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.

Decatur School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	3500 Academy Rd. Philadelphia, Pa 19154	Enrollment Grade Range	1034 '00-08'
Phone/Fax	215-281-2606 / 215-281-5803	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Decatur	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	**46.19%**	**$24,844,736**	**$53,787,987**
Building	48.90 %	$21,507,735	$43,984,477
Grounds	12.32 %	$319,495	$2,594,234

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	89.43 %	$1,253,634	$1,401,798
Exterior Walls (Shows condition of the structural condition of the exterior facade)	02.14 %	$70,578	$3,294,107
Windows (Shows functionality of exterior windows)	00.00 %	$0	$1,607,338
Exterior Doors (Shows condition of exterior doors)	11.08 %	$14,334	$129,408
Interior Doors (Classroom doors)	81.26 %	$254,545	$313,257
Interior Walls (Paint and Finishes)	05.21 %	$61,465	$1,178,953
Plumbing Fixtures	48.44 %	$584,446	$1,206,619
Boilers	60.75 %	$1,012,205	$1,666,241
Chillers/Cooling Towers	65.60 %	$1,433,270	$2,184,767
Radiators/Unit Ventilators/HVAC	184.51 %	$7,079,300	$3,836,729
Heating/Cooling Controls	158.95 %	$1,915,113	$1,204,835
Electrical Service and Distribution	106.97 %	$926,010	$865,696
Lighting	64.36 %	$1,991,969	$3,095,086
Communications and Security (Cameras, Pa System and Fire Alarm)	68.57 %	$794,892	$1,159,319

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.

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.

Decatur Annex School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	3500 Academy Rd. Philadelphia, Pa 19154	Enrollment	
		Grade Range	'00-08'
Phone/Fax	215-281-2606 / 215-281-5803	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Decatur	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	**46.19%**	**$24,844,736**	**$53,787,987**
Building	41.86 %	$3,017,505	$7,209,276
Grounds	12.32 %	$319,495	$2,594,234

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	87.59 %	$445,474	$508,561
Exterior Walls (Shows condition of the structural condition of the exterior facade)	10.28 %	$42,462	$413,041
Windows (Shows functionality of exterior windows)	00.00 %	$0	$180,325
Exterior Doors (Shows condition of exterior doors)	13.52 %	$2,986	$22,094
Interior Doors (Classroom doors)	31.25 %	$15,545	$49,745
Interior Walls (Paint and Finishes)	00.00 %	$0	$174,768
Plumbing Fixtures	32.65 %	$136,402	$417,803
Boilers	00.00 %	$0	$0
Chillers/Cooling Towers	00.00 %	$0	$323,870
Radiators/Unit Ventilators/HVAC	135.90 %	$772,921	$568,758
Heating/Cooling Controls	132.68 %	$236,968	$178,605
Electrical Service and Distribution	00.00 %	$0	$128,331
Lighting	38.92 %	$178,558	$458,816
Communications and Security (Cameras, Pa System and Fire Alarm)	74.28 %	$127,662	$171,858

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

S833001;Shallcross and Decatur

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):	102,477
Year Built:	1964
Last Renovation:	1969
Replacement Value:	$53,787,987
Repair Cost:	$24,844,735.58
Total FCI:	46.19 %
Total RSLI:	69.44 %

Description:

Facility Condition Assessment
September 2015

School District of Philadelphia
Stephen Decatur Elementary School
3500 Academy Road
Philadelphia, PA 19154

89,247 SF / 1120 Students / LN 08

Stephen Decatur Annex
3500 Academy Road
Philadelphia, PA 19154

13,230 sf / LN 08

General

Stephen Decatur Elementary School and Annex Building are located at 3500 Academy Road. The main building was constructed in 1964, has 89,247 square feet and is 3 stories tall. The Annex Building located in the play area behind the main building and a small precast concrete “portable building” connected to the main building were constructed around 1969. The main building has a partial basement with unexcavated areas, crawlspaces, a boiler room, a gymnasium, and a cafeteria. The front entrance to the Main Building faces Academy Road; the front entrance to the Annex Building faces the play area. There is an extensive asphalt play area (playground) at the first floor level between the main building and the Annex. Faculty parking is accessed from Academy Road at the basement (Ground Floor) level. Rick Weischedel, the Building Engineer accompanied the FCA team during the inspection.

The inspection Team met Principal Genevieve Endy-Okane at the time of inspection who indicated that the building has old boilers and poor heating control. There are leaks in some of the rooms, creating musty odors. Even though there is an ADA ramp inside the building to make the first floor accessible, the side door used for entrance to the ramp has steps, which makes ramp access difficult; the library located in a “permanent concrete portable building” has steps, with no ramp access. Bathrooms often are not working due to broken plumbing fixtures. Lighting in the Annex Building is not good and needs to be upgraded. Classroom doors do not have security locks, which can be locked from inside the classroom.

Architectural/Structural

Foundations in the Main Building are constructed of brick and concrete. Basement brick and masonry joints are in good condition with no major settlement cracks observed. Footings were not seen and their construction type or condition could not be ascertained. There are crawl spaces utilized for utility runs in this building assessed by doors in the basement; these spaces were not inspected due to limited access and lighting, but from the outside appeared to be in good condition. The fuel oil pipe feeding the boiler enters the building in the basement in the south end of the boiler room; at the entry point through the wall, there was water leakage observed. There is no basement in the Annex.

Floor slabs in the basement are in good condition although covered with dirt and in need of stripping, cleaning and repainting. Upper floor slabs are constructed of cast-in-place concrete with cast-in-place concrete beams, painted and exposed as ceilings in corridors and most classrooms. No major cracking was observed in any floor slab inspected in the Main Building or the Annex.

Roof construction in the Main Building consists of reinforced concrete beams and deck, bearing on concrete beams and columns. The gymnasium has an exposed concrete plank roof deck bearing on yellow painted long-span steel bar joists. The roof deck above all parts of the building consists of a “flat” deck with minimum overall slope and pitch to roof drains. Roof access is via a brick penthouse structure with an integral boiler stack and elevator shaft. The Main Building and Annex Building have internal roof drains at “low” points with vertical leaders running through the building in internal chases. There are no vertical leaders running down the outside of the exterior walls. None of the roofs have overflow scuppers or overflow roof drains, but the roof has a low gravel stop (no parapet), if the roof drains are clogged, water would flow over the edge of the roof, which would be visible from below indicating clogged roof drains. The roofing membranes of the Main Building and Annex are probably 20 years old and much of the brick-colored granules embedded in the asphalt membrane are wearing away and washing down the roof drains. Since it was raining at the time of inspection, it was seen how slowly the water drains from all levels of the nearly dead level Main roof. To improve drainage when the building is re-roofed, additional slope should be created by use of tapered insulation. The Annex has a more perceptible slope and seemed to drain a little better for that reason.

Exterior walls of the Main Building are generally in good condition. Minor concerns are the areas of horizontal joint cracking and separation under limestone window sills and dirt accumulation on front wall brick, showing the need for better cleaning maintenance. Limestone joints above and below windows should be inspected and recaulked to maintain water tight integrity. Some of the brick joints under the univents also need to be recaulked. Approximately six univent grilles are damaged and need to be replaced. The connection between the Library (1969 addition) and the Main Building is constructed of precast concrete panels up to the top of the exit doors and corrugated metal siding above that height. The metal siding is in poor condition and should be replaced with new metal panels or stucco with a better connection to the Main Building. The brick up to the height of the first floor window sills is coated with a clear anti-graffiti coating on the front and sides and “brick-red” paint on the playground side. The Annex is also painted with the same color paint almost up to the roof. Some of the brick joints on the Annex require repointing especially in the upper section of the wall near the structural steel/flashing connection; cracked and separating brick joints should be repointed. The red paint should be reapplied to cover patched areas and to extend up to the roof the additional 3 feet which will improve the appearance. The retaining wall separating the upper play area from the lower faculty parking area (along Academy

Road) is also painted with the same red paint. The far right section and the left section enclosing the stairway up to the playground are cracking and need to be repaired, then repainted.

Exterior windows in both buildings were recently replaced with clear anodized double glazed insulating units, with “hopper -type” operational sections. There were no leaks or operational issues expressed with, respect to the windows. Auditorium and gymnasium windows have new, black, insect/security screens attached to the masonry on the exterior, which are in good condition. The auditorium has electrically operated windows (in good operating condition) high on the wall providing ventilation to the room. First floor windows in the Main Building and the Annex facing the play area and basement windows facing the street have heavy gauge black insect/security screens, which are secured to the window units. This type of security screen is more unobtrusive than the older galvanized mesh units and do not have the problem of leaf accumulation or bird nests located between the security screens and the windows.

Exterior doors at the Main Building and Annex front entrances and two other student entrances are flush, painted, hollow metal steel doors & frames with narrow vertical vision panels with security screens. Exit doors or mechanical area entrance/exit doors around the building are flush, painted hollow metal steel doors & frames without vision panels. Doors are generally in fair condition, with dents and no graffiti. Most exterior doors and frames have rust and are worn at the bottoms; they should be repaired and repainted, providing new hardware and weatherstripping after repaired. There is an ADA compliant handicap accessible ramp inside the building accessed from the east access driveway, however there are 3 steps up into the building at that entrance. There is space outside the door to construct a drop-off area and ramp to provide a fully accessible entrance, including more complete Accessible Route signage which would lead to the accessible entrance.

Roof coverings on the Main Building and the Annex consist of a fully adhered built-up rolled asphalt membrane system, with impregnated surface granules. Flashing is asphalt-backed adhered metal-faced flashing secured to rooftop ventilation ductwork, plumbing vents, and masonry parapets into reglets. Roof structures include masonry penthouse and building walls, plumbing vents, ventilation ductwork, and roof drains. Metal-faced asphalt-backed flashing terminates over gravel stop along edge of roof and under aluminum counterflashing set into masonry with reglets or attached to roof structures. Flashing set into masonry appears to be in fair condition with no leaks reported in areas below rooftop brick and metal structures. However, all flashing joints set into brick walls above roofs need to be recaulked every 2-3 years as this is an item that needs maintenance. Overlapping joints of asphalt membrane have some exposed cracking asphalt and should be frequently inspected to ensure water-tightness. The impregnated surface granules are gradually wearing away and accumulating around roof drains. Without the granules, the membrane will degrade quickly and loose integrity. The roof over the auditorium has soft spots, which means that water may be under the membrane. The low area between the auditorium and lobby roofs has been leaking and has been recently patched; water does not drain well from this roof. As mentioned above, the pitch of this roof appears to be less than desirable or that required by code, preventing good drainage and allowing water to remain on the surface until it evaporates. For the previous two reasons and because it is presumed that from their appearance both the Main Building (including the library addition) and the Annex roofs are older than 20 years, it is recommended to replace both roofs.

Partitions are constructed of painted block (concrete masonry units) throughout the Main Building and the Annex. Corners are bull-nose block to soften the hard edges and provide a more durable surface. Wall bases are either painted block or glazed block. There were no joint cracks observed in the inspection. This highly durable wall system is in good condition.

Interior doors used for classrooms, offices, storage rooms, and bathrooms are solid wood oak veneer doors with steel frames. Many of these wood doors have narrow lite wired glass vision panels where vision is desirable; some have security screens. Door to classrooms on 2nd and 3rd floors of the Main Building and the Annex are in good enough condition to be refinished to improve their appearance. Most first floor Main Building doors (except for those recently replaced) are original condition and should be replaced with new hardware. Toilet room and janitor closet doors in the Main Building are wood and generally in poor condition requiring replacement. Stairway doors are hollow metal doors with narrow lite wired glass vision panels and steel door frames and push/pull hardware which should be changed to panic hardware to provide positive latching as required by code; doors should be changed with the hardware. The auditorium, cafeteria and gymnasium doors are solid core wood with old (possibly the original) panic hardware in fair but worn condition that should be changed for better operation. Interior basement doors in the mechanical room are hollow metal steel doors with steel frames; doors and frames should be repainted. Classroom, office, and special function room doors throughout both buildings have old nob-style latchsets and should have lever-handle locksets that can be locked from the inside of the classroom, as required today for lock-down security. Doors in the Annex are solid core wood in fair

condition

Interior fittings/hardware in the Main Building and Annex include whiteboards and tackboards with metal chalk trays mounted on one wall in each classroom; it appears as if all blackboards have been upgraded as none were seen. The library space is located in an addition connected to the Main Building and has wood book cases, tables and chairs all in good condition. Some toilet room partitions in the Main Building and both toilet rooms in the Annex have newer plastic (phenolic resin) partitions and doors; the toilet rooms in the Main Building with older, original, transite partitions with wood doors (seen in the basement) should be upgraded to the newer phenolic partitions. Most toilet rooms have accessories in place and operational. Some toilet rooms have enlarged stalls which serve as accessible toilets. However, neither building has toilet rooms that fully comply with ADA which have grab bars, accessories at correct mounting heights, wrist blade faucets, leg protection, and extended or properly mounted bowl heights. One science room (Room 217 in the Main Building) has been renovated with new architectural finishes, a smartboard, new oak and resin top lab tables and an oak and resin instruction lab bench & sink with lever handles in the front. There is also a plastic laminate counter and cabinet unit in the back of the classroom.

Stair construction in the Main Building consists of concrete treads with steel nosings, concrete risers, and steel handrails (29" high) and guards (36" high) at tops of landings and open sides of stairways and steel balusters with 4" spacing. Stairway handrails and guards do not meet today's code requirements; handrails at 36" with guards at 42" at open sides of stairway and platforms should be provided. Concrete platforms and landings are finished with clear sealer, but the concrete has a mottled appearance and looks dirty. Stairs should be stripped and refinished to give them a cleaner appearance. There is a 3 riser concrete stair in the Annex; one of the risers is cracked and needs to be repaired. Railings are also 30" high and do not have the 12" end extension, and do not meet today's code. Guards are not required on that stair.

Wall finishes in the basement, first, and second, floors are full height painted concrete masonry units (block) throughout the building. The paint on the walls in the cafeteria is peeling and damaged; the cafeteria should be repainted. Throughout the building, there are also locations in corridors and classrooms where the paint on the walls is damaged and in need of repainting. The auditorium has a teakwood panel overlay installed around the sides and front of the stage area, adding warmth to the space. There are artistic wall mosaics installed in the entrance lobby area and entrance stair which appear to be designed by and possibly installed by students.

Floor finishes in the classrooms, corridors, kitchen, gymnasium, most of the lobby, the school office area, auditorium, and auditorium stage consist of vinyl asbestos tile (VAT). The cafeteria, part of the lobby area, and the new Science Classroom has vinyl composition tile (VCT) in place of the VAT; the VCT floors have been well maintained and do not appear to need replacement. The rooms with vinyl asbestos tile floors should be tested for asbestos and if they are asbestos containing, although most appear to be in good condition, they should be properly removed and replaced at some point in the near future. Basements, stairs, and toilet rooms have sealed concrete finishes which are in need of stripping, cleaning, and resealing; toilet rooms in particular should have a clean finish to promote the appearance of cleanliness. The library and principal's offices have carpet, which is stained and needs to be replaced. Floor finishes in the Annex are VCT in hallways and classrooms, ceramic mosaic tile in the toilet rooms, and painted concrete with loose laid carpet mats in the exit vestibule and two other entrances.

Ceiling finishes in most spaces throughout the Main Building consist of exposed precast concrete painted white, with suspended 1x4 (classrooms and offices) or surface mounted 2x4 (corridors and toilets) fluorescent lighting fixtures in corridors, classrooms, and offices. The auditorium has a 2'x2' acoustical tile ceiling with surface mounted fluorescent lighting fixtures. The ceiling is stained from roof leaks and should be replaced when the roof leaks are repaired. The painted ceiling surfaces are well maintained. The gym has white precast concrete planks over an exposed yellow painted steel truss structure, in good condition. The library in the Main Building has 12"x12" ceiling tiles glued to the concrete deck. The painted concrete overhangs at all entrances into the main building need to be repainted. The Annex has 2x4 suspended acoustical tile ceilings with recessed fluorescent lighting throughout the building.

Fixed furnishings include wood seating in the auditorium which has signs of wear on seating surfaces; some chairs need adjustment. Seat bottoms should be refinished to improve the appearance. The cafeteria has folding tables for serving students. The kitchen area has stainless steel service counters and food preparation tables.

There is a 1200 lb. hydraulic elevator which stops at each of the 4 levels in the building.

There is no ADA accessible ramp into the Main Building. A drop off area and a ramp up approximately 24" should be

provided from the sidewalk along the east driveway which leads to the Faculty Parking lot. A ramp into the building would allow wheelchair users to get into the building then proceed up the existing ramp inside the building up to the first floor. There is a second ramp inside the Main Building providing access to the play area, but the door out of the building to the play area has a single step. An asphalt ramp should be created to provide unimpeded access to this existing ramp. There is a 4 riser stairway from the Main Building into the vestibule that leads into the library. Since there is not enough room to create a ramp down to the library, either a chair lift should be provided in the vestibule or an asphalt ramp should be provided at the exit doors leading to the asphalt play area, in order to provide wheelchair access to the library. The Annex has a concrete ramp and railings from the play area into one of the doors to the building.

Mechanical

Plumbing Fixtures – The Main Building is equipped with wall hung urinals (flush valve type), wall hung water closets (flush valve type), and wall hung lavatories with wheel handle faucets. There is a water closet, lavatory and hand sink located in each of the kindergarten classrooms. Science classrooms are equipped with lab sinks and prep sinks which are original and should be replaced since they have exceeded their service life. 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.

The Annex is equipped with wall hung urinals (flush valve type), wall hung 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.

In the Main Building drinking fountains in the corridors and at the restrooms are wall hung fountains. Drinking fountains are typically located at the bathroom groups. The IMC has a high low electric water cooler arrangement. The gymnasium is equipped with recessed drinking fountains. Most appear to be the original installed equipment. The replacement of all drinking fountains is recommended as the equipment is approximately 51 years old and beyond its service life.

In the Annex there is a wall hung EWC in the corridor located at the restroom. In addition, there is a vertical EWC in the building. The replacement of all drinking fountains is recommended as the equipment is approximately 51 years old and beyond its service life.

In the Main Building, wall hung service sinks as well as floor set mop basins are original available throughout the building for use by the janitorial staff. Service sinks are located in the vicinity of the bathroom groups and drinking fountains. The sinks appear have exceeded their service life, and should be replaced. The Cafeteria's food prep/kitchen is equipped with one, three compartment stainless steel sink with wheel handle operated faucets and its sanitary connection is served by a floor mounted grease trap. The kitchen is also equipped with a hand sink. The triple wash sink (with lever handles) and hand sink (with lever handles) show signs of normal usage. The grease interceptor shows no signs of rust or corrosion and is accessible for maintenance. Chemicals are injected manually into the sanitizing basin.

In the Annex, a wall hung service sink is located by the bathroom group in a custodial closet and is original. The sink shows signs of heavy use and should be replaced.

Domestic Water Distribution – For the Main Building it appears that the 4" domestic water service piping is mostly soldered copper. Water service enters the building in the basement, with double check backflow preventer (RPZA – reduced pressure zone assembly) and a 2" water meter on the main line upon entering the building. The water meter appears to be new. The 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. The Annex water supply is fed from the Main Building and is recommended to be inspected and repaired as needed.

The Main Building domestic water system is produced by a Weil McLain, natural gas fired boiler, model J-7 series 3, 900,000 btuh input, 720,000 output which is located in the boiler mechanical room. The boiler produces hot water of which is then stored in a 752 gallon storage tank, manufactured Old Dominion Iron Steel Corp. The hot water system is equipped with a recirculation pump as well. The domestic water equipment appears to be original to the build and should be replaced. A water softener was located in the boiler room for treating the boiler make up water system. The water softener system appears to be relatively new.

The Annex domestic water system consist of a vertical tank type electric Bradford White, model MI40S6D513, 4500 watts. The water heater is over 10 years old and should be replaced. The system is not equipped with an expansion tank or circulating pump but does have a P/T relief.

Sanitary Waste - The sanitary waste piping system in the Main Building is extra heavy cast iron with lead and oakum seals 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. The Annex sanitary system is a gravity system as well and it is recommended to inspect this piping and repair or replace sections as needed

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 building since the roof does not have parapets. The Annex has roof drains but no scuppers.

