumulation in corners and at doors. The entrance lobby in the old building has newer VCT in good condition, protected with loose entrance mats. The cafetorium (in the old building) has terrazzo in very good condition and the kitchen (part of the new addition) has highly quarry tile, also in good condition. The gymnasium (in the old building) has VCT which is worn and damaged and should be refinished. Stair walking surfaces in both buildings are painted or sealed concrete which appears to have been refinished with the construction of the addition. Toilet rooms in both buildings have ceramic mosaic floors which are dirty and in need of cleaning, but in good condition. In the old building classrooms, sections of VCT need to be added where old unit ventilators were replaced with newer smaller units, exposing sections of bare concrete floor.

Ceiling finishes in classrooms and corridors in the old building are exposed, painted concrete planks painted white with surface mounted 1x4 fluorescent lighting fixtures. The cafetorium has a 2x4 suspended acoustical tile ceiling with surface mounted fluorescent lighting, that looks like it is new and is in good condition. The Gymnasium has an exposed precast concrete plank roof system, painted white. All painted ceilings are in good condition. Ceilings in the new addition in all spaces consist of 2x4 suspended acoustical tile ceiling with recessed lighting in good condition.

Fixed furnishings in each classroom in the new addition consist of plastic laminate locker/cubbie island and a countertop and cabinet-sink-counter storage areas against the wall opposite the island. This arrangement creates a contained utility/storage area near the door. A full service kitchen is provided with stainless steel institutional cooking and serving equipment. The art classroom and the science classroom in the old building have built in wood casework and benchtops. The music room has large wood storage cabinets. The stage in the cafetorium has a ramp up to the stage and a stage curtain, however there is no fixed seating, since the space doubles in use as a cafeteria.

There is an elevator in the building, serving both floors. The inspection team was told it fails often and requires frequent repairs. There is wheelchair access into the main building entrance and four doors on the playgroud side into the new and old sections of the building. Handicap parking is also marked and provided near the accessible entrance to the new addition.

MECHANICAL SYSTEMS

Plumbing Fixtures – The building is equipped with wall hung urinals (flush valve type), a combination of wall hung and floor set water closets (flush valve type), and wall hung lavatories with wheel handle faucets. Many of the original plumbing fixtures remain in service, however, these fixtures have reached the end of their service life and should be replaced. New fixtures will provide lower water consumption and provide savings on water heating costs. The bathrooms are also equipped with floor drains.

Electric water coolers in the corridors are located near the restrooms in general. These EWCs are wall hung fountains. There are also recessed style drinking fountains located in the gymnasium. Most appear to be the original installed equipment. The replacement of all original drinking fountains is recommended as the equipment is approximately 43 years old and beyond its service life. In the 2007 – 2008 addition, the electric water coolers are ten years old, are high/low ADA compliant and do not need to be replaced.

Wall hung service sinks are original and are available within the building for use by the janitorial staff. The Cafeteria's food prep/kitchen is equipped with one, three compartment stainless steel sink with blade handle operated faucets. The grease trap could not be located during the survey. The kitchen is also equipped with a hand sink. The triple wash sink and hand sink show signs of normal usage. Some fixtures are discharge to indirect connections to floor sinks in the kitchen while others are hard connections to the sanitary system. Chemicals are injected manually into the sanitizing basin.

Some classrooms are equipped with hand sinks. These sinks are original and should be replaced.

Domestic Water Distribution – It appears that the 4" domestic water service piping is mostly soldered copper. Water service enters the building on the first floor, with a double check backflow preventer (RPZA – reduced pressure zone assembly) and bypass assembly, however there is water meter on the main line located in a vault prior to entering the building. The domestic water piping is copper with soldered joints. The distribution piping appears to be original and is at the end of its service life and is recommended to be inspected and repaired as needed.

There are six instantaneous, tankless, natural gas fired, water heaters, manufactured by Paloma, model PH-28CIFSN (minimum input 19,000 btuh, maximum input 199,900 btuh) which serves the school restrooms and kitchen. Three water heaters serve the kitchen while the others serve the remainder of fixtures requiring hot water. The water heaters are located in the mechanical room near the building engineer's office. The water heaters were installed in 2008 and should not need to be replaced for 5 – 7 years. The water heaters for the kitchen cannot maintain the heating requirement of 140 degrees F. The hot water system is equipped with two recirculation pumps, one for the kitchen loop and one for the restroom loop. The system is also equipped with two expansion tanks.

Sanitary Waste - The sanitary waste piping system in the original building is galvanized with threaded fittings and joints and appears to be the original piping installed in the building. It is therefore recommended to inspect this piping and repair or replace sections as needed. The sanitary system leaves the building by gravity flow.

Rain Water Drainage - The rain water drains from the roof are routed through mechanical chases in the building and connect to the underground site drainage system. There are no overflow scuppers for the upper roof of the building as the roof does not have a parapet. The lower roofs which have parapets are not equipped with a secondary drainage system.

Energy Supply - A 4" natural gas service enters the building on the first floor in the main mechanical equipment room near the engineer's office. The gas service needs protection as it is not in a screen enclosure and can easily be tampered with. The natural gas main is welded, black steel piping while the branches are threaded, black steel.

Heat Generating and Cooling Generating Systems – There is no centralized heating or cooling systems for the building.

Distribution Systems – There is no piping distribution systems for the building.

Fresh air is admitted into the building through the unit ventilators and through outside air connections to air handling and roof top unit equipment. Ventilation air is induced into the classrooms through the outside air intake grilles located in the building exterior wall which are ducted to the unit ventilators.

The building uses unit ventilators with electric resistance heating and direct expansion coils for cooling in the classrooms with remote condensing units. The unit ventilators are packaged self-contained equipment manufactured by Carrier, Thermal Zone and American Standard. The Carrier units are model 24ABB342A0060010, Thermal Zone are model TZAA-336-DC757 and the American Standard units are model 2A7C3030A4000AA. The Carrier units are 3-1/2 ton and 3 ton units, R410a, Thermal Zone units are 3 ton units and the American Standard are 2-1/2 ton units, R22. The American Standard and Thermal Zone units utilize R22 which will be phased out in 2020. In addition, there are some condensing units which are located within 10'-0" of the edge of the roof. According to the mechanical code protection must be provided at the room edge if the equipment is located within 10'-0" of the edge. Electric resistance convectors are located at the mid landing levels for the stairwells and at entryways/exits.

The gymnasium is served by one roof top unit, manufactured by Titan, heating and ventilation only, with electric resistance heating coils. The supply distribution system consists of sidewall supply duct grilles. The return system consists of two return grilles connected to a ducted return system. The unit appears to be about ten years old and has approximately another 10 – 15 years of service life provided that regular maintenance is performed at the required intervals.

The kitchen has been provided with a hood exhaust system and a make-up air heating and ventilation system for the space Proper air flow pressurization and balancing should be performed for the seating area with respect to the kitchen to maintain the kitchen under negative pressurization.

Terminal & Package Units - There are twenty roof mounted exhaust fans of which some provide exhaust to bathrooms, electrical rooms and for classrooms for the relief air of the outside air provided by the unit ventilators. The fans are a combination of upblast models and ventilators. The fans for relief air are equipped with variable speed drives to allow for pressurization control for the building. There are two split system Mitsubishi cooling only units to serve the LAN rooms.

Controls & Instrumentation - The original control system consists of DDC installed in 2008.

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

ELECTRICAL SYSTEMS

Site Electrical Service is from Medium voltage underground lines on wooden poles along Benner St. An underground medium voltage cable drop from utility power pole feeds the main service switchgear located in the main electrical room in the basement. Main service substation consists of 600A medium voltage load interrupter, metering transformer section, 1500/2000KVA, 13200V to 480/277V transformer and 2500A, 408/277V switchboard. The existing substation is new and in good condition.

Main distribution switchboard feeds existing elevator, a motor control center in the electrical closet A213, a distribution panel in the mechanical room B142. It also feeds seven power panels throughout the building. The power panels in turn feed lighting fixtures directly and receptacles via several step down transformers rated from 45KVA to 75KVA. All electrical panels and transformers are

placed in five electrical closets (re. three in the first floor and two in the second floor). Surge protection device is provided in each panel for protection of sensitive electronic devices. School distribution system is new and in a good working condition.

Classrooms, corridors, offices, and other areas typically provided with adequate number of duplex receptacles. No major deficiencies were observed except those receptacles in kindergarten classrooms in the original building which are not of tamper-resistant type. This is in violation of the electrical codes that receptacles that are subject to child access be of either tamper proof or GFCI.

Interior building spaces are illuminated by various types of fluorescent lighting fixtures. 2x4 lay in grid fluorescent with parabolic lens and T8 lamps are used for the classrooms and offices in newer building. Original building utilized with 1x4 surface mounted fluorescent with outdated T12 lamps in the classrooms and 1x4 surface mounted fluorescent with T8 lamps in the corridors. Cafeteria is provided by linear surface fluorescent lighting fixtures with parabolic lenses and T8 lamp. These lighting fixtures are still in good conditions and no need for replacement. Gymnasium provided with pendent mounted metal halide fixtures which have high energy consumption and are difficult to re-lamp. Fluorescent fixtures with outdated T12 lamps should be replaced with similar type fluorescent but with T8 lamps. All existing pendent mounted metal halide fixtures in gymnasium should also be replaced with high bay LED lighting fixtures.

The Fire Alarm system is addressable, and in compliance with today's safety codes. The Smoke detection system consists of area smoke detector in corridors and manual pull stations for fire notification. There are a sufficient number of horn/strobes installed in the classrooms, corridors, offices and other areas in new wing of the school. No horn/strobe provided in classrooms located in the original wing of the school.

The school telephone and data systems are new and working adequately. A main distribution frame (MDF) along whit a telephone PBX system (telephone within an enterprise that switches calls between enterprise users on local lines while allowing all users to share a certain number of external phone lines) along with several IDF (Intermediate Distribution Frame) servicing the communication system of the building. School also equipped with wifi system.

Separate PA system does not exist. School uses the telephone systems for public announcement. This system is working adequately.

Each classroom is provided by intercom telephone service. The system is permit paging and intercom communication between main office phone to classroom phones, and classroom to main office, classroom to classroom, and to office. Outside line access from a classroom phone through the PBX is blocked. The system is interfaces with master clock system for class change signaling utilizing paging speakers. The system also equipped with a tone generator and input from program/clock controller.

In general clock and Program system in the both buildings are functioning. Our observation showing that in some area the clocks do not have a good signal reception. Providing additional transmitter may solve the problem. However further investigation is required for troubleshooting.

CATV system is provided in the school.

