

## 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.

### Finletter School

Governance	DISTRICT	Report Type	Elementary/middle
Address	6100 N. Front St. Philadelphia, Pa 19120	Enrollment	749
Phone/Fax	215-276-5265 / 215-276-5285	Grade Range	'00-08'
Website	Www.Philasd.Org/Schools/Finletter	Admissions Category	Neighborhood
		Turnaround Model	N/A

### Building/System FCI Tiers

Facility Condition Index (FCI) = $\frac{\text{Cost of Assessed Deficiencies}}{\text{Replacement Value}}$				
< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
<b>Buildings</b>				
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.
<b>Systems</b>				
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
<b>Overall</b>	<b>38.25%</b>	<b>\$18,341,026</b>	<b>\$47,953,290</b>
Building	54.67 %	\$17,213,080	\$31,484,979
Grounds	10.01 %	\$256,996	\$2,566,176

### Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
<b>Roof</b> (Shows physical condition of roof)	23.70 %	\$187,586	\$791,412
<b>Exterior Walls</b> (Shows condition of the structural condition of the exterior facade)	09.93 %	\$230,062	\$2,316,472
<b>Windows</b> (Shows functionality of exterior windows)	159.49 %	\$1,802,775	\$1,130,308
<b>Exterior Doors</b> (Shows condition of exterior doors)	142.35 %	\$129,537	\$91,002
<b>Interior Doors</b> (Classroom doors)	171.14 %	\$377,002	\$220,288
<b>Interior Walls</b> (Paint and Finishes)	11.03 %	\$109,625	\$994,119
<b>Plumbing Fixtures</b>	07.87 %	\$66,795	\$848,515
<b>Boilers</b>	89.62 %	\$1,050,122	\$1,171,729
<b>Chillers/Cooling Towers</b>	162.38 %	\$2,494,726	\$1,536,365
<b>Radiators/Unit Ventilators/HVAC</b>	98.29 %	\$2,652,016	\$2,698,052
<b>Heating/Cooling Controls</b>	189.90 %	\$1,608,907	\$847,260
<b>Electrical Service and Distribution</b>	111.56 %	\$679,157	\$608,772
<b>Lighting</b>	52.76 %	\$1,148,324	\$2,176,517
<b>Communications and Security</b> (Cameras, Pa System and Fire Alarm)	68.82 %	\$561,084	\$815,252

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.

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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.

### Finletter LSH School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	6100 N. Front St. Philadelphia, Pa 19120	Enrollment	
Phone/Fax	215-276-5265 / 215-276-5285	Grade Range	'00-08'
Website	Www.Philasd.Org/Schools/Finletter	Admissions Category	Neighborhood
		Turnaround Model	N/A

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< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
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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.
<b>Systems</b>				
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
<b>Overall</b>	<b>38.25%</b>	<b>\$18,341,026</b>	<b>\$47,953,290</b>
Building	06.26 %	\$870,951	\$13,902,135
Grounds	10.01 %	\$256,996	\$2,566,176

### Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
<b>Roof</b> (Shows physical condition of roof)	00.00 %	\$0	\$934,787
<b>Exterior Walls</b> (Shows condition of the structural condition of the exterior facade)	02.27 %	\$16,648	\$734,388
<b>Windows</b> (Shows functionality of exterior windows)	16.76 %	\$53,727	\$320,618
<b>Exterior Doors</b> (Shows condition of exterior doors)	10.64 %	\$4,181	\$39,283
<b>Interior Doors</b> (Classroom doors)	05.19 %	\$4,589	\$88,446
<b>Interior Walls</b> (Paint and Finishes)	00.00 %	\$0	\$395,421
<b>Plumbing Fixtures</b>	00.00 %	\$0	\$742,856
<b>Boilers</b>	00.00 %	\$0	\$439,174
<b>Chillers/Cooling Towers</b>	08.54 %	\$49,157	\$575,843
<b>Radiators/Unit Ventilators/HVAC</b>	00.00 %	\$0	\$1,011,254
<b>Heating/Cooling Controls</b>	132.68 %	\$421,330	\$317,561
<b>Electrical Service and Distribution</b>	00.00 %	\$0	\$228,173
<b>Lighting</b>	02.02 %	\$16,476	\$815,778
<b>Communications and Security</b> (Cameras, Pa System and Fire Alarm)	93.15 %	\$284,621	\$305,564

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  
**S727001;Finletter**  
Final  
**Site Assessment Report**  
January 31, 2017



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## 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 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):	62,760
Year Built:	1931
Last Renovation:	1999
Replacement Value:	\$47,953,290
Repair Cost:	\$18,341,026.42
Total FCI:	38.25 %
Total RSLI:	70.53 %



### Description:

Facility Condition Assessment  
July 2015

**School District of Philadelphia**  
**Thomas K. Finletter School**  
**6101 N. Front Street**  
**Philadelphia, PA 19120**

62,760 SF / 676 Students / LN 07

**Finletter Little School House**  
**6101 N. Front Street**  
**Philadelphia, PA 19120**

23,523sf / 239 students / LN 07



## General

Thomas K. Finletter School (main building) and Little School House are located at 6101 North Front Street. The front entrance of the main (original) building faces North Front Street; the main entrance of the Little School House faces East Godfrey Avenue. The main building was constructed in 1930, has 62,760 square feet, and is 3 stories tall with a full basement. The Little School House was constructed in 1997 and has 23,523 square feet and is a one story building. There is also a precast concrete panel "Portable Building" located on the site (not included in this condition assessment). Augustus Smith ("Smitty"), the Building Engineer accompanied the team during the building inspection.

## Architectural/Structural

Foundations appear to be constructed of concrete and brick. Joints are generally in good condition with the exception of one area of wall having horizontal cracks in the concrete foundation, located in the boiler room. The crack is roughly 50ft in length extending through adjacent pilasters and is cause for some concern. The horizontal cracking needs structural repairs as soon as possible, to minimize further cracking and damage with loss of bearing capacity of the wall. There is also some stepped cracking of internal concrete block walls in the area of the horizontal wall cracking. Extensive peeling paint was observed on basement walls and ceilings, mainly due to high room moisture related to excessive steam released by the boilers and a lack of general maintenance of the space. Footings were not seen and their construction type or condition could not be ascertained. There is evidence of rusting on the steel lintels above most basement windows with some localized joint cracking extending beyond the lintels which can be seen from inside the basement and outside the building. Cracks of this nature can be sources of water infiltration from outside into the basement. The Little School House foundation and footings could not be seen, however no evidence of settlement was observed at grade in the boiler room where the top of the foundation was observed. Although not part of this condition assessment, the foundation supporting the "Portable Building" is cracking at one corner location; this could prove to be a serious problem if not repaired. Vertical and horizontal cracks extend completely across the corner foundation pilaster; it should be reconstructed to minimize future damage.

Floor slabs in the basement are in good condition although covered with dirt and in need of stripping, cleaning and repainting. Upper floor slabs in the main building are also constructed of cast-in-place concrete with cast-in-place concrete beams supporting the slabs. Cracking and spalling of the concrete structure was not observed.

Roof construction over the main building is reinforced concrete beams and deck, bearing on masonry walls. The superstructure is constructed of reinforced concrete columns, beams, and floor slabs. The main building roof deck is flat with minimum overall slope; areas around roof drains are depressed for drainage. Roof access in the main building is via a door out of a masonry penthouse; a steep, narrow, dark stairway with very low headroom up from a 3<sup>rd</sup> floor stairway landing leading to a narrow, suspended wood board walkway provides access to the roof penthouse. The roof over the auditorium is constructed of heavy timber trusses with wood decking. What could be seen appeared to be in good condition as observed in the attic space. There is no roof access to the roof of the Little School House. To access that roof, an extension ladder is required, however the roof deck could be observed from the upper windows of the main building and appeared to be in good condition.

Exterior walls and penthouse structures in the main building are generally in good condition, however the lintels above most basement windows, some upper windows, and some doors are rusted with brick joint cracks extending from the lintels into the brick joints in the walls; some cracks above upper windows on the rear wall are extensive and need repair soon. Lintels should be replaced when windows are replaced. The exterior above-grade foundation wall of the main building is painted brown in some areas and reddish brown in others; the reddish brown areas need to be repainted to match the brown walls. Many brick roof-structure walls and parapets have been repointed or caulked (not a good solution) and continue to show signs of cracking and joint failure. Terra cotta coping joints are beginning to fail and should be re-grouted to maintain a water tight condition. A more detailed inspection of the main building masonry is required to repair all failing joints and ensure a watertight envelope. Masonry on the Little School House is generally in good condition with the exception of the tan brick corner, tan brick column, and the yellow brick column at the building entrance on E. Godfrey Ave. where joint cracking is evident.

Exterior windows in the main building were replaced in the 1980's with bronze anodized, aluminum frame, operable, single hung units with single thickness clear plexiglass acrylic vision panel glazing. Windows are in poor condition with oxidized frames and severely scratched single-pane plexiglass. Operable units are difficult to operate up and down or do not stay open due to broken internal counterbalance weights, accidentally slamming closed in some cases – a potential safety hazard. Single pane plexiglas units do not meet today's energy code requirements and are large sources of heat loss. Basement level windows are at grade when viewed from the outside; galvanized steel security screens attached to basement windows, the lower section of 1<sup>st</sup> floor windows, and the auditorium windows are in good condition. Windows in the Little School House (LSH) are factory painted aluminum tube frame units with insulated glass. This is one of the few if not the only LSH with glass (not plexiglass) windows; consequently, windows are still clear and in good condition. Security screens attached to the outside of the windows have factory painted frames, however they are

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severely faded and have been victims of graffiti. The screens are in need of replacing.

Exterior doors on the main building are painted steel flush hollow metal units with steel frames. The main entrance and secondary main entrance on Front Street have decorative Romanesque-style tile arches around door openings. The masonry surrounding the Front Street doorways should be cleaned to highlight their style and artistic technique. Some doors have small glazing vision panels with steel security mesh. Door panels and frames are in need of refinishing to remove dents, rust, and layers of paint; they should then receive fresh coats of paint. Door hardware is generally poor condition; panic hardware and locks are broken or not functioning, and hardware is not ADA compliant. There are no handicap entrances, and no accessible ramps. All exterior hardware systems and exterior doors need to be replaced. Little School House doors and frames are painted steel. They are all severely oxidized, slightly dented, and need to be repainted; some hardware is in need of adjustment but in general appears to be functioning properly.

Roof covering on the main building flat roof is a ceramic granule impregnated, fully adhered rolled asphalt sheet system. Brick rooftop structures, brick parapets, and most ventilation fan structures are flashed with the asphalt-backed roofing membrane as flashing with copper counterflashing. The roof membrane is in fair condition with dried cracked asphalt seen along membrane joints. The membrane, flashing, and counterflashing embedded in brickwork covering the top of the flashing is weathered and is probably past its normal service life of 20 years. Roof openings include toilet room vents, ventilation ductwork, and roof drains. Flashing of the penetrations and rooftop brick structures appears to be in fair condition and also past its normal service life; although no leaks were reported at this time, there have been leaks into classrooms which would originate either from the roof, terra cotta coping, or from the windows. Glazed terracotta coping joints may have been repaired at one time, but appear to be cracking open in a number of locations, possibly allowing water to penetrate down into the walls below. Many joint cracks in the penthouse and chimney structures have been repointed and could be the source of water infiltration. New cracks are forming in various locations including the chimney. Copper counter flashing on brick rooftop structures and parapets have been repaired with excessive amounts of caulking which is now weathered, cracking, and the potential sources of future leaks. The auditorium is covered with a "residential-type, 3-tab" asphalt roofing shingles sloping to pitched metal troughs on the three low sides of the roof. Leaks along the low flat roof intersection to the main building corridor have created large water-damaged/effloresced areas in plaster walls and ceilings in backstage rooms and have been reportedly repaired. Troughs forming gutters along both eaves have been recently recaulked as they have been previous sources of leaks, but may be sources of new leaks, evident above windows and doors. The Little School House Roof is covered with a heavy, "dimensional", two-color, asphalt roofing shingle system. Gutters are painted aluminum integrated into the edge of the roof. Roofing shingles and gutters appear to be in good condition although almost 20 years old. Heavier roofing shingles of this type could last longer than 20 years. The three clerestories and the entrance canopy roof on the LSH are covered with a blue standing seam metal roof system and blue metal siding. The paint is in good condition, however one of the clerestories has been defaced with graffiti and painted over with a non-matching paint, hurting the appearance of the clerestory. Although not part of this condition assessment, the roof membrane of the Portable Building recently had serious leaks causing water damage inside and although it has been said to have been repaired, leaks still seem to persist.

Partitions in basements are mostly constructed of brick masonry. The upper 3 floors of the building have plaster on wood lath or masonry partitions. There are wood framed clerestory glass panels located in walls above classroom doors in the corridors. These panels are in generally good condition being above the reach of anyone, but the glass is not wired or fire rated. Between some classrooms are manually operated full height wood folding partions which are not used and provide little sound insulation between classrooms. Corridors in floors one through 3 have marble panel wainscot, providing good damage resistance and long durability.

Interior doors are either the original wood and plate glass (not fire rated or wired) raised panel doors with original hardware, or replacement wood doors with narrow lite wired glass vision panels and replacement hardware at least 20 years of age. Most wood doors regardless of age or type are damaged, have broken glass or broken hardware. Some interior basement doors and most interior stairway doors are hollow metal in hollow metal frames; most steel frames are rusted where coming in contact with floors. Doors are generally in poor condition throughout the building, are not ADA compliant, do not have ADA or proper locking hardware, and are not fire rated where required. Stairway doors do not positively latch as required of fire rated doors. Classroom doors do not have security locking feature from inside classrooms. Auditorium doors are raised panel wood doors that are probably original; these doors could be refinished with new hardware installed. All interior doors opening into corridors and the hardware attached to the doors need to be replaced.

Interior fittings/hardware include black slate chalkboards with oak chalk trays or bulletin boards either integral to the original dark oak folding wall partitions built into the folding panels or mounted on plaster walls. These folding wall panels are no longer opened as they are heavy and most hinges and bearings are not operable. These wall panels need to be replaced with sturdier, safer, fixed partitions. Toilet room partitions in the main building are solid plastic partitions which replaced the original partitions; most are in good condition. Toilet room accessories (toilet paper dispensers, soap, paper towel or dryers, grab bars, door latches) have been recently replaced. The Little School House toilet rooms have solid plastic floor mounted partitions and most of the required toilet room accessories; sinks areas have less space than required for full ADA compliance. These toilet rooms have been well maintained and are in good condition.