Energy Supply - Duplex fuel oil supply pumps provide the required fuel to the boilers when operating on fuel oil. The 10,000 gallon fuel storage tank is located underground adjacent to the building near the boiler room. The fuel pumps and controls are beyond their serviceable life and therefore should be replaced. The 4" natural gas enters the building in the basement into the main boiler mechanical equipment room. The natural gas main is welded, black steel piping while the branches are threaded, black steel.

Heat Generating Systems – Heating water is generated by two Weil McLain 92 series hot water boilers with heavy oil fired burners. Both boilers are equipped with Weil McLain heavy oil burners, model WP#AL36-5. In the past, the boilers were operated on number 6 fuel oil before being operated on number 2 fuel oil. The boilers appear to have been install in 1965 as part of the original installation. Both boilers are at the end of their service life and should be replaced. There is no draft control on the either boiler flue. There were np combustion air louvers which would serve the boiler room to provide combustion air for the boiler operation. Burner oil pumps are driven by independent motors. The oil supply to the burner is equipped with dual solenoid valves and strainer/disposable media filter.

There are two, end suction base mounted, centrifugal heating water pumps for the hot water system. The Pumps are manufactured by Taco, model 5012-10.0, 450 gpm, 95 feet head, 20 HP, 1750 RPM. Both pumps are beyond their service life and should be replaced.

The Annex mechanical heating equipment is fed from the Main Building's boiler heating system.

Distribution Systems – The heating water distribution piping is black steel with welded fittings. The piping has been in use beyond its service life and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes. The District should hire a qualified contractor to examine the distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 5 years.

For the Main Building, fresh air is admitted into the building through the unit ventilators and outside air intakes to air handling equipment. Ventilation air is induced into the spaces through the outside air intake grilles located in the building exterior wall which are ducted to the unit ventilators. Additional ventilation air is provided via operable windows in the cafeteria, auditorium and gymnasium. The new unit ventilators should be designed for quiet operation and equipped with hot water and chilled water coils, and integral heat exchangers.

Similarly, the Annex classrooms are served by unit ventilators, are configured of that of the Main Building and should be replaced as well for the same reasons and same recommendations.

The Main Building uses unit ventilators with heating water coils in the classrooms and heating water convectors in the hallways, and suspended heating water convectors in bathrooms and stairwells, and currently is the sole source of heat for these areas. Relief air from the classrooms is transferred into the corridor and then is transferred to the foul air relief risers located at the end of the corridors which then terminate at the roof level.

The gymnasium in the Main Building is served by two heating and ventilating units with heating water coils. The H&V units supply air to the space through an overhead ducted supply system with concentric diffusers and low return grilles. Windows can also be opened for natural ventilation. It is recommended to replace these systems with a roof top mounted unit with a similar overhead supply air distribution system and return air ductwork and low return intake grilles which

would be protected from damage.

The cafeteria in the Main Building is served by unit ventilators with heating water coils. The unit ventilators are part of the original building equipment, have exceeded their life expectancy and should be replaced. A roof top mounted unit could be provided with heating and cooling coils as well as ventilation to meet the outside air ventilation requirements for the cafeteria seating area. The kitchen is provided with heating and ventilation as well as a general exhaust system for the space. It is recommended that a hood exhaust system be implemented for any equipment which generates heat. This system should be coupled with a heating and ventilating supply air system. 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.

The auditorium in the Main Building is served by heating and ventilating units with heating water coils. The H&V units supply air to the space through an overhead ducted supply system with concentric diffusers and low return grilles. It is recommended to replace these systems with a roof top mounted unit with a similar overhead supply air distribution system and return air ductwork.

The IMC in the Main Building is served by a packaged roof top unit which provides heating, cooling and ventilation to the space. The rooftop unit supply air to the space through an overhead ducted supply system with linear slot diffusers and a centralized return grilles to a ducted return the unit. Convection heat is also provided just below the windows. The connector which links to the Main Building is heated with electric baseboard convectors.

Terminal & Package Units – In the Main Building, there are a few areas which are served by window air conditioning units but predominantly the building does not have cooling systems. There are roof mounted exhaust fans which serve the restrooms. The fans should be replaced. The kitchen hood exhaust fan is also located on the roof. Make up air for the toilet exhaust is transferred via a door grille or transfer duct between the bathroom and the corridor. The first floor IT room is served by a split system DX, Mr. Slim Mitsubishi unit with the condensing unit located remotely.

In the Annex, the bathrooms are served by roof mounted exhaust fans. The fans should be replaced.

Controls & Instrumentation – In the Main Building, the original pneumatic systems (Honeywell) still provide basic control functions. Pneumatic room thermostats drive the unit ventilators, the damper actuators and control valves. Wall mounted pneumatic thermostats on the corridor walls control the hot water convectors. There are two reciprocating air compressors which generate control air for the temperature control system which are located in the boiler room which feed a common storage tank. A common refrigerated air dryer manufactured by Hankinson, serves the compressors. The maintenance staff reports temperature control is generally lacking throughout the facility and in general there are areas that are overheating while others are cold. Potential problems with oil, moisture or dirt in the pneumatic copper tubing can be one source of problems. The small rubber gaskets and tubing connections at control devices can become brittle over time and fail to compound control problems. The pneumatic systems are beyond their service life and require too much attention from the maintenance staff. The original control valves, dampers and pneumatic actuators are over 51 years old and should be replaced. These controls should be converted to DDC.

The Annex is supplied with pneumatic control air from the Main Building. These controls should be replaced and upgraded to DDC system as well.

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

Sprinklers - The school building is NOT covered by an automatic sprinkler system, neither the Main Building nor the Annex. 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. Two of the three kitchen hoods in the cafeteria are equipped with an Ansul fire suppression system. It is recommended to add a fire suppression system to the hood which currently does not have one.

Electrical

Site electrical service is delivered from medium voltage overhead lines on wooden poles along Academy Road. One pit

mounted utility transformer, 500KVA rated with 13.2KV primary and 208/120VAC secondary, is installed outside of the building along Academy Road, supplying power to the main building.

The service entrance equipment for the main building consists of a disconnect switch, utility meter, and 1000A rated switchboard, located in an electrical room in the basement. It was determined that this equipment does not have spare capacity for future loads and is at the end of its useful life, therefore requiring replacement.

Power distribution for main building power, receptacles, and lighting is delivered from panel boards located throughout the building on each floor including the basement. Panel boards and wires are old, degraded and have reached the end of their useful life, requiring replacement. As recommended by Building Owners and Managers (BOMA) International, replacement panel boards should be larger than the existing panels with additional circuit breakers for future expansion. Electrical distribution in the Annex Building is from two, 208, 3PH, 4wire, distribution panel located inside the Annex building. These distribution panel boards which feed all loads in Annex building, are fed from the main switch board located in the main building. These panels are still in good condition and do not require replacement.

In general there are not enough receptacles installed in classrooms of the main building and the Annex building. Our recommendation is to have a minimum of two receptacles on each classroom wall. Floor mounted receptacles in the computer room in the main building are not UL listed and should be removed. Receptacles should be installed on vertical wire-mold power poles providing power to the computer tables located in the middle of the computer room. Receptacles in other rooms in the Annex building are not of tamper-resistant type; the electrical codes requires that all receptacles subject to child access shall be either tamper-resistant or GFCI.

Corridors in main building have recently been upgraded to T8 fluorescent fixtures. Most other fixtures in the main building (over 90%) have fluorescent fixtures with outdated T12 lamps. The Gymnasium is illuminated with pendent mounted metal halide fixtures which have high energy consumption and are difficult to re-lamp. Lighting levels in the main building do not meet IES (Illuminating Engineering Society) recommended level in most areas. Lighting in the Annex building is also provided by fluorescent fixtures with outdated T12 lamps; these fixtures should also be replaced.

Fire Alarm System in the main building consists of a manual fire alarm system connected to 120V power. Since this system does not meet the current fire alarm codes, it should be replaced. The Annex is not controlled by a separate fire alarm system. All notification devices are controlled by the main fire alarm control panel located in the main building.

The school telephone and data systems are new and working adequately. A main distribution frame (MDF) along with 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) services the communication system of the building. This school also equipped with Wi-Fi system.

A separate PA system does not exist. The school uses the telephone system for public announcements; it is working adequately.

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

Clock and Program systems in the school functions properly in both buildings. A new wireless clock control system was recently installed in the school and is working properly.

Television System is not provided in both buildings.

Video surveillance system is not provided in both buildings. The s has an access control system including door contact and motion security sensors in critical areas. The school desires a complete video surveillance system with cameras located in critical areas, such as exit doors, corridors, and building exterior areas. The cameras should be controlled by a Closed Circuit Television (CCTV) system.

Emergency power system is provided in the main building. One 18.7KVA, 120/208 volt diesel generator made by

“Generac” is installed in the boiler room. The diesel generator is in good condition, however, it may not have enough capacity to provide power for future loads. A larger emergency generator should be provided to provide adequate power for future loads.

An Uninterruptible Power System (UPS) is provided for IT racks.

Emergency Lighting and Exit Lighting are provided in the school. A sufficient number of lighting fixtures in main building are fed from the existing backup power generator. The Annex building also has emergency battery-pack lighting fixtures, but exit signs do not have battery-pack auxiliary power. Annex building exit signs need to be replaced with battery-pack type fixtures.

Lightning Protection System is adequate. It is accomplished with air terminals mounted on the chimney; however, some repairs are needed. A study is needed to verify that the air terminals provide the proper coverage. Lightning protection is not provided in Annex building and is not required.

Grounding system is present in both buildings and appears to be adequate.

A traction-type elevator (estimated 20 hp) is in operation in the main building. The elevator is old and has exceeded its useful life and should be replaced.

Theater Lighting and dimming controls are old and do not comply with present day electrical codes. Lights are turned on and off by branch circuit breakers in the lighting panel and not by diming system. These days in modern school auditoriums, stage lighting is provided with front, upstage, high side, backlighting and scenery lighting. In addition to the stage lights, dimmable house lights and switchable stage work lights are recommended for general illumination during rehearsals and other activities outside performances. Supplemental fluorescent lighting is also required in the stage area for lectures and testing. These supplemental lighting fixtures should be controlled by dimmer bank controls during performances.

Sound System in the Auditorium is old and does not comply with recent multipurpose auditorium sound system requirements recommended by ECE40020 and should be replaced.

Campus areas, parking areas, and building perimeters have lighting that is adequate for personnel safety and security of property.

Site Video Surveillance is not provided in either building.

Site paging system is not adequate. There are not enough speakers on exterior walls to provide adequate coverage of the outside area.

Grounds

Paving and parking is constructed of asphalt. There are many cracked and broken areas throughout the faculty parking lots in front and rear; these lots need to be repaved. The catch basin in the front of the parking lot along Academy Road is partially blocked with debris; it should be cleaned out and the pipe checked for flow to ensure good operation. The asphalt play area between the Annex and Main Building is in good condition.

The brick retaining wall that separates the play area from the lower Faculty Parking lot along Academy Road has areas of cracking in two locations that need to be repaired.

Some of the concrete sidewalk at the main entrance to the building need to be replaced.

Site fencing is composed of chain link fencing which is in fair condition with some bent and rusting sections around the site. There is no fence and gate to close-off the entrance to the parking lot which might be a security issue. The fence along the east property line is rusted and needs to be repainted. The chain link fence along the top of the retaining wall is rusted and needs to be replaced.

RECOMMENDATIONS

Architectural

Main Building

- Strip and reseal or paint concrete floors in stairways, toilet rooms, and parts of basement, (14,500sf)
- Repair leak around fuel oil pipe where entering the basement
- Recaulk joint under the first floor limestone window sills (1200lf)
- Repaint damaged and rusted exterior metal doors and frames (24)3x7
- Replace damaged univent louvers (6) 2x4
- Replace metal siding above head height on Library Addition connecting corridor (500sf)
- Powerwash exterior front and sides (20,000sf)
- Replace roof including flashing and counterflashing at brick walls on roofs (37,000sf)
- Repaint steel doors and metal frames in mechanical rooms and stairs (28) 3x7
- Refinish wood doors into first floor classrooms, storage rooms, and other doors recently replaced (20) 3x7
- Replace wood doors into second and third floor classrooms and all toilet rooms (40) 3x7
- Provide security hardware for classrooms and offices, locking from the inside of the room (60)
- Repaint interior block walls where surface is damaged in cafeteria, kitchen, corridors, classrooms, and stairways (10,000sf)
- Replace transite toilet room partitions with plastic partitions in Faculty toilet rooms (6 toilet compartments)
- Provide toilet room accessories where partitions are replaced (6)
- Replace stairway handrails and guards with code compliant systems (300ft rail; 300ft rail+guard)
- Remove 9”x9” VAT floors in classrooms, corridors, and auditorium with and replace with VCT (68,047sf)
- Refinish auditorium seats (150)
- Replace acoustical tile ceiling in auditorium and library (7000sf)
- Repaint underside of concrete overhangs at entrances (100 sf)
- Replace carpet in library and offices (2700 sf)

Annex Building

- Repair cracked masonry (500 sf)
- Repaint exterior walls exposed to view of play area (3000 sf)
- Repaint exterior doors (5 3 x 7)
- Replace roof (13,200 sf)
- Refinish interior doors (16 3 x 7)
- Provide new lever lock set and security lock for classroom doors (10)

Mechanical

Main Building

- In the Main Building replace all lavatories in the building with lower flow fixtures, as the fixtures are original.
- In the Main Building replace all water closets in the building with lower flow fixtures, as the fixtures are original.
- In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original. In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original.
- In the Main Building replace all lavatories in the building with lower flow fixtures, as the fixtures are original.
- In the Main Building replace all water closets in the building with lower flow fixtures, as the fixtures are original.
- In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original. In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original.
- In the Main Building 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.
- In the Main Building replace service sinks (janitor sinks) in the building.
- In the Main 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.
- In the Main Building replace the 10,000 gallon underground storage tank (UST) installed before 2000.
- In the Main Building Add automatic sanitizing chemicals to the stainless steel sink in the cafeteria.
- In the Main Building replace natural gas fired boiler and storage tank with vertical tank type water heaters.

- In the Main Building inspect and replace the original as needed the domestic water piping in the building.
- In the Main 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.
- In the Main Building hire a qualified contractor to examine the heating water piping in service for 51 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.
- In the Main Building replace duplex fuel oil pumps.
- In the Main Building replace the two Weil McLain 92 series hot water boilers estimated to have been in service since 1965.
- In the Main Building replace the hot water convectors.
- In the Main Building replace exhaust fans.
- In the Main Building replace the existing unit ventilators throughout the building with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units shall be equipped with hot water / chilled water coils and integral heat recovery wheels.
- In the Main Building remove the window air conditioning units and install a 250 ton air-cooled chiller on the roof with chilled water distribution piping and pumps located in a mechanical room on the basement level to supply more reliable air conditioning for the building with a much longer service life.
- In the Main Building provide ventilation, heating and cooling for the gymnasium by installing a packaged roof top unit.
- In the Main Building provide ventilation for the corridors at one basement and nine first floor entryways (10 locations total) by installing fan coil air handling units hung from the structure with outdoor air ducted to the unit from louvers in the window openings
- In the Main Building provide ventilation, heating and cooling for the Cafeteria by removing the existing unit ventilators and installing a package rooftop constant volume air handling unit with distribution ductwork and registers.
- In the Main Building provide ventilation, heating and cooling for the Auditorium by removing the existing unit ventilators and installing a package rooftop constant volume air handling unit with distribution ductwork and registers.
- In the Main Building replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency.
- In the Main Building provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- In the Main Building and Annex 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.
- In the Main Building install a new sprinkler system throughout the building.

Annex Building

- In the Annex replace all lavatories in the building with lower flow fixtures, as the fixtures are original.
- In the Annex replace all water closets in the building with lower flow fixtures, as the fixtures are original.
- In the Annex replace all urinals in the building with lower flow fixtures, as the fixtures are original. In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original.
- In the Annex 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.
- In the Annex replace service sinks (janitor sinks) in the building.
- In the Annex 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.
- In Annex replace vertical tank electric water heater.
- In the Annex inspect and replace the original as needed the domestic water piping in the building
- In the Annex 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.
- In the Annex hire a qualified contractor to examine the heating water piping in service for 51 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

- In the Annex replace the hot water convectors.
- In the Annex replace exhaust fans.
- In the Annex replace the existing unit ventilators throughout the building with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units shall be equipped with hot water / chilled water coils and integral heat recovery wheels.
- In the Annex replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency.
- In the Annex provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.
- In the Annex install a new sprinkler system throughout the building

Electrical

Main Building

- Upgrade the existing electrical service with a new service. Replace the existing switchboard with new 2000A, 208/120V, 3PH, 4 wire switchboards.
- Upgrade existing distribution system by providing new panel boards and new feeders. Provide arc flash labels on all panel boards. Estimated total 16 panel boards.
- Install minimum two receptacles on each wall in classroom. It is recommended that a vertical wire-mold power pole with two-compartments for data and power, be installed in the computer lab. Provide surge protective receptacles for computers.
- Replace existing fluorescent lighting fixtures with new T-5 fluorescent lighting fixtures. Estimated 90% of existing lighting fixtures.
- Provide high bay LED fixtures in the gymnasium.
- Replace the existing manual fire alarm system with a new automatic Fire Alarm System including a control panel, initiated devices in corridors, air ducts, electrical and LAN rooms, library, and computer rooms. Provide notification devices in classrooms, offices, auditorium, corridors, other areas recommended by codes.
- Provide an adequate video surveillance system including cameras and Closed Circuit Television (CCTV) system. Cameras should be installed in corridors, at school entrance doors and on various walls around the building.
- Replace existing back-up power system with a new emergency power system including 100KW diesel generator and auto transfer switch.
- Provide new stage lighting and controller in Auditorium.
- Provide new sound system including a freestanding 19” rack backstage with mixer per amplifiers, CD player, cassette player, AM-FM radio, graphic or parametric equalizer, and receivers for wireless microphones.
- Add five more speakers on exterior walls to adequately cover the area.
- Replace all exit signs with battery-pack exit signs.

Annex Building

- It is recommended that a vertical wire-mold power pole with two-compartments for data and power, be installed. Use GFCI type receptacle in areas subject to access by children.
- Replace lighting fixtures with new T-5 fluorescent lighting fixtures.
- Replace existing fire alarm devices with a new automatic Fire Alarm System including control panel, initiated devices in corridors, air ducts, electrical and LAN rooms, library, and computer rooms. Provide notification devices in class rooms, offices, corridors, other area recommended by codes. Fire alarm system in Annex to be connected to the fire panel in the main building.

Grounds

- Repave cracked and damaged asphalt parking lots in front and rear with new asphalt, including re-striping (40,000)
- Provide new ADA accessible handicap ramp into side of building (30 ft)
- Provide new sloped asphalt up 6” to doors, in play area at two entrances (150 sf)
- Repair brick retaining wall, cracking in two locations (200 sf)
- Provide new chain link fence on top of retaining wall (160 ft)
- Repair cracked concrete paving at entrance (500 sf)
- Inspect and clean out catch basins and storm drains in front parking lot

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 3 / Tm 2
Status:	Accepted by SDP	Team:	Tm 2
Site ID:	S833001		

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.