Video surveillance system is not provided in the school. School provided only with access control system such a door contacts on IMC, and main entrance doors and motion security sensors in corridors. The school desires a complete video surveillance system with cameras located in critical areas, such as exit doors, corridors, and building exterior areas. This includes an adequate number of cameras around the exterior. The cameras should be controlled by a Closed Circuit Television (CCTV) system.

Emergency Power System is provided in the school. A new 30KVA, 480/277V, three phase, 4W is provided in Boiler room for emergency lighting. A 15KVA transformer is also provided to step down the 480 volt emergency power to 208/120V for feeding emergency lighting.

Uninterruptible Power System (UPS) is provided for Local Area Network in the main IT room

Emergency lighting system, including exit lights are provided in the buildings. Numbers of lighting fixtures in corridors and all exit signs are fed by emergency backup generator.

Lightning Protection System is not provided in the school. Further study is needed to ascertain if lightning protection system is needed for the building.

An estimated 20 horsepower rated hydraulic type elevator is in operation at the school. The elevator appears to be working properly.

Normal kitchen operations cause electrical breakers to shut off. A survey of kitchen equipment and distribution of electrical service

should be implemented to determine if there is adequate power to the kitchen.

Stage lighting is provided with front lighting, upstage lighting, high-side lighting, backlighting, and scenery lighting. Additionally, there are dimmable house lights and switchable stage work lights provided for general illumination during rehearsals other activities. Supplemental fluorescent lighting is also provided in stage area for lectures and testing. Supplemental lighting can be turned off by a dimmer bank during performances.

An adequate sound system is provided in school auditorium.

Campus areas, parking areas, and building perimeters have lighting that is adequate for personnel safety and security of property. However some of the lighting fixtures need to be repaired or replaced to make the system fully operational as designed.

The exterior building and parking areas are not monitored by a video surveillance system.

Site paging system appears to have a sufficient number of speakers located on building exterior walls and appears to be working adequately.

GROUNDS

Paving for parking consists of asphalt paving. Asphalt is less than 10 years old and in fair condition with some cracks and broken areas forming. The number of required parking spaces for school staff is unknown, but the lot was full at the time of inspection indicating that some staff and probably visitors may need to park on the street. There is a ramp providing accessibility to the new addition. Handicap parking spaces may have been provided. Handrails and guards at ramps and stairs are adequate in design, but need a new coat of paint.

There is a site fence with brick piers at approximately 25 feet (or farther) on center. There are gates into the parking area and building entrances. The fence, gates and piers are in good condition.

RECOMMENDATIONS

- Strip, clean and reseal concrete floors mechanical room (1,000 sf)
- Install guard rails on roof to provide edge protection near rooftop HVAC equipment (60 ft length 42" h)
- Repaint all exterior doors and provide weather stipping (20 3'x7')
- Remove graffiti from Loading Dock area (1000 sf)
- Repair spalling precast concrete column and beam (200 sf)
- Remove and replace all wood interior doors, frames in classrooms and offices in old building (66)
- Repaint interior steel doors, frames, in stairways in old building (8)
- Repaint interior classroom, cafetorium, and gymnasium walls in old building (20,000sf)
- Remove and replace damaged, old 12"x12" VCT floors in all old building classrooms (also at univents), offices, nurse, and gymnasium (40,000 sf)
- Replace 2 stop hydraulic elevator
- Paint exterior handrails and guards (80 lf)

MECHANICAL

- Replace all lavatories in the building with lower flow fixtures, as the fixtures are original.
- Replace all water closets in the building with lower flow fixtures, as the fixtures are original.
- Replace all urinals in the building with lower flow fixtures, as the fixtures are original.
- Replace the wall hung drinking fountains and integral refrigerated coolers in the corridors and at the restrooms. These units are well beyond their service life and most are NOT accessible type.
- Replace service sinks (janitor sinks) in the building.
- Replace hand sinks in class rooms.
- Add automatic sanitizing chemicals to the stainless steel sink in the cafeteria.
- Inspect and replace the original as needed the domestic water piping in the building.
- Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property. A fire pump may be required depending on the available city water pressure.
- Install a new sprinkler system throughout the building

ELECTRICAL

- Provide lightning protection studies to ascertain if lightning protection system is needed for the building.
- Replace all existing receptacles with GFCI type receptacle in areas subject to kid access Estimated 10each.
- Replace all lighting fixtures in classrooms of original building. Estimated 1000 fluorescent fixtures

GROUNDS

- Crackfill faculty parking lot (500 lf)

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 5 / Tm 2
Status:	Accepted by SDP	Team:	Tm 2
Site ID:	S733001		

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	58.00 %	0.00 %	$0.00
A20 - Basement Construction	58.00 %	0.00 %	$0.00
B10 - Superstructure	58.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	66.19 %	0.45 %	$20,332.10
B30 - Roofing	65.00 %	2.23 %	$40,265.68
C10 - Interior Construction	50.79 %	7.82 %	$153,236.44
C20 - Stairs	58.00 %	0.39 %	$438.42
C30 - Interior Finishes	85.05 %	14.69 %	$586,715.54
D10 - Conveying	105.71 %	316.87 %	$387,153.48
D20 - Plumbing	115.84 %	87.76 %	$1,431,032.65
D30 - HVAC	128.13 %	0.00 %	$0.00
D40 - Fire Protection	105.71 %	177.49 %	$1,142,374.31
D50 - Electrical	84.87 %	7.74 %	$363,186.31
E10 - Equipment	38.17 %	0.00 %	$0.00
E20 - Furnishings	82.50 %	0.00 %	$0.00
G20 - Site Improvements	44.54 %	0.86 %	$5,644.90
G40 - Site Electrical Utilities	43.33 %	0.00 %	$0.00
Totals:	**80.20 %**	**10.35 %**	**$4,130,379.83**

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)
B733001;Lawton	79,856	10.57	$404,478.34	$1,806,076.67	$391,753.64	$0.00	$1,522,426.28
G733001;Grounds	50,700	0.65	$0.00	$5,644.90	$0.00	$0.00	$0.00
Total:		**10.35**	**$404,478.34**	**$1,811,721.57**	**$391,753.64**	**$0.00**	**$1,522,426.28**

Deficiencies By Priority

1 - Response Time (< 2 yr) - $404,478.34
2 - Response Time (2-3 yrs) - $1,811,721.57
3 - Response Time (3-4 yrs) - $391,753.64
4 - Response Time (4-5 yrs)
5 - Response Time (> 5 yrs) - $1,522,426.28

Budget Estimate Total: $4,130,379.83

Executive Summary

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

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

Function:	Elementary School
Gross Area (SF):	79,856
Year Built:	1973
Last Renovation:	2008
Replacement Value:	$39,027,410
Repair Cost:	$4,124,734.93
Total FCI:	10.57 %
Total RSLI:	81.00 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B733001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S733001		

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	58.00 %	0.00 %	$0.00
A20 - Basement Construction	58.00 %	0.00 %	$0.00
B10 - Superstructure	58.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	66.19 %	0.45 %	$20,332.10
B30 - Roofing	65.00 %	2.23 %	$40,265.68
C10 - Interior Construction	50.79 %	7.82 %	$153,236.44
C20 - Stairs	58.00 %	0.39 %	$438.42
C30 - Interior Finishes	85.05 %	14.69 %	$586,715.54
D10 - Conveying	105.71 %	316.87 %	$387,153.48
D20 - Plumbing	115.84 %	87.76 %	$1,431,032.65
D30 - HVAC	128.13 %	0.00 %	$0.00
D40 - Fire Protection	105.71 %	177.49 %	$1,142,374.31
D50 - Electrical	84.87 %	7.74 %	$363,186.31
E10 - Equipment	38.17 %	0.00 %	$0.00
E20 - Furnishings	82.50 %	0.00 %	$0.00
Totals:	**81.00 %**	**10.57 %**	**$4,124,734.93**

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.	79,856	100	1973	2073		58.00 %	0.00 %	58			$1,469,350
A1030	Slab on Grade	$7.73	S.F.	79,856	100	1973	2073		58.00 %	0.00 %	58			$617,287
A2010	Basement Excavation	$6.55	S.F.	79,856	100	1973	2073		58.00 %	0.00 %	58			$523,057
A2020	Basement Walls	$12.70	S.F.	79,856	100	1973	2073		58.00 %	0.00 %	58			$1,014,171
B1010	Floor Construction	$75.10	S.F.	79,856	100	1973	2073		58.00 %	0.00 %	58			$5,997,186
B1020	Roof Construction	$13.88	S.F.	79,856	100	1973	2073		58.00 %	0.00 %	58			$1,108,401
B2010	Exterior Walls	$36.91	S.F.	79,856	100	1973	2073		58.00 %	0.09 %	58		$2,505.84	$2,947,485
B2020	Exterior Windows	$18.01	S.F.	79,856	40	2008	2048		82.50 %	0.00 %	33			$1,438,207
B2030	Exterior Doors	$1.45	S.F.	79,856	25	2008	2033		72.00 %	15.40 %	18		$17,826.26	$115,791
B3010105	Built-Up	$37.76	S.F.	46,944	20	2008	2028		65.00 %	0.00 %	13			$1,772,605
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		25				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.74	S.F.	46,944	20	2008	2028		65.00 %	115.91 %	13		$40,265.68	$34,739
C1010	Partitions	$17.91	S.F.	79,856	100	1973	2073		58.00 %	0.00 %	58			$1,430,221
C1020	Interior Doors	$3.51	S.F.	79,856	40	1973	2013	2028	32.50 %	54.67 %	13		$153,236.44	$280,295
C1030	Fittings	$3.12	S.F.	79,856	40	1973	2013	2027	30.00 %	0.00 %	12			$249,151
C2010	Stair Construction	$1.41	S.F.	79,856	100	1973	2073		58.00 %	0.39 %	58		$438.42	$112,597