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Stair construction in the main building consists of concrete treads, risers, and stringers with wood handrails (29" high), guards (36" high), and steel ballusters with 3" spacing. Since handrail and guard heights are not in compliance with today's codes, new handrail and guard systems are required.

Wall finishes in the old building are plaster which is cracked with surface crazing in a number of classroom and corridor locations. There is damage in most classrooms at doorways and corners. There are also many areas of water damage on upper floor plaster walls due to water penetration from coping leaks, roof leaks, or lintel leaks. Moveable partitions between some classrooms are the original dark stained oak; these partitions are heavy and no longer opened and have instead been used as tackboards and as fixed surfaces. Thus, the folding wood panels are covered with staples and small gouges. Blackboards are embedded into the wood panels but are not always used; some classrooms have smartboards which connect to the teacher's laptop computers, used for teaching in lieu of blackboards. Corridors have 48" high marble panel wainscots that are generally in good condition with isolated cracks or damages requiring repair. Stained wood trim in all rooms is damaged and worn requiring filling and refinishing. Toilet room walls on upper floors are painted plaster; most have marble wainscots. Toilet room walls in the basement are painted brick. The auditorium has a paneled wood wainscot that is worn and damaged in need of repair and refinishing. The queuing area outside the auditorium has marble columns, marble wainscot, and plaster walls with decorative plaster capitals on square marble covered columns. These historical marble and plaster decorative elements can be revitalized with some repair and new paint. There are a number of plaster wall and ceiling areas in the auditorium that have been damaged from water entering the building through the roof or steel lintels. Assuming these leaks have been addressed after roof, gutter, and lintel repairs, the plaster should be repaired. Wall finishes in the LSH consists of painted block in classrooms, corridors, toilet rooms, offices, and multi-purpose room. A small number of separation walls in classrooms are gypsum board and metal stud. All walls are in good condition with some areas requiring some paint touch-up.

Floor finishes in the original building mostly consist of dark stained oak floors in classrooms, offices, and the auditorium. Most are in good enough condition to be stripped to remove the years of built-up dirt and varnish, sanded, and refinished. There are some rooms (main office, nurse, and faculty lounge) with 12"x12" vinyl composition tile (VCT) over the original wood floors. The gymnasium which also serves as the cafeteria is finished in VCT. All 12"x12" VCT floors in the building are worn and need to be removed and replaced. Stair landing surfaces are finished in exposed concrete that have years of dirt ground into and waxed into the surfaces; stair treads and risers are painted. Stairs should be stripped, cleaned and resealed or repainted. All corridor floors are finished with 4'x4' (nominal size) concrete tiles which appear to be a highly durable monolithic system. Edges along the walls are painted; These corridor floors have not recently been stripped and cleaned and have years of dirt sealed into the surface and corners, causing their color to be very dark and dingy. There is an especially large build-up of dirt at all corners. All toilet rooms have sealed/waxed concrete as the floor finish; like the corridors there are years of sealed in dirt and grime which needs to be stripped away before resealing the floor. The room in the basement originally designated as the cafeteria is now a food prep area finished with VCT.

Basement ceilings and all toilet room ceilings are exposed painted concrete deck above, with suspended lighting fixtures. Almost all other spaces throughout the original building have 2x4 suspended acoustical tile ceiling with either recessed or surface mounted fluorescent lighting fixtures. Ceilings and lighting fixtures are old, discolored and damaged and need to be replaced. The auditorium has a plaster ceiling with incandescent suspended lighting fixtures that appear to be original. The plaster ceiling has water damages that should be repaired to bring the decorative ceiling back to life.

Furnishings in the building include the original folding wood seating in the auditorium which is still in use. Some of the seats ( approx. 25%) need to be repaired to operate properly and many are scratched; at least 75% have surface damages. Repair of the seats and complete refinishing is recommended if parts can be obtained to restore the operation; otherwise, full replacement is required. Casework and storage cabinets in the classrooms and the office is damaged, worn and needs replacement.

## Mechanical

Plumbing Fixtures - Many of the original plumbing fixtures remain in service, while some appear to have been replaced or upgraded in the 1970s. Fixtures in the restrooms on each floor consist of wall mounted or floor mounted water closets, wall hung urinals, and lavatories with wheel handle faucets. It is recommended to replace all water closets, urinals, and lavatories throughout the building. For the Little School House, all fixtures appear to be original, are in satisfactory condition, and should not need replacement within the next 10 years.

Drinking fountains in the corridors and at the restrooms are wall hung with some having integral refrigerated coolers. Most appear to be the original installed equipment. Replacement of all drinking fountains in the Main building is recommended. The Little School House has the original, wall hung drinking fountains and are in satisfactory condition. They should not need replacement in the next 10 years.

A service sink is available in the basement for use by the janitorial staff and appears to be the original equipment. The Cafeteria has one three compartment stainless steel sink with lever operated faucets and appropriate chemicals. The three compartment sink drains

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through a grease trap. The Little School House has the appropriate stainless steel sink with sanitizing basins and grease trap. There is a grease hood installed but is not currently in use.

The plumbing fixtures throughout the main building are beyond their serviceable life and should all be replaced, with exception of the stainless steel sink. The Little School House needs only a fire suppression system for the grease hood.

Domestic Water Distribution - Domestic water distribution piping is soldered copper. Water service enters the building in the basement, with backflow preventers (RPZA – reduced pressure zone assembly) and the water meter on the main line after entering the building. The distribution piping is leaking has been repaired in various places. An inspection of the domestic water distribution system is recommended. The Little School House water domestic water distribution is soldered copper. Water service enters the building in the mechanical room with the water meter and backflow preventers. The distribution piping in the Little School House appears to be in satisfactory condition and should not need service or replacement within the next 10 years.

One Bradford White natural gas fired vertical water heater tank is installed in the basement with appropriate piping, controls, and venting. The water heater in the main building appears to be 10-15 years old and should be replaced within the next 10 years. The Little School House has two PVI vertical gas fired water heaters. The water heaters in the Little School House appear to be original, making them almost 20 years old. Replace the water heaters in the main building and in the LSH.

Sanitary Waste - The sanitary waste piping systems are threaded cast iron. The small sewer ejector pit is located in the basement with one pump. The complete sanitary system appears to be the original installed equipment and is well beyond its serviceable life. Recommend replacement of sanitary system throughout the main building. The sanitary system in the Little School House appears to be in satisfactory condition and should not need service or replacement for the next 10 years.

Rain Water Drainage - The rain water drains from the roof are routed through mechanical chases in the building. There are no roof overflow drains. Roof overflow drains to the main building. However, the District should consider adding overflow scuppers to the building to protect the main roof from flooding. No roof access to the Little School House.

Energy Supply - Duplex fuel oil supply pumps provide the required fuel to the boilers when operating on fuel oil. The concrete fuel tank is located in the basement alongside the fuel oil pumps. The pumps appear to be beyond their serviceable life and should be replaced. Replace the concrete fuel tank with an underground tank outside the building. The Little School House primarily uses natural gas for all heat sources in the building, having the gas meter out in the mechanical yard by the chiller. There are two small No. 2 fuel oil tanks having a total capacity of approximately 500 gallons located in the mechanical room to fuel the boilers in the event of the loss of natural gas.

Heat Generating Systems - Steam is generated in the main building by two Weil McLain oil fired boilers. The boilers appear to be at the end of their serviceable life and should be replaced within the next 5 years. Hot water is generated in the Little School House by two Burnham model V1106W boilers with dual fuel Powerflame burners, each having gross output of 1069 MBH. The boilers in the Little School House appear to be in satisfactory condition and should not need replacement for the next 10 years.

Cooling Generating Systems - Chilled water is generated in the Little School House by a model 30GN-080, 80 ton Carrier air cooled chiller. This appears to be the original installed equipment and is functioning properly. The equipment operates off of R-22 refrigerant which is being phased out and will not be manufactured after 2020. Switching the unit over to a new refrigerant or replacing with a new air cooled chiller is recommended.

Distribution Systems - The boiler feed water is treated with a combination of chemicals, controlled with a Master water treatment controller. There is a condensate return tank with duplex pumps returning condensate to the boilers. Moisture issues are apparent throughout the basement as a result of the leaking steam. The steam traps are failing throughout the building. The steam and condensate return lines are only occasionally insulated and are beyond their serviceable life. The Little School House has duplex chilled water pumps and duplex hot water pumps to distribute the conditioned water to the radiators and AHUs throughout the building. The pumps and distribution systems at the Little School House appear to be in satisfactory condition and should not need replacement for the next 10 years.

Ventilation and additional heating for the main building was provided by a house fan in the basement which is operational. The air is pushed into the various rooms of the building through ducts built into the walls. The air is exhausted from other ducts built into the walls, up through the attic space, and out through roof mounted vents. Fresh air is also available through the use of operable windows throughout the building. The Little School House receives ventilation through outside air ducted in through the AHUs in the ceiling throughout the building. The ventilation in the Little School House is satisfactory and should not need replacement for the next 10 years.

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Terminal & Package Units - Approximately 1/5 of the rooms in the main building have window air conditioning units. The Little School House does not have terminal or packaged units.

Controls & Instrumentation – In the main building, there are some pneumatic thermostats on the walls that are not in service. The pneumatic control valves on the radiators are not in service. Most of the heating radiators are flowing 100% flow when the steam is on. This results in an “on-off” control for the whole building, i.e. when the boilers are on, the whole building has heat. And when the boilers are off, the whole building is without heat. Add a new DDC system to the main building. The Little School House has a BMS that was originally installed in 1997. This system is not working properly and ultimately is not functional. It is recommended to integrate a new control system for both buildings and re-commissioning the system for the Little School House.

Sprinklers - There are no sprinklers in the main building, a new sprinkler system is recommended. The LSH has sprinklers throughout, with the fire water supply entering the building in the mechanical room. There is adequate pressure from the municipal water system - no fire pump is required. There is a grease hood installed in the kitchen area but is not currently in use. The grease hood requires a chemical agent fire suppression system but one is not installed. Installing fire suppression system for the grease hood in the Little School House is recommended. The existing sprinkler system appears to be in satisfactory condition and should not need replacement for the next 10 years.

## Electrical

Site Electrical Service for the main building comes from medium voltage overhead lines on wooden poles along Front St. Two pole-mounted power transformers with medium voltage primary (Voltage level unknown at this time) and 120/240VAC secondary and an estimated available power of 150KVA are installed, supplying power to facility.

The service entrance to the facility consists of a disconnect switch and utility meter located in a closet in the Multipurpose Room, and a 225A service switchboard located in the Boiler Room in the basement. The switchboard is of an open bus, open switch type. This type of existing service entrance is obsolete, unsafe, does not meet current codes, and needs to be replaced.

Power distribution is achieved through corridor located lighting/receptacle panel boards. Panel boards, two on each floor, are flush mounted. It appears that panel boards and branch circuit breakers have out-lived their useful lives should be replaced. There is one 75KVA phase converter transformer for converting 240VAC to 120/208VAC and to three phase for powering the 208-volts required loads.

In general for the Main Building, there are not enough receptacles installed in the classrooms. It is recommended to have a minimum of two receptacles on each classroom wall. The computer room should have receptacles at three feet on center on each wall.

Receptacles in the LSH are not tamper-resistant type. This is in violation of the national electrical code, which states that receptacles that are subject to child access shall be of either tamper proof or GFCI type. Receptacles should be replaced.

Lighting in the Main Building is provided by fluorescent fixtures with T-12 lamps. Classrooms and corridors utilize 1x4, (2) lamp or 2x4, (4) lamp lay-in or surface mounted fixtures. Lighting levels in the gymnasium, auditorium, and boiler room do not meet IES (Illuminating Engineering Society) standards. Lighting in the LSH classrooms is provided by suspended 1x4 fluorescent lighting fixtures. Lighting in offices and corridors are provided by recessed 2x4 fluorescent lighting fixtures. All are relatively in good condition with some minor maintenance and repairs needed to some of the fixtures. The lighting fixtures in portable building are provided by 1x4 surface/pendent fluorescent lighting fixtures with T8 bulbs; fixtures are in need maintenance and repair.

Fire Alarm System in main building consists of a 120V manual fire alarm system made by Couch Company. The company has been out of business since 1985 and spare parts have not been available since 2003. The existing system does not meet current fire alarm codes and must be replaced. Fire Alarm System in LSH and portable building is inadequate and does not comply with the current codes; for example, there are no horn/strobes provided in classrooms. The fire alarm system for the both facilities should be controlled by a central control panel.

Telephone and /LAN equipment/devices in main building is located in Room 206. The air circulation in this room is not adequate and should be provided to avoid shortening the equipment life and overheating. The communication system of both LSH and temporary building (not included in this FAC) are connected to main building telephone and LAN (Local Area Networking) systems and are all working properly.

Public address / music systems are not provided in the facility. The telephone system is used for public announcements.

Intercom and paging systems in all the buildings are functional. The paging system is a one way communication system from the

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office to each classroom. Two way communications is obtained through wall mounted phones in classrooms and other areas.

Clock and Program systems in the main building, LSH and portable building are not functioning properly.

Television system is not provided in any of the buildings.

Security Systems, access control, and video surveillance systems are provided in main building, however an insufficient number of cameras provides inadequate coverage for exit doors, corridors and other critical areas. When provided, they should be connected to the Closed Circuit Television system (CCTV). This CCTV system is installed and is working properly. In the Little School House, there is inadequate video surveillance coverage and there are no motion sensors.

Emergency power systems (backup power generator) are not provided in this facility.

Uninterruptible Power System (UPS) is provided for the IT racks in the main building.

Emergency lighting system, including exit lights do not provide adequate coverage in the main building. There are insufficient numbers of emergency lights in corridors, the library, and stairways. Adequate numbers of emergency battery-pack lighting fixtures are provided in LSH corridor

Lightning Protection System is adequate on the main building. It is accomplished with air terminals mounted on the chimney, however, some repairs are needed to make the system fully operational. A study needs to be conducted to verify that the air terminals provide the proper coverage. No lightning protection is need on LSH and temporary portable building.

Grounding is present and is adequate.

Elevator is not provided in either building.

Theatrical Lighting and dimming controls in the Main Building is old and not a code compliant installation; lights are turned on and off by circuit breakers.

Site Lighting System is adequate. Exterior lighting fixtures are installed at exit doors.

Site paging system is provided and operating adequately.