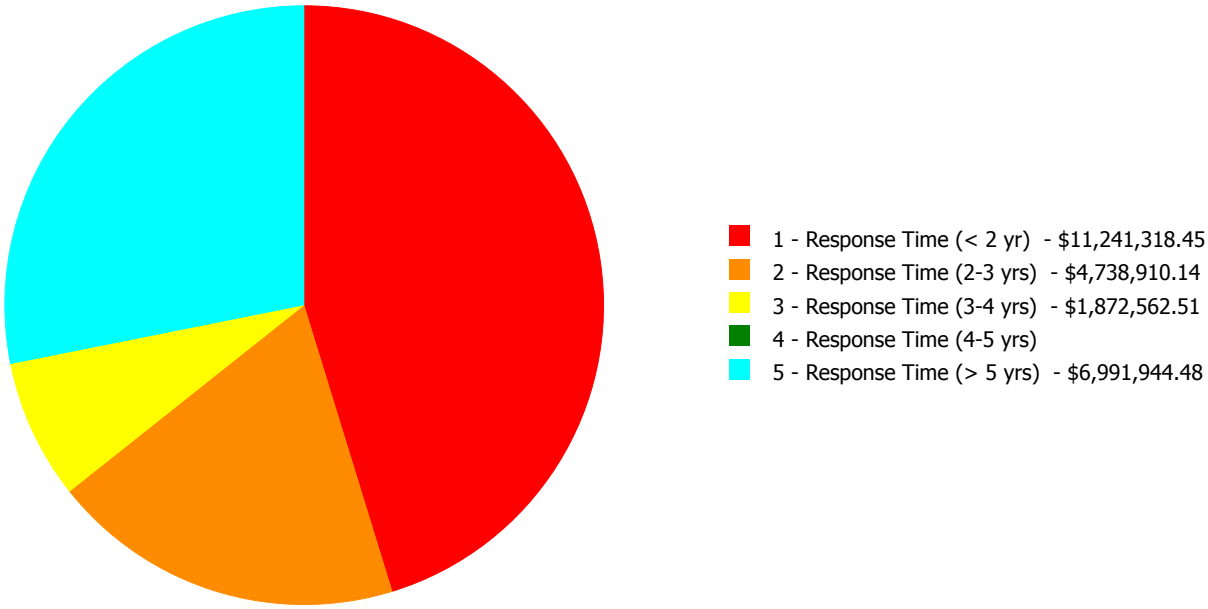
Current Investment Requirement and Condition by Uniformat Classification

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	49.92 %	0.00 %	$0.00
A20 - Basement Construction	50.09 %	0.06 %	$1,215.91
B10 - Superstructure	49.81 %	0.00 %	$0.00
B20 - Exterior Enclosure	55.22 %	2.31 %	$130,359.91
B30 - Roofing	110.00 %	88.94 %	$1,699,108.07
C10 - Interior Construction	49.06 %	11.63 %	$289,849.47
C20 - Stairs	49.59 %	104.62 %	$149,368.05
C30 - Interior Finishes	63.92 %	29.04 %	$1,267,301.89
D10 - Conveying	14.29 %	0.00 %	$0.00
D20 - Plumbing	75.96 %	82.51 %	$1,947,632.83
D30 - HVAC	98.21 %	114.97 %	$12,449,776.96
D40 - Fire Protection	105.71 %	235.90 %	$2,135,047.14
D50 - Electrical	112.45 %	70.84 %	$4,267,137.57
E10 - Equipment	34.19 %	5.73 %	$93,445.81
E20 - Furnishings	29.92 %	43.52 %	$94,996.94
G20 - Site Improvements	0.00 %	16.40 %	$319,495.03
G40 - Site Electrical Utilities	0.00 %	0.00 %	$0.00
Totals:	**69.44 %**	**46.19 %**	**$24,844,735.58**

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)
B842001;Decatur	89,247	48.90	$9,786,647.55	$4,197,732.29	$1,587,020.39	$0.00	$5,936,334.88
B842003;Decatur Annex	13,230	41.86	$1,389,898.17	$438,838.12	$133,159.55	$0.00	$1,055,609.60
G833001;Grounds	148,400	12.32	$64,772.73	$102,339.73	$152,382.57	$0.00	$0.00
Total:		**46.19**	**$11,241,318.45**	**$4,738,910.14**	**$1,872,562.51**	**$0.00**	**$6,991,944.48**

Deficiencies By Priority



Budget Estimate Total: $24,844,735.58

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):	89,247
Year Built:	1964
Last Renovation:	1969
Replacement Value:	$43,984,477
Repair Cost:	$21,507,735.11
Total FCI:	48.90 %
Total RSLI:	72.86 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B842001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S833001		

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	49.00 %	0.00 %	$0.00
A20 - Basement Construction	49.00 %	0.07 %	$1,215.91
B10 - Superstructure	49.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	54.83 %	1.69 %	$84,911.85
B30 - Roofing	110.00 %	89.43 %	$1,253,634.41
C10 - Interior Construction	47.76 %	12.52 %	$274,304.17
C20 - Stairs	49.00 %	118.70 %	$149,368.05
C30 - Interior Finishes	62.70 %	33.51 %	$1,267,301.89
D10 - Conveying	14.29 %	0.00 %	$0.00
D20 - Plumbing	83.63 %	88.40 %	$1,611,029.66
D30 - HVAC	97.95 %	115.23 %	$11,439,888.57
D40 - Fire Protection	105.71 %	177.49 %	$1,276,720.35
D50 - Electrical	110.11 %	75.50 %	$3,960,917.50
E10 - Equipment	37.14 %	6.58 %	$93,445.81
E20 - Furnishings	32.50 %	49.97 %	$94,996.94
Totals:	**72.86 %**	**48.90 %**	**$21,507,735.11**

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.	89,247	100	1964	2064		49.00 %	0.00 %	49			$1,642,145
A1030	Slab on Grade	$7.73	S.F.	89,247	100	1964	2064		49.00 %	0.00 %	49			$689,879
A2010	Basement Excavation	$6.55	S.F.	89,247	100	1964	2064		49.00 %	0.00 %	49			$584,568
A2020	Basement Walls	$12.70	S.F.	89,247	100	1964	2064		49.00 %	0.11 %	49		$1,215.91	$1,133,437
B1010	Floor Construction	$75.10	S.F.	89,247	100	1964	2064		49.00 %	0.00 %	49			$6,702,450
B1020	Roof Construction	$13.88	S.F.	89,247	100	1964	2064		49.00 %	0.00 %	49			$1,238,748
B2010	Exterior Walls	$36.91	S.F.	89,247	100	1964	2064		49.00 %	2.14 %	49		$70,577.72	$3,294,107
B2020	Exterior Windows	$18.01	S.F.	89,247	40	2000	2040		62.50 %	0.00 %	25			$1,607,338
B2030	Exterior Doors	$1.45	S.F.	89,247	25	1964	1989	2042	108.00 %	11.08 %	27		$14,334.13	$129,408
B3010105	Built-Up	$37.76	S.F.	37,065	20	1964	1984	2037	110.00 %	89.57 %	22		$1,253,634.41	$1,399,574
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	$0.06	S.F.	37,065	20	1964	1984	2037	110.00 %	0.00 %	22			$2,224
C1010	Partitions	$17.91	S.F.	89,247	100	1964	2064		49.00 %	0.00 %	49			$1,598,414
C1020	Interior Doors	$3.51	S.F.	89,247	40	1964	2004	2037	55.00 %	81.26 %	22		$254,544.86	$313,257
C1030	Fittings	$3.12	S.F.	89,247	40	1964	2004	2028	32.50 %	7.10 %	13		$19,759.31	$278,451
C2010	Stair Construction	$1.41	S.F.	89,247	100	1964	2064		49.00 %	118.70 %	49		$149,368.05	$125,838

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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.	89,247	10	1964	1974	2020	50.00 %	5.21 %	5		$61,464.51	$1,178,953
C3010231	Vinyl Wall Covering	$0.97	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.		30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.	2,700	10	1964	1974	2028	130.00 %	153.30 %	13		$30,215.05	$19,710
C3020412	Terrazzo & Tile	$75.52	S.F.		50				0.00 %	0.00 %				$0
C3020413	Vinyl Flooring	$9.68	S.F.	72,047	20	2015	2035		100.00 %	147.98 %	20		$1,032,046.25	$697,415
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	14,500	50	1964	2014	2052	74.00 %	396.34 %	37		$55,745.74	$14,065
C3030	Ceiling Finishes	$20.97	S.F.	89,247	25	1964	1989	2029	56.00 %	4.69 %	14		$87,830.34	$1,871,510
D1010	Elevators and Lifts	$1.53	S.F.	89,247	35	1964	1999	2020	14.29 %	0.00 %	5			$136,548
D2010	Plumbing Fixtures	$13.52	S.F.	89,247	35	1964	1999	2042	77.14 %	48.44 %	27		$584,446.04	$1,206,619
D2020	Domestic Water Distribution	$1.68	S.F.	89,247	25	1964	1989	2042	108.00 %	392.68 %	27		$588,760.18	$149,935
D2030	Sanitary Waste	$2.90	S.F.	89,247	25	1964	1989	2042	108.00 %	169.16 %	27		$437,823.44	$258,816
D2040	Rain Water Drainage	$2.32	S.F.	89,247	30	1964	1994	2037	73.33 %	0.00 %	22			$207,053
D3020	Heat Generating Systems	$18.67	S.F.	89,247	35	1964	1999	2052	105.71 %	60.75 %	37		$1,012,205.26	$1,666,241
D3030	Cooling Generating Systems	$24.48	S.F.	89,247	30	1964	1994	2040	83.33 %	65.60 %	25		$1,433,269.61	$2,184,767
D3040	Distribution Systems	$42.99	S.F.	89,247	25	1964	1989	2042	108.00 %	184.51 %	27		$7,079,300.29	$3,836,729
D3050	Terminal & Package Units	$11.60	S.F.	89,247	20	1964	1984	2028	65.00 %	0.00 %	13			$1,035,265
D3060	Controls & Instrumentation	$13.50	S.F.	89,247	20	1964	1984	2037	110.00 %	158.95 %	22		$1,915,113.41	$1,204,835
D4010	Sprinklers	$7.05	S.F.	89,247	35			2052	105.71 %	202.91 %	37		$1,276,720.35	$629,191
D4020	Standpipes	$1.01	S.F.	89,247	35			2052	105.71 %	0.00 %	37			$90,139
D5010	Electrical Service/Distribution	$9.70	S.F.	89,247	30	1964	1994	2047	106.67 %	106.97 %	32		$926,009.92	$865,696
D5020	Lighting and Branch Wiring	$34.68	S.F.	89,247	20	1964	1984	2037	110.00 %	64.36 %	22		$1,991,969.11	$3,095,086
D5030	Communications and Security	$12.99	S.F.	89,247	15	1964	1979	2032	113.33 %	68.57 %	17		$794,892.38	$1,159,319
D5090	Other Electrical Systems	$1.41	S.F.	89,247	30	1964	1994	2047	106.67 %	197.12 %	32		$248,046.09	$125,838
E1020	Institutional Equipment	$4.82	S.F.	89,247	35	1964	1999	2028	37.14 %	21.72 %	13		$93,445.81	$430,171
E1090	Other Equipment	$11.10	S.F.	89,247	35	1964	1999	2028	37.14 %	0.00 %	13			$990,642
E2010	Fixed Furnishings	$2.13	S.F.	89,247	40	1964	2004	2028	32.50 %	49.97 %	13		$94,996.94	$190,096
								Total	**72.86 %**	**48.90 %**			**$21,507,735.11**	**$43,984,477**

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 block 100%

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

Note: Concrete = 14,500 17%
Wood - 0
VCT - 4,000 4%
VAT - 68,047 76%
Carpet- 2,700 3%

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

Note: Acoustical tile ceiling 11,500 13%
Painted concrete 77,747 87%

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:	**$21,507,735**	**$0**	**$0**	**$0**	**$0**	**$1,677,529**	**$0**	**$0**	**$0**	**$0**	**$0**	**$23,185,264**
*** 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	$1,216	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,216**
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	$70,578	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$70,578**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$14,334	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$14,334**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$1,253,634	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,253,634**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

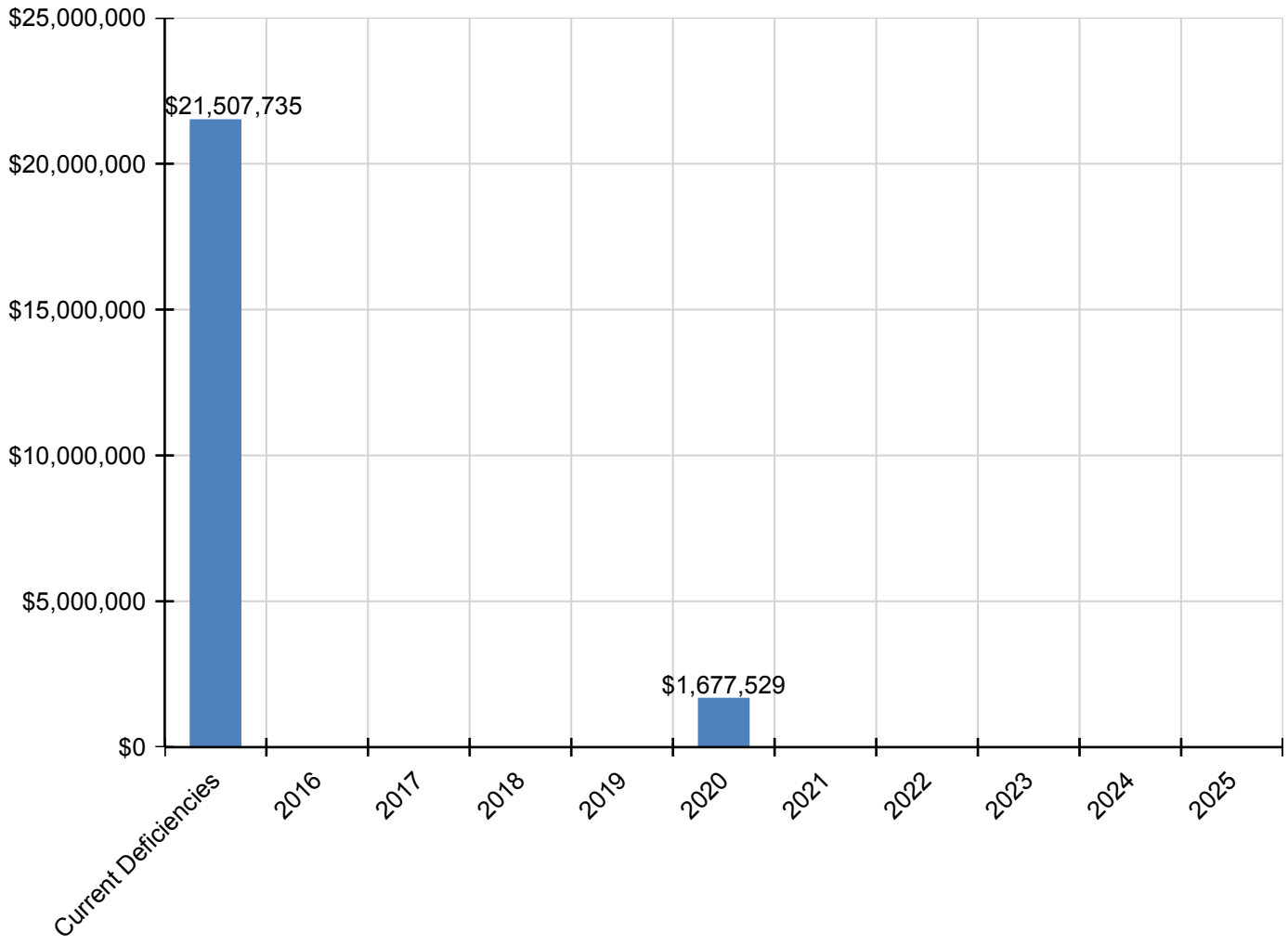
C1020 - Interior Doors	$254,545	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$254,545**
C1030 - Fittings	$19,759	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$19,759**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$149,368	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$149,368**
C30 - Interior Finishes	$0	$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	$61,465	$0	$0	$0	$0	$1,503,402	$0	$0	$0	$0	$0	**$1,564,867**
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	$30,215	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$30,215**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$1,032,046	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,032,046**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$55,746	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$55,746**
C3030 - Ceiling Finishes	$87,830	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$87,830**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$0	$0	$0	$0	$0	$174,126	$0	$0	$0	$0	$0	**$174,126**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$584,446	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$584,446**
D2020 - Domestic Water Distribution	$588,760	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$588,760**
D2030 - Sanitary Waste	$437,823	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$437,823**
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	$1,012,205	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,012,205**
D3030 - Cooling Generating Systems	$1,433,270	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,433,270**
D3040 - Distribution Systems	$7,079,300	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$7,079,300**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$1,915,113	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,915,113**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$1,276,720	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,276,720**
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	$926,010	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$926,010**
D5020 - Lighting and Branch Wiring	$1,991,969	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,991,969**
D5030 - Communications and Security	$794,892	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$794,892**
D5090 - Other Electrical Systems	$248,046	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$248,046**
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	$93,446	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$93,446**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$94,997	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$94,997**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

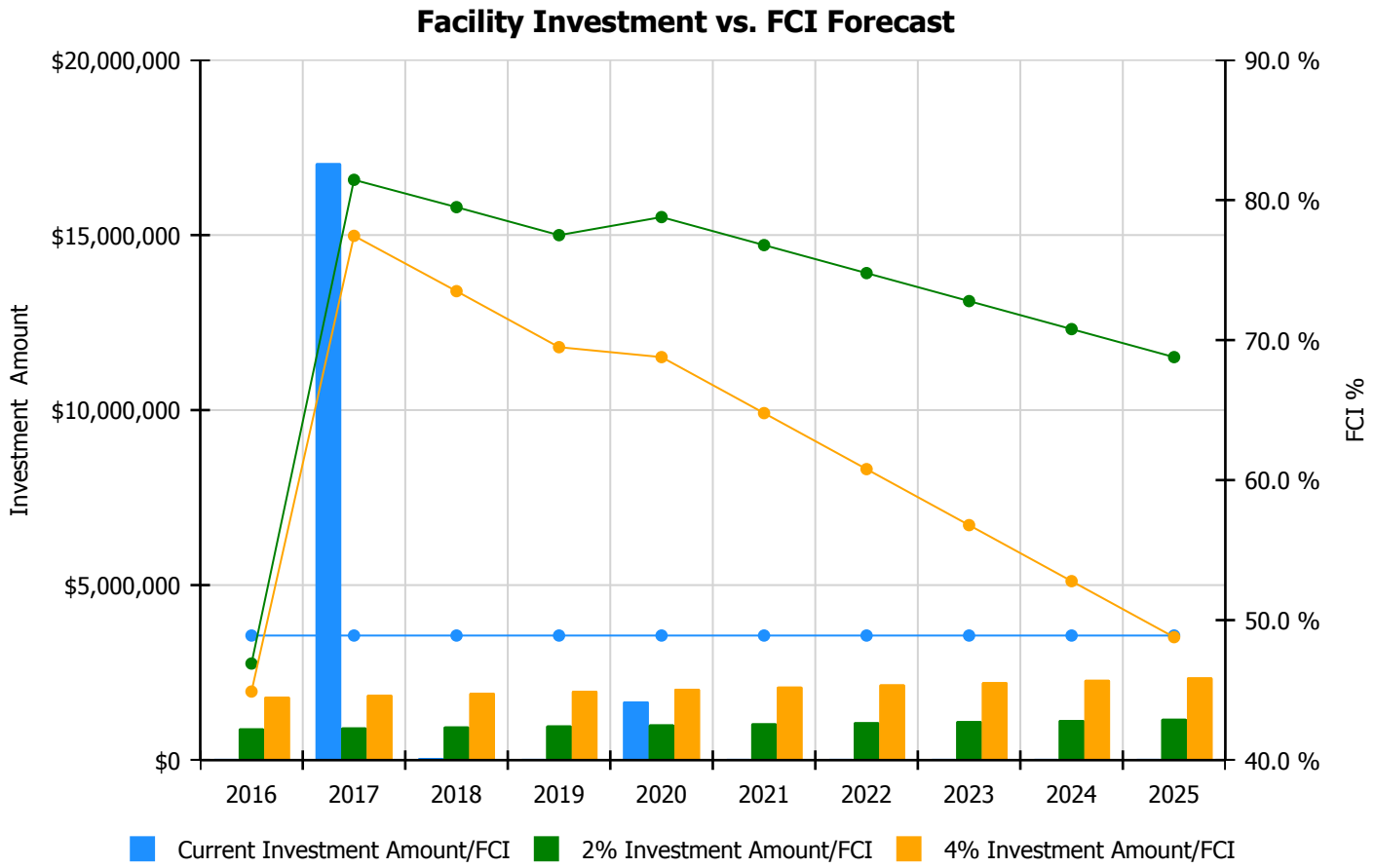
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