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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 $
C3010230	Paint & Covering	$13.21	S.F.	75,856	10	1973	1983	2027	120.00 %	10.20 %	12		$102,169.74	$1,002,058
C3010231	Vinyl Wall Covering	$0.97	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.	4,000	30	2008	2038		76.67 %	0.00 %	23			$10,520
C3020411	Carpet	$7.30	S.F.	2,000	10	2008	2018	2020	50.00 %	0.00 %	5			$14,600
C3020412	Terrazzo & Tile	$75.52	S.F.	8,400	50	2008	2058		86.00 %	0.00 %	43			$634,368
C3020413	Vinyl Flooring	$9.68	S.F.	67,656	20	1973	1993	2028	65.00 %	73.40 %	13		$480,701.27	$654,910
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	1,800	50	1973	2023	2050	70.00 %	220.19 %	35		$3,844.53	$1,746
C3030	Ceiling Finishes	$20.97	S.F.	79,856	25	2008	2033		72.00 %	0.00 %	18			$1,674,580
D1010	Elevators and Lifts	$1.53	S.F.	79,856	35	1973	2008	2052	105.71 %	316.87 %	37		$387,153.48	$122,180
D2010	Plumbing Fixtures	$13.52	S.F.	79,856	35	1973	2008	2055	114.29 %	61.06 %	40		$659,227.04	$1,079,653
D2020	Domestic Water Distribution	$1.68	S.F.	79,856	25	1973	1998	2045	120.00 %	283.29 %	30		$380,051.97	$134,158
D2030	Sanitary Waste	$2.90	S.F.	79,856	25	1973	1998	2045	120.00 %	169.16 %	30		$391,753.64	$231,582
D2040	Rain Water Drainage	$2.32	S.F.	79,856	30	1973	2003	2050	116.67 %	0.00 %	35			$185,266
D3020	Heat Generating Systems	$18.67	S.F.		0				0.00 %	0.00 %				$0
D3030	Cooling Generating Systems	$24.48	S.F.		0				0.00 %	0.00 %				$0
D3040	Distribution Systems	$67.47	S.F.	79,856	25	1973	1998	2045	120.00 %	0.00 %	30			$5,387,884
D3050	Terminal & Package Units	$11.60	S.F.	79,856	20	1973	1993	2045	150.00 %	0.00 %	30			$926,330
D3060	Controls & Instrumentation	$13.50	S.F.	79,856	20	1973	1993	2045	150.00 %	0.00 %	30			$1,078,056
D4010	Sprinklers	$7.05	S.F.	79,856	35			2052	105.71 %	202.91 %	37		$1,142,374.31	$562,985
D4020	Standpipes	$1.01	S.F.	79,856	35			2052	105.71 %	0.00 %	37			$80,655
D5010	Electrical Service/Distribution	$9.70	S.F.	79,856	30	1973	2003	2035	66.67 %	0.00 %	20			$774,603
D5020	Lighting and Branch Wiring	$34.68	S.F.	79,856	20	1973	1993	2037	110.00 %	12.30 %	22		$340,767.45	$2,769,406
D5030	Communications and Security	$12.99	S.F.	79,856	15	1973	1988	2020	33.33 %	0.00 %	5			$1,037,329
D5090	Other Electrical Systems	$1.41	S.F.	79,856	30	1973	2003	2035	66.67 %	19.91 %	20		$22,418.86	$112,597
E1020	Institutional Equipment	$4.82	S.F.	79,856	35	2008	2043		80.00 %	0.00 %	28			$384,906
E1090	Other Equipment	$11.10	S.F.	79,856	35	1973	2008	2022	20.00 %	0.00 %	7			$886,402
E2010	Fixed Furnishings	$2.13	S.F.	79,856	40	2008	2048		82.50 %	0.00 %	33			$170,093
								Total	**81.00 %**	**10.57 %**			**$4,124,734.93**	**$39,027,410**

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 walls 95%
ceramic tile 5%

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

Note: Concrete = 1,800sf 2%
Terrazzo =3,600sf 4%
QT =3,000sf 4%
CT = 1,800sf 2%
VCT = 67,656sf 85%
Carpet = 2,000sf 3%

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

Note: 55% exposed concrete
45% suspended acoustical tile

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

Note: (4) 45KVA, 480 to 208/120V transformer
(1) 75KVA, 480 to 208/120V transformer

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:	**$4,124,735**	**$0**	**$0**	**$0**	**$0**	**$1,341,422**	**$0**	**$1,199,179**	**$0**	**$0**	**$0**	**$6,665,335**
*** 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	$2,506	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,506**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$17,826	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$17,826**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$40,266	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$40,266**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

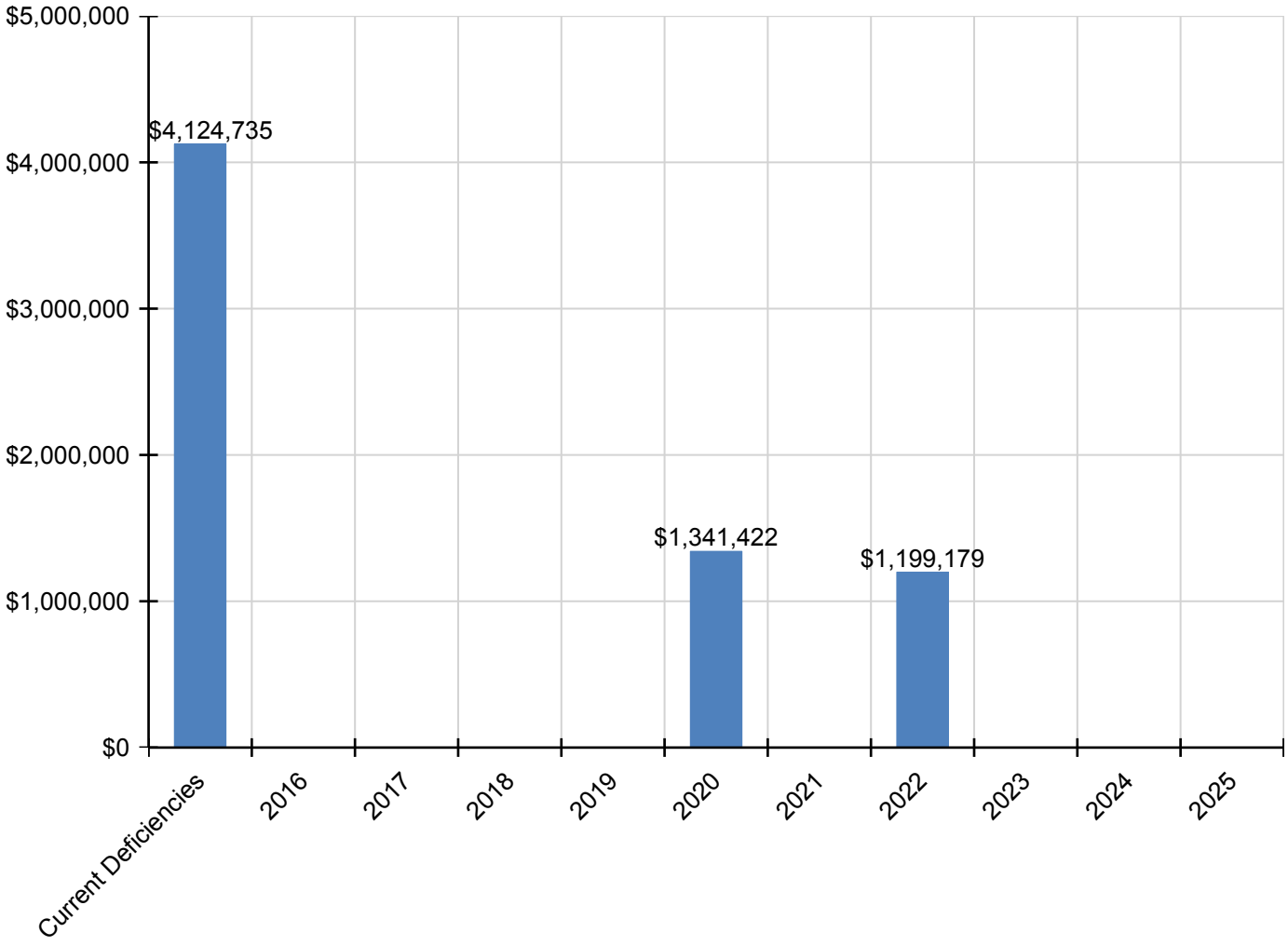
C1020 - Interior Doors	$153,236	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$153,236**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$438	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$438**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$102,170	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$102,170**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$18,618	$0	$0	$0	$0	$0	**$18,618**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$480,701	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$480,701**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$3,845	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,845**
C3030 - Ceiling Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$387,153	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$387,153**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$659,227	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$659,227**
D2020 - Domestic Water Distribution	$380,052	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$380,052**
D2030 - Sanitary Waste	$391,754	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$391,754**
D2040 - Rain Water Drainage	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3040 - Distribution Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,142,374	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,142,374**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5020 - Lighting and Branch Wiring	$340,767	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$340,767**
D5030 - Communications and Security	$0	$0	$0	$0	$0	$1,322,804	$0	$0	$0	$0	$0	**$1,322,804**
D5090 - Other Electrical Systems	$22,419	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$22,419**
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	$1,199,179	$0	$0	$0	**$1,199,179**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

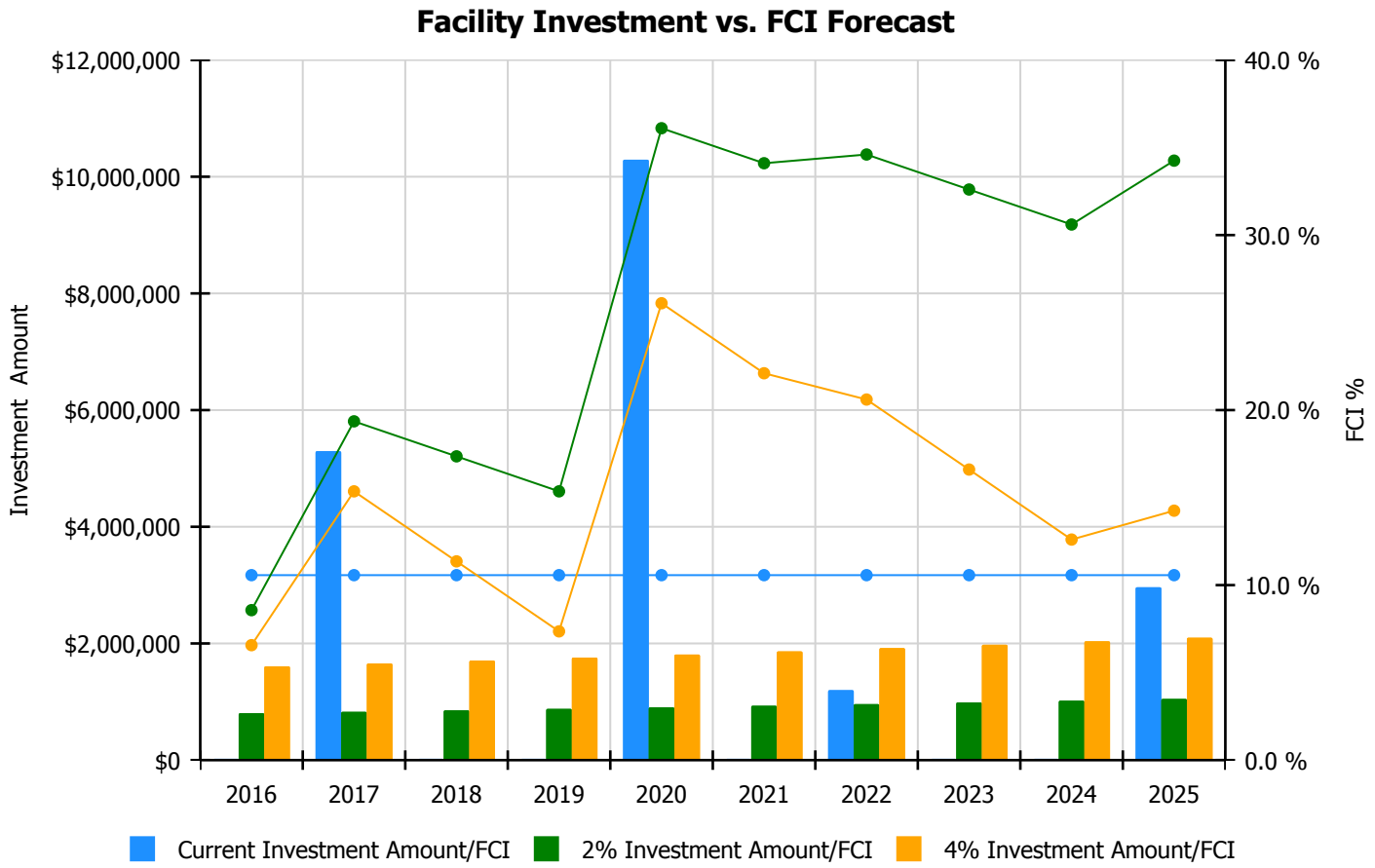
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