## Grounds

Paving from sidewalks to front doors is constructed of 4'x4' (nominal) concrete panels; roughly half are in need of replacement and although they are not all contiguous, it may be possible to replace only those that are failing. The side and rear are paved with asphalt which serves as the combined playground and parking area. The entire parking and playground area is filled with cracks. Some of the cracks are large enough that the and students could trip on some of the uneven paving. Parking and play area striping is worn and almost invisible. Clear separation of play area and parking, to provide a safe area for the children to play, is lacking. The number of required parking spaces for school staff is unknown. Repaving of the entire asphalt area is required. Restriping of parking areas and better designation of play and parking areas are required. Granite block stairways into the building are need resetting and regrouting. New handrails and guards are required at all stairs.

Wrought iron fencing is generally in good condition. There are some damaged and bent fence panels in need of replacement. Most of the fence is rusted and requires repainting. The gates providing street and pedestrian access are either missing or inoperative and require replacement.

Landscaping is in need of trimming and maintenance along Front Avenue.

## **RECOMMENDATIONS**

### **Architectural**

#### **Main Bldg**

- Strip and repaint concrete foundation (basement) walls in mechanical rooms (5,000sf)
- Repair spalling concrete ceilings (landing platforms) in 2 exterior exit stairways all 3 floors (600sf)
- Clean and repaint basement floor in mechanical rooms; clean and reseal concrete floors in hallways and stairways (350x10x3 +750=11,000+5000sf=16,000sf)
- Remove and replace all lintels and cracked masonry at basement windows and grade exit doorways and rooftop structures (80)
- Repair structural crack in foundation wall –chase out concrete, patch with concrete (100ft)
- Repair structural crack in Portable Building foundation wall –chase out concrete, patch with concrete (50ft)
- Replace all exterior windows with insulated single hung units (300)3.5x8
- Replace all exterior doors with ADA and code compliant exit hardware; repaint doors and frames.(16)3x7
- Powerwash front entrance and elevation facing Front Street (6000sf)
- Repair metal gutter trough over auditorium (250lf)
- Recaulk copper flashing and repair (1000ft)
- Provide new aluminum coping on top of terra cotta coping (1500ft)
- Replace roof on portable building (1500sf)
- Repoint cracked brickwork on roof top structures and attic level windows (1500sf)
- Remove non-rated glass panels between classrooms and corridors; fill with fire rated gyp bd sys. (30 @ 6sf)
- Remove and replace all wood interior doors, frames and hardware in classrooms, closets, offices, etc. (80)
- Provide security hardware for classrooms and offices, locking from inside classroom. (50)
- Remove and replace all basement steel doors, frames, and hardware in mechanical rooms and stairways (18 3x7 doors)
- Remove folding wood partitions; replace with gypsum board and metal stud walls (9) @300sf ea =2700sf
- Provide toilet room accessories (6 sets)
- Repair water damage, cracks, and repaint all interior plaster walls (10,000sf)
- Remove and replace stairway handrails and guards and guards at auditorium entrance with code compliant systems (3) 4 story;=50x12=600lf
- Reset treads and regrout all joints between limestone block tread/risers at exterior stairs (50 treads)
- Replace handrails at reconstructed exterior stairs (100lf)
- Strip, sand, repair and refinish all wood floors in classrooms and in auditorium (7000sf x 3.5 + 6000 = 30000sf)
- Remove and replace all 12"x12" VCT floors in gymnasium and other rooms (10,000sf)
- Replace all 2x4 acoustical tile ceilings (35,000sf)
- Repair and refinish damaged folding wood auditorium chairs (400)
- Repair and refinish wood panels (wainscot) in auditorium (1000sf)
- Replace rusted rooftop security railing and railing at window wells(16x16ft + 50 x 5ft)
- Add elevator (4 stop)

## Architectural

### Little School House

- Repair brick posts and building corner at Godfrey St entrance (200sf)
- Replace security screens (oxidized frames) – 12 4x8 screens
- Repaint exterior doors and graffiti clerestory (5) 3x7 + 100sf
- Repair cracks in VCT (250lf)
- Provide security hardware for classrooms and offices (20 sets)
- Repair Gyp bd under clerestory that had leaked (100sf)

## Mechanical

### 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 of all drinking fountains in the Main building. These units are well beyond their service life and most are NOT accessible type.
- Hire a qualified contractor to perform a detailed examination of the sanitary waste piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Install new hot water heaters in the main building.
- Replace duplex fuel oil pumps and skid.
- Demolish existing fuel oil tank and install an underground fuel oil tank.

- Provide a new building automation system in the main building (BAS) with communication interface to the preferred system in use throughout the District.
- Install a fire protection sprinkler system with quick response type heads to reduce insurance costs by providing protection for the property in the main building. A fire pump may be required depending on the available city water pressure.
- Remove existing steam boilers and steam distribution system. Install hot water boilers and hot water distribution system.
- Install chiller and chilled water distribution system.
- Install unit ventilators in all classrooms. 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. Install steam converters in the existing boiler room with circulating pumps, distribution piping and controls to provide heating hot water for the new coils.
- Install AHUs to condition the cafeteria. Provide ventilation, heating and cooling for the Cafeteria by removing the electric convection heaters and installing a package rooftop constant volume air handling unit with distribution ductwork and registers for supply and return air.
- Install AHUs to condition the gymnasium. Provide ventilation, heating and cooling for the Auditorium by installing a package rooftop constant volume air handling unit with distribution ductwork and registers.
- Install AHUs to condition the auditorium. Provide ventilation, heating and cooling for the Auditorium by installing a package rooftop constant volume air handling unit with distribution ductwork and registers.

### Little School House

- Convert the chiller over to a new refrigerant or replace with a new air cooled chiller.
- Install a new DDC system, re-commission, and provide training for maintenance personnel.
- Install chemical sprinkler system for kitchen hood

## Electrical

### Main Building

- Upgrade the existing electrical service entrance. Replace the existing incoming and distribution switchboard with new 1200A, 480/277, 3PH, 4 wire switchboards.
- Replace the entire distribution system with new panel boards and new feeders. Provide arc flash labels on the all panel boards. Estimated, 16 panel boards.
- Install a minimum two receptacles in each wall of classrooms. It is recommend that surface mounted raceways with two-compartment, (data and power) cavities, be installed in the computer lab room.
- Replace all lighting fixtures with new fluorescent lighting fixtures with T-5 lamps.
- 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 classrooms, offices, auditorium, corridors, other areas as recommended by codes.
- Replace existing master clock system.
- Provide lightning protection studies to ascertain adequacy of existing systems.
- Provide new stage lighting and controller in Auditorium.
- Provide new sound system including a freestanding 19" rack backstage with mixer per 3amplifiers, CD player, cassette player, AM-FM radio, graphic or parametric equalizer, and receivers for wireless microphone.
- Provide sufficient number of cameras on portable building exterior wall and connect them to the main building CCTV system. Estimated 3 each
- Replace existing receptacles with GFIC receptacles in the areas subject to child access in the portable building. Estimated 10 each.

## Electrical

### Little School House

- Replace existing receptacles with GFIC receptacle in the areas subject to child access. Estimated 100 each.
- Replace existing master clock system.
- Replace existing fire alarm system of the building.
- Provide sufficient number of cameras on LSH exterior wall and connect them to main building CCTV system. Estimated 3 each.

## Grounds



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- Repave parking / playground with asphalt(45,000sf)
- Repaint damaged wrought iron fencing (500lf)
- Replace rusted rooftop security railing and railing at window wells (50lf)
- Add handicap ramp to front door (up 30") including railings
- Repave cracking concrete sidewalk panels in front of the building (300sf)

### Attributes:

#### General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 2
Status:	Accepted by SDP	Team:	Tm 2
Site ID:	S727001		

## 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	52.09 %	0.00 %	\$0.00
A20 - Basement Construction	54.40 %	1.76 %	\$36,176.43
B10 - Superstructure	50.45 %	0.58 %	\$48,651.21
B20 - Exterior Enclosure	62.29 %	48.29 %	\$2,236,930.27
B30 - Roofing	37.31 %	10.87 %	\$187,586.45
C10 - Interior Construction	41.10 %	22.67 %	\$470,754.73
C20 - Stairs	32.01 %	172.22 %	\$204,258.15
C30 - Interior Finishes	88.66 %	26.01 %	\$1,156,456.41
D10 - Conveying	77.14 %	400.36 %	\$997,521.79
D20 - Plumbing	80.10 %	19.60 %	\$438,688.78
D30 - HVAC	102.55 %	86.23 %	\$8,276,257.73
D40 - Fire Protection	88.84 %	121.91 %	\$875,066.57
D50 - Electrical	92.60 %	58.41 %	\$2,962,400.33
E10 - Equipment	38.18 %	6.61 %	\$90,802.49
E20 - Furnishings	24.09 %	55.76 %	\$102,479.58
G20 - Site Improvements	42.07 %	12.51 %	\$256,995.50
G40 - Site Electrical Utilities	40.00 %	0.00 %	\$0.00
<b>Totals:</b>	<b>70.53 %</b>	<b>38.25 %</b>	<b>\$18,341,026.42</b>

### 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)
B727001;Finletter	62,760	54.67	\$2,034,494.42	\$6,829,332.65	\$1,269,588.66	\$1,074,595.21	\$6,005,068.77
B727002;Finletter LSH	23,523	6.26	\$155,407.63	\$503,479.09	\$146,167.35	\$0.00	\$65,897.14
G727001;Grounds	117,600	10.01	\$45,357.23	\$40,207.88	\$171,430.39	\$0.00	\$0.00
<b>Total:</b>		<b>38.25</b>	<b>\$2,235,259.28</b>	<b>\$7,373,019.62</b>	<b>\$1,587,186.40</b>	<b>\$1,074,595.21</b>	<b>\$6,070,965.91</b>

### Deficiencies By Priority



- 1 - Response Time (< 2 yr) - \$2,235,259.28
- 2 - Response Time (2-3 yrs) - \$7,373,019.62
- 3 - Response Time (3-4 yrs) - \$1,587,186.40
- 4 - Response Time (4-5 yrs) - \$1,074,595.21
- 5 - Response Time (> 5 yrs) - \$6,070,965.91

**Budget Estimate Total: \$18,341,026.42**

## 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):	62,760
Year Built:	1930
Last Renovation:	1999
Replacement Value:	\$31,484,979
Repair Cost:	\$17,213,079.71
Total FCI:	54.67 %
Total RSLI:	77.85 %



### Description:

### Attributes:

#### General Attributes:

Active:	Open	Bldg ID:	B727001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S727001		

## 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	35.00 %	0.00 %	\$0.00
A20 - Basement Construction	35.00 %	2.99 %	\$36,176.43
B10 - Superstructure	35.00 %	0.87 %	\$48,651.21
B20 - Exterior Enclosure	59.24 %	61.12 %	\$2,162,374.17
B30 - Roofing	51.35 %	23.70 %	\$187,586.45
C10 - Interior Construction	30.10 %	30.27 %	\$466,166.00
C20 - Stairs	15.00 %	230.82 %	\$204,258.15
C30 - Interior Finishes	106.46 %	35.42 %	\$1,152,973.33
D10 - Conveying	77.14 %	400.36 %	\$997,521.79
D20 - Plumbing	106.34 %	34.23 %	\$438,688.78
D30 - HVAC	123.23 %	111.81 %	\$7,805,770.49
D40 - Fire Protection	105.71 %	169.68 %	\$858,326.79
D50 - Electrical	110.11 %	72.14 %	\$2,661,304.05
E10 - Equipment	34.29 %	9.09 %	\$90,802.49
E20 - Furnishings	12.50 %	76.66 %	\$102,479.58
<b>Totals:</b>	<b>77.85 %</b>	<b>54.67 %</b>	<b>\$17,213,079.71</b>

## 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 the system 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	RSLT%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$18.40	S.F.	62,760	100	1930	2030	2050	35.00 %	0.00 %	35			\$1,154,784
A1030	Slab on Grade	\$7.73	S.F.	62,760	100	1930	2030	2050	35.00 %	0.00 %	35			\$485,135
A2010	Basement Excavation	\$6.55	S.F.	62,760	100	1930	2030	2050	35.00 %	0.00 %	35			\$411,078
A2020	Basement Walls	\$12.70	S.F.	62,760	100	1930	2030	2050	35.00 %	4.54 %	35		\$36,176.43	\$797,052
B1010	Floor Construction	\$75.10	S.F.	62,760	100	1930	2030	2050	35.00 %	1.03 %	35		\$48,651.21	\$4,713,276
B1020	Roof Construction	\$13.88	S.F.	62,760	100	1930	2030	2050	35.00 %	0.00 %	35			\$871,109
B2010	Exterior Walls	\$36.91	S.F.	62,760	100	1930	2030	2050	35.00 %	9.93 %	35		\$230,061.89	\$2,316,472
B2020	Exterior Windows	\$18.01	S.F.	62,760	40	1980	2020	2057	105.00 %	159.49 %	42		\$1,802,774.99	\$1,130,308
B2030	Exterior Doors	\$1.45	S.F.	62,760	25	1985	2010	2042	108.00 %	142.35 %	27		\$129,537.29	\$91,002
B3010105	Built-Up	\$37.76	S.F.	14,500	20	1985	2005	2028	65.00 %	32.73 %	13		\$179,208.88	\$547,520
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.	6,200	25	1985	2010	2020	20.00 %	3.49 %	5		\$8,377.57	\$240,126
B3020	Roof Openings	\$0.06	S.F.	62,760	20	1930	1950	2028	65.00 %	0.00 %	13			\$3,766
C1010	Partitions	\$17.91	S.F.	62,760	100	1930	2030		15.00 %	6.42 %	15		\$72,188.36	\$1,124,032
C1020	Interior Doors	\$3.51	S.F.	62,760	40	1930	1970	2057	105.00 %	171.14 %	42		\$377,001.70	\$220,288
C1030	Fittings	\$3.12	S.F.	62,760	40	1930	1970	2028	32.50 %	8.67 %	13		\$16,975.94	\$195,811
C2010	Stair Construction	\$1.41	S.F.	62,760	100	1930	2030		15.00 %	230.82 %	15		\$204,258.15	\$88,492