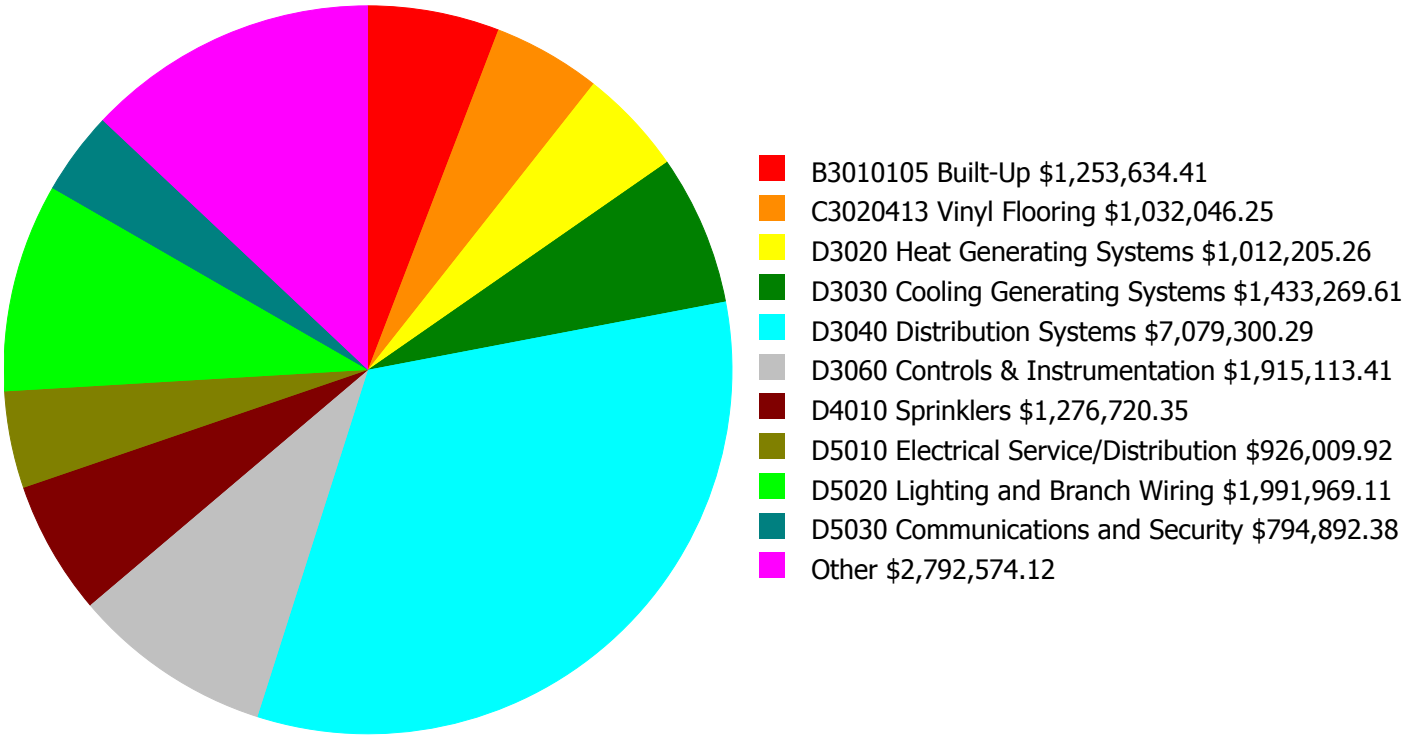
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 48.9%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$906,080.00	46.90 %	$1,812,160.00	44.90 %
2017	$17,053,260	$933,263.00	81.44 %	$1,866,525.00	77.44 %
2018	$23,691	$961,261.00	79.49 %	$1,922,521.00	73.49 %
2019	$0	$990,098.00	77.49 %	$1,980,197.00	69.49 %
2020	$1,677,529	$1,019,801.00	78.78 %	$2,039,603.00	68.78 %
2021	$0	$1,050,395.00	76.78 %	$2,100,791.00	64.78 %
2022	$0	$1,081,907.00	74.78 %	$2,163,814.00	60.78 %
2023	$0	$1,114,364.00	72.78 %	$2,228,729.00	56.78 %
2024	$0	$1,147,795.00	70.78 %	$2,295,591.00	52.78 %
2025	$0	$1,182,229.00	68.78 %	$2,364,458.00	48.78 %
Total:	**$18,754,480**	**$10,387,193.00**		**$20,774,389.00**	

Deficiency Summary by System

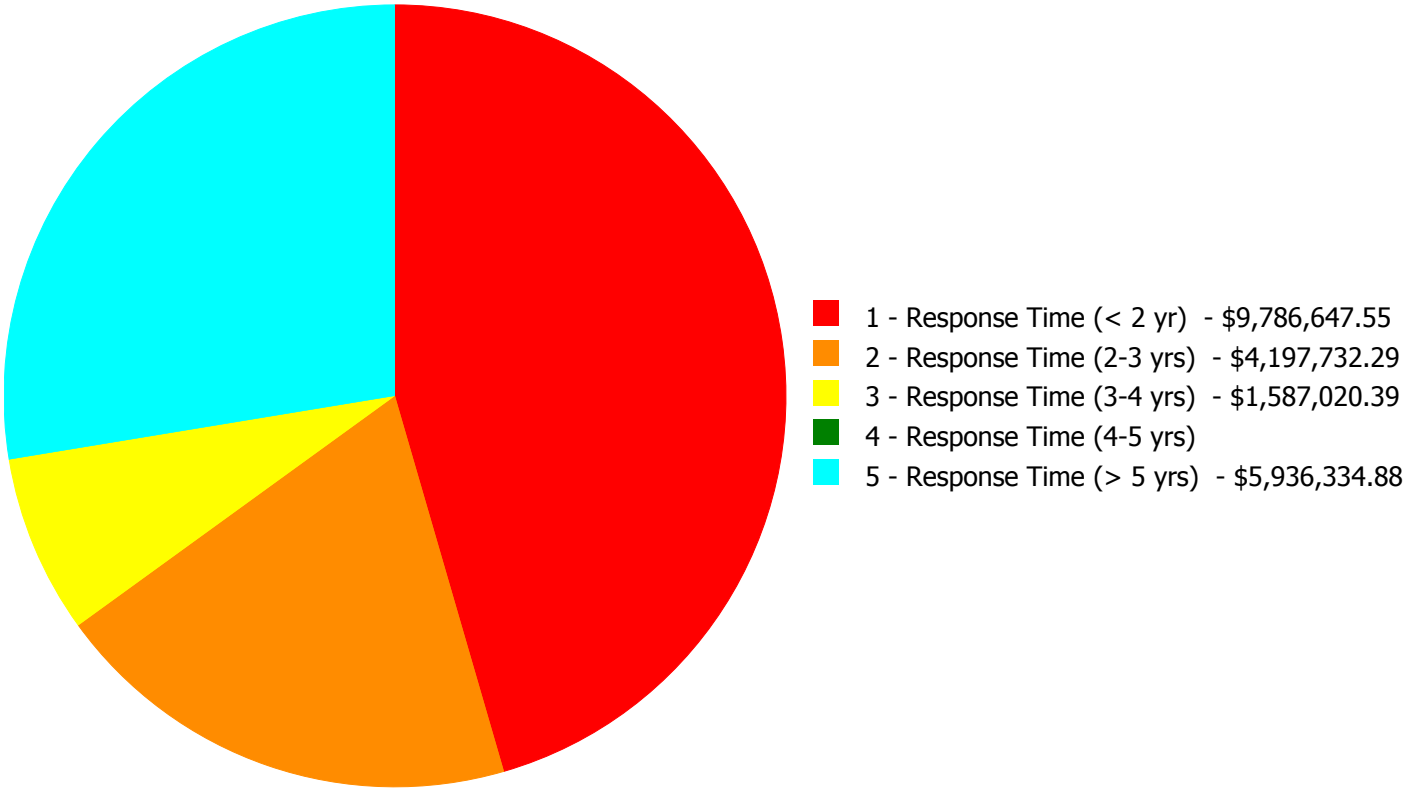
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $21,507,735.11

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: $21,507,735.11

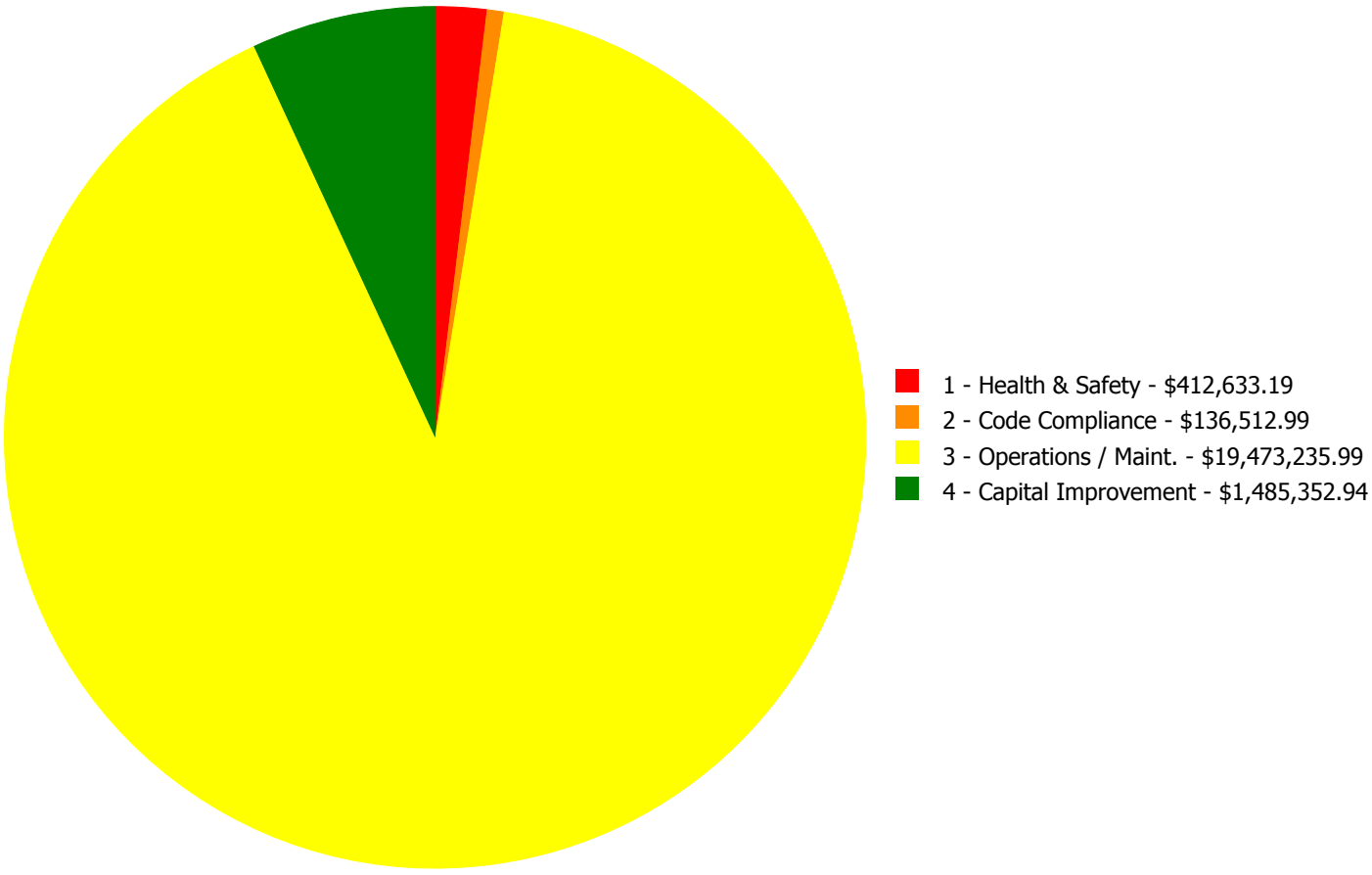
Deficiency By Priority Investment Table

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
A2020	Basement Walls	$0.00	$1,215.91	$0.00	$0.00	$0.00	$1,215.91
B2010	Exterior Walls	$24,079.22	$46,498.50	$0.00	$0.00	$0.00	$70,577.72
B2030	Exterior Doors	$0.00	$14,334.13	$0.00	$0.00	$0.00	$14,334.13
B3010105	Built-Up	$1,253,634.41	$0.00	$0.00	$0.00	$0.00	$1,253,634.41
C1020	Interior Doors	$0.00	$254,544.86	$0.00	$0.00	$0.00	$254,544.86
C1030	Fittings	$0.00	$19,759.31	$0.00	$0.00	$0.00	$19,759.31
C2010	Stair Construction	$149,368.05	$0.00	$0.00	$0.00	$0.00	$149,368.05
C3010230	Paint & Covering	$0.00	$61,464.51	$0.00	$0.00	$0.00	$61,464.51
C3020411	Carpet	$0.00	$30,215.05	$0.00	$0.00	$0.00	$30,215.05
C3020413	Vinyl Flooring	$0.00	$1,032,046.25	$0.00	$0.00	$0.00	$1,032,046.25
C3020415	Concrete Floor Finishes	$0.00	$55,745.74	$0.00	$0.00	$0.00	$55,745.74
C3030	Ceiling Finishes	$0.00	$87,351.64	$478.70	$0.00	$0.00	$87,830.34
D2010	Plumbing Fixtures	$0.00	$584,446.04	$0.00	$0.00	$0.00	$584,446.04
D2020	Domestic Water Distribution	$0.00	$0.00	$136,512.99	$0.00	$452,247.19	$588,760.18
D2030	Sanitary Waste	$0.00	$0.00	$437,823.44	$0.00	$0.00	$437,823.44
D3020	Heat Generating Systems	$0.00	$0.00	$1,012,205.26	$0.00	$0.00	$1,012,205.26
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$1,433,269.61	$1,433,269.61
D3040	Distribution Systems	$4,305,202.56	$0.00	$0.00	$0.00	$2,774,097.73	$7,079,300.29
D3060	Controls & Instrumentation	$0.00	$1,915,113.41	$0.00	$0.00	$0.00	$1,915,113.41
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$1,276,720.35	$1,276,720.35
D5010	Electrical Service/Distribution	$926,009.92	$0.00	$0.00	$0.00	$0.00	$926,009.92
D5020	Lighting and Branch Wiring	$1,991,969.11	$0.00	$0.00	$0.00	$0.00	$1,991,969.11
D5030	Communications and Security	$794,892.38	$0.00	$0.00	$0.00	$0.00	$794,892.38
D5090	Other Electrical Systems	$248,046.09	$0.00	$0.00	$0.00	$0.00	$248,046.09
E1020	Institutional Equipment	$93,445.81	$0.00	$0.00	$0.00	$0.00	$93,445.81
E2010	Fixed Furnishings	$0.00	$94,996.94	$0.00	$0.00	$0.00	$94,996.94
	Total:	$9,786,647.55	$4,197,732.29	$1,587,020.39	$0.00	$5,936,334.88	$21,507,735.11

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: $21,507,735.11

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: Decatur Main Building - exterior window sills

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

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

Qty: 1,200.00

Unit of Measure: L.F.

Estimate: $24,079.22

Assessor Name: System

Date Created: 11/20/2015

Notes: Recaulk joint under the first floor limestone window sills (1200lf)

System: B3010105 - Built-Up

Location: Decatur Main Building - roof

Distress: Failing

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Remove and Replace Built Up Roof

Qty: 37,000.00

Unit of Measure: S.F.

Estimate: $1,253,634.41

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace roof including flashing and counterflashing at brick walls on roofs (37,000sf)

System: C2010 - Stair Construction

Location: Decatur Main Building - stairs

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

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

Qty: 300.00

Unit of Measure: L.F.

Estimate: $149,368.05

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace stairway handrails and guards with code compliant systems (300ft rail; 300ft rail+guard)

System: D3040 - Distribution Systems

Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE Std 62 - insert the SF of bldg. in the qty.

Qty: 89,247.00

Unit of Measure: S.F.

Estimate: $4,305,202.56

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building replace the existing unit ventilators throughout the building with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units shall be equipped with hot water / chilled water coils and integral heat exchanger.

System: D5010 - Electrical Service/Distribution

Location: Electrical Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Switchboard

Qty: 1.00

Unit of Measure: Ea.

Estimate: $520,610.38

Assessor Name: System

Date Created: 10/20/2015

Notes: Upgrade the existing electrical service with a new service. Replace the existing switchboard with new 2000A, 208/120V, 3PH, 4 wire switchboards.

System: D5010 - Electrical Service/Distribution

Location: Entire Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Electrical Distribution System (U)

Qty: 1.00

Unit of Measure: Ea.

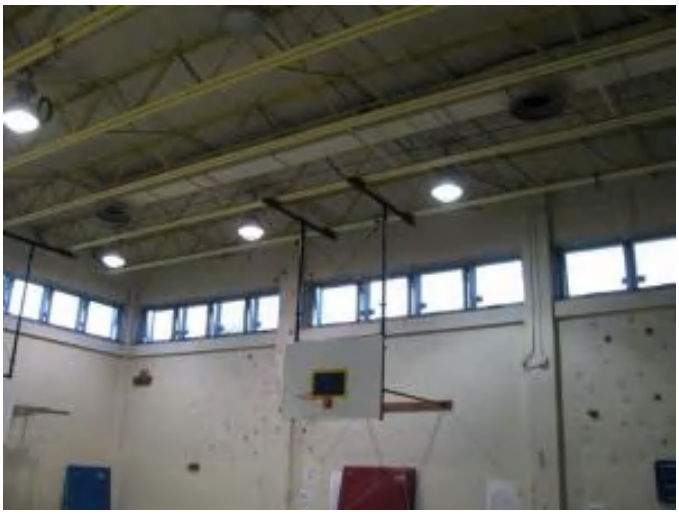
Estimate: $405,399.54

Assessor Name: System

Date Created: 10/21/2015

Notes: Upgrade existing distribution system by replacing new panel boards and new feeders. Provide arc flash label on all panel boards. Estimated total 16 panel boards.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Lighting Fixtures (SF)

Qty: 1.00

Unit of Measure: S.F.

Estimate: $1,347,006.94

Assessor Name: System

Date Created: 10/21/2015

Notes: Replace lighting fixtures with new fluorescent lighting fixtures with T-5 or compact fluorescent lamp. Estimated 90% of the lighting fixtures. Replace LED High bay in gymnasium.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace Wiring Devices (SF) - surface mounted conduit and boxes

Qty: 1.00

Unit of Measure: S.F.

Estimate: $592,878.84

Assessor Name: System

Date Created: 10/21/2015

Notes: Install minimum two receptacles on each wall in class rooms. It is recommended that a vertical wire-mold power pole with two-compartment, for data and power, be installed in the computer lab room. Provide surge protective receptacle for computers.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 1 - Response Time (< 2 yr)
Correction: Replace lighting fixtures
Qty: 1.00
Unit of Measure: Ea.
Estimate: $30,304.68
Assessor Name: System
Date Created: 10/21/2015

Notes: Add five more speakers on exterior walls to adequately cover the area. Estimated 30each.

System: D5020 - Lighting and Branch Wiring

Location: Exterior Building (Decatur)
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 1 - Response Time (< 2 yr)
Correction: Add Lighting Fixtures
Qty: 1.00
Unit of Measure: Ea.
Estimate: $21,778.65
Assessor Name: System
Date Created: 10/21/2015

Notes: Add five more speakers on exterior walls to adequately cover the area.

System: D5030 - Communications and Security

Location: Entire building (Decatur)

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace fire alarm system

Qty: 1.00

Unit of Measure: S.F.

Estimate: $506,992.63

Assessor Name: System

Date Created: 10/21/2015

Notes: Replace existing fire alarm system with a new automatic Fire Alarm System including control panel, initiated devices in corridors, air ducts, electrical and LAN rooms, library, and computer rooms. Provide notification devices in class rooms, offices, auditorium, corridors, other area recommended by codes

System: D5030 - Communications and Security

Location: Entire Building (Decature)

Distress: Security Issue

Category: 1 - Health & Safety

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Video Surveillance System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $249,498.95

Assessor Name: System

Date Created: 10/21/2015

Notes: Provide an adequate video surveillance system including camera and Closed Circuit Television (CCTV) system. Cameras should install in the corridors, school entrance doors and on the walls around the building.

System: D5030 - Communications and Security

Location: Auditorium (Decatur)

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Sound System

Qty: 1.00

Unit of Measure: LS

Estimate: $38,400.80

Assessor Name: System

Date Created: 10/21/2015

Notes: Provide new sound system including a freestanding 19" rack backstage with mixer per amplifiers, CD player, cassette player, AM-FM radio, graphic or parametric equalizer, and receivers for wireless microphone.