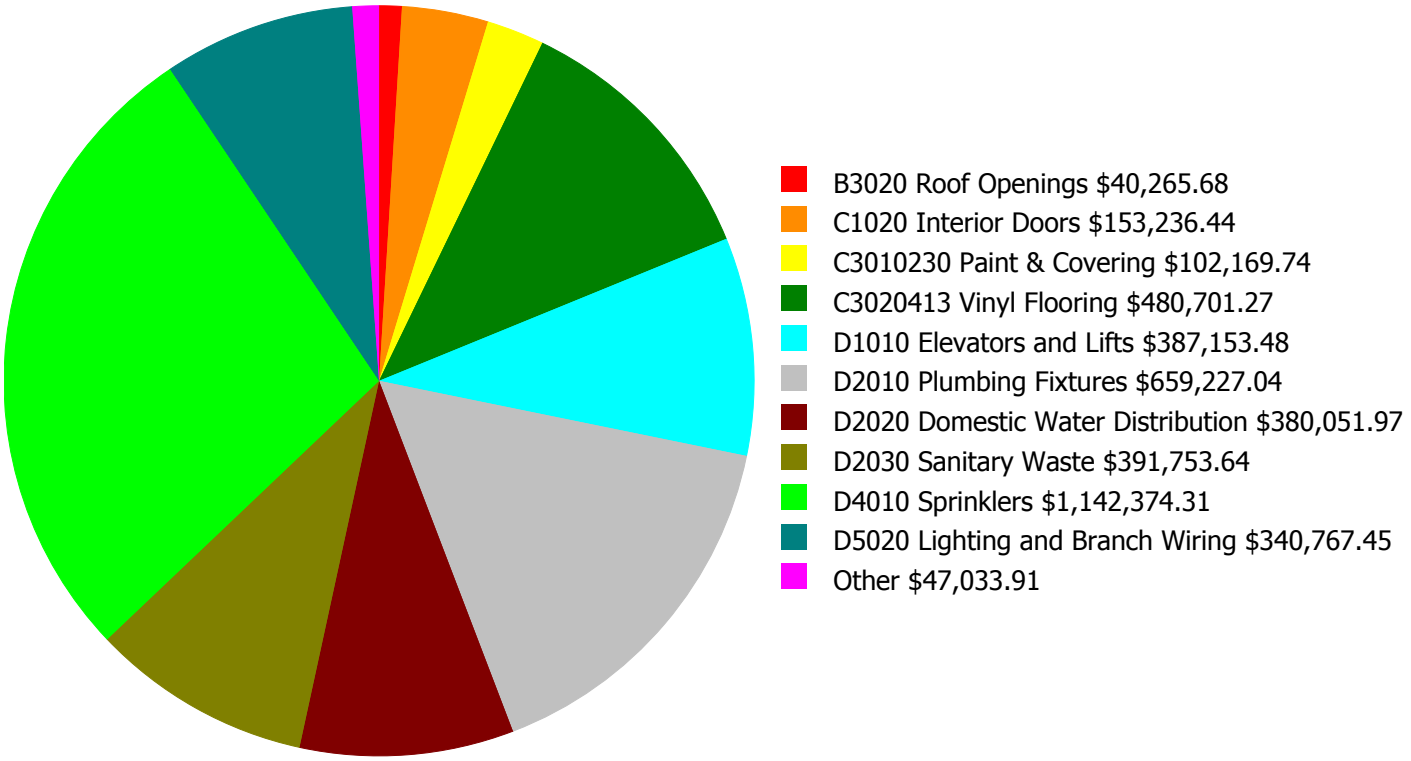
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 10.57%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$803,965.00	8.57 %	$1,607,929.00	6.57 %
2017	$5,294,965	$828,084.00	19.36 %	$1,656,167.00	15.36 %
2018	$0	$852,926.00	17.36 %	$1,705,852.00	11.36 %
2019	$0	$878,514.00	15.36 %	$1,757,028.00	7.36 %
2020	$10,291,480	$904,869.00	36.10 %	$1,809,739.00	26.10 %
2021	$0	$932,015.00	34.10 %	$1,864,031.00	22.10 %
2022	$1,199,179	$959,976.00	34.60 %	$1,919,952.00	20.60 %
2023	$0	$988,775.00	32.60 %	$1,977,550.00	16.60 %
2024	$0	$1,018,438.00	30.60 %	$2,036,877.00	12.60 %
2025	$2,963,100	$1,048,992.00	34.25 %	$2,097,983.00	14.25 %
Total:	**$19,748,724**	**$9,216,554.00**		**$18,433,108.00**	

Deficiency Summary by System

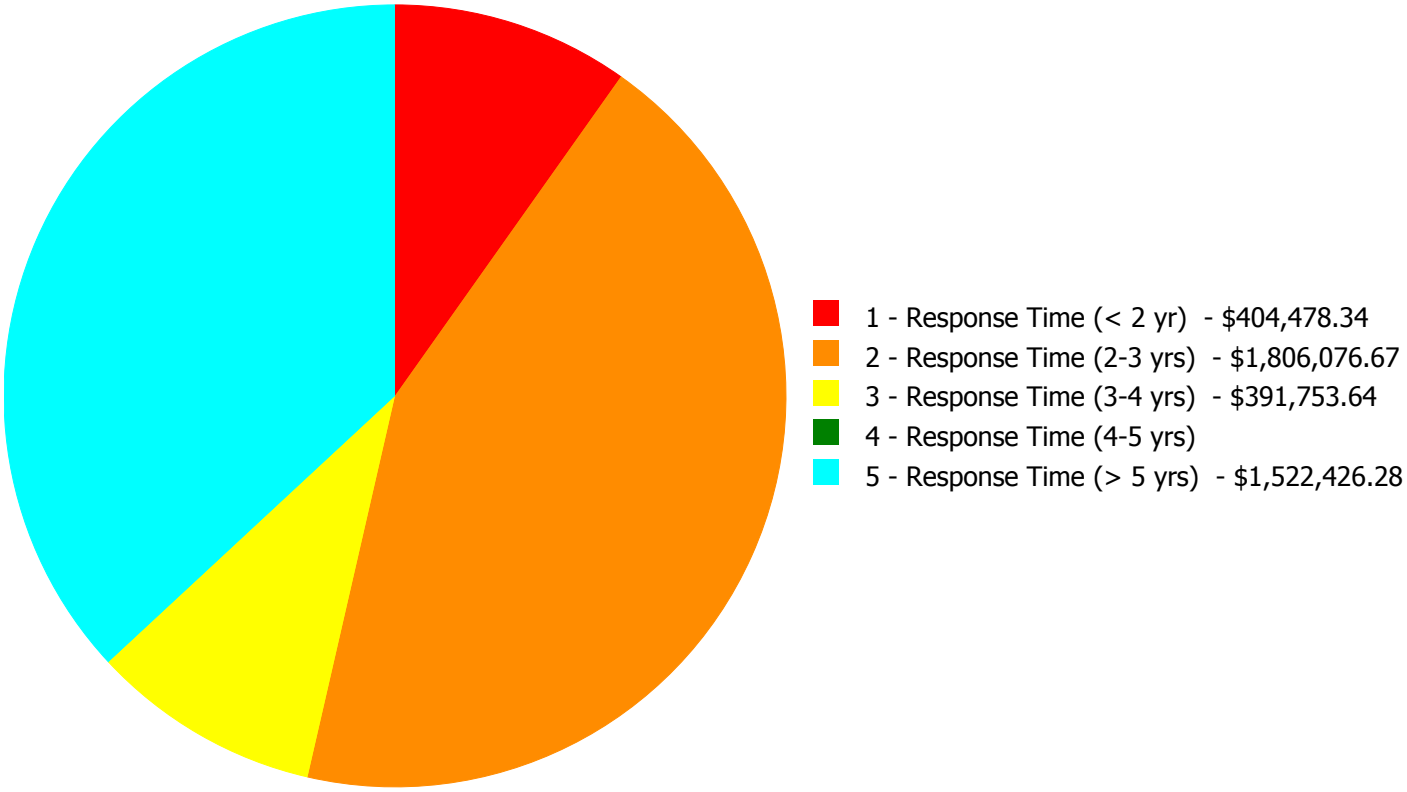
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $4,124,734.93