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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.	62,760	10	1930	1940	2027	120.00 %	13.22 %	12		\$109,625.27	\$829,060
C3010231	Vinyl Wall Covering	\$0.97	S.F.		15				0.00 %	0.00 %				\$0
C3010232	Wall Tile	\$2.63	S.F.	62,760	30	1930	1960	2020	16.67 %	0.00 %	5			\$165,059
C3020411	Carpet	\$7.30	S.F.		10				0.00 %	0.00 %				\$0
C3020412	Terrazzo & Tile	\$75.52	S.F.		50				0.00 %	0.00 %				\$0
C3020413	Vinyl Flooring	\$9.68	S.F.	9,400	20	1930	1950	2037	110.00 %	132.07 %	22		\$120,175.32	\$90,992
C3020414	Wood Flooring	\$22.27	S.F.	37,650	25	1930	1955	2042	108.00 %	39.81 %	27		\$333,775.14	\$838,466
C3020415	Concrete Floor Finishes	\$0.97	S.F.	15,710	50	1930	1980	2067	104.00 %	403.65 %	52		\$61,512.54	\$15,239
C3030	Ceiling Finishes	\$20.97	S.F.	62,760	25	1985	2010	2042	108.00 %	40.11 %	27		\$527,885.06	\$1,316,077
D1010	Elevators and Lifts	\$3.97	S.F.	62,760	35			2042	77.14 %	400.36 %	27		\$997,521.79	\$249,157
D2010	Plumbing Fixtures	\$13.52	S.F.	62,760	35	1930	1965	2052	105.71 %	7.87 %	37		\$66,795.05	\$848,515
D2020	Domestic Water Distribution	\$1.68	S.F.	62,760	25	1930	1955	2042	108.00 %	23.21 %	27		\$24,473.55	\$105,437
D2030	Sanitary Waste	\$2.90	S.F.	62,760	25	1930	1955	2042	108.00 %	162.13 %	27		\$295,080.85	\$182,004
D2040	Rain Water Drainage	\$2.32	S.F.	62,760	30	1930	1960	2047	106.67 %	35.95 %	32		\$52,339.33	\$145,603
D3020	Heat Generating Systems	\$18.67	S.F.	62,760	35	1930	1965	2052	105.71 %	89.62 %	37		\$1,050,121.66	\$1,171,729
D3030	Cooling Generating Systems	\$24.48	S.F.	62,760	30	1930	1960	2047	106.67 %	162.38 %	32		\$2,494,725.70	\$1,536,365
D3040	Distribution Systems	\$42.99	S.F.	62,760	25	1930	1955	2052	148.00 %	98.29 %	37		\$2,652,016.28	\$2,698,052
D3050	Terminal & Package Units	\$11.60	S.F.	62,760	20	1930	1950	2037	110.00 %	0.00 %	22			\$728,016
D3060	Controls & Instrumentation	\$13.50	S.F.	62,760	20	1930	1950	2037	110.00 %	189.90 %	22		\$1,608,906.85	\$847,260
D4010	Sprinklers	\$7.05	S.F.	62,760	35	1930	1965	2052	105.71 %	193.99 %	37		\$858,326.79	\$442,458
D4020	Standpipes	\$1.01	S.F.	62,760	35	1930	1965	2052	105.71 %	0.00 %	37			\$63,388
D5010	Electrical Service/Distribution	\$9.70	S.F.	62,760	30	1930	1960	2047	106.67 %	111.56 %	32		\$679,156.83	\$608,772
D5020	Lighting and Branch Wiring	\$34.68	S.F.	62,760	20	1930	1950	2037	110.00 %	52.76 %	22		\$1,148,324.35	\$2,176,517
D5030	Communications and Security	\$12.99	S.F.	62,760	15	1930	1945	2032	113.33 %	68.82 %	17		\$561,084.07	\$815,252
D5090	Other Electrical Systems	\$1.41	S.F.	62,760	30	1930	1960	2047	106.67 %	308.21 %	32		\$272,738.80	\$88,492
E1020	Institutional Equipment	\$4.82	S.F.	62,760	35	1930	1965	2027	34.29 %	30.02 %	12		\$90,802.49	\$302,503
E1090	Other Equipment	\$11.10	S.F.	62,760	35	1930	1965	2027	34.29 %	0.00 %	12			\$696,636
E2010	Fixed Furnishings	\$2.13	S.F.	62,760	40	1930	1970	2020	12.50 %	76.66 %	5		\$102,479.58	\$133,679
<b>Total</b>									<b>77.85 %</b>	<b>54.67 %</b>			<b>\$17,213,079.71</b>	<b>\$31,484,979</b>

## 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.

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<b>System:</b>	B3010 - Roof Coverings	This system contains no images
<b>Note:</b>	built up roof 70% shingles 30%	
<b>System:</b>	C3010 - Wall Finishes	This system contains no images
<b>Note:</b>	painting block or gypsum board 90% marble wainscot (corridors and stairs) 6% glazed brick 3% wood 1%	
<b>System:</b>	C3020 - Floor Finishes	This system contains no images
<b>Note:</b>	vinyl floor 15% wood floor 60% concrete 25%	
<b>System:</b>	D5010 - Electrical Service/Distribution	This system contains no images
<b>Note:</b>	75KVA Phase converter transformer	

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## 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
<b>Total:</b>	<b>\$17,213,080</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$687,161</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$17,900,241</b>
<b>* A - Substructure</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A10 - Foundations</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A1010 - Standard Foundations</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A1030 - Slab on Grade</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A20 - Basement Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A2010 - Basement Excavation</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A2020 - Basement Walls</b>	\$36,176	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,176
<b>B - Shell</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B10 - Superstructure</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B1010 - Floor Construction</b>	\$48,651	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,651
<b>B1020 - Roof Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B20 - Exterior Enclosure</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B2010 - Exterior Walls</b>	\$230,062	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$230,062
<b>B2020 - Exterior Windows</b>	\$1,802,775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,802,775
<b>B2030 - Exterior Doors</b>	\$129,537	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$129,537
<b>B30 - Roofing</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010 - Roof Coverings</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010105 - Built-Up</b>	\$179,209	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$179,209
<b>B3010120 - Single Ply Membrane</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010130 - Preformed Metal Roofing</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010140 - Shingle &amp; Tile</b>	\$8,378	\$0	\$0	\$0	\$0	\$306,209	\$0	\$0	\$0	\$0	\$0	\$314,587
<b>B3020 - Roof Openings</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>C - Interiors</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>C10 - Interior Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>C1010 - Partitions</b>	\$72,188	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$72,188

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C1020 - Interior Doors	\$377,002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$377,002
C1030 - Fittings	\$16,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,976
C20 - Stairs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C2010 - Stair Construction	\$204,258	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$204,258
C30 - Interior Finishes	\$0	\$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	\$0
C3010230 - Paint & Covering	\$109,625	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$109,625
C3010231 - Vinyl Wall Covering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3010232 - Wall Tile	\$0	\$0	\$0	\$0	\$0	\$210,484	\$0	\$0	\$0	\$0	\$0	\$0	\$210,484
C3020 - Floor Finishes	\$0	\$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	\$0
C3020412 - Terrazzo & Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020413 - Vinyl Flooring	\$120,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120,175
C3020414 - Wood Flooring	\$333,775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$333,775
C3020415 - Concrete Floor Finishes	\$61,513	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,513
C3030 - Ceiling Finishes	\$527,885	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$527,885
D - Services	\$0	\$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	\$0
D1010 - Elevators and Lifts	\$997,522	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$997,522
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$66,795	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$66,795
D2020 - Domestic Water Distribution	\$24,474	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,474
D2030 - Sanitary Waste	\$295,081	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$295,081
D2040 - Rain Water Drainage	\$52,339	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,339
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3020 - Heat Generating Systems	\$1,050,122	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,050,122
D3030 - Cooling Generating Systems	\$2,494,726	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,494,726
D3040 - Distribution Systems	\$2,652,016	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,652,016
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3060 - Controls & Instrumentation	\$1,608,907	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,608,907
D40 - Fire Protection	\$0	\$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	\$0	\$858,327
D4020 - Standpipes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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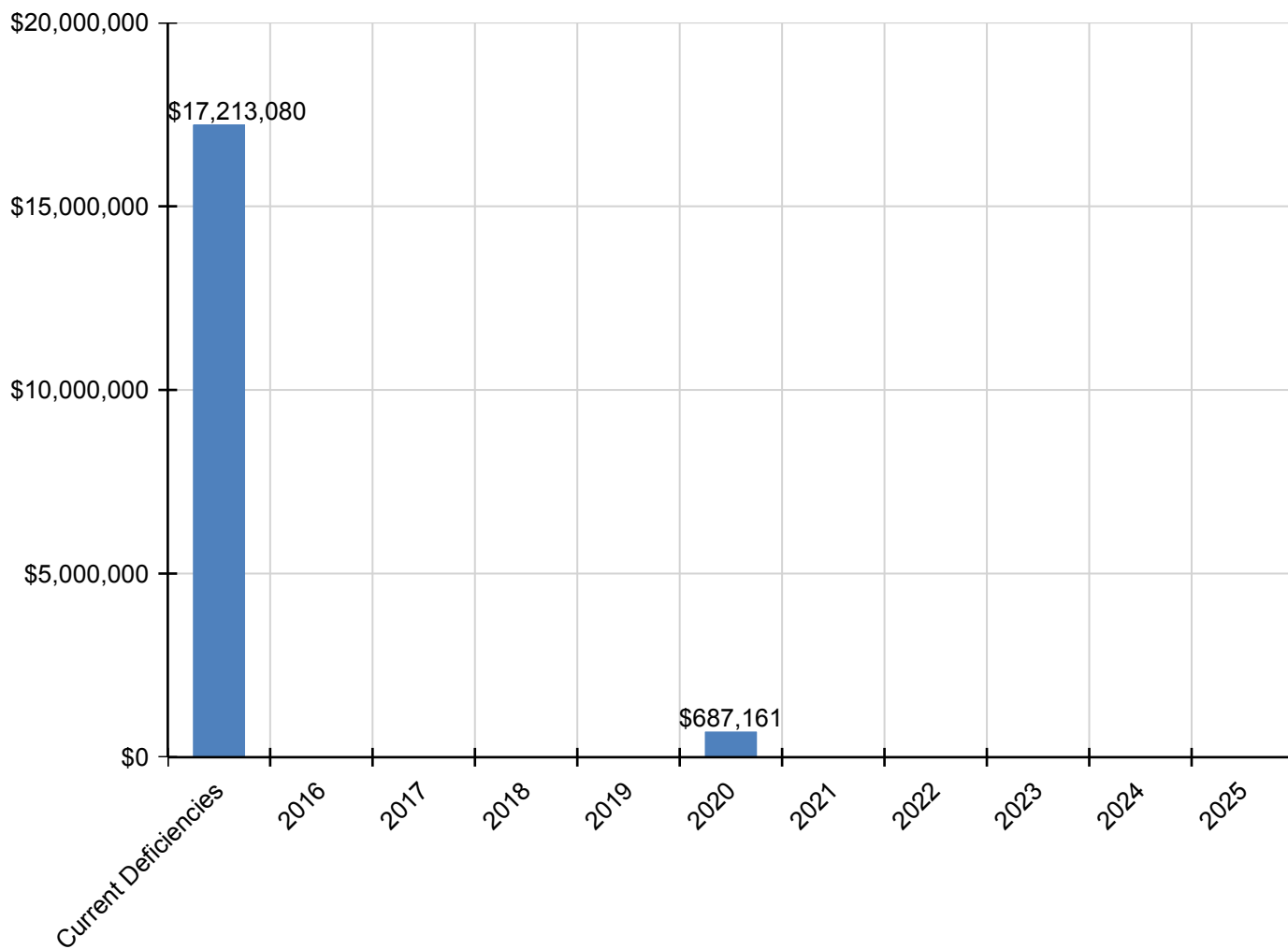
<b>D50 - Electrical</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>D5010 - Electrical Service/Distribution</b>	\$679,157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$679,157
<b>D5020 - Lighting and Branch Wiring</b>	\$1,148,324	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,148,324
<b>D5030 - Communications and Security</b>	\$561,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$561,084
<b>D5090 - Other Electrical Systems</b>	\$272,739	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$272,739
<b>E - Equipment &amp; Furnishings</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>E10 - Equipment</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>E1020 - Institutional Equipment</b>	\$90,802	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,802
<b>E1090 - Other Equipment</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>E20 - Furnishings</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>E2010 - Fixed Furnishings</b>	\$102,480	\$0	\$0	\$0	\$0	\$170,468	\$0	\$0	\$0	\$0	\$0	\$0	\$272,947