System: D5090 - Other Electrical Systems

Location: Boiler Room (Decatur)

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Replace standby generator system

Qty: 1.00

Unit of Measure: Ea.

Estimate: $248,046.09

Assessor Name: System

Date Created: 10/21/2015

Notes: Replace existing back up power system with a new emergency power system including 100KW diesel generator and auto transfer switch.

System: E1020 - Institutional Equipment

Location: Auditorium (Decatur)

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 1 - Response Time (< 2 yr)

Correction: Add/Replace Stage Theatrical Lighting System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $93,445.81

Assessor Name: System

Date Created: 10/21/2015

Notes: Provide new stage lighting and controller in Auditorium.

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

System: A2020 - Basement Walls

Location: Decatur Main Building - basement

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Waterproof basement or foundation walls - excavate, waterproof and backfill per LF based on 5' of depth

Qty: 2.00

Unit of Measure: L.F.

Estimate: $1,215.91

Assessor Name: System

Date Created: 11/20/2015

Notes: Repair leak around fuel oil pipe where entering the basement

System: B2010 - Exterior Walls

Location: Decatur Main Building - exterior walls

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Sooty and dirty walls - powerwash

Qty: 20,000.00

Unit of Measure: S.F.

Estimate: $21,874.70

Assessor Name: System

Date Created: 11/20/2015

Notes: Powerwash exterior front and sides (20,000sf)

System: B2010 - Exterior Walls

Location: Decatur Main Building + Addition exterior library connector corridor

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace insulated metal exterior wall panels

Qty: 500.00

Unit of Measure: S.F.

Estimate: $18,946.06

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace metal siding above head height on Library Addition connecting corridor (500sf)

System: B2010 - Exterior Walls

Location: Decatur Main Building - exterior walls

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace exterior wall louvers - pick the closest size and insert the number of louvers

Qty: 6.00

Unit of Measure: Ea.

Estimate: $5,677.74

Assessor Name: System

Date Created: 11/20/2015

Notes:

System: B2030 - Exterior Doors

Location: Decatur Main Building - exterior doors

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Refinish and repaint exterior doors - per leaf

Qty: 24.00

Unit of Measure: Ea.

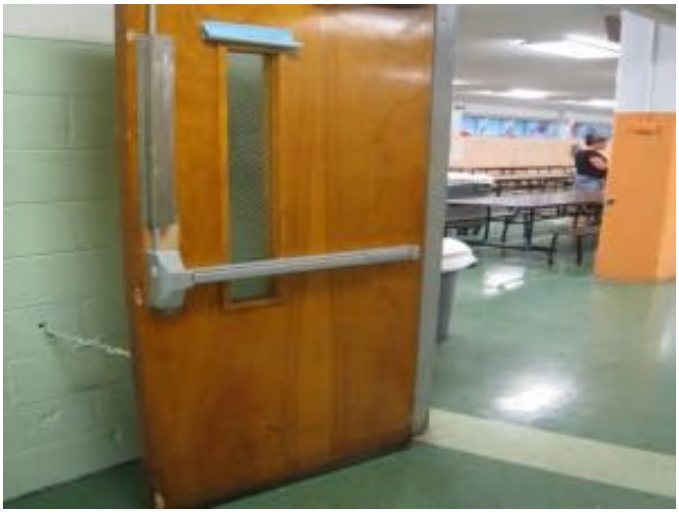
Estimate: $14,334.13

Assessor Name: System

Date Created: 11/20/2015

Notes: Repaint damaged and rusted exterior metal doors and frames (24)3x7

System: C1020 - Interior Doors



Location: Decatur Main Building - corridors

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: 40.00

Unit of Measure: Ea.

Estimate: $190,823.48

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace wood doors into some classrooms and all toilet rooms (40) 3x7

System: C1020 - Interior Doors

Location: Decatur Main Building - mech room + stairs
Distress: Damaged
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Refinish interior doors
Qty: 28.00
Unit of Measure: Ea.
Estimate: $23,189.12
Assessor Name: System
Date Created: 11/20/2015

Notes: Repaint steel doors in mechanical rooms and stairs (28) 3x7

System: C1020 - Interior Doors

Location: Decatur Main Building
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Refinish interior doors
Qty: 20.00
Unit of Measure: Ea.
Estimate: $16,563.66
Assessor Name: System
Date Created: 11/20/2015

Notes: Refinish wood doors into first floor classrooms, storage rooms, and other doors recently replaced (20) 3x7

System: C1020 - Interior Doors

Location: Decatur Main Building - classroom + office doors

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Provide security hardware for classroom and office doors

Qty: 60.00

Unit of Measure: Ea.

Estimate: $13,766.19

Assessor Name: System

Date Created: 11/20/2015

Notes: Provide security hardware for classrooms and offices, locking from the inside of the room (60)

System: C1020 - Interior Doors

Location: Decatur Main Building - mech rm + stairs

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Repair and repaint HM door frames - per frame

Qty: 28.00

Unit of Measure: Ea.

Estimate: $10,202.41

Assessor Name: System

Date Created: 11/20/2015

Notes: Repaint metal frames in mechanical rooms and stairs (28) 3x7

System: C1030 - Fittings

Location: Decatur Main Building - toilet rooms

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace toilet partitions

Qty: 6.00

Unit of Measure: Ea.

Estimate: $15,398.43

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace transite toilet room partitions with plastic partitions in Faculty toilet rooms (6 toilet compartments)

System: C1030 - Fittings

Location: Decatur Main Building - toilet rooms

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace toilet accessories - select accessories and quantity

Qty: 1.00

Unit of Measure: Ea.

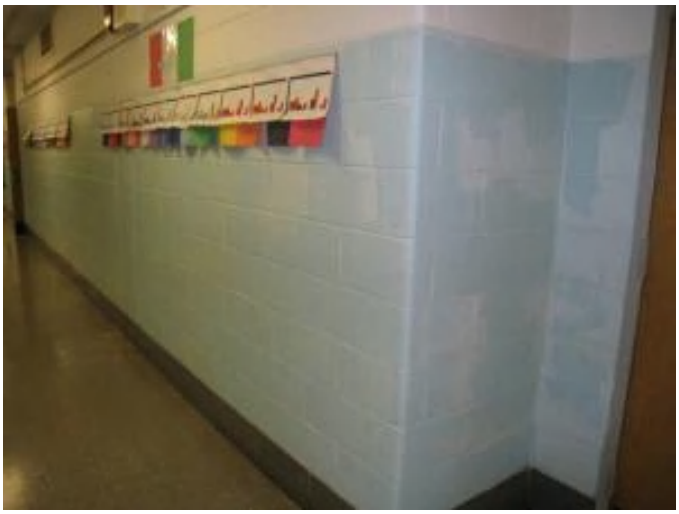
Estimate: $4,360.88

Assessor Name: System

Date Created: 11/20/2015

Notes: Provide toilet room accessories where partitions are replaced (6)

System: C3010230 - Paint & Covering



Location: Decatur Main Building - interior

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Repair substrate and repaint interior concrete or CMU walls - SF of wall surface

Qty: 10,000.00

Unit of Measure: S.F.

Estimate: $61,464.51

Assessor Name: System

Date Created: 11/20/2015

Notes: Repaint interior block walls where surface is damaged in cafeteria, kitchen, corridors, classrooms, and stairways (10,000sf)

System: C3020411 - Carpet

Location: Decatur Main Building - library + offices

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace carpet

Qty: 2,700.00

Unit of Measure: S.F.

Estimate: $30,215.05

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace carpet in library and offices (2700sf)

System: C3020413 - Vinyl Flooring

Location: Decatur Main Building - floors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 68,047.00

Unit of Measure: S.F.

Estimate: $1,032,046.25

Assessor Name: System

Date Created: 11/20/2015

Notes: Remove 9”x9” VAT floors in classrooms, corridors, and auditorium with and replace with VCT (68,047sf)

System: C3020415 - Concrete Floor Finishes

Location: Decatur Main Building - concrete slabs all floors

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Clean and reseal concrete floors

Qty: 14,500.00

Unit of Measure: S.F.

Estimate: $55,745.74

Assessor Name: System

Date Created: 11/20/2015

Notes: Strip and reseal or paint concrete floors in stairways, toilet rooms, and parts of basement, (14,500sf)

System: C3030 - Ceiling Finishes

Location: Decatur Main Building - ceiling

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace glued on or mechanically attached acoustical ceiling tiles

Qty: 7,000.00

Unit of Measure: S.F.

Estimate: $87,351.64

Assessor Name: System

Date Created: 11/20/2015

Notes: Replace acoustical tile ceiling in auditorium and library (7000sf)

System: D2010 - Plumbing Fixtures

Location: Decatur Main Building - 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: 32.00

Unit of Measure: Ea.

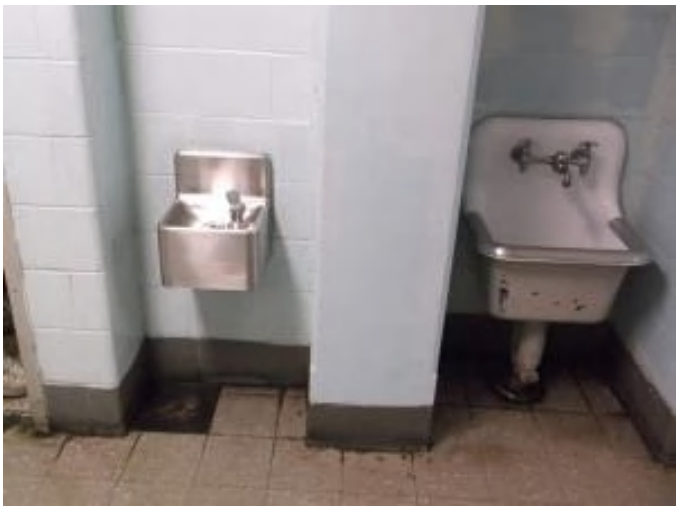
Estimate: $238,788.73

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building replace all water closets in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures



Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace water fountains to meet ADA - includes high and low fountains and new recessed alcove

Qty: 8.00

Unit of Measure: Ea.

Estimate: $125,543.18

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building 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: Decatur Main Building - 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: 24.00

Unit of Measure: Ea.

Estimate: $91,464.30

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building replace all lavatories in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace wall hung urinals

Qty: 20.00

Unit of Measure: Ea.

Estimate: $74,121.09

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original. In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace floor janitor or mop sink - insert the quantity

Qty: 8.00

Unit of Measure: Ea.

Estimate: $54,528.74

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building replace service sinks (janitor sinks) in the building

System: D3060 - Controls & Instrumentation

Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 89,274.00

Unit of Measure: S.F.

Estimate: $1,915,113.41

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency. In the Main Building provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.

System: E2010 - Fixed Furnishings

Location: Decatur Main Building - auditorium

Distress: Appearance

Category: 3 - Operations / Maint.

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

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

Qty: 150.00

Unit of Measure: Ea.

Estimate: $94,996.94

Assessor Name: System

Date Created: 11/20/2015

Notes: Refinish auditorium seats (150)

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

System: C3030 - Ceiling Finishes

Location: Decatur Main Building - entrance overhangs

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Re-paint ceilings - SF of ceilings

Qty: 100.00

Unit of Measure: S.F.

Estimate: $478.70

Assessor Name: System

Date Created: 11/20/2015

Notes: Repaint underside of concrete overhangs at entrances (100sf)

System: D2020 - Domestic Water Distribution

Location: Decatur Main Building - main boile rmechanical equipment room

Distress: Beyond Service Life

Category: 2 - Code Compliance

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

Correction: Replace vertical tank type gas-fired water heater (120 gal)

Qty: 2.00

Unit of Measure: Ea.

Estimate: $136,512.99

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building replace natural gas fired boiler and storage tank with vertical tank type water heaters.

System: D2030 - Sanitary Waste

Location: Decatur Main Building - 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: 89,247.00

Unit of Measure: S.F.

Estimate: $437,823.44

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main 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

System: D3020 - Heat Generating Systems

Location: Decatur Main Building - main boiler mechanical equipment room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 2.00

Unit of Measure: Ea.

Estimate: $1,012,205.26

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building replace the two Weil McLain 92 series hot water boilers estimated to have been in service since 1965.

Priority 5 - Response Time (> 5 yrs):

System: D2020 - Domestic Water Distribution

Location: Decatur Main Building - 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: 89,247.00

Unit of Measure: S.F.

Estimate: $452,247.19

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building inspect and replace the original as needed the domestic water piping in the building.

System: D3030 - Cooling Generating Systems

Location: Decatur Main Building - adjacent to the building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 89,247.00

Unit of Measure: S.F.

Estimate: $1,433,269.61

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building remove the window air conditioning units and install a 250 ton air-cooled chiller on the roof with chilled water distribution piping and pumps located in a mechanical room on the basement level to supply more reliable air conditioning for the building with a much longer service life.

System: D3040 - Distribution Systems

Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace hydronic heating piping (75KSF)

Qty: 89,247.00

Unit of Measure: S.F.

Estimate: $878,584.12

Assessor Name: System

Date Created: 02/06/2016

Notes: In the Main Building hire a qualified contractor to examine the heating water piping in service for 51 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

System: D3040 - Distribution Systems

Location: Decatur Main Building - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Provide classroom FC units and dedicated OA ventilation system. (20 clsrms)

Qty: 10.00

Unit of Measure: C

Estimate: $830,609.93

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building provide ventilation for the corridors at one basement and nine first floor entryways (10 locations total) by installing fan coil air handling units hung from the structure with outdoor air ducted to the unit from louvers in the window openings

System: D3040 - Distribution Systems

Location: Decatur Main Building - roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 850.00

Unit of Measure: Student

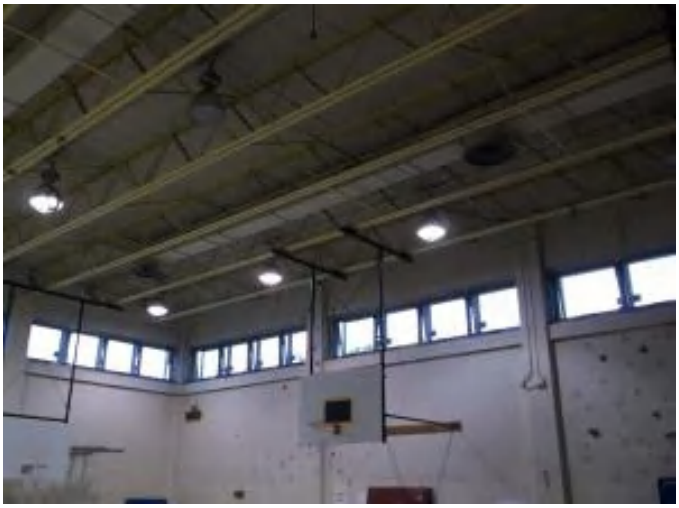
Estimate: $434,958.00

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building provide ventilation, heating and cooling for the Cafeteria by removing the existing unit ventilators and installing a package rooftop constant volume air handling unit with distribution ductwork and registers.

System: D3040 - Distribution Systems



Location: Decatur Main Building - roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 6,000.00

Unit of Measure: S.F.

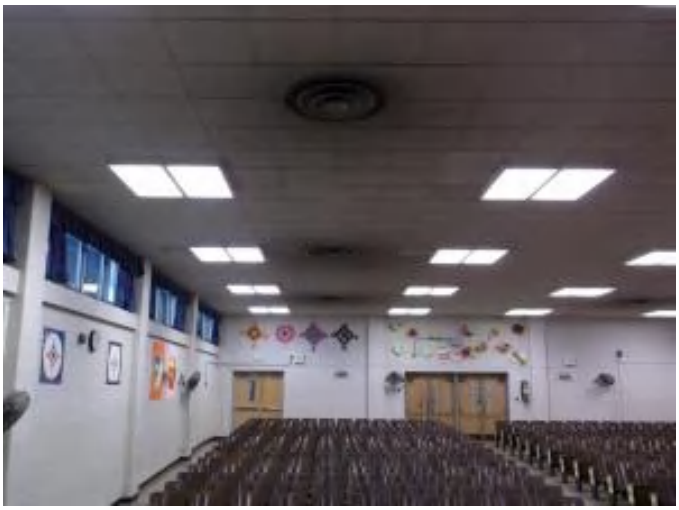
Estimate: $344,860.27

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building provide ventilation, heating and cooling for the gymnasium by installing a packaged roof top unit.

System: D3040 - Distribution Systems



Location: Decatur Main Building - roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 200.00

Unit of Measure: Seat

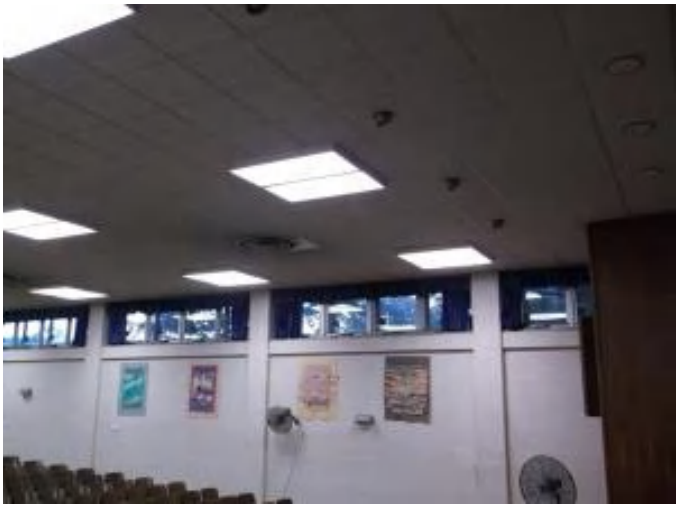
Estimate: $285,085.41

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building provide ventilation, heating and cooling for the Auditorium by removing the existing unit ventilators and installing a package rooftop constant volume air handling unit with distribution ductwork and registers.

System: D4010 - Sprinklers



Location: Decatur Main Building - 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: 89,247.00

Unit of Measure: S.F.