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: $4,124,734.93

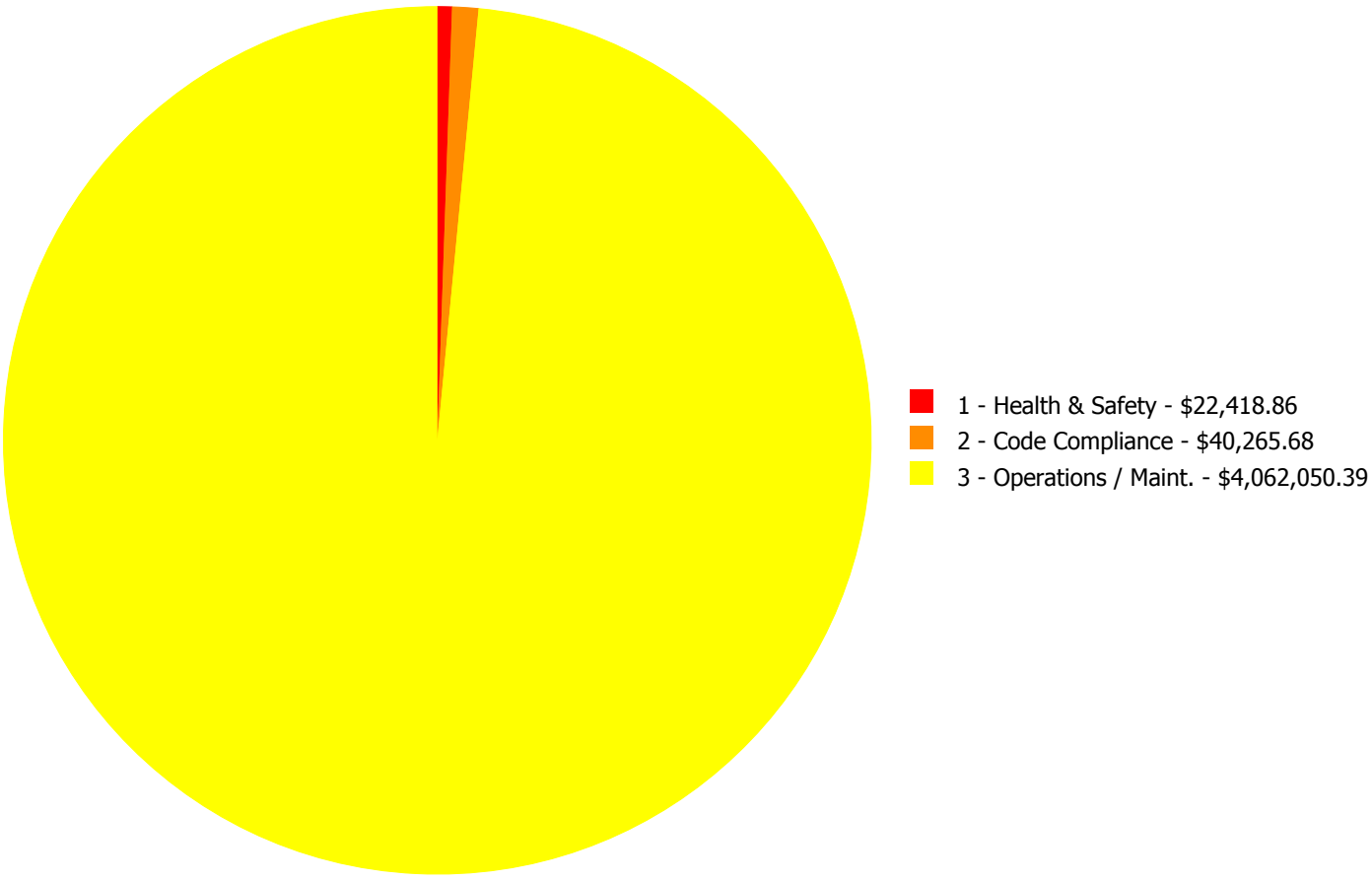
Deficiency By Priority Investment Table

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
B2010	Exterior Walls	$1,026.35	$1,479.49	$0.00	$0.00	$0.00	$2,505.84
B2030	Exterior Doors	$0.00	$17,826.26	$0.00	$0.00	$0.00	$17,826.26
B3020	Roof Openings	$40,265.68	$0.00	$0.00	$0.00	$0.00	$40,265.68
C1020	Interior Doors	$0.00	$153,236.44	$0.00	$0.00	$0.00	$153,236.44
C2010	Stair Construction	$0.00	$438.42	$0.00	$0.00	$0.00	$438.42
C3010230	Paint & Covering	$0.00	$102,169.74	$0.00	$0.00	$0.00	$102,169.74
C3020413	Vinyl Flooring	$0.00	$480,701.27	$0.00	$0.00	$0.00	$480,701.27
C3020415	Concrete Floor Finishes	$0.00	$3,844.53	$0.00	$0.00	$0.00	$3,844.53
D1010	Elevators and Lifts	$0.00	$387,153.48	$0.00	$0.00	$0.00	$387,153.48
D2010	Plumbing Fixtures	$0.00	$659,227.04	$0.00	$0.00	$0.00	$659,227.04
D2020	Domestic Water Distribution	$0.00	$0.00	$0.00	$0.00	$380,051.97	$380,051.97
D2030	Sanitary Waste	$0.00	$0.00	$391,753.64	$0.00	$0.00	$391,753.64
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$1,142,374.31	$1,142,374.31
D5020	Lighting and Branch Wiring	$340,767.45	$0.00	$0.00	$0.00	$0.00	$340,767.45
D5090	Other Electrical Systems	$22,418.86	$0.00	$0.00	$0.00	$0.00	$22,418.86
	Total:	$404,478.34	$1,806,076.67	$391,753.64	$0.00	$1,522,426.28	$4,124,734.93

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: $4,124,734.93

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: B2010 - Exterior Walls

Location: original building - loading dock
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Remove graffiti - power wash and paint
Qty: 1,000.00
Unit of Measure: S.F.
Estimate: $1,026.35
Assessor Name: Craig Anding
Date Created: 02/12/2016

Notes: Remove graffiti from Loading Dock area (1000sf)

System: B3020 - Roof Openings

Location: new building - roof
Distress: Building / MEP Codes
Category: 2 - Code Compliance
Priority: 1 - Response Time (< 2 yr)
Correction: Install safety guard rails at roof perimeter (OSHA required if roof hatch is 10’ from roof edge).
Qty: 60.00
Unit of Measure: L.F.
Estimate: $40,265.68
Assessor Name: Craig Anding
Date Created: 02/12/2016

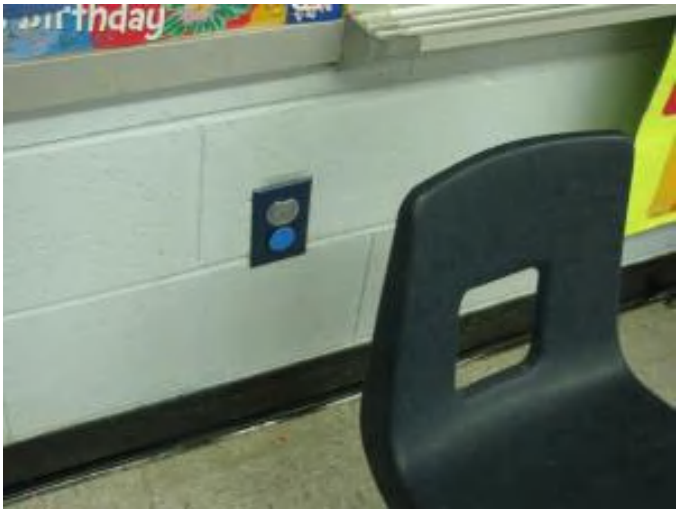
Notes: Install guard rails on roof to provide edge protection near rooftop HVAC equipment (60ft length 42” h)

System: D5020 - Lighting and Branch Wiring

Location: Original Building classrooms
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace lighting fixtures
Qty: 1.00
Unit of Measure: Ea.
Estimate: $339,119.88
Assessor Name: Craig Anding
Date Created: 01/20/2016

Notes: Replace all lighting fixtures in classrooms of original building. Estimated 1000 fluorescent fixtures.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building
Distress: Inadequate
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace Wiring Device
Qty: 0.00
Unit of Measure: Ea.
Estimate: $1,647.57
Assessor Name: Craig Anding
Date Created: 01/20/2016

Notes: Replace all existing receptacles with GFCI type receptacle in areas subject to kid access. Estimated 10 each.

System: D5090 - Other Electrical Systems

Location: Roof

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Repair Lightning Protection System

Qty: 1.00

Unit of Measure: Job

Estimate: $22,418.86

Assessor Name: Craig Anding

Date Created: 01/20/2016

Notes: Provide lightning protection studies to ascertain if lightning protection system is needed for the building.

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

System: B2010 - Exterior Walls

Location: original building - walls

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repaint exterior walls - concrete or stucco

Qty: 200.00

Unit of Measure: S.F.

Estimate: $1,479.49

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Repair spalling precast concrete column and beam (200sf)

System: B2030 - Exterior Doors

Location: all exterior doors

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace hardware with compliant hardware, paint and weatherstrip - per leaf

Qty: 20.00

Unit of Measure: Ea.

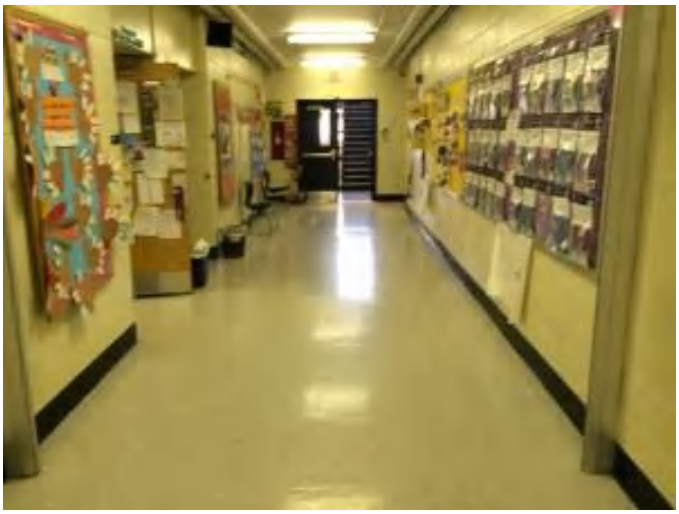
Estimate: $17,826.26

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Repaint all exterior doors and provide weatherstipping (20 3'x7')

System: C1020 - Interior Doors



Location: original building - interior doors

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: 66.00

Unit of Measure: Ea.

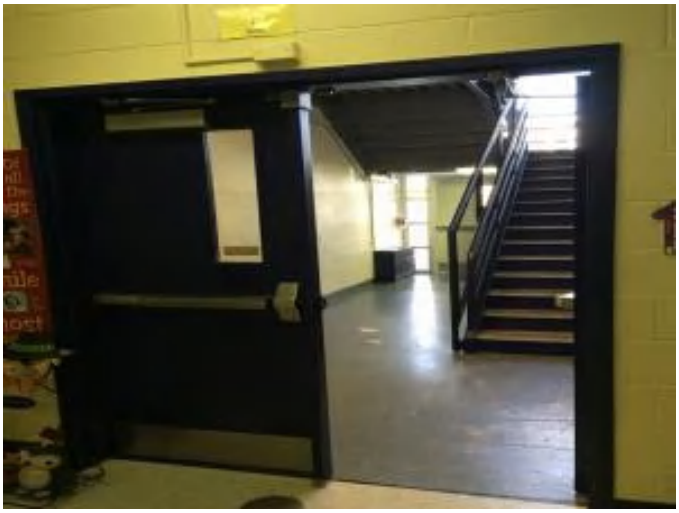
Estimate: $146,610.98

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Remove and replace all wood interior doors, frames in classrooms and offices in old building (66)

System: C1020 - Interior Doors



Location: original building - stairway doors

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Refinish interior doors

Qty: 8.00

Unit of Measure: Ea.