\* Indicates non-renewable system



## Forecasted Sustainment Requirement

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

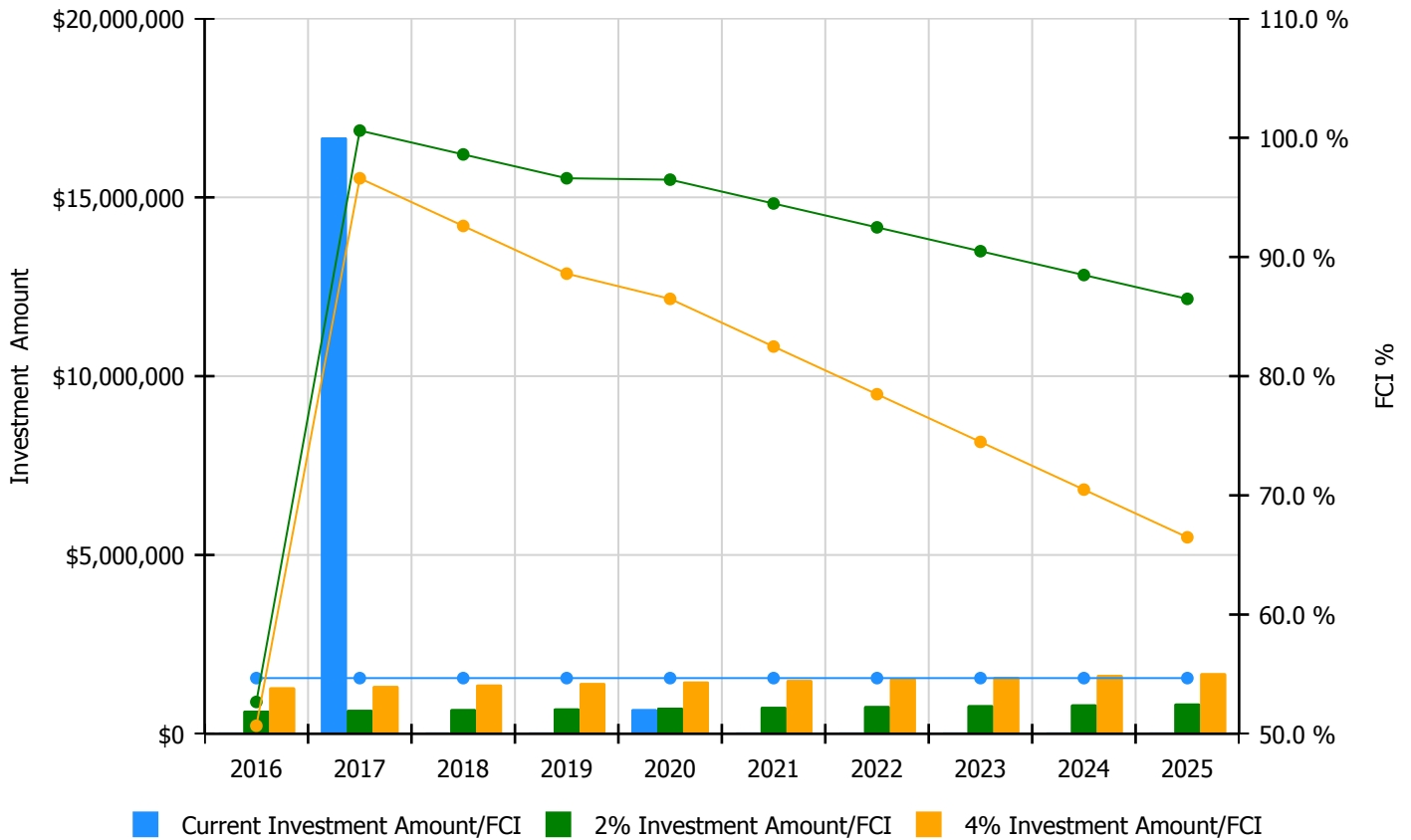


## 10 Year FCI Forecast by Investment Scenario

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

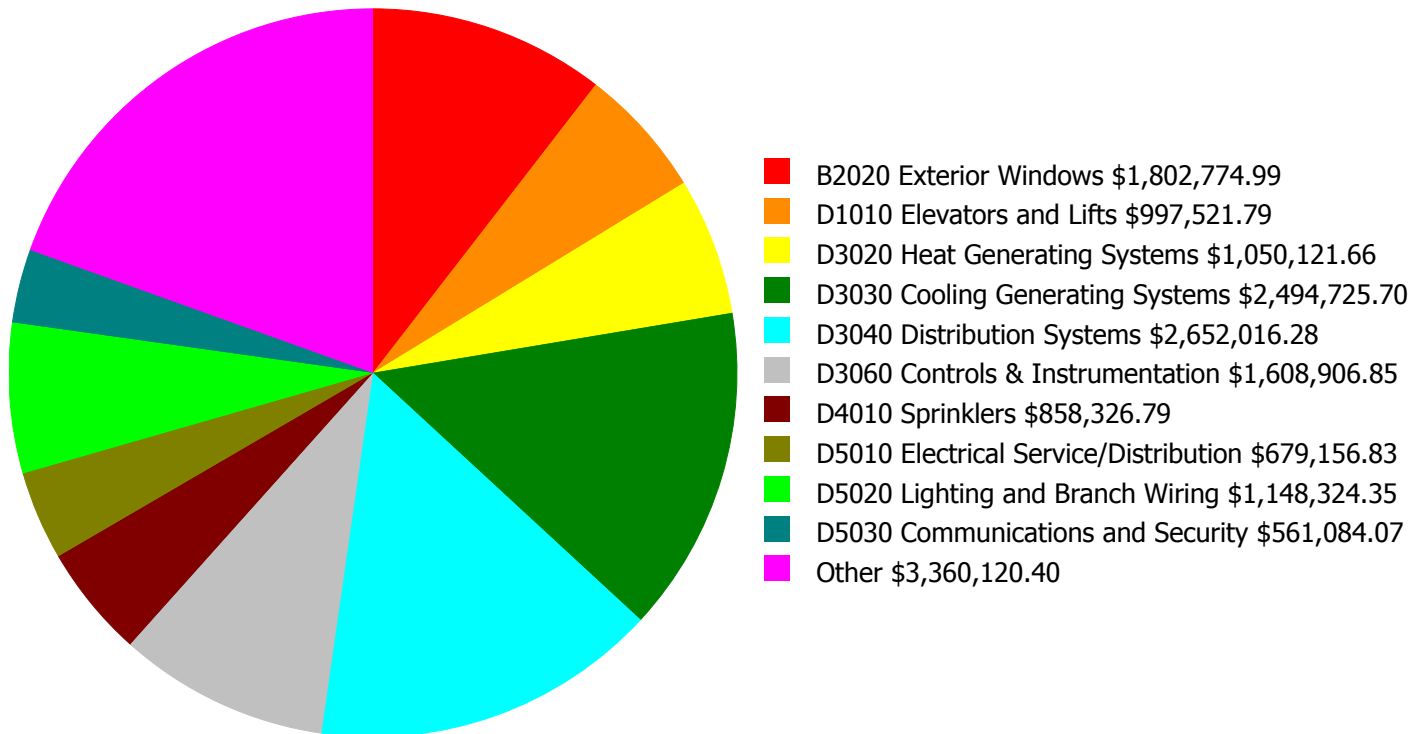
**Facility Investment vs. FCI Forecast**



Year	Investment Amount Current FCI - 54.67%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$648,591.00	52.67 %	\$1,297,181.00	50.67 %
2017	\$16,677,731	\$668,048.00	100.60 %	\$1,336,097.00	96.60 %
2018	\$0	\$688,090.00	98.60 %	\$1,376,179.00	92.60 %
2019	\$0	\$708,732.00	96.60 %	\$1,417,465.00	88.60 %
2020	\$687,161	\$729,994.00	96.48 %	\$1,459,989.00	86.48 %
2021	\$0	\$751,894.00	94.48 %	\$1,503,788.00	82.48 %
2022	\$0	\$774,451.00	92.48 %	\$1,548,902.00	78.48 %
2023	\$0	\$797,685.00	90.48 %	\$1,595,369.00	74.48 %
2024	\$0	\$821,615.00	88.48 %	\$1,643,230.00	70.48 %
2025	\$0	\$846,264.00	86.48 %	\$1,692,527.00	66.48 %
<b>Total:</b>	<b>\$17,364,892</b>	<b>\$7,435,364.00</b>		<b>\$14,870,727.00</b>	

## Deficiency Summary by System

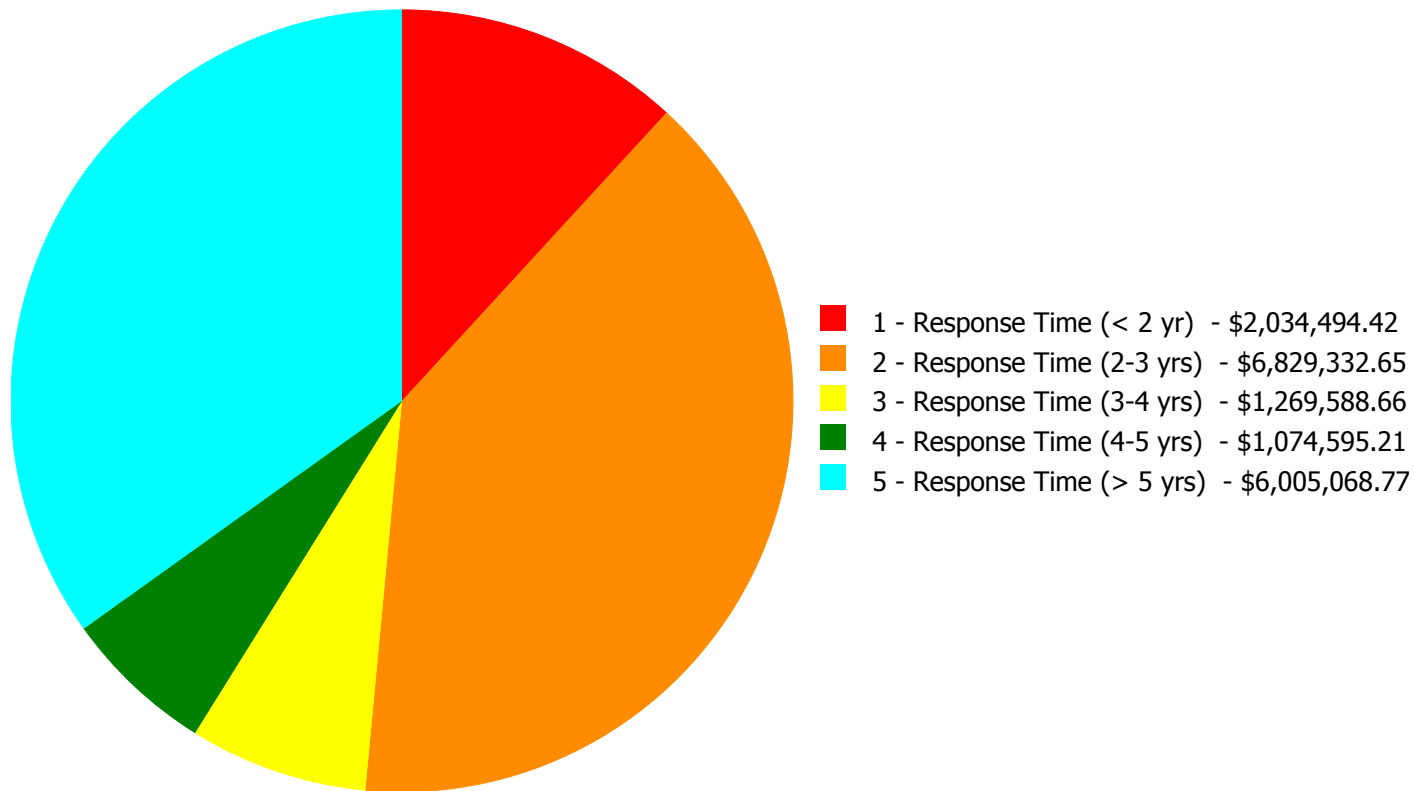
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



**Budget Estimate Total: \$17,213,079.71**

## 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: \$17,213,079.71**

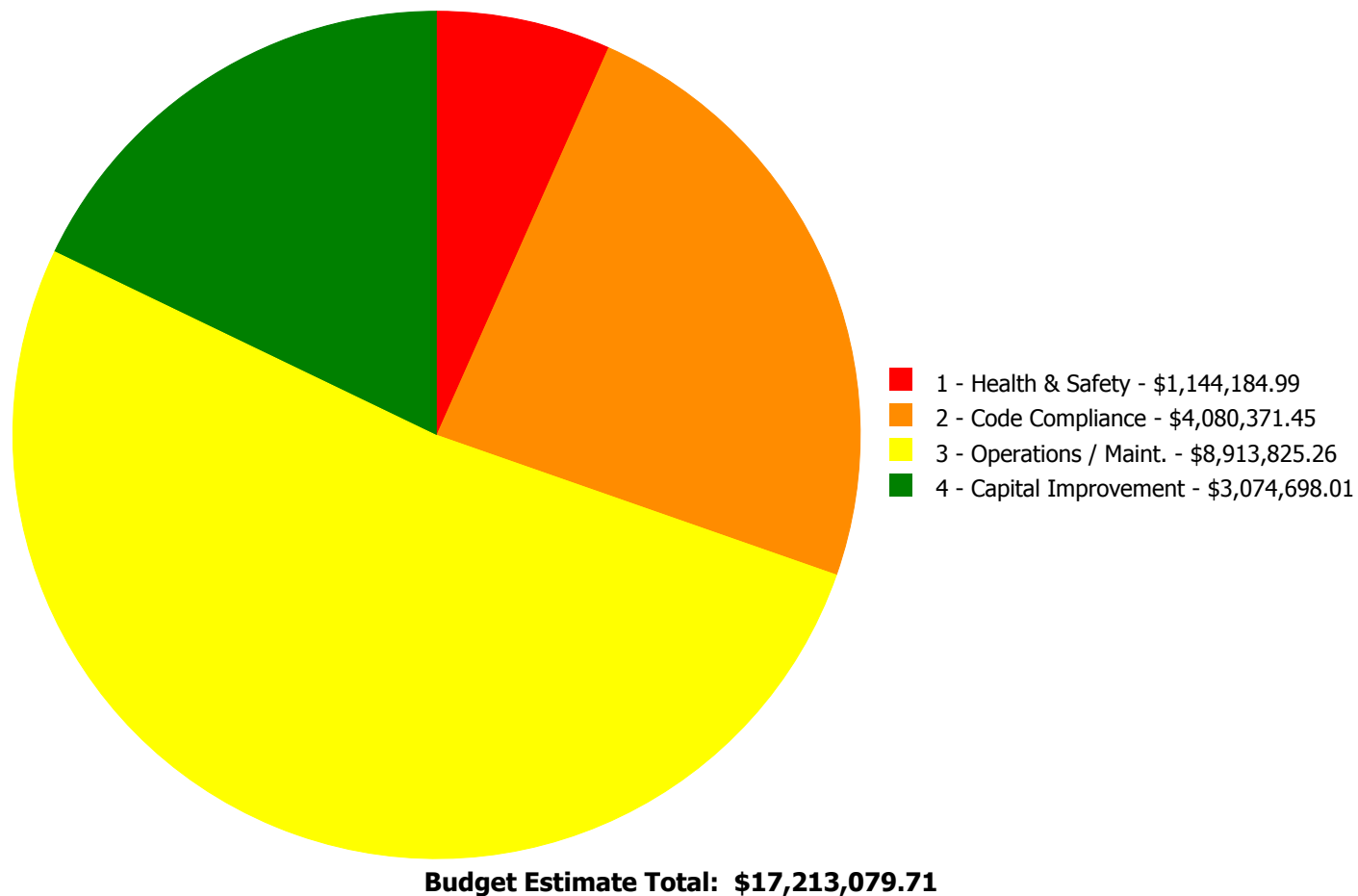
## Deficiency By Priority Investment Table