Estimate: $1,276,720.35

Assessor Name: System

Date Created: 02/07/2016

Notes: In the Main Building and Annex 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. In the Main Building 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
D3020 Heat Generating Systems	Boiler, cast iron, gas & oil, steam, 3270 MBH	2.00	Ea.	Main boiler mechnaical equipment room	Weil McLain				35			$106,126.00	$233,477.20
D3020 Heat Generating Systems	Boiler, cast iron, gas & oil, steam, 3270 MBH	2.00	Ea.	Main boiler mechnaical equipment room	Weil McLain	n/a			35			$106,126.00	$233,477.20
D3020 Heat Generating Systems	Boiler, gas fired, natural or propane, cast iron, hot water, gross output, 544 MBH, includes standard controls and insulated jacket, packaged	1.00	Ea.	Main boiler mechanical equipment room	Weil McLain				35			$18,095.40	$19,904.94
D5010 Electrical Service/Distribution	Switchboards, no main disconnect, 4 wire, 120/208 V, 1000 amp, incl CT compartment, excl CT's or PT's	1.00	Ea.	Electrical Room					30	1964	2017	$8,973.45	$9,870.80
												Total:	**$496,730.14**

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:	Annex
Gross Area (SF):	13,230
Year Built:	1969
Last Renovation:	
Replacement Value:	$7,209,276
Repair Cost:	$3,017,505.44
Total FCI:	41.86 %
Total RSLI:	73.56 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B842003
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S833001		

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	54.00 %	0.00 %	$0.00
A20 - Basement Construction	54.00 %	0.00 %	$0.00
B10 - Superstructure	54.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	58.43 %	7.38 %	$45,448.06
B30 - Roofing	110.00 %	87.59 %	$445,473.66
C10 - Interior Construction	58.52 %	5.15 %	$15,545.30
C20 - Stairs	54.00 %	0.00 %	$0.00
C30 - Interior Finishes	71.85 %	0.00 %	$0.00
D20 - Plumbing	49.97 %	62.56 %	$336,603.17
D30 - HVAC	101.07 %	112.11 %	$1,009,888.39
D40 - Fire Protection	105.71 %	462.09 %	$858,326.79
D50 - Electrical	128.27 %	39.38 %	$306,220.07
E10 - Equipment	14.29 %	0.00 %	$0.00
E20 - Furnishings	12.50 %	0.00 %	$0.00
Totals:	**73.56 %**	**41.86 %**	**$3,017,505.44**

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	$24.32	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$321,754
A1030	Slab on Grade	$15.51	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$205,197
A2010	Basement Excavation	$13.07	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$172,916
A2020	Basement Walls	$23.02	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$304,555
B1010	Floor Construction	$92.20	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$1,219,806
B1020	Roof Construction	$24.11	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$318,975
B2010	Exterior Walls	$31.22	S.F.	13,230	100	1969	2069		54.00 %	10.28 %	54		$42,461.78	$413,041
B2020	Exterior Windows	$13.63	S.F.	13,230	40	2000	2040		62.50 %	0.00 %	25			$180,325
B2030	Exterior Doors	$1.67	S.F.	13,230	25	1969	1994	2042	108.00 %	13.52 %	27		$2,986.28	$22,094
B3010105	Built-Up	$37.76	S.F.	13,230	20	1969	1989	2037	110.00 %	89.17 %	22		$445,473.66	$499,565
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.68	S.F.	13,230	20	1969	1989	2037	110.00 %	0.00 %	22			$8,996
C1010	Partitions	$14.93	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$197,524
C1020	Interior Doors	$3.76	S.F.	13,230	40	1969	2009	2057	105.00 %	31.25 %	42		$15,545.30	$49,745
C1030	Fittings	$4.12	S.F.	13,230	40	1969	2009	2028	32.50 %	0.00 %	13			$54,508
C2010	Stair Construction	$1.28	S.F.	13,230	100	1969	2069		54.00 %	0.00 %	54			$16,934

Site Assessment Report - B842003;Decatur Annex

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.	13,230	10	1969	1979	2020	50.00 %	0.00 %	5			$174,768
C3010231	Vinyl Wall Covering	$0.97	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.		30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.		10				0.00 %	0.00 %				$0
C3020412	Terrazzo & Tile	$75.52	S.F.	100	50	1969	2019	2020	10.00 %	0.00 %	5			$7,552
C3020413	Vinyl Flooring	$9.68	S.F.	12,600	20	1969	1989	2020	25.00 %	0.00 %	5			$121,968
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	530	50	1969	2019	2020	10.00 %	0.00 %	5			$514
C3030	Ceiling Finishes	$20.97	S.F.	13,230	25	1969	1994	2042	108.00 %	0.00 %	27			$277,433
D2010	Plumbing Fixtures	$31.58	S.F.	13,230	35	1969	2004	2029	40.00 %	32.65 %	14		$136,402.40	$417,803
D2020	Domestic Water Distribution	$2.90	S.F.	13,230	25	1969	1994	2042	108.00 %	352.64 %	27		$135,297.71	$38,367
D2030	Sanitary Waste	$2.90	S.F.	13,230	25	1969	1994	2042	108.00 %	169.16 %	27		$64,903.06	$38,367
D2040	Rain Water Drainage	$3.29	S.F.	13,230	30	1969	1999	2028	43.33 %	0.00 %	13			$43,527
D3020	Heat Generating Systems	$18.67	S.F.		35				0.00 %	0.00 %				$0
D3030	Cooling Generating Systems	$24.48	S.F.		30				0.00 %	0.00 %				$0
D3040	Distribution Systems	$42.99	S.F.	13,230	25	1969	1994	2042	108.00 %	135.90 %	27		$772,920.53	$568,758
D3050	Terminal & Package Units	$11.60	S.F.	13,230	20	1969	1989	2028	65.00 %	0.00 %	13			$153,468
D3060	Controls & Instrumentation	$13.50	S.F.	13,230	20	1969	1989	2037	110.00 %	132.68 %	22		$236,967.86	$178,605
D4010	Sprinklers	$13.05	S.F.	13,230	35			2052	105.71 %	497.14 %	37		$858,326.79	$172,652
D4020	Standpipes	$0.99	S.F.	13,230	35			2052	105.71 %	0.00 %	37			$13,098
D5010	Electrical Service/Distribution	$9.70	S.F.	13,230	30	1969	1999	2029	46.67 %	0.00 %	14			$128,331
D5020	Lighting and Branch Wiring	$34.68	S.F.	13,230	20	1969	1989	2047	160.00 %	38.92 %	32		$178,557.89	$458,816
D5030	Communications and Security	$12.99	S.F.	13,230	15	1969	1984	2032	113.33 %	74.28 %	17		$127,662.18	$171,858
D5090	Other Electrical Systems	$1.41	S.F.	13,230	30	1969	1999	2029	46.67 %	0.00 %	14			$18,654
E1020	Institutional Equipment	$4.82	S.F.	13,230	35	1969	2004	2020	14.29 %	0.00 %	5			$63,769
E1090	Other Equipment	$11.10	S.F.	13,230	35	1969	2004	2020	14.29 %	0.00 %	5			$146,853
E2010	Fixed Furnishings	$2.13	S.F.	13,230	40	1969	2009	2020	12.50 %	0.00 %	5			$28,180
								Total	**73.56 %**	**41.86 %**			**$3,017,505.44**	**$7,209,276**

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 block 100%

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

Note: VCT – 12,600 95%
Conc - 100 1%
CT - 530 4%

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

Note: Acoustical tile ceilings - 100%

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:	**$3,017,505**	**$0**	**$0**	**$0**	**$0**	**$693,204**	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,710,710**
*** 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	$42,462	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$42,462**
B2020 - Exterior Windows	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2030 - Exterior Doors	$2,986	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,986**
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	$445,474	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$445,474**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

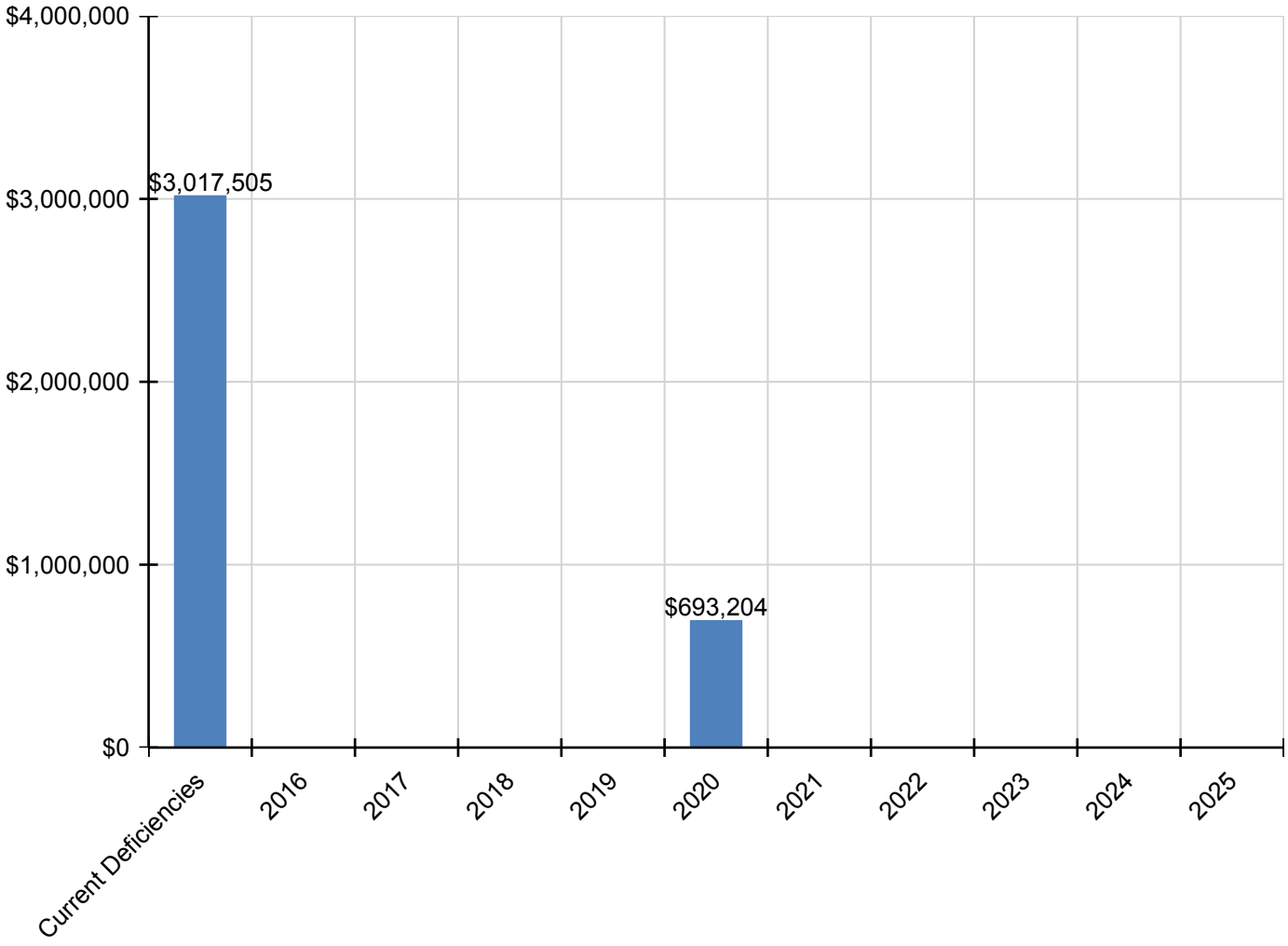
C1020 - Interior Doors	$15,545	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$15,545**
C1030 - Fittings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$222,865	$0	$0	$0	$0	$0	**$222,865**
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	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$9,630	$0	$0	$0	$0	$0	**$9,630**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$155,534	$0	$0	$0	$0	$0	**$155,534**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$656	$0	$0	$0	$0	$0	**$656**
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**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$136,402	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$136,402**
D2020 - Domestic Water Distribution	$135,298	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$135,298**
D2030 - Sanitary Waste	$64,903	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$64,903**
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	$772,921	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$772,921**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3060 - Controls & Instrumentation	$236,968	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$236,968**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$858,327	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$858,327**
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	$178,558	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$178,558**
D5030 - Communications and Security	$127,662	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$127,662**
D5090 - Other Electrical Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
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	$81,317	$0	$0	$0	$0	$0	**$81,317**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$187,267	$0	$0	$0	$0	$0	**$187,267**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$0	$0	$0	$0	$0	$35,935	$0	$0	$0	$0	$0	**$35,935**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

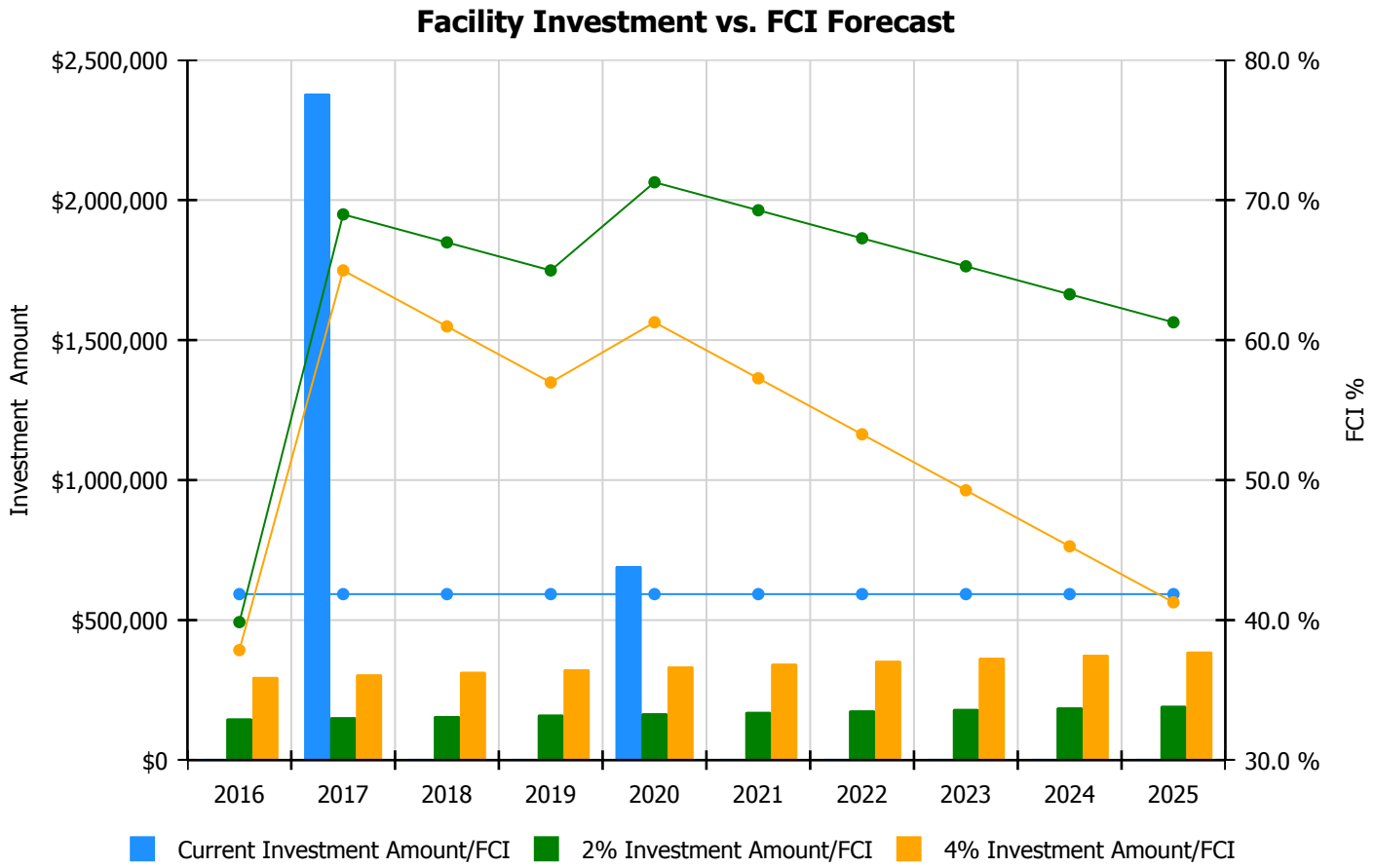
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

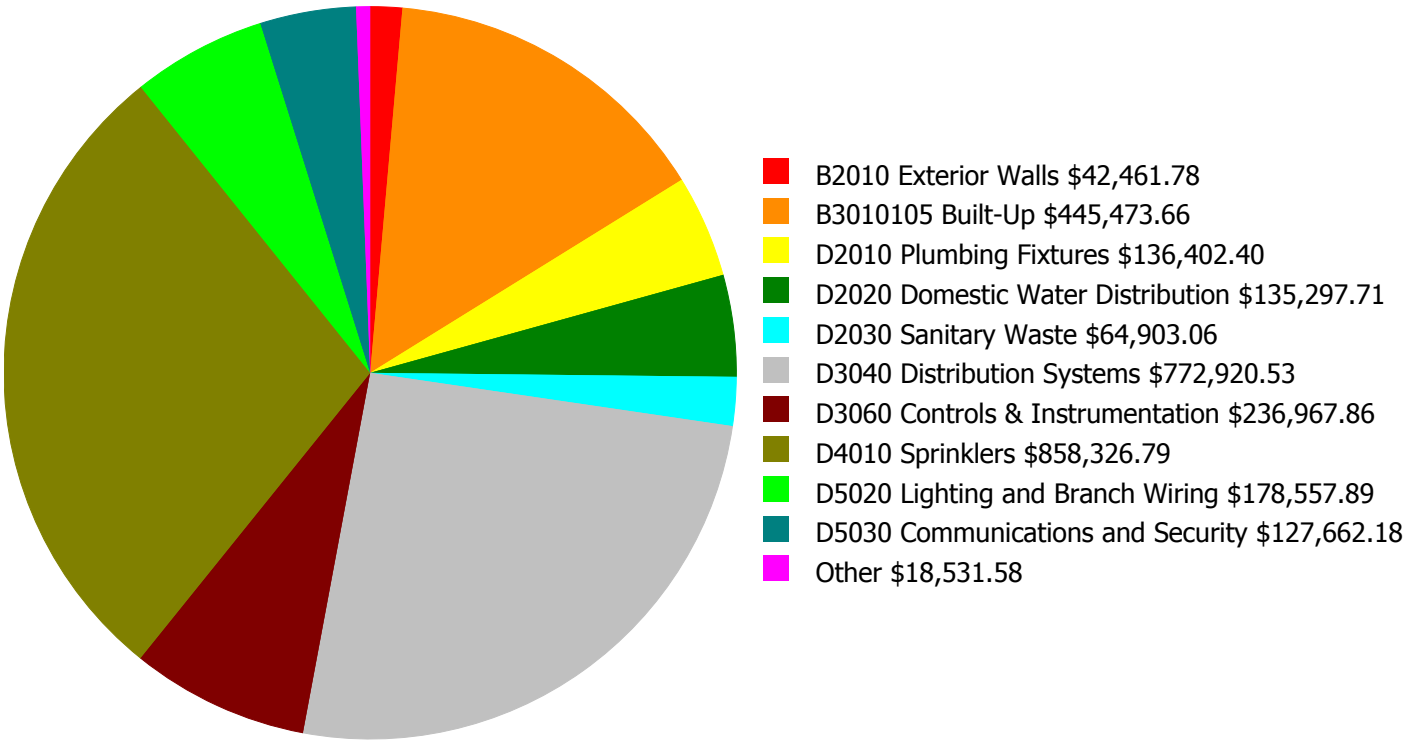
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 41.86%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$148,511.00	39.86 %	$297,022.00	37.86 %
2017	$2,380,119	$152,966.00	68.98 %	$305,933.00	64.98 %
2018	$0	$157,555.00	66.98 %	$315,111.00	60.98 %
2019	$0	$162,282.00	64.98 %	$324,564.00	56.98 %
2020	$693,204	$167,151.00	71.27 %	$334,301.00	61.27 %
2021	$0	$172,165.00	69.27 %	$344,330.00	57.27 %
2022	$0	$177,330.00	67.27 %	$354,660.00	53.27 %
2023	$0	$182,650.00	65.27 %	$365,300.00	49.27 %
2024	$0	$188,129.00	63.27 %	$376,259.00	45.27 %
2025	$0	$193,773.00	61.27 %	$387,547.00	41.27 %
Total:	**$3,073,323**	**$1,702,512.00**		**$3,405,027.00**	

Deficiency Summary by System

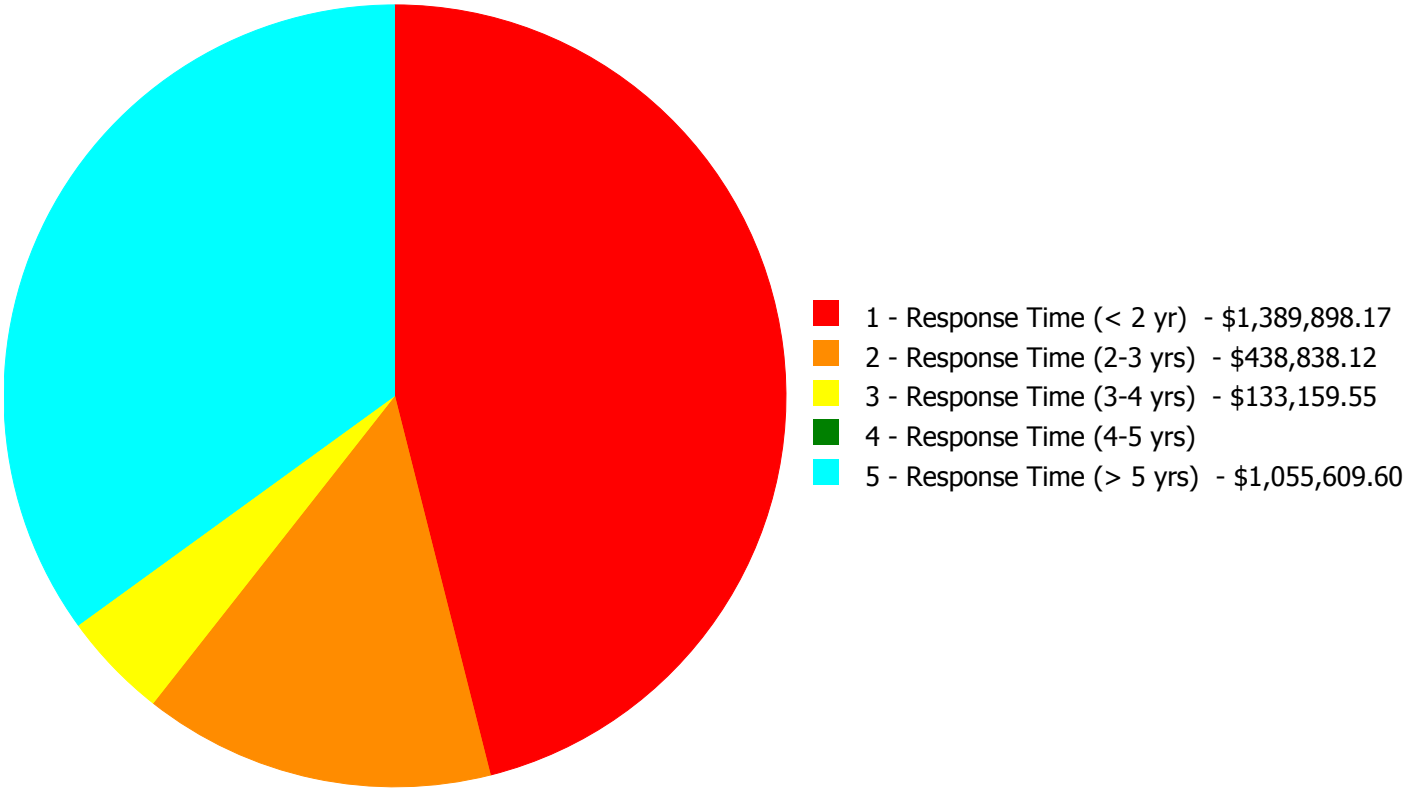
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $3,017,505.44