Estimate: $6,625.46

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Repaint interior steel doors, frames, in stairways in old building (8)

System: C2010 - Stair Construction

Location: exterior handrails

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Re-paint stairway handrails - per LF of handrail pipe

Qty: 80.00

Unit of Measure: L.F.

Estimate: $438.42

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Paint exterior handrails and guards (80lf)

System: C3010230 - Paint & Covering

Location: original building - interior walls

Distress: Appearance

Category: 3 - Operations / Maint.

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

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

Qty: 20,000.00

Unit of Measure: S.F.

Estimate: $102,169.74

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Repaint interior classroom, cafetorium, and gymnasium walls in old building (20,000sf)

System: C3020413 - Vinyl Flooring

Location: original building - floors

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace VCT

Qty: 40,000.00

Unit of Measure: S.F.

Estimate: $480,701.27

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Remove and replace damaged, old 12”x12” VCT floors in all old building classrooms (also at univents), offices, nurse, and gymnasium (40,000sf)

System: C3020415 - Concrete Floor Finishes

Location: original building - first floor - concrete floors

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Clean and reseal concrete floors

Qty: 1,000.00

Unit of Measure: S.F.

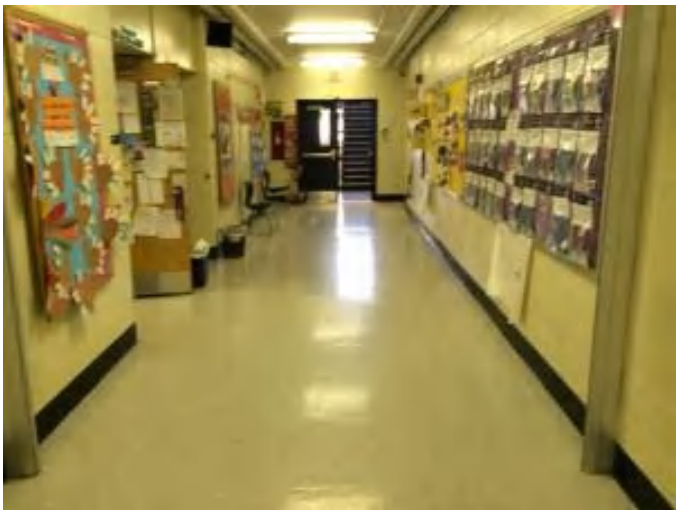
Estimate: $3,844.53

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Strip, clean and reseal concrete floors mechanical room (1,500sf)

System: D1010 - Elevators and Lifts



Location: original building

Distress: Failing

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $387,153.48

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Replace 2 stop hydraulic elevator

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 40.00

Unit of Measure: Ea.

Estimate: $298,485.91

Assessor Name: Craig Anding

Date Created: 02/27/2016

Notes: Replace all water closets in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 15.00

Unit of Measure: Ea.

Estimate: $111,932.22

Assessor Name: Craig Anding

Date Created: 02/27/2016

Notes: Replace all urinals in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 28.00

Unit of Measure: Ea.

Estimate: $106,708.35

Assessor Name: Craig Anding

Date Created: 02/27/2016

Notes: Replace all lavatories in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 12.00

Unit of Measure: Ea.

Estimate: $89,545.77

Assessor Name: Craig Anding

Date Created: 02/27/2016

Notes: Replace the wall hung drinking fountains and integral refrigerated coolers in the corridors and at the restrooms. These units are well beyond their service life and most are NOT accessible type.

System: D2010 - Plumbing Fixtures

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 5.00

Unit of Measure: Ea.

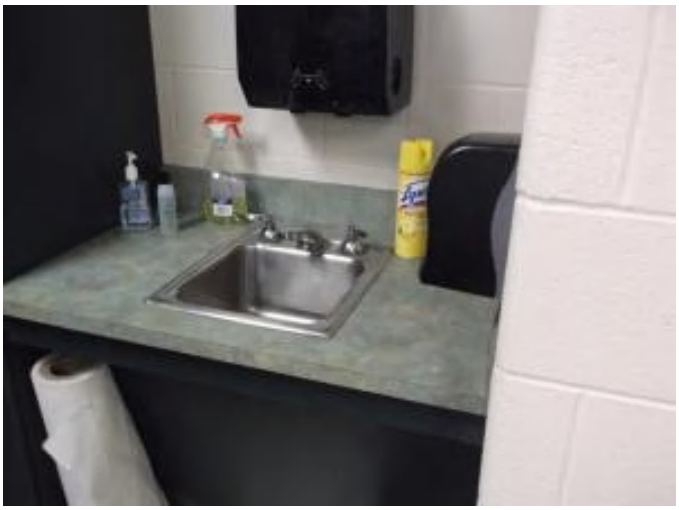
Estimate: $37,310.74

Assessor Name: Craig Anding

Date Created: 02/27/2016

Notes: Replace service sinks (janitor sinks) in the building.

System: D2010 - Plumbing Fixtures



Location:	Throughout the building
Distress:	Beyond Service Life
Category:	3 - Operations / Maint.
Priority:	2 - Response Time (2-3 yrs)
Correction:	Remove and replace or replace lavatory - quantify accessible if required
Qty:	4.00
Unit of Measure:	Ea.
Estimate:	$15,244.05
Assessor Name:	Craig Anding
Date Created:	02/27/2016

Notes: Replace hand sinks in class rooms.

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

System: D2030 - Sanitary Waste

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 79,856.00

Unit of Measure: S.F.

Estimate: $391,753.64

Assessor Name: Craig Anding

Date Created: 02/27/2016

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

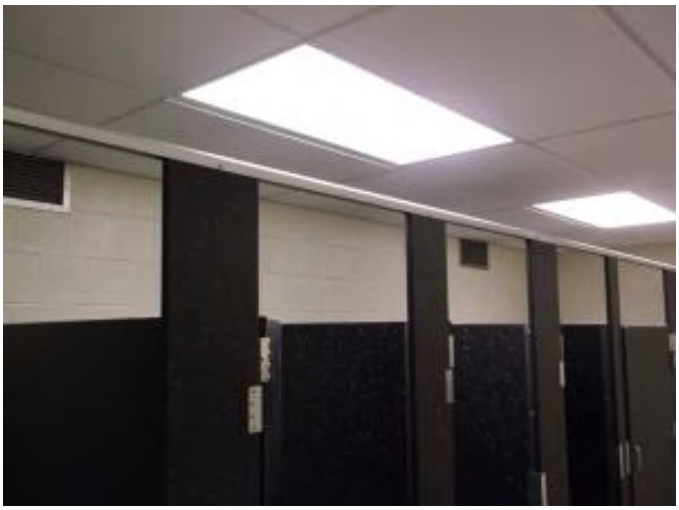
Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Replace domestic water piping (75 KSF)
Qty: 75,000.00
Unit of Measure: S.F.
Estimate: $380,051.97
Assessor Name: Craig Anding
Date Created: 02/27/2016

Notes: Inspect and replace the original as needed the domestic water piping in the building

System: D4010 - Sprinklers



Location: Throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Install a fire protection sprinkler system
Qty: 79,856.00
Unit of Measure: S.F.
Estimate: $1,142,374.31
Assessor Name: Craig Anding
Date Created: 02/27/2016

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

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
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 400 kVA & above, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	1.00	Ea.	Electrical Room					30	1973	2035	$42,849.00	$47,133.90
D5010 Electrical Service/Distribution	Switchboards, no main disconnect, 4 wire, 277/480 V, 3000 amp, incl CT compartment, excl CT's or PT's	1.00	Ea.	Electrical Room					30	1973	2035	$12,792.60	$14,071.86
D5010 Electrical Service/Distribution	Transformer, liquid-filled, 5 kV or 15 kV primary, 277/480 V secondary, 3 phase, 1000 kVA, pad mounted	1.00	Ea.	Electrical Room					30	1973	2035	$50,425.20	$55,467.72
												Total:	**$116,673.48**

Executive Summary

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

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

Function:	
Gross Area (SF):	50,700
Year Built:	1973
Last Renovation:	2008
Replacement Value:	$874,731
Repair Cost:	$5,644.90
Total FCI:	0.65 %
Total RSLI:	44.23 %

Description:

Attributes:

General Attributes:

Bldg ID:	S733001	Site ID:	S733001

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	44.54 %	0.86 %	$5,644.90
G40 - Site Electrical Utilities	43.33 %	0.00 %	$0.00
Totals:	**44.23 %**	**0.65 %**	**$5,644.90**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30	1973	2003		0.00 %	0.00 %	-12			$0
G2020	Parking Lots	$7.65	S.F.	22,000	30	1973	2003	2028	43.33 %	3.35 %	13		$5,644.90	$168,300
G2030	Pedestrian Paving	$11.52	S.F.	20,200	40	1973	2013	2028	32.50 %	0.00 %	13			$232,704
G2040	Site Development	$4.36	S.F.	50,700	25	1973	1998	2028	52.00 %	0.00 %	13			$221,052
G2050	Landscaping & Irrigation	$3.78	S.F.	8,500	15	1973	1988	2028	86.67 %	0.00 %	13			$32,130
G4020	Site Lighting	$3.58	S.F.	50,700	30	1973	2003	2028	43.33 %	0.00 %	13			$181,506
G4030	Site Communications & Security	$0.77	S.F.	50,700	30	1973	2003	2028	43.33 %	0.00 %	13			$39,039
								Total	**44.23 %**	**0.65 %**			**$5,644.90**	**$874,731**

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.