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	\$1,814.50	\$34,361.93	\$0.00	\$0.00	\$0.00	\$36,176.43
B1010	Floor Construction	\$0.00	\$48,651.21	\$0.00	\$0.00	\$0.00	\$48,651.21
B2010	Exterior Walls	\$0.00	\$230,061.89	\$0.00	\$0.00	\$0.00	\$230,061.89
B2020	Exterior Windows	\$0.00	\$1,802,774.99	\$0.00	\$0.00	\$0.00	\$1,802,774.99
B2030	Exterior Doors	\$0.00	\$129,537.29	\$0.00	\$0.00	\$0.00	\$129,537.29
B3010105	Built-Up	\$50,823.04	\$128,385.84	\$0.00	\$0.00	\$0.00	\$179,208.88
B3010140	Shingle & Tile	\$0.00	\$8,377.57	\$0.00	\$0.00	\$0.00	\$8,377.57
C1010	Partitions	\$0.00	\$72,188.36	\$0.00	\$0.00	\$0.00	\$72,188.36
C1020	Interior Doors	\$0.00	\$377,001.70	\$0.00	\$0.00	\$0.00	\$377,001.70
C1030	Fittings	\$0.00	\$16,975.94	\$0.00	\$0.00	\$0.00	\$16,975.94
C2010	Stair Construction	\$204,258.15	\$0.00	\$0.00	\$0.00	\$0.00	\$204,258.15
C3010230	Paint & Covering	\$0.00	\$109,625.27	\$0.00	\$0.00	\$0.00	\$109,625.27
C3020413	Vinyl Flooring	\$0.00	\$120,175.32	\$0.00	\$0.00	\$0.00	\$120,175.32
C3020414	Wood Flooring	\$0.00	\$333,775.14	\$0.00	\$0.00	\$0.00	\$333,775.14
C3020415	Concrete Floor Finishes	\$0.00	\$61,512.54	\$0.00	\$0.00	\$0.00	\$61,512.54
C3030	Ceiling Finishes	\$0.00	\$527,885.06	\$0.00	\$0.00	\$0.00	\$527,885.06
D1010	Elevators and Lifts	\$0.00	\$997,521.79	\$0.00	\$0.00	\$0.00	\$997,521.79
D2010	Plumbing Fixtures	\$0.00	\$66,795.05	\$0.00	\$0.00	\$0.00	\$66,795.05
D2020	Domestic Water Distribution	\$0.00	\$0.00	\$0.00	\$24,473.55	\$0.00	\$24,473.55
D2030	Sanitary Waste	\$0.00	\$0.00	\$295,080.85	\$0.00	\$0.00	\$295,080.85
D2040	Rain Water Drainage	\$0.00	\$52,339.33	\$0.00	\$0.00	\$0.00	\$52,339.33
D3020	Heat Generating Systems	\$0.00	\$0.00	\$0.00	\$1,050,121.66	\$0.00	\$1,050,121.66
D3030	Cooling Generating Systems	\$0.00	\$0.00	\$0.00	\$0.00	\$2,494,725.70	\$2,494,725.70
D3040	Distribution Systems	\$0.00	\$0.00	\$0.00	\$0.00	\$2,652,016.28	\$2,652,016.28
D3060	Controls & Instrumentation	\$0.00	\$1,608,906.85	\$0.00	\$0.00	\$0.00	\$1,608,906.85
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$0.00	\$858,326.79	\$858,326.79
D5010	Electrical Service/Distribution	\$679,156.83	\$0.00	\$0.00	\$0.00	\$0.00	\$679,156.83
D5020	Lighting and Branch Wiring	\$419,327.38	\$0.00	\$728,996.97	\$0.00	\$0.00	\$1,148,324.35
D5030	Communications and Security	\$561,084.07	\$0.00	\$0.00	\$0.00	\$0.00	\$561,084.07
D5090	Other Electrical Systems	\$27,227.96	\$0.00	\$245,510.84	\$0.00	\$0.00	\$272,738.80
E1020	Institutional Equipment	\$90,802.49	\$0.00	\$0.00	\$0.00	\$0.00	\$90,802.49
E2010	Fixed Furnishings	\$0.00	\$102,479.58	\$0.00	\$0.00	\$0.00	\$102,479.58
Total:		\$2,034,494.42	\$6,829,332.65	\$1,269,588.66	\$1,074,595.21	\$6,005,068.77	\$17,213,079.71

## 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:



## 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: A2020 - Basement Walls



**Location:** basement

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Repair cracks in foundation walls - pick the appropriate repair and insert the LF

**Qty:** 100.00

**Unit of Measure:** L.F.

**Estimate:** \$1,814.50

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair structural crack in foundation wall –chase out concrete, patch with concrete (100ft)

#### System: B3010105 - Built-Up



**Location:** portable building

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Remove and Replace Built Up Roof

**Qty:** 1,500.00

**Unit of Measure:** S.F.

**Estimate:** \$50,823.04

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Replace roof on portable building (1500sf)

**System: C2010 - Stair Construction**



**Location:** stairways auditorium lobby

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**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:** \$140,427.23

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove and replace stairway handrails and guards and guards and guards at auditorium entrance with code compliant systems (3) 4 story;=25x12=300lf wall mounted handrails and center mounted rails and balustrade; + 50ft @ auditorium

---

**System: C2010 - Stair Construction**



**Location:** exterior stairs

**Distress:** Failing

**Category:** 3 - Operations / Maint.

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Repair exterior stairs

**Qty:** 50.00

**Unit of Measure:** Riser

**Estimate:** \$48,238.22

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Reset treads, regrout all joints between limestone block tread/risers, repair brick on sides of stairs at exterior stairs (50 treads)

---



**System: C2010 - Stair Construction**



**Location:** exterior stairs  
**Distress:** Damaged  
**Category:** 3 - Operations / Maint.  
**Priority:** 1 - Response Time (< 2 yr)  
**Correction:** Replace inadequate or install proper stair railing - select appropriate material  
**Qty:** 100.00  
**Unit of Measure:** L.F.  
**Estimate:** \$15,592.70  
**Assessor Name:** System  
**Date Created:** 09/03/2015

**Notes:** Replace handrails at reconstructed exterior stairs (1000lf)

---

**System: D5010 - Electrical Service/Distribution**



**Location:** Boiler Room in the basement  
**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:** \$365,053.68  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**Notes:** Upgrade the existing electrical service entrance. Replace the existing incoming and distribution switchboard with new 1200A, 480/277, 3PH, 4 wire switchboards.

---

**System: D5010 - Electrical Service/Distribution**



**Location:** Entire Building  
**Distress:** Building / MEP Codes  
**Category:** 3 - Operations / Maint.  
**Priority:** 1 - Response Time (< 2 yr)  
**Correction:** Replace Electrical Distribution System (U)  
**Qty:** 1.00  
**Unit of Measure:** Ea.  
**Estimate:** \$314,103.15  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**Notes:** Replace the entire distribution system with new panel boards and new feeders. Provide arc flash label on the all panel boards. Estimated, 16 panel boards.

---

**System: D5020 - Lighting and Branch Wiring**



**Location:** Entire Building  
**Distress:** Inadequate  
**Category:** 4 - Capital Improvement  
**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:** \$417,679.81  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**Notes:** Install minimum two receptacles in each wall of class rooms. It is recommend that surface mounted raceway with tow-compartment, for data and power, be installed in the computer lab room.

---

**System: D5020 - Lighting and Branch Wiring**



**Location:** Portable Building  
**Distress:** Life Safety / NFPA / PFD  
**Category:** 1 - Health & Safety  
**Priority:** 1 - Response Time (< 2 yr)  
**Correction:** Replace Wiring Device  
**Qty:** 10.00  
**Unit of Measure:** Ea.  
**Estimate:** \$1,647.57  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**Notes:** Replace existing receptacle with GFCI receptacle in the areas subject to kid access in portable building. Estimated 10 each.

---

**System: D5030 - Communications and Security**



**Location:** 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:** \$324,719.29  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**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

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Add/Replace Clock System or Components

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$164,874.77

**Assessor Name:** System

**Date Created:** 08/13/2015

**Notes:** Replace existing master clock system.

---

**System: D5030 - Communications and Security**

This deficiency has no image.

**Location:** Auditorium

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Add/Replace Sound System

**Qty:** 1.00

**Unit of Measure:** LS

**Estimate:** \$44,392.64

**Assessor Name:** System

**Date Created:** 08/13/2015

**Notes:** Provide new sound system including a freestanding 19" rack backstage with mixer per 3amplifiers, CD player, cassette player, AM-FM radio, graphic or parametric equalizer, and receivers for wireless microphone.

---

**System: D5030 - Communications and Security**

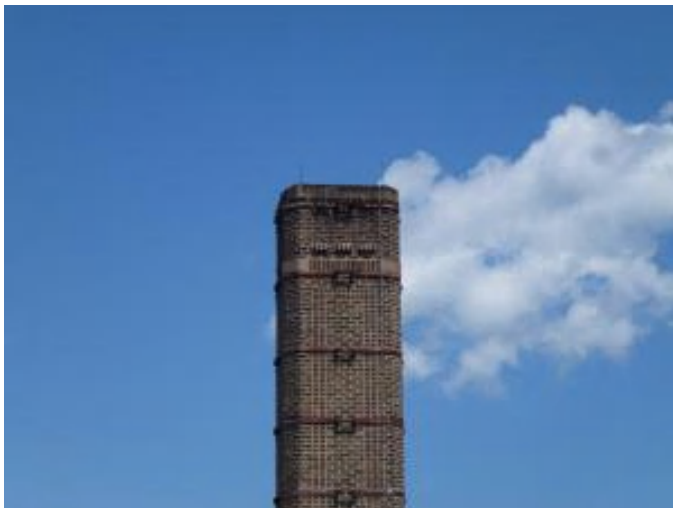


**Location:** Exterior Building  
**Distress:** Inadequate  
**Category:** 4 - Capital Improvement  
**Priority:** 1 - Response Time (< 2 yr)  
**Correction:** Add/Replace Video Surveillance System  
**Qty:** 1.00  
**Unit of Measure:** Ea.  
**Estimate:** \$27,097.37  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**Notes:** Provide sufficient number of cameras on portable building exterior wall and connect them to main building CCTV system. Estimated 3each

---

**System: D5090 - Other Electrical Systems**



**Location:** Roof  
**Distress:** Life Safety / NFPA / PFD  
**Category:** 1 - Health & Safety  
**Priority:** 1 - Response Time (< 2 yr)  
**Correction:** Repair Lightning Protection System  
**Qty:** 1.00  
**Unit of Measure:** Job  
**Estimate:** \$27,227.96  
**Assessor Name:** System  
**Date Created:** 08/13/2015

**Notes:** Provide lightning protection studies to ascertain adequacy of existing systems.

---

**System: E1020 - Institutional Equipment**



**Location:** Auditorium

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Add/Replace Stage Theatrical Lighting System

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$90,802.49

**Assessor Name:** System

**Date Created:** 08/13/2015

**Notes:** Provide new stage lighting and controller in Auditorium.

---



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

**System: A2020 - Basement Walls**



**Location:** basement

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Repair concrete wall in poor condition including rebar dowelling - insert the SF of wall area

**Qty:** 100.00

**Unit of Measure:** S.F.

**Estimate:** \$22,907.96

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair structural crack in foundation wall –chase out concrete, patch with concrete (100ft)

---

**System: A2020 - Basement Walls**



**Location:** portable building

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Repair concrete wall in poor condition including rebar dowelling - insert the SF of wall area

**Qty:** 50.00

**Unit of Measure:** S.F.

**Estimate:** \$11,453.97

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair structural crack in Portable Building foundation wall –chase out concrete, patch with concrete (50ft)

---

**System: B1010 - Floor Construction**



**Location:** exterior stair towers

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Repair rebar and epoxy grout exposed rebar on the underside of floors and floor beams

**Qty:** 600.00

**Unit of Measure:** S.F.

**Estimate:** \$48,651.21

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair spalling concrete ceilings (landing platforms) in 2 exterior exit stairways all 3 floors (600sf)

---

**System: B2010 - Exterior Walls**



**Location:** basement windows and doorways

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replacing failing steel lintels in brick wall construction

**Qty:** 400.00

**Unit of Measure:** L.F.

**Estimate:** \$191,210.01

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove and replace all lintels and cracked masonry at basement windows and grade exit doorways and rooftop structures (80)

---



**System: B2010 - Exterior Walls**



**Location:** brick exterior walls

**Distress:** Building Envelope Integrity

**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:** 1,000.00

**Unit of Measure:** S.F.

**Estimate:** \$32,289.47

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repoint cracked brickwork on roof top structures and attic level windows (1500sf)

---

**System: B2010 - Exterior Walls**



**Location:** Front Street side of bldg

**Distress:** Appearance

**Category:** 3 - Operations / Maint.

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

**Correction:** Sooty and dirty walls - powerwash

**Qty:** 6,000.00

**Unit of Measure:** S.F.

**Estimate:** \$6,562.41

**Assessor Name:** System

**Date Created:** 09/04/2015

**Notes:** Powerwash front entrance and elevation facing Front Street (6000sf)

---

**System: B2020 - Exterior Windows**



**Location:** exterior walls

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 300.00

**Unit of Measure:** Ea.

**Estimate:** \$1,802,774.99

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Replace all exterior windows with insulated single hung units (300)3.5x8 ave size

---

**System: B2030 - Exterior Doors**



**Location:** exterior walls

**Distress:** Building Envelope Integrity

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replace exterior doors - per leaf

**Qty:** 16.00

**Unit of Measure:** Ea.

**Estimate:** \$129,537.29

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Replace all exterior doors with ADA and code compliant exit hardware; repaint doors and frames.(16)3x7

---

**System: B3010105 - Built-Up**



**Location:** building roof - coping

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replace or replace parapet caps - BUR

**Qty:** 1,500.00

**Unit of Measure:** L.F.

**Estimate:** \$128,385.84

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Provide new aluminum coping on top of terra cotta coping (1500ft)

---

**System: B3010140 - Shingle & Tile**



**Location:** auditorium roof

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Rain gutter replacment - select the type of material and number of mitres

**Qty:** 250.00

**Unit of Measure:** L.F.

**Estimate:** \$8,377.57

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair metal gutter trough over auditorium (250lf)

---

**System: C1010 - Partitions**



**Location:** classrooms

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 3,000.00

**Unit of Measure:** S.F.

**Estimate:** \$66,838.49

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove folding wood partitions; replace with gypsum board and metal stud walls (9) @300sf ea =2700sf

---

**System: C1010 - Partitions**



**Location:** corridors, above classroom doors

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

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

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

**Qty:** 200.00

**Unit of Measure:** S.F.

**Estimate:** \$5,349.87

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove non-rated glass panels between classrooms and corridors; fill with fire rated gyp bd sys. (30 @ 6sf)

---

**System: C1020 - Interior Doors**



**Location:** classrooms and offices

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

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

**Correction:** Remove and replace interior doors - wood doors with wood frame - per leaf

**Qty:** 50.00

**Unit of Measure:** Ea.

**Estimate:** \$232,716.95

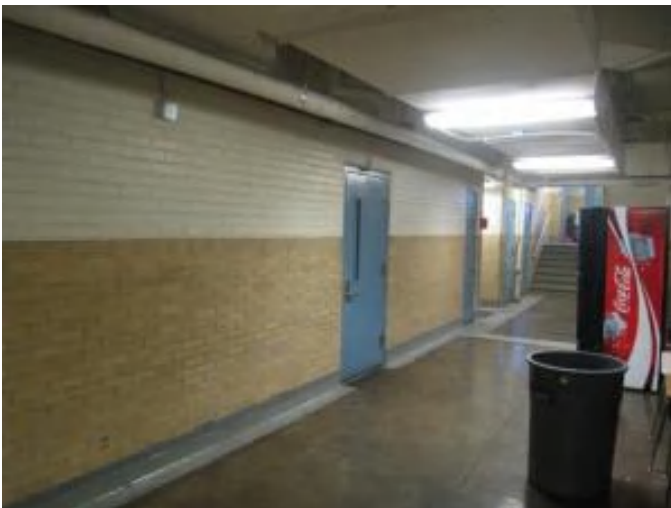
**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove and replace all wood interior doors, frames and hardware in classrooms and offices, etc. with fire rated doors with fire rated glazing (50)