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: $3,017,505.44

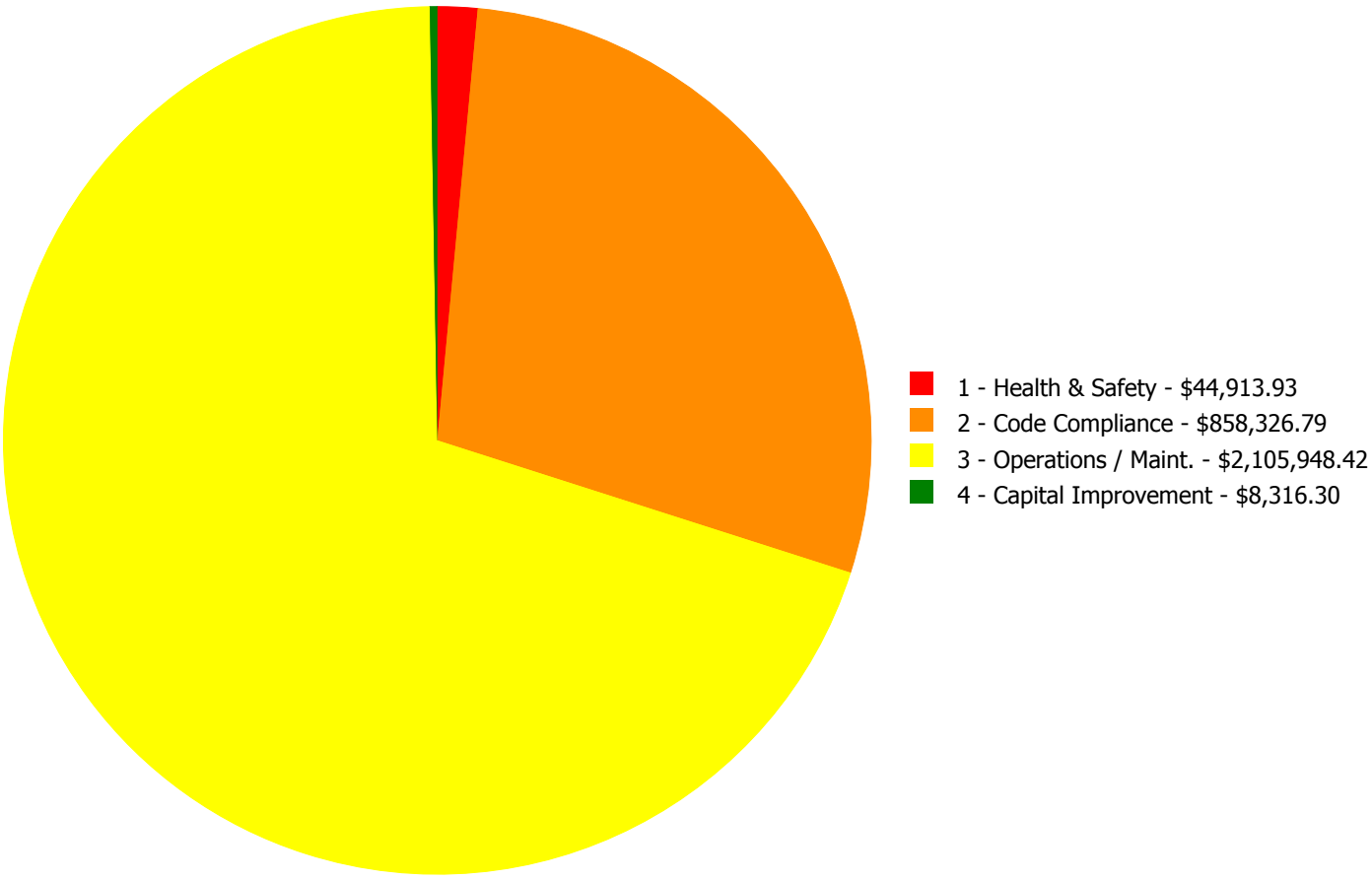
Deficiency By Priority Investment Table

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	$0.00	$42,461.78	$0.00	$0.00	$0.00	$42,461.78
B2030	Exterior Doors	$0.00	$2,986.28	$0.00	$0.00	$0.00	$2,986.28
B3010105	Built-Up	$445,473.66	$0.00	$0.00	$0.00	$0.00	$445,473.66
C1020	Interior Doors	$0.00	$15,545.30	$0.00	$0.00	$0.00	$15,545.30
D2010	Plumbing Fixtures	$0.00	$136,402.40	$0.00	$0.00	$0.00	$136,402.40
D2020	Domestic Water Distribution	$0.00	$0.00	$68,256.49	$0.00	$67,041.22	$135,297.71
D2030	Sanitary Waste	$0.00	$0.00	$64,903.06	$0.00	$0.00	$64,903.06
D3040	Distribution Systems	$638,204.44	$4,474.50	$0.00	$0.00	$130,241.59	$772,920.53
D3060	Controls & Instrumentation	$0.00	$236,967.86	$0.00	$0.00	$0.00	$236,967.86
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$858,326.79	$858,326.79
D5020	Lighting and Branch Wiring	$178,557.89	$0.00	$0.00	$0.00	$0.00	$178,557.89
D5030	Communications and Security	$127,662.18	$0.00	$0.00	$0.00	$0.00	$127,662.18
	Total:	$1,389,898.17	$438,838.12	$133,159.55	$0.00	$1,055,609.60	$3,017,505.44

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: $3,017,505.44

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: B3010105 - Built-Up

Location: Decatur Annex - roof
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Remove and Replace Built Up Roof
Qty: 13,200.00
Unit of Measure: S.F.
Estimate: $445,473.66
Assessor Name: Craig Anding
Date Created: 11/20/2015

Notes: Replace roof (13,200sf)

System: D3040 - Distribution Systems

Location: Decatur Annex - throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace the existing unit ventilators with new units designed to provide adequate ventilation per ASHRAE Std 62 - insert the SF of bldg. in the qty.
Qty: 13,230.00
Unit of Measure: S.F.
Estimate: $638,204.44
Assessor Name: Craig Anding
Date Created: 02/07/2016

Notes: In the Annex replace the existing unit ventilators throughout the building with new units designed to provide adequate ventilation per ASHRAE Std 62. The new units shall be equipped with hot water / chilled water coils and integral heat exchanger.

System: D5020 - Lighting and Branch Wiring

This deficiency has no image.

Location: Decatur Annex - entire building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace Lighting Fixtures (SF)
Qty: 0.00
Unit of Measure: S.F.
Estimate: $170,241.59
Assessor Name: Craig Anding
Date Created: 10/21/2015

Notes: Replace lighting fixtures with new fluorescent lighting fixtures with T-5.

System: D5020 - Lighting and Branch Wiring

This deficiency has no image.

Location: Decatur Annex - classrooms
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 1 - Response Time (< 2 yr)
Correction: Replace Wiring Device
Qty: 1.00
Unit of Measure: Ea.
Estimate: $8,316.30
Assessor Name: Craig Anding
Date Created: 10/21/2015

Notes: Install minimum two receptacles on each wall in class rooms. It is recommended that a surface mounted raceway with two-compartment, for data and power. Use GFCI type receptacle in areas subject to kid access.

System: D5030 - Communications and Security

This deficiency has no image.

Location: Decatur Annex - entire building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace fire alarm system
Qty: 1.00
Unit of Measure: S.F.
Estimate: $85,042.62
Assessor Name: Craig Anding
Date Created: 10/21/2015

Notes:
Replace existing fire alarm devices with a new automatic Fire Alarm System including control panel, initiated devices in corridors, air ducts, electrical and LAN rooms, library, and computer rooms. Provide notification devices in class rooms, offices, , corridors, other area recommended by codes. Fire alarm system to be commutated with fire panel in the main building.

System: D5030 - Communications and Security

This deficiency has no image.

Location: Decatur Annex - interior
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Add/Replace Video Surveillance System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $42,619.56
Assessor Name: Craig Anding
Date Created: 10/21/2015

Notes: Provide an adequate camera in the annex building. Cameras should install in the corridors, entrance doors and on the walls around the building. System shall be connected to main building video surveillance system.

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

System: B2010 - Exterior Walls

Location: Decatur Annex - exterior walls
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Repaint exterior walls - CMU
Qty: 3,000.00
Unit of Measure: S.F.
Estimate: $26,317.04
Assessor Name: Craig Anding
Date Created: 11/20/2015

Notes: Repaint exterior walls exposed to view of play area (3000sf)

System: B2010 - Exterior Walls

Location: Decatur Annex - exterior wall
Distress: Failing
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area
Qty: 500.00
Unit of Measure: S.F.
Estimate: $16,144.74
Assessor Name: Craig Anding
Date Created: 11/20/2015

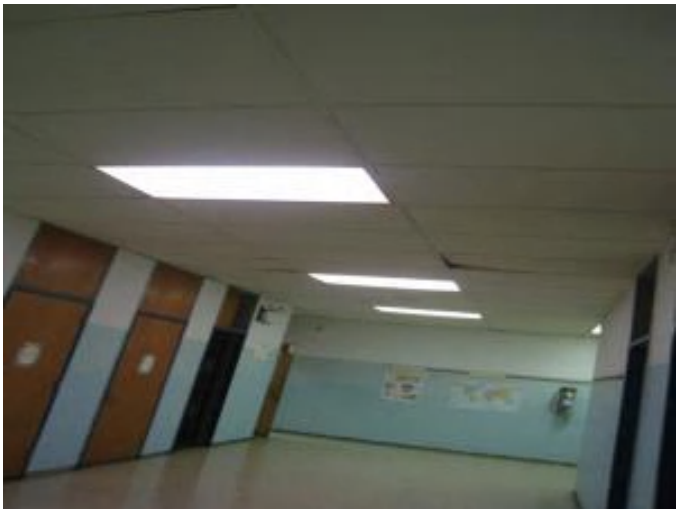
Notes: Repair cracked masonry (500sf)

System: B2030 - Exterior Doors

Location: Decatur Annex - exterior doors
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Refinish and repaint exterior doors - per leaf
Qty: 5.00
Unit of Measure: Ea.
Estimate: $2,986.28
Assessor Name: Craig Anding
Date Created: 11/20/2015

Notes: Repaint exterior doors (5 3x7)

System: C1020 - Interior Doors



Location: Decatur Annex - interiors
Distress: Appearance
Category: 3 - Operations / Maint.
Priority: 2 - Response Time (2-3 yrs)
Correction: Refinish interior doors
Qty: 16.00
Unit of Measure: Ea.
Estimate: $13,250.93
Assessor Name: Craig Anding
Date Created: 11/20/2015

Notes: Refinish interior doors (16 3x7)

System: C1020 - Interior Doors

Location: Decatur Annex - interiors

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Provide security hardware for classroom and office doors

Qty: 10.00

Unit of Measure: Ea.

Estimate: $2,294.37

Assessor Name: Craig Anding

Date Created: 11/20/2015

Notes: Provide new lever locksets and security locks for classroom doors (10)

System: D2010 - Plumbing Fixtures

Location: Decatur Annex - 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: 8.00

Unit of Measure: Ea.

Estimate: $59,697.18

Assessor Name: Craig Anding

Date Created: 02/07/2016

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

System: D2010 - Plumbing Fixtures

Location: Decatur Annex - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace water fountains to meet ADA - includes high and low fountains and new recessed alcove

Qty: 2.00

Unit of Measure: Ea.

Estimate: $31,385.79

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex 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: Decatur Annex - 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: 6.00

Unit of Measure: Ea.

Estimate: $22,866.08

Assessor Name: Craig Anding

Date Created: 02/07/2016

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

System: D2010 - Plumbing Fixtures

Location: Decatur Annex - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace or replace stall or floor type urinal

Qty: 3.00

Unit of Measure: Ea.

Estimate: $15,637.26

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex replace all urinals in the building with lower flow fixtures, as the fixtures are original. In the Main Building replace all urinals in the building with lower flow fixtures, as the fixtures are original.

System: D2010 - Plumbing Fixtures

Location: Decatur Annex - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace floor janitor or mop sink - insert the quantity

Qty: 1.00

Unit of Measure: Ea.

Estimate: $6,816.09

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex replace service sinks (janitor sinks) in the building

System: D3040 - Distribution Systems

Location: Decatur Annex - roof

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace rooftop gravity ventilator units - select the proper type and size

Qty: 8.00

Unit of Measure: Ea.

Estimate: $4,474.50

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex replace exhaust fans.

System: D3060 - Controls & Instrumentation

This deficiency has no image.

Location: Decatur Annex - throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (150KSF)

Qty: 13,230.00

Unit of Measure: S.F.

Estimate: $236,967.86

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex provide a new building automation system (BAS) with communication interface to the preferred system in use throughout the District.

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

System: D2020 - Domestic Water Distribution

Location: Decatur Annex - closet

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace vertical tank type gas-fired water heater (120 gal)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $68,256.49

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In Annex replace vertical tank electric water heater.

System: D2030 - Sanitary Waste

Location: Decatur Annex - 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: 13,230.00

Unit of Measure: S.F.

Estimate: $64,903.06

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex 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: Decatur Annex - 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: 13,230.00
Unit of Measure: S.F.
Estimate: $67,041.22
Assessor Name: Craig Anding
Date Created: 02/07/2016

Notes: In the Annex inspect and replace the original as needed the domestic water piping in the building

System: D3040 - Distribution Systems

Location: Decatur Annex - throughout the building
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 5 - Response Time (> 5 yrs)
Correction: Replace hydronic heating piping (75KSF)
Qty: 13,230.00
Unit of Measure: S.F.
Estimate: $130,241.59
Assessor Name: Craig Anding
Date Created: 02/07/2016

Notes: In the Annex hire a qualified contractor to examine the heating water piping in service for 51 years and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

System: D4010 - Sprinklers

Location: Decatur Annex - throughout the building

Distress: Life Safety / NFPA / PFD

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 60,000.00

Unit of Measure: S.F.

Estimate: $858,326.79

Assessor Name: Craig Anding

Date Created: 02/07/2016

Notes: In the Annex 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	Switchboards, distribution section, aluminum bus bars, subfeed lug-rated, 400 amp, excl breakers	2.00	Ea.	Interior building (dcatur Annex)					30	1969	2029	$3,167.10	$6,967.62
												Total:	**$6,967.62**

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):	148,400
Year Built:	1964
Last Renovation:	
Replacement Value:	$2,594,234
Repair Cost:	$319,495.03
Total FCI:	12.32 %
Total RSLI:	0.00 %

Description:

Attributes:

General Attributes:

Bldg ID:	S833001	Site ID:	S833001

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	0.00 %	16.40 %	$319,495.03
G40 - Site Electrical Utilities	0.00 %	0.00 %	$0.00
Totals:	**0.00 %**	**12.32 %**	**$319,495.03**

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.	2,400	30				0.00 %	0.00 %				$27,648
G2020	Parking Lots	$7.65	S.F.	41,800	30				0.00 %	47.65 %			$152,382.57	$319,770
G2030	Pedestrian Paving	$11.52	S.F.	72,400	40				0.00 %	8.63 %			$71,964.16	$834,048
G2040	Site Development	$4.36	S.F.	148,400	25				0.00 %	14.71 %			$95,148.30	$647,024
G2050	Landscaping & Irrigation	$3.78	S.F.	31,800	15				0.00 %	0.00 %				$120,204
G4020	Site Lighting	$3.58	S.F.	148,400	30				0.00 %	0.00 %				$531,272
G4030	Site Communications & Security	$0.77	S.F.	148,400	30				0.00 %	0.00 %				$114,268
								Total	**0.00 %**	**12.32 %**			**$319,495.03**	**$2,594,234**

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.