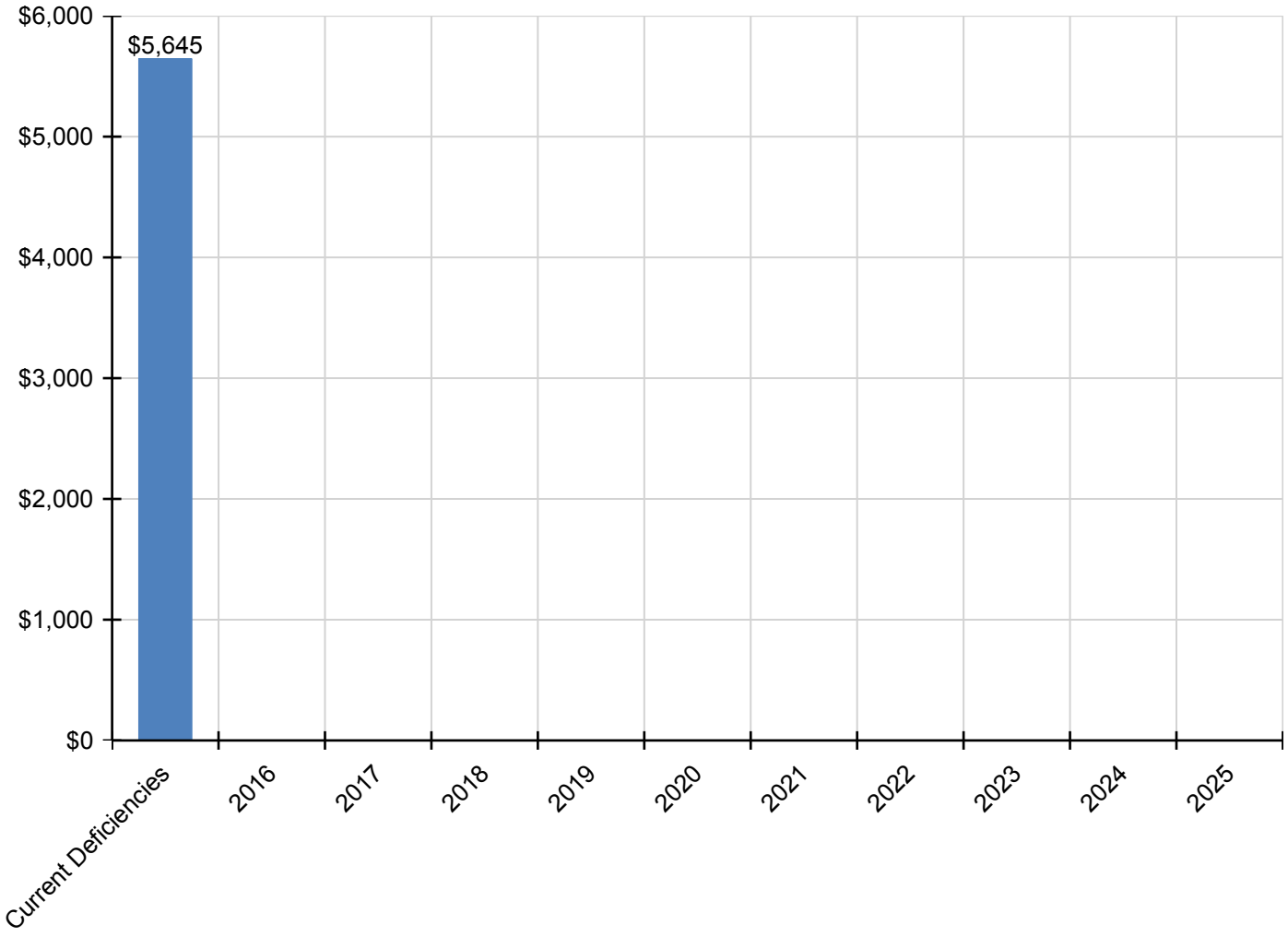
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$5,645**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$5,645**
G - Building Sitework	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G20 - Site Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2010 - Roadways	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2020 - Parking Lots	$5,645	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$5,645**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040 - Site Development	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2050 - Landscaping & Irrigation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

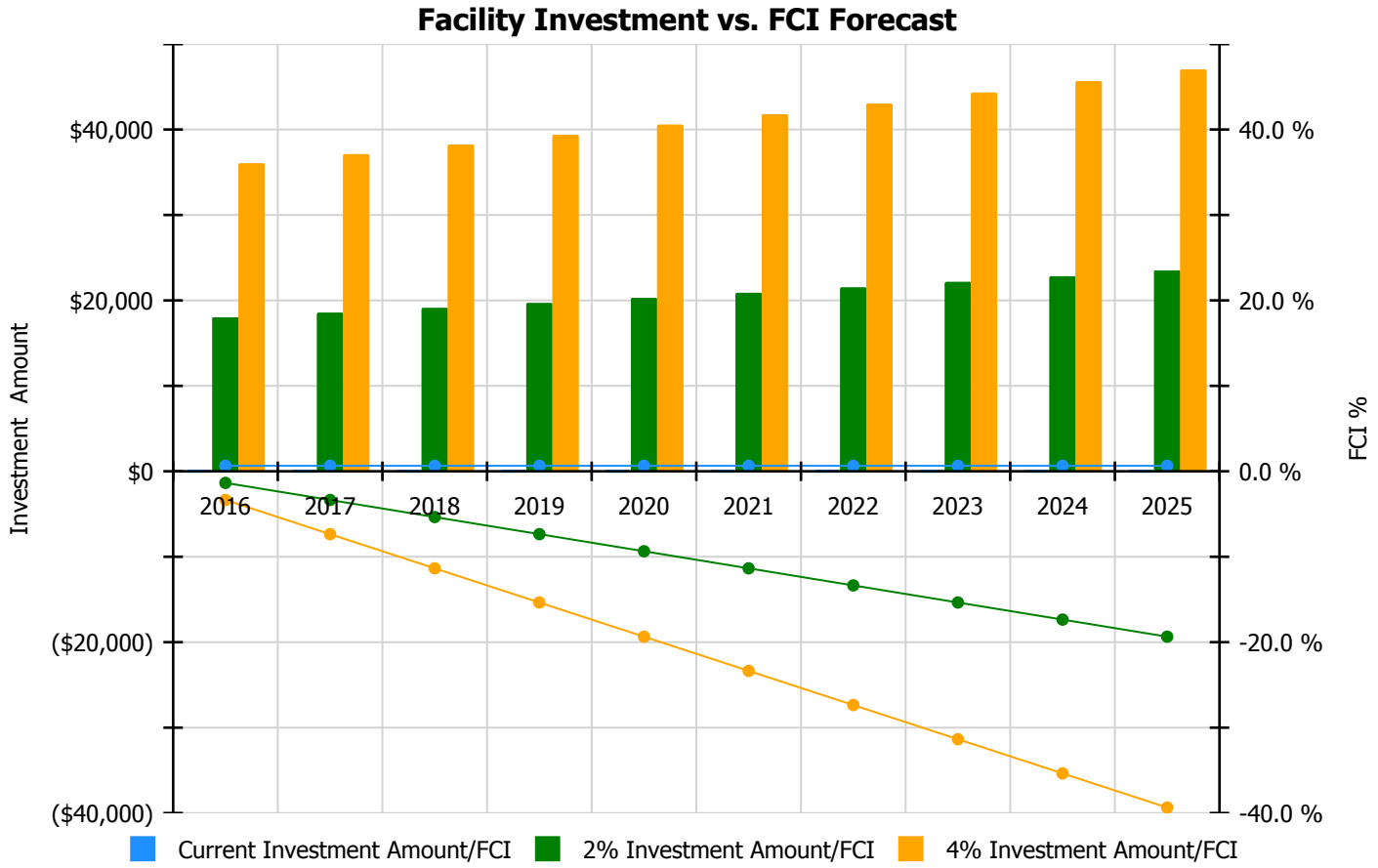
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

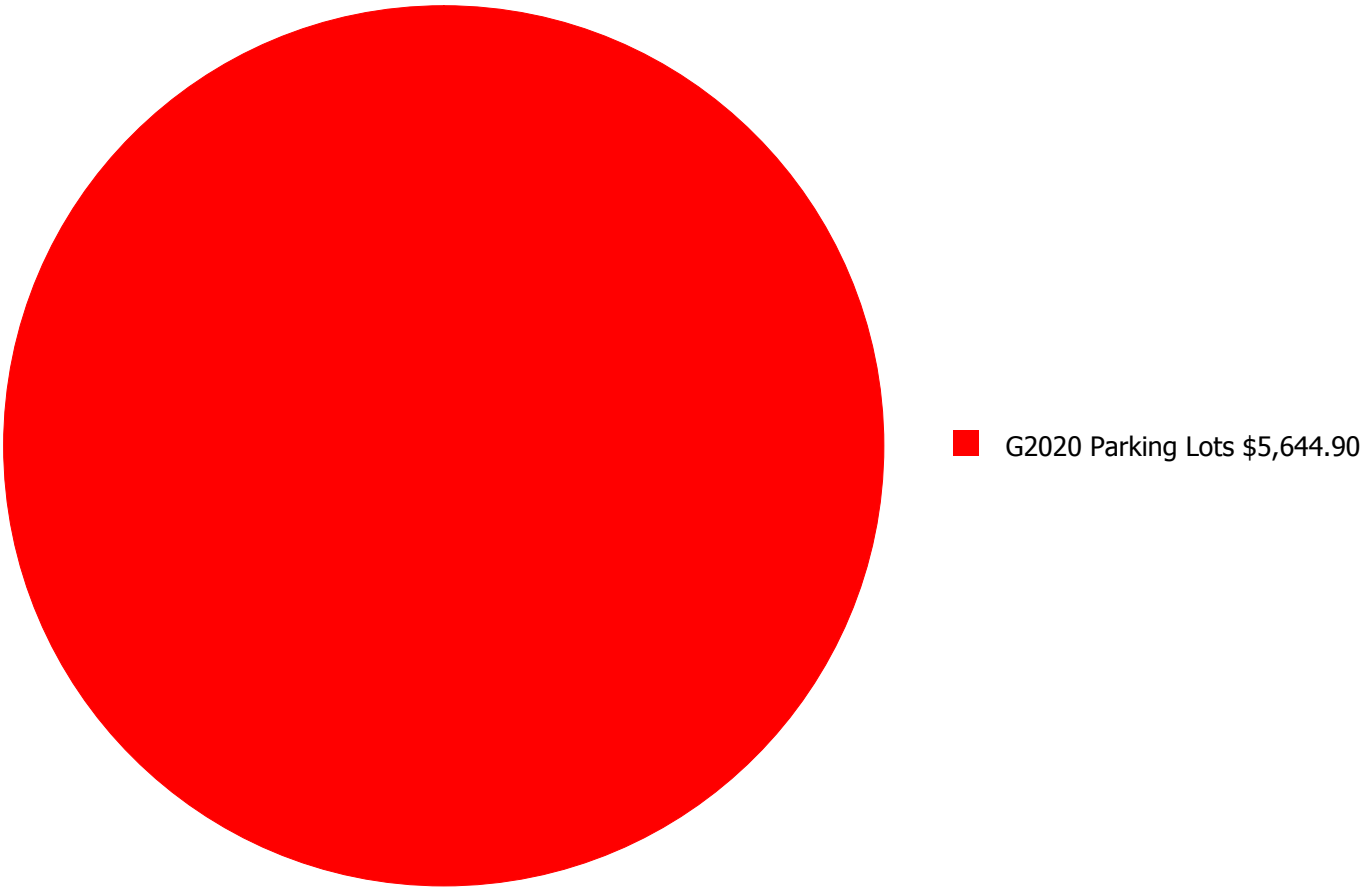
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 0.65%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$18,019.00	-1.35 %	$36,039.00	-3.35 %
2017	$0	$18,560.00	-3.35 %	$37,120.00	-7.35 %
2018	$0	$19,117.00	-5.35 %	$38,234.00	-11.35 %
2019	$0	$19,690.00	-7.35 %	$39,381.00	-15.35 %
2020	$0	$20,281.00	-9.35 %	$40,562.00	-19.35 %
2021	$0	$20,889.00	-11.35 %	$41,779.00	-23.35 %
2022	$0	$21,516.00	-13.35 %	$43,032.00	-27.35 %
2023	$0	$22,162.00	-15.35 %	$44,323.00	-31.35 %
2024	$0	$22,827.00	-17.35 %	$45,653.00	-35.35 %
2025	$0	$23,511.00	-19.35 %	$47,023.00	-39.35 %
Total:	**$0**	**$206,572.00**		**$413,146.00**	