---

**System: C1020 - Interior Doors**



**Location:** basement

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replace hollow metal frames and doors

**Qty:** 18.00

**Unit of Measure:** Ea.

**Estimate:** \$91,403.77

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove and replace all basement steel doors, frames, and hardware in mechanical rooms and stairways (18 3x7 doors)

---



**System: C1020 - Interior Doors**



**Location:** interior rooms

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Refinish interior doors

**Qty:** 50.00

**Unit of Measure:** Ea.

**Estimate:** \$41,409.15

**Assessor Name:** System

**Date Created:** 12/14/2015

**Notes:** Refinish worn closet and other interior classroom doors (50 doors)

---

**System: C1020 - Interior Doors**



**Location:** classrooms and offices

**Distress:** Security Issue

**Category:** 1 - Health & Safety

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

**Correction:** Provide security hardware for classroom and office doors

**Qty:** 50.00

**Unit of Measure:** Ea.

**Estimate:** \$11,471.83

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Provide security hardware on classrooms and offices (50sets)

---

**System: C1030 - Fittings**



**Location:** toilet rooms (upstairs)

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

**Correction:** Replace toilet accessories - select accessories and quantity

**Qty:** 6.00

**Unit of Measure:** Ea.

**Estimate:** \$16,975.94

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Provide toilet room accessories (6 sets)

---

**System: C3010230 - Paint & Covering**



**Location:** interior walls

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 10,000.00

**Unit of Measure:** S.F.

**Estimate:** \$72,115.26

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair water damage, cracks, and repaint all interior plaster walls and ceilings (10,000sf)

---

**System: C3010230 - Paint & Covering**



**Location:** basement - boiler room

**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:** 5,000.00

**Unit of Measure:** S.F.

**Estimate:** \$37,510.01

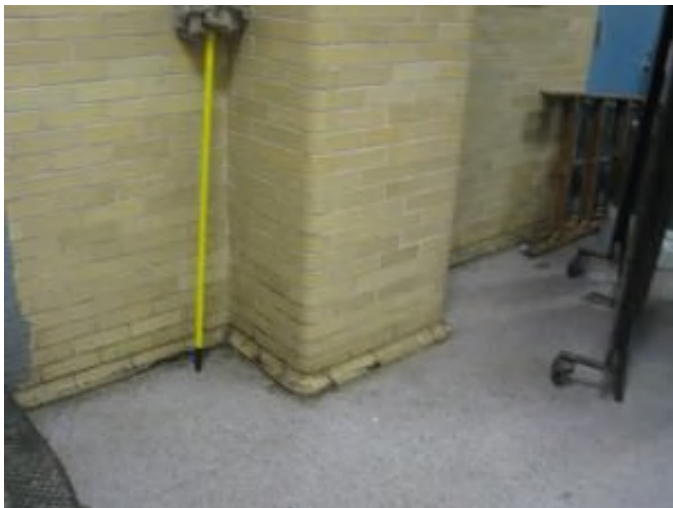
**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Strip and repaint concrete foundation (basement) walls in mechanical rooms (5,000sf)

---

**System: C3020413 - Vinyl Flooring**



**Location:** misc rooms and gym

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replace VCT

**Qty:** 10,000.00

**Unit of Measure:** S.F.

**Estimate:** \$120,175.32

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Remove and replace all 12"x12" VCT floors in gymnasium and other rooms (10,000sf)

---



**System: C3020414 - Wood Flooring**



**Location:** classrooms and offices

**Distress:** Appearance

**Category:** 3 - Operations / Maint.

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

**Correction:** Refinish wood floors

**Qty:** 30,000.00

**Unit of Measure:** S.F.

**Estimate:** \$323,008.20

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Strip, sand, repair and refinish all wood floors in classrooms and in auditorium (7000sf x 3.5 + 6000 = 30000sf)

---

**System: C3020414 - Wood Flooring**



**Location:** auditorium walls

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

**Correction:** Refinish wood floors

**Qty:** 1,000.00

**Unit of Measure:** S.F.

**Estimate:** \$10,766.94

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair and refinish wood panels (wainscot) in auditorium (1000sf)

---

**System: C3020415 - Concrete Floor Finishes**



**Location:** all floors

**Distress:** Appearance

**Category:** 3 - Operations / Maint.

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

**Correction:** Clean and reseal concrete floors

**Qty:** 16,000.00

**Unit of Measure:** S.F.

**Estimate:** \$61,512.54

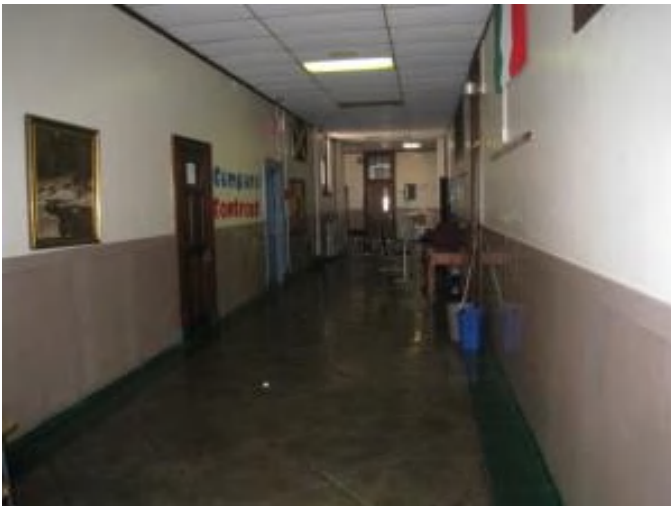
**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Clean and repaint basement floor in mechanical rooms; clean and reseal concrete floors in hallways and stairways (16000sf)

---

**System: C3030 - Ceiling Finishes**



**Location:** entire building except basement and auditorium

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 35,000.00

**Unit of Measure:** S.F.

**Estimate:** \$527,885.06

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Replace all 2x4 acoustical tile ceilings (45,000sf)

---

**System: D1010 - Elevators and Lifts**

This deficiency has no image.

**Location:** corridor

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

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

**Correction:** Add external 5 stop elevator - adjust the electrical run lengths to hook up the elevator

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$997,521.79

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** add elevator (4-5 stop); provide access to 3 floors, basement, and auditorium

---

**System: D2010 - Plumbing Fixtures**



**Location:** Throughout the building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replace or replace wall hung urinals

**Qty:** 12.00

**Unit of Measure:** Ea.

**Estimate:** \$39,829.00

**Assessor Name:** System

**Date Created:** 10/12/2015

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

---

**System: D2010 - Plumbing Fixtures**



**Location:** Throughout the building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$15,692.89

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Replace of all drinking fountains in the Main building. These units are well beyond their service life and most are NOT accessible type.

---

**System: D2010 - Plumbing Fixtures**



**Location:** Throughout the building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$7,462.15

**Assessor Name:** System

**Date Created:** 10/12/2015

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

---

**System: D2010 - Plumbing Fixtures**



**Location:** Throughout the building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$3,811.01

**Assessor Name:** System

**Date Created:** 10/12/2015

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

---

**System: D2040 - Rain Water Drainage**



**Location:** Roof

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

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

**Correction:** Create new overflow scupper through a parapet with up to 100' downspout

**Qty:** 5.00

**Unit of Measure:** Ea.

**Estimate:** \$52,339.33

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Add roof overflow drains to the main building to provide a secondary means of drainage.

---



**System: D3060 - Controls & Instrumentation**



**Location:** 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:** 75,000.00

**Unit of Measure:** S.F.

**Estimate:** \$1,608,906.85

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Provide a new building automation system in the main building (BAS) with communication interface to the preferred system in use throughout the District.

---

**System: E2010 - Fixed Furnishings**



**Location:** auditorium

**Distress:** Damaged

**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:** 400.00

**Unit of Measure:** Ea.

**Estimate:** \$102,479.58

**Assessor Name:** System

**Date Created:** 09/03/2015

**Notes:** Repair operation and refinish (sand, stain, varnish) damaged folding wood auditorium chairs (400);

---

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

**System: D2030 - Sanitary Waste**



**Location:** Throughout the building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 60,150.00

**Unit of Measure:** S.F.

**Estimate:** \$295,080.85

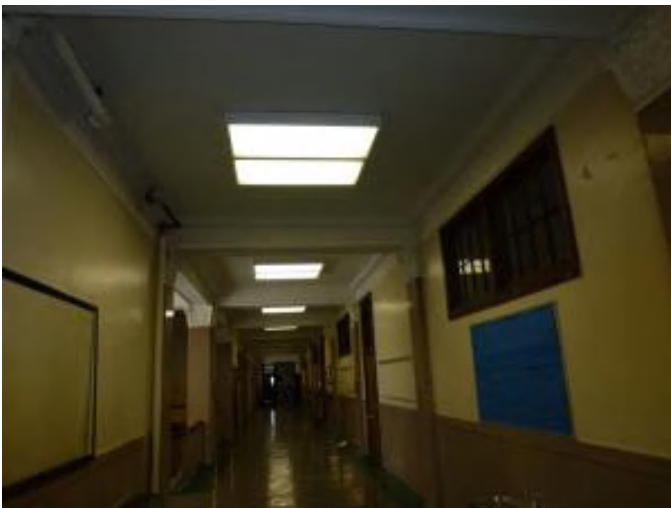
**Assessor Name:** System

**Date Created:** 10/12/2015

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

---

**System: D5020 - Lighting and Branch Wiring**



**Location:** Entire Building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Replace Lighting Fixtures (SF)

**Qty:** 1.00

**Unit of Measure:** S.F.

**Estimate:** \$728,996.97

**Assessor Name:** System

**Date Created:** 08/13/2015

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

---

**System: D5090 - Other Electrical Systems**

This deficiency has no image.

**Location:** B727001;Finletter

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

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

**Correction:** Add Standby Generator System

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$245,510.84

**Assessor Name:** System

**Date Created:** 09/24/2015

**Notes:** Install a new emergency power system including 100KW diesel generator and respective transfer switch.

---



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

**System: D2020 - Domestic Water Distribution**



**Location:** Boiler Mechanical Equipment Room

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Replace instantaneous water heater

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$24,473.55

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Install new hot water heaters in the main building.

---

**System: D3020 - Heat Generating Systems**



**Location:** Boiler Mechanical Equipment Room

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 2.00

**Unit of Measure:** Ea.

**Estimate:** \$1,050,121.66

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Remove existing steam boilers.

---

**Priority 5 - Response Time (> 5 yrs):**

**System: D3030 - Cooling Generating Systems**

This deficiency has no image.

**Location:** Main building

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Install chilled water system with distribution piping and pumps. (+150KSF)

**Qty:** 150,000.00

**Unit of Measure:** S.F.

**Estimate:** \$2,494,725.70

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Install chiller and chilled water distribution system.

---

**System: D3040 - Distribution Systems**



**Location:** Throughout the building

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

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

**Qty:** 20.00

**Unit of Measure:** C

**Estimate:** \$1,661,219.77

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Install unit ventilators in all classrooms. 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. Install steam converters in the existing boiler room with circulating pumps, distribution piping and controls to provide heating hot water for the new coils.

---

**System: D3040 - Distribution Systems**



**Location:** Cafeteria

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

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

**Qty:** 850.00

**Unit of Measure:** Pr.

**Estimate:** \$397,410.06

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Install AHUs to condition the cafeteria. Provide ventilation, heating and cooling for the Cafeteria by removing the electric convection heaters and installing a package rooftop constant volume air handling unit with distribution ductwork and registers for supply and return air.

---

**System: D3040 - Distribution Systems**

This deficiency has no image.

**Location:** Gymnasium

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

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

**Qty:** 6,000.00

**Unit of Measure:** Ea.

**Estimate:** \$308,301.04

**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Install AHUs to condition the gymnasium. Provide ventilation, heating and cooling for the Auditorium by installing a package rooftop constant volume air handling unit with distribution ductwork and registers.

---

**System: D3040 - Distribution Systems**



**Location:** Auditorium

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**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

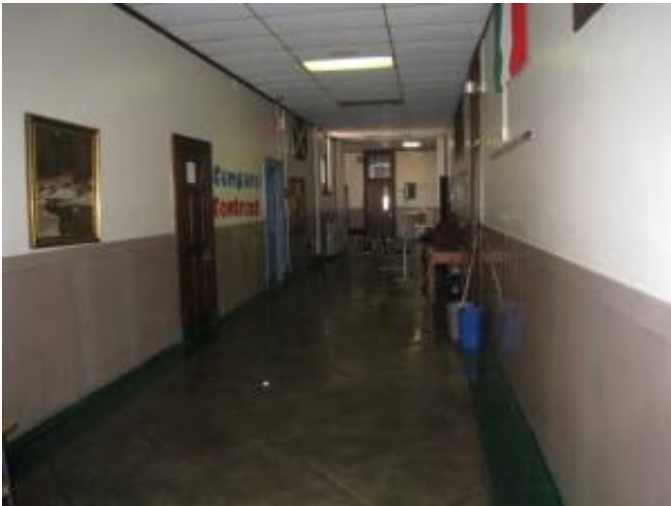
**Assessor Name:** System

**Date Created:** 10/12/2015

**Notes:** Install AHUs to condition the auditorium. Provide ventilation, heating and cooling for the Auditorium by installing a package rooftop constant volume air handling unit with distribution ductwork and registers.