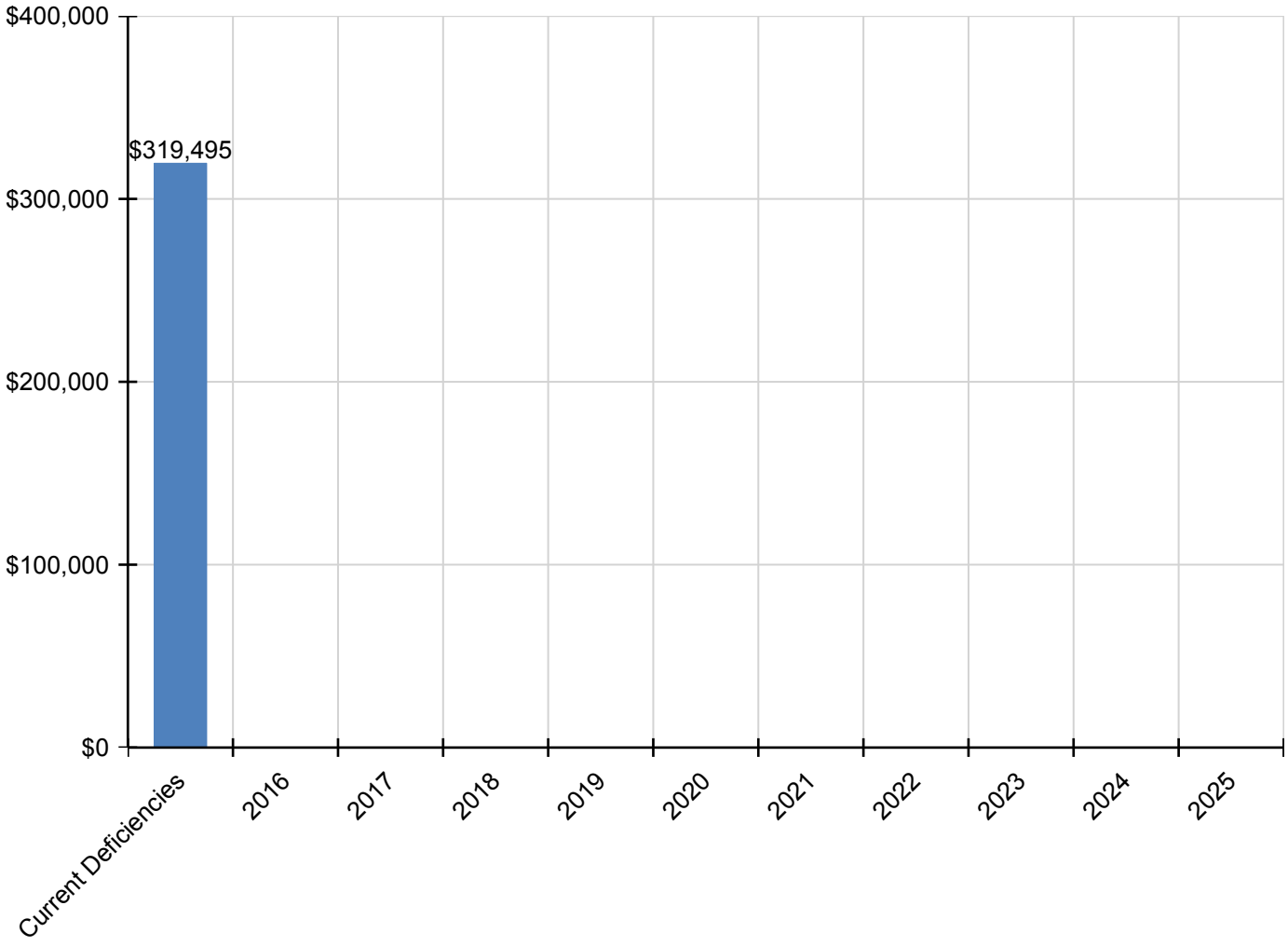
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$319,495**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$319,495**
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	$152,383	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$152,383**
G2030 - Pedestrian Paving	$71,964	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$71,964**
G2040 - Site Development	$95,148	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$95,148**
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

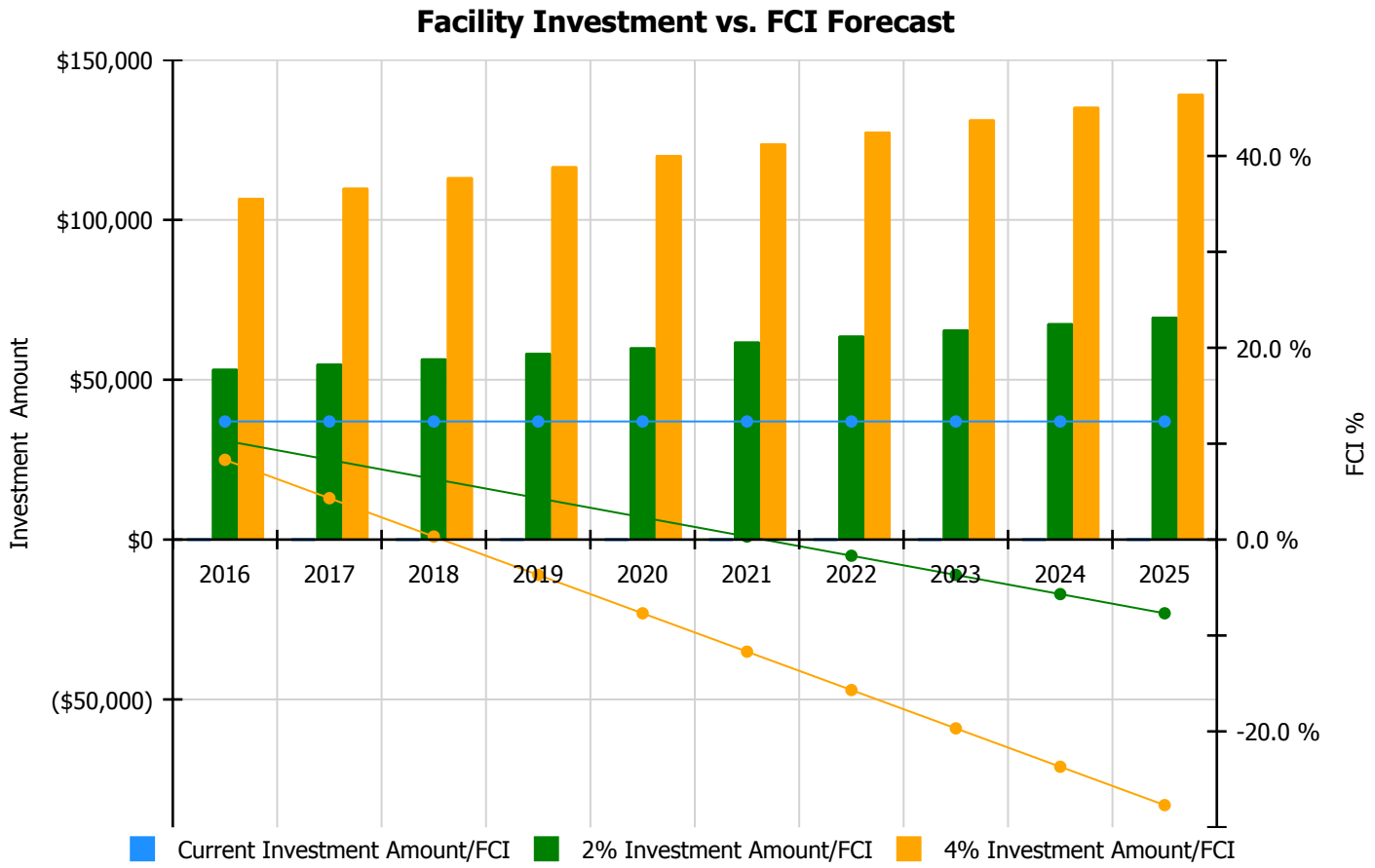
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

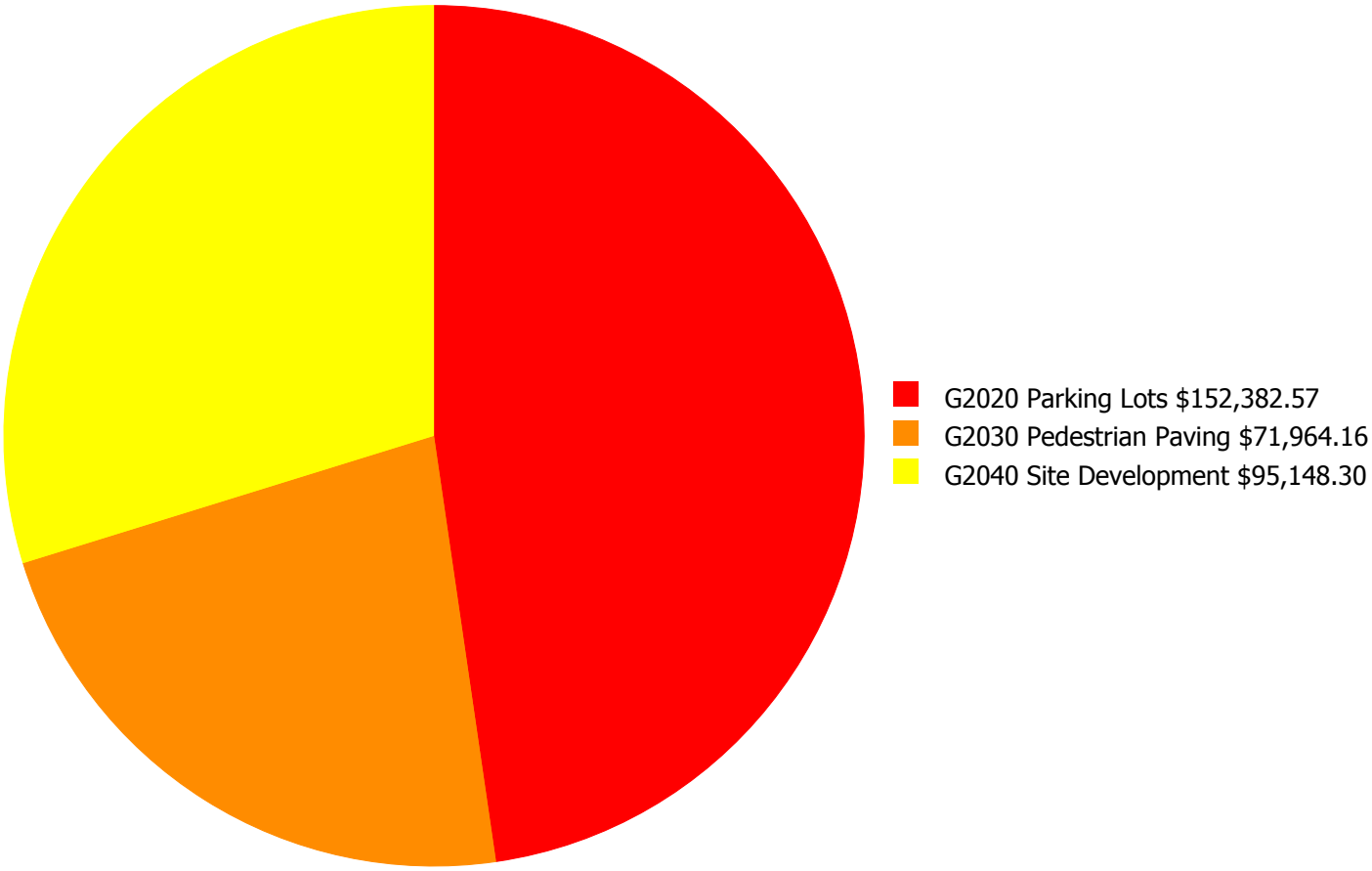
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 12.32%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$53,441.00	10.32 %	$106,882.00	8.32 %
2017	$0	$55,044.00	8.32 %	$110,089.00	4.32 %
2018	$0	$56,696.00	6.32 %	$113,392.00	0.32 %
2019	$0	$58,397.00	4.32 %	$116,793.00	-3.68 %
2020	$0	$60,149.00	2.32 %	$120,297.00	-7.68 %
2021	$0	$61,953.00	0.32 %	$123,906.00	-11.68 %
2022	$0	$63,812.00	-1.68 %	$127,623.00	-15.68 %
2023	$0	$65,726.00	-3.68 %	$131,452.00	-19.68 %
2024	$0	$67,698.00	-5.68 %	$135,395.00	-23.68 %
2025	$0	$69,729.00	-7.68 %	$139,457.00	-27.68 %
Total:	**$0**	**$612,645.00**		**$1,225,286.00**	

Deficiency Summary by System

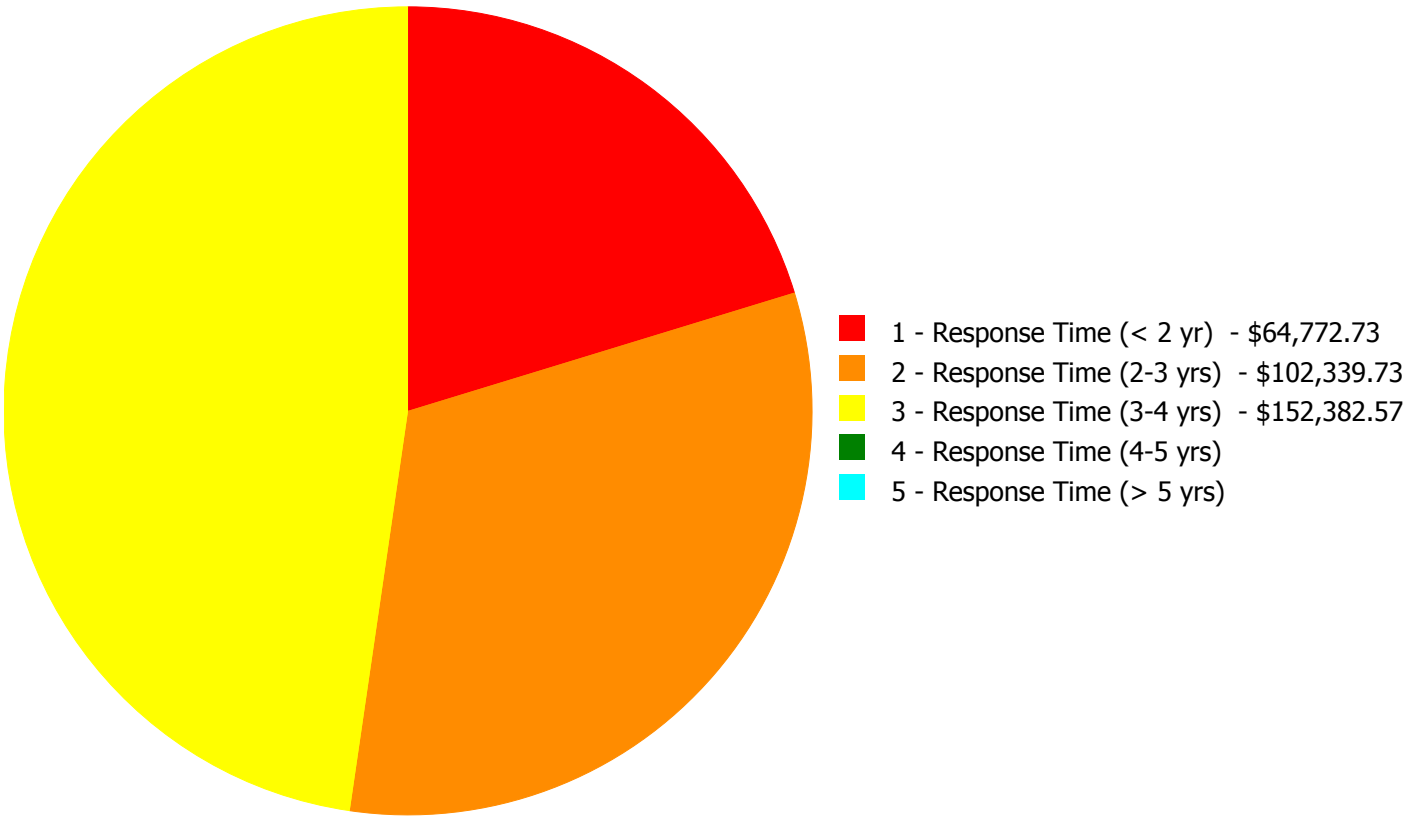
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $319,495.03

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: $319,495.03

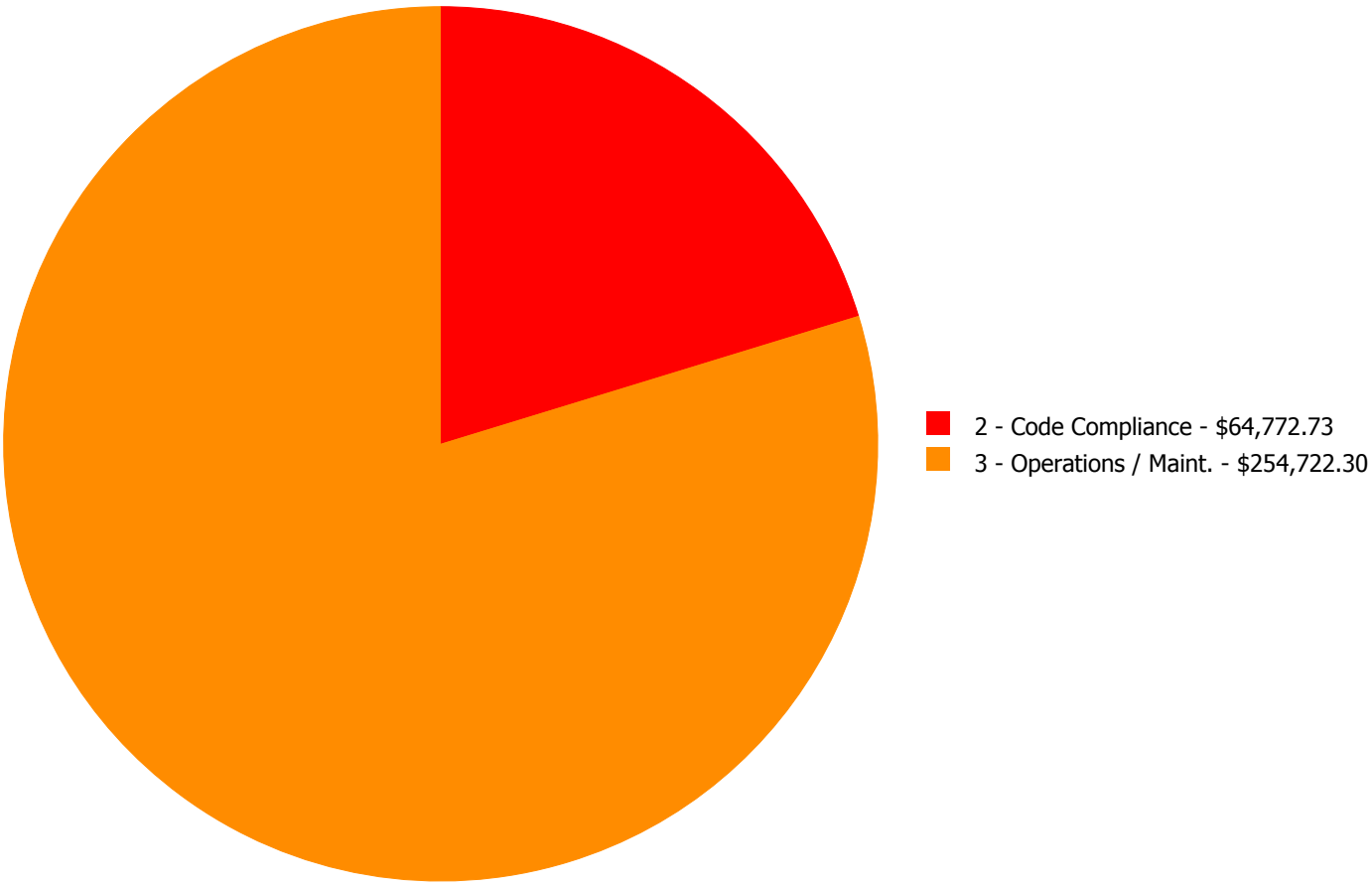
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2020	Parking Lots	$0.00	$0.00	$152,382.57	$0.00	$0.00	$152,382.57
G2030	Pedestrian Paving	$64,772.73	$7,191.43	$0.00	$0.00	$0.00	$71,964.16
G2040	Site Development	$0.00	$95,148.30	$0.00	$0.00	$0.00	$95,148.30
	Total:	$64,772.73	$102,339.73	$152,382.57	$0.00	$0.00	$319,495.03

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: $319,495.03

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: G2030 - Pedestrian Paving

Location: Decatur site at main building

Distress: Accessibility

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to a 48" rise - per LF of ramp - figure 1 LF per inch of rise

Qty: 30.00

Unit of Measure: L.F.

Estimate: $33,594.56

Assessor Name: Ben Nixon

Date Created: 11/20/2015

Notes: Provide new ADA accessible handicap ramp into side of building (30ft)

System: G2030 - Pedestrian Paving

Location: Decatur site at main building

Distress: Accessibility

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to a 48" rise - per LF of ramp - figure 1 LF per inch of rise

Qty: 24.00

Unit of Measure: L.F.

Estimate: $31,178.17

Assessor Name: Ben Nixon

Date Created: 11/20/2015

Notes: Provide new sloped asphalt up 6” - 12" to doors, in play area at two entrances for ADA access

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

System: G2030 - Pedestrian Paving

Location: Decatur main building entrance walkway and sidewalk

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace concrete sidewalk or concrete paving - 4" concrete thickness

Qty: 500.00

Unit of Measure: S.F.

Estimate: $7,191.43

Assessor Name: Ben Nixon

Date Created: 11/20/2015

Notes: Repair cracked concrete paving at entrance (500sf)

System: G2040 - Site Development

Location: Decatur site retaining wall

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Repair exterior brick retaining wall - per LF of wall - up to 4' tall

Qty: 200.00

Unit of Measure: L.F.

Estimate: $74,581.02

Assessor Name: Ben Nixon

Date Created: 11/20/2015

Notes: Repair brick retaining wall, cracking in two locations (200sf)

System: G2040 - Site Development

Location: Decatur site - fence on retaining wall

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace chain link fence - 6' high

Qty: 160.00

Unit of Measure: L.F.

Estimate: $14,354.89

Assessor Name: Ben Nixon

Date Created: 11/20/2015

Notes: Provide new chain link fence on top of retaining wall (160ft)

System: G2040 - Site Development

Location: Decatur front parking lot

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace failed or collapsed storm or sanitary drain line - minimum of 30 LF - per LF

Qty: 15.00

Unit of Measure: L.F.

Estimate: $6,212.39

Assessor Name: Tom Moe

Date Created: 11/20/2015

Notes: Inspect and clean out catch basins and storm drains in front parking lot

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

System: G2020 - Parking Lots

Location: Decatur parking lots

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Resurface parking lot - grind and resurface including striping

Qty: 40,000.00

Unit of Measure: S.F.

Estimate: $152,382.57

Assessor Name: Ben Nixon

Date Created: 11/20/2015

Notes: Repave cracked and damaged asphalt parking lots in front and rear with new asphalt, including restriping (40,000)

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