Deficiency Summary by System

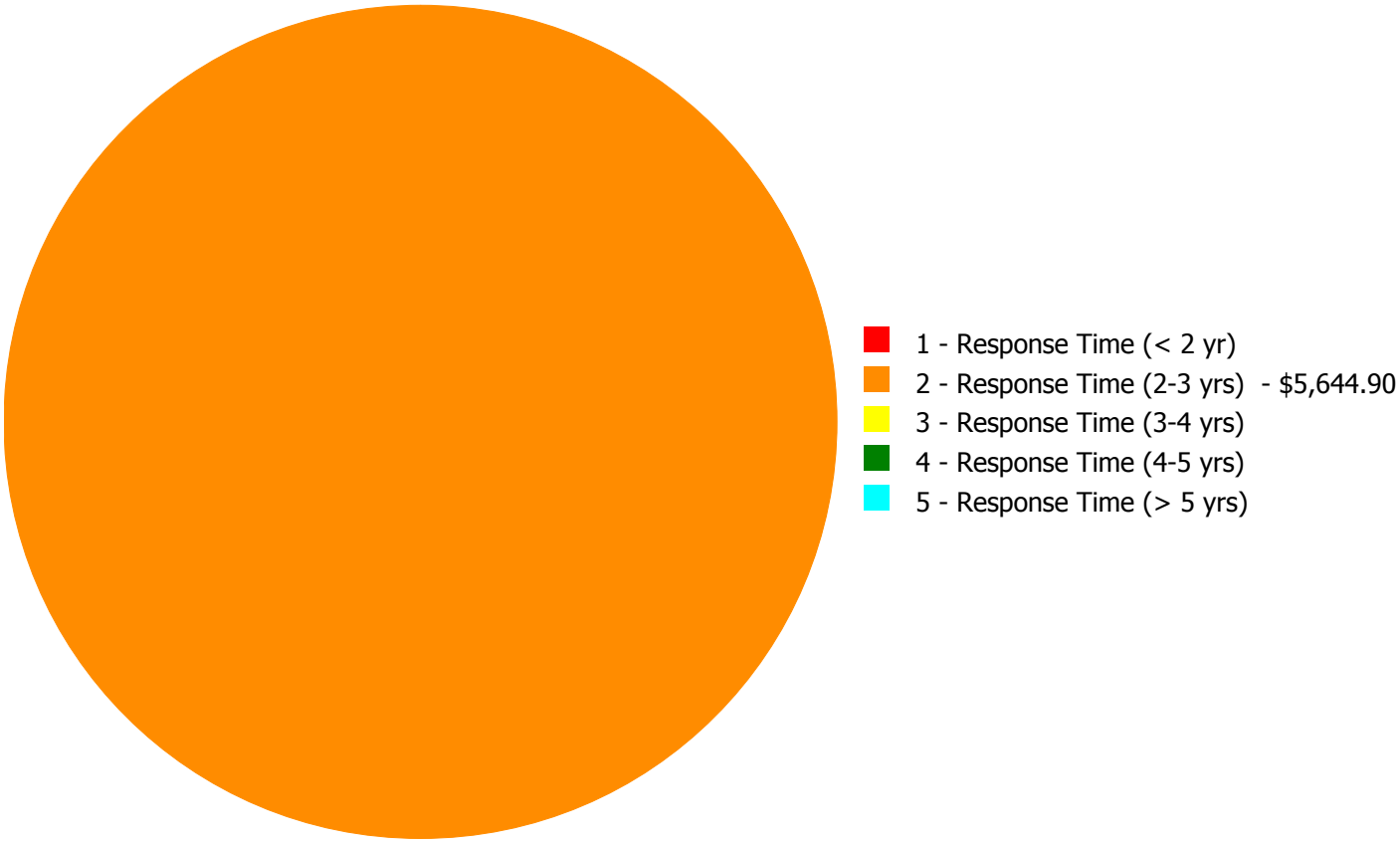
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $5,644.90

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: $5,644.90

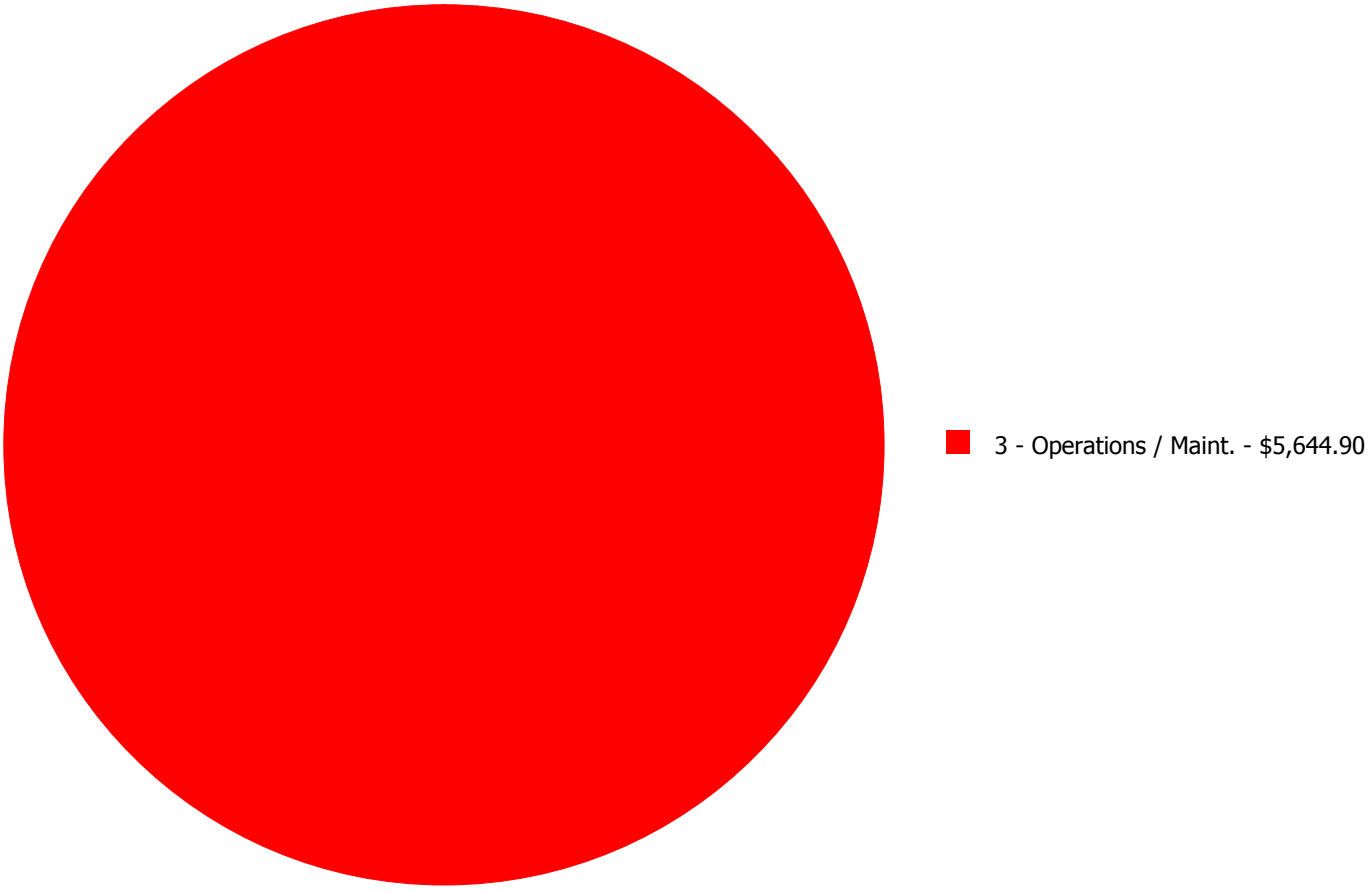
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2020	Parking Lots	$0.00	$5,644.90	$0.00	$0.00	$0.00	$5,644.90
	Total:	$0.00	$5,644.90	$0.00	$0.00	$0.00	$5,644.90

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:



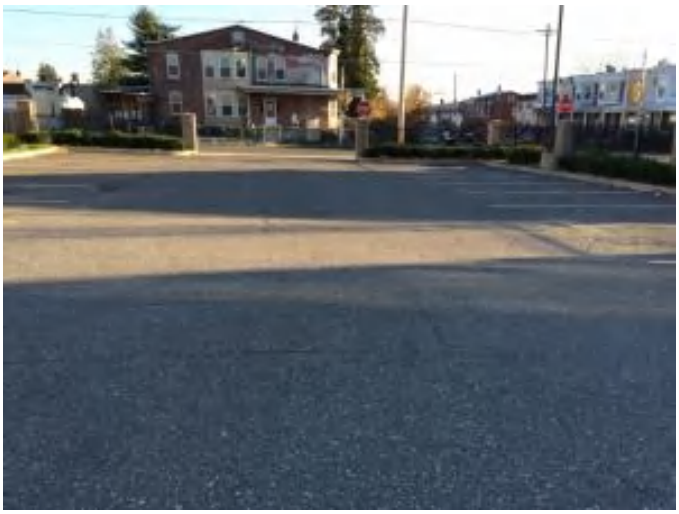
Budget Estimate Total: $5,644.90

Deficiency Details by Priority

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

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

System: G2020 - Parking Lots



Location: faculty parking lot

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Fill cracks in AC paving - by the LF - select appropriate width and depth

Qty: 500.00

Unit of Measure: L.F.

Estimate: $5,644.90

Assessor Name: Craig Anding

Date Created: 02/12/2016

Notes: Crackfill faculty parking lot (500lf)

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