---

**System: D4010 - Sprinklers**



**Location:** Throughout the building

**Distress:** Life Safety / NFPA / PFD

**Category:** 1 - Health & Safety

**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:** System

**Date Created:** 10/12/2015

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

---

## 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, oil fired, flame retention burner, cast iron, steam, gross output, 4940 MBH, includes standard controls and insulated flush jacket, packaged	2.00	Ea.	Boiler Mechanical Equipment Room	Weil McLain	1994			35			\$103,881.00	\$228,538.20
D3020 Heat Generating Systems	Boiler, oil fired, flame retention burner, cast iron, steam, gross output, 4940 MBH, includes standard controls and insulated flush jacket, packaged	2.00	Ea.	Boiler Mechanical Equipment Room	Weil McLain	1994			35			\$103,881.00	\$228,538.20
D5010 Electrical Service/Distribution	Panelboards, 3 pole 3 wire, main circuit breaker, 240 V, 225 amp	1.00	Ea.						30	1930	2017	\$3,105.00	\$3,415.50
<b>Total:</b>												<b>\$460,491.90</b>	



## 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	82.00 %	0.00 %	\$0.00
A20 - Basement Construction	82.00 %	0.00 %	\$0.00
B10 - Superstructure	82.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	72.15 %	6.81 %	\$74,556.10
B30 - Roofing	25.44 %	0.00 %	\$0.00
C10 - Interior Construction	72.67 %	0.86 %	\$4,588.73
C20 - Stairs	82.00 %	0.00 %	\$0.00
C30 - Interior Finishes	40.04 %	0.29 %	\$3,483.08
D20 - Plumbing	44.94 %	0.00 %	\$0.00
D30 - HVAC	47.38 %	17.98 %	\$470,487.24
D40 - Fire Protection	48.57 %	7.90 %	\$16,739.78
D50 - Electrical	45.89 %	21.78 %	\$301,096.28
E10 - Equipment	48.57 %	0.00 %	\$0.00
E20 - Furnishings	55.00 %	0.00 %	\$0.00
<b>Totals:</b>	<b>59.30 %</b>	<b>6.26 %</b>	<b>\$870,951.21</b>



## 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 the system 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.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$572,079
A1030	Slab on Grade	\$15.51	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$364,842
A2010	Basement Excavation	\$13.07	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$307,446
A2020	Basement Walls	\$23.02	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$541,499
B1010	Floor Construction	\$92.20	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$2,168,821
B1020	Roof Construction	\$24.11	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$567,140
B2010	Exterior Walls	\$31.22	S.F.	23,523	100	1997	2097		82.00 %	2.27 %	82		\$16,648.09	\$734,388
B2020	Exterior Windows	\$13.63	S.F.	23,523	40	1997	2037		55.00 %	16.76 %	22		\$53,727.22	\$320,618
B2030	Exterior Doors	\$1.67	S.F.	23,523	25	1997	2022		28.00 %	10.64 %	7		\$4,180.79	\$39,283
B3010105	Built-Up	\$37.76	S.F.		20				0.00 %	0.00 %				\$0
B3010120	Single Ply Membrane	\$38.73	S.F.		20				0.00 %	0.00 %				\$0
B3010130	Preformed Metal Roofing	\$54.22	S.F.	500	30	1997	2027		40.00 %	0.00 %	12			\$27,110
B3010140	Shingle & Tile	\$38.73	S.F.	23,023	20	1997	2017	2020	25.00 %	0.00 %	5			\$891,681
B3020	Roof Openings	\$0.68	S.F.	23,523	20	1997	2017	2020	25.00 %	0.00 %	5			\$15,996
C1010	Partitions	\$14.93	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$351,198
C1020	Interior Doors	\$3.76	S.F.	23,523	40	1997	2037		55.00 %	5.19 %	22		\$4,588.73	\$88,446
C1030	Fittings	\$4.12	S.F.	23,523	40	1997	2037		55.00 %	0.00 %	22			\$96,915
C2010	Stair Construction	\$1.28	S.F.	23,523	100	1997	2097		82.00 %	0.00 %	82			\$30,109

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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.	23,523	10	1997	2007	2020	50.00 %	0.00 %	5			\$310,739
C3010231	Vinyl Wall Covering	\$0.97	S.F.	23,523	15				0.00 %	0.00 %				\$22,817
C3010232	Wall Tile	\$2.63	S.F.	23,523	30				0.00 %	0.00 %				\$61,865
C3020411	Carpet	\$7.30	S.F.	6,000	10	1997	2007	2027	120.00 %	0.00 %	12			\$43,800
C3020412	Terrazzo & Tile	\$75.52	S.F.	1,500	50	1997	2047		64.00 %	0.00 %	32			\$113,280
C3020413	Vinyl Flooring	\$9.68	S.F.	15,000	20	1997	2017	2023	40.00 %	2.07 %	8		\$3,004.38	\$145,200
C3020414	Wood Flooring	\$22.27	S.F.		25				0.00 %	0.00 %				\$0
C3020415	Concrete Floor Finishes	\$0.97	S.F.	1,023	50	1997	2047		64.00 %	0.00 %	32			\$992
C3030	Ceiling Finishes	\$20.97	S.F.	23,523	25	1997	2022		28.00 %	0.10 %	7		\$478.70	\$493,277
D2010	Plumbing Fixtures	\$31.58	S.F.	23,523	35	1997	2032		48.57 %	0.00 %	17			\$742,856
D2020	Domestic Water Distribution	\$2.90	S.F.	23,523	25	1997	2022		28.00 %	0.00 %	7			\$68,217
D2030	Sanitary Waste	\$2.90	S.F.	23,523	25	1997	2022		28.00 %	0.00 %	7			\$68,217
D2040	Rain Water Drainage	\$3.29	S.F.	23,523	30	1997	2027		40.00 %	0.00 %	12			\$77,391
D3020	Heat Generating Systems	\$18.67	S.F.	23,523	35	1997	2032		48.57 %	0.00 %	17			\$439,174
D3030	Cooling Generating Systems	\$24.48	S.F.	23,523	30	1997	2027		40.00 %	8.54 %	12		\$49,157.36	\$575,843
D3040	Distribution Systems	\$42.99	S.F.	23,523	25	1997	2022		28.00 %	0.00 %	7			\$1,011,254
D3050	Terminal & Package Units	\$11.60	S.F.	23,523	20	1997	2017	2027	60.00 %	0.00 %	12			\$272,867
D3060	Controls & Instrumentation	\$13.50	S.F.	23,523	20	1997	2017	2037	110.00 %	132.68 %	22		\$421,329.88	\$317,561
D4010	Sprinklers	\$8.02	S.F.	23,523	35	1997	2032		48.57 %	8.87 %	17		\$16,739.78	\$188,654
D4020	Standpipes	\$0.99	S.F.	23,523	35	1997	2032		48.57 %	0.00 %	17			\$23,288
D5010	Electrical Service/Distribution	\$9.70	S.F.	23,523	30	1997	2027	2027	40.00 %	0.00 %	12			\$228,173
D5020	Lighting and Branch Wiring	\$34.68	S.F.	23,523	20	1997	2017	2022	35.00 %	2.02 %	7		\$16,475.74	\$815,778
D5030	Communications and Security	\$12.99	S.F.	23,523	15	1997	2012	2027	80.00 %	93.15 %	12		\$284,620.54	\$305,564
D5090	Other Electrical Systems	\$1.41	S.F.	23,523	30	1997	2027	2027	40.00 %	0.00 %	12			\$33,167
E1020	Institutional Equipment	\$4.82	S.F.	23,523	35	1997	2032		48.57 %	0.00 %	17			\$113,381
E1090	Other Equipment	\$11.10	S.F.	23,523	35	1997	2032		48.57 %	0.00 %	17			\$261,105
E2010	Fixed Furnishings	\$2.13	S.F.	23,523	40	1997	2037		55.00 %	0.00 %	22			\$50,104
<b>Total</b>									<b>59.30 %</b>	<b>6.26 %</b>			<b>\$870,951.21</b>	<b>\$13,902,135</b>

## 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.

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**System:** C3010 - Wall Finishes This system contains no images  
**Note:** paint 100%

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**System:** C3020 - Floor Finishes This system contains no images  
**Note:** concrete: 1,023 - 4%  
carpet: 6,000 - 25%  
VCT: 15,000 - 65%  
CT: 1,500 - 6%

## 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
<b>Total:</b>	<b>\$870,951</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,553,725</b>	<b>\$0</b>	<b>\$3,376,775</b>	<b>\$202,329</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,003,780</b>
<b>* A - Substructure</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>* A10 - Foundations</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A1010 - Standard Foundations</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A1030 - Slab on Grade</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>* A20 - Basement Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A2010 - Basement Excavation</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>A2020 - Basement Walls</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B - Shell</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B10 - Superstructure</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B1010 - Floor Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B1020 - Roof Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B20 - Exterior Enclosure</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B2010 - Exterior Walls</b>	\$16,648	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,648
<b>B2020 - Exterior Windows</b>	\$53,727	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$53,727
<b>B2030 - Exterior Doors</b>	\$4,181	\$0	\$0	\$0	\$0	\$0	\$0	\$53,145	\$0	\$0	\$0	\$57,326
<b>B30 - Roofing</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010 - Roof Coverings</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010105 - Built-Up</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010120 - Single Ply Membrane</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010130 - Preformed Metal Roofing</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>B3010140 - Shingle &amp; Tile</b>	\$0	\$0	\$0	\$0	\$0	\$1,137,073	\$0	\$0	\$0	\$0	\$0	\$1,137,073
<b>B3020 - Roof Openings</b>	\$0	\$0	\$0	\$0	\$0	\$20,397	\$0	\$0	\$0	\$0	\$0	\$20,397
<b>C - Interiors</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>C10 - Interior Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>C1010 - Partitions</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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C1020 - Interior Doors	\$4,589	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,589
C1030 - Fittings	\$0	\$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	\$0
C2010 - Stair Construction	\$0	\$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	\$0
C3010 - Wall Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3010230 - Paint & Covering	\$0	\$0	\$0	\$0	\$0	\$396,255	\$0	\$0	\$0	\$0	\$0	\$0	\$396,255
C3010231 - Vinyl Wall Covering	\$0	\$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	\$0
C3020 - Floor Finishes	\$0	\$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	\$0
C3020412 - Terrazzo & Tile	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020413 - Vinyl Flooring	\$3,004	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$202,329	\$0	\$0	\$0	\$205,333
C3020414 - Wood Flooring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3020415 - Concrete Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3030 - Ceiling Finishes	\$479	\$0	\$0	\$0	\$0	\$0	\$0	\$667,336	\$0	\$0	\$0	\$0	\$667,814
D - Services	\$0	\$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	\$0
D2010 - Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2020 - Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$92,287	\$0	\$0	\$0	\$0	\$92,287
D2030 - Sanitary Waste	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$92,287	\$0	\$0	\$0	\$0	\$92,287
D2040 - Rain Water Drainage	\$0	\$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	\$0
D3020 - Heat Generating Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3030 - Cooling Generating Systems	\$49,157	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,157
D3040 - Distribution Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,368,086	\$0	\$0	\$0	\$0	\$1,368,086
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3060 - Controls & Instrumentation	\$421,330	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$421,330
D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$16,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,740
D4020 - Standpipes	\$0	\$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	\$0
D5010 - Electrical Service/Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Site Assessment Report - B727002;Finletter LSH

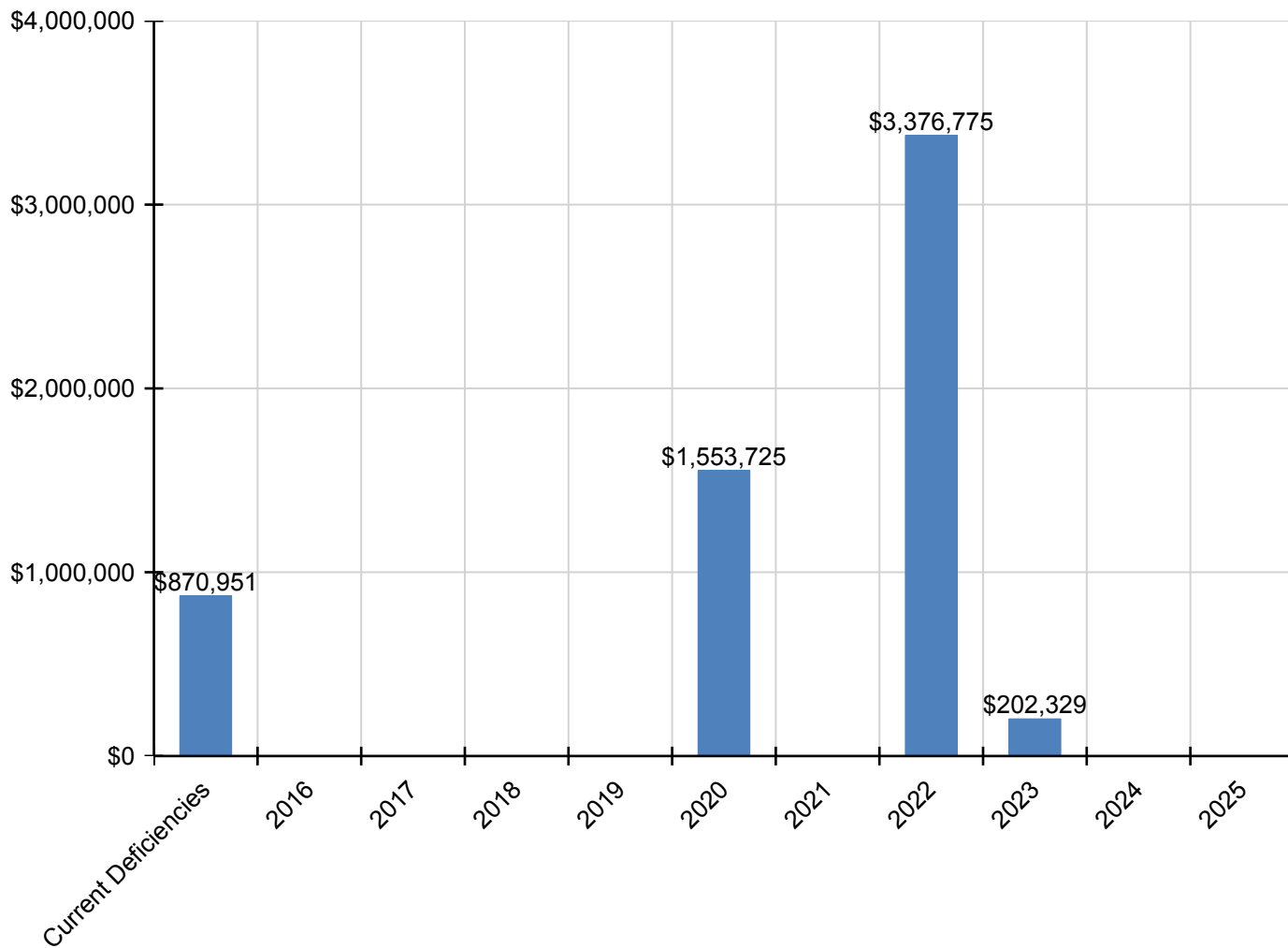
D5020 - Lighting and Branch Wiring	\$16,476	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,103,633	\$0	\$0	\$0	\$1,120,109
D5030 - Communications and Security	\$284,621	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$284,621
D5090 - Other Electrical Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E - Equipment & Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E10 - Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1020 - Institutional Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1090 - Other Equipment	\$0	\$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	\$0
E2010 - Fixed Furnishings	\$0	\$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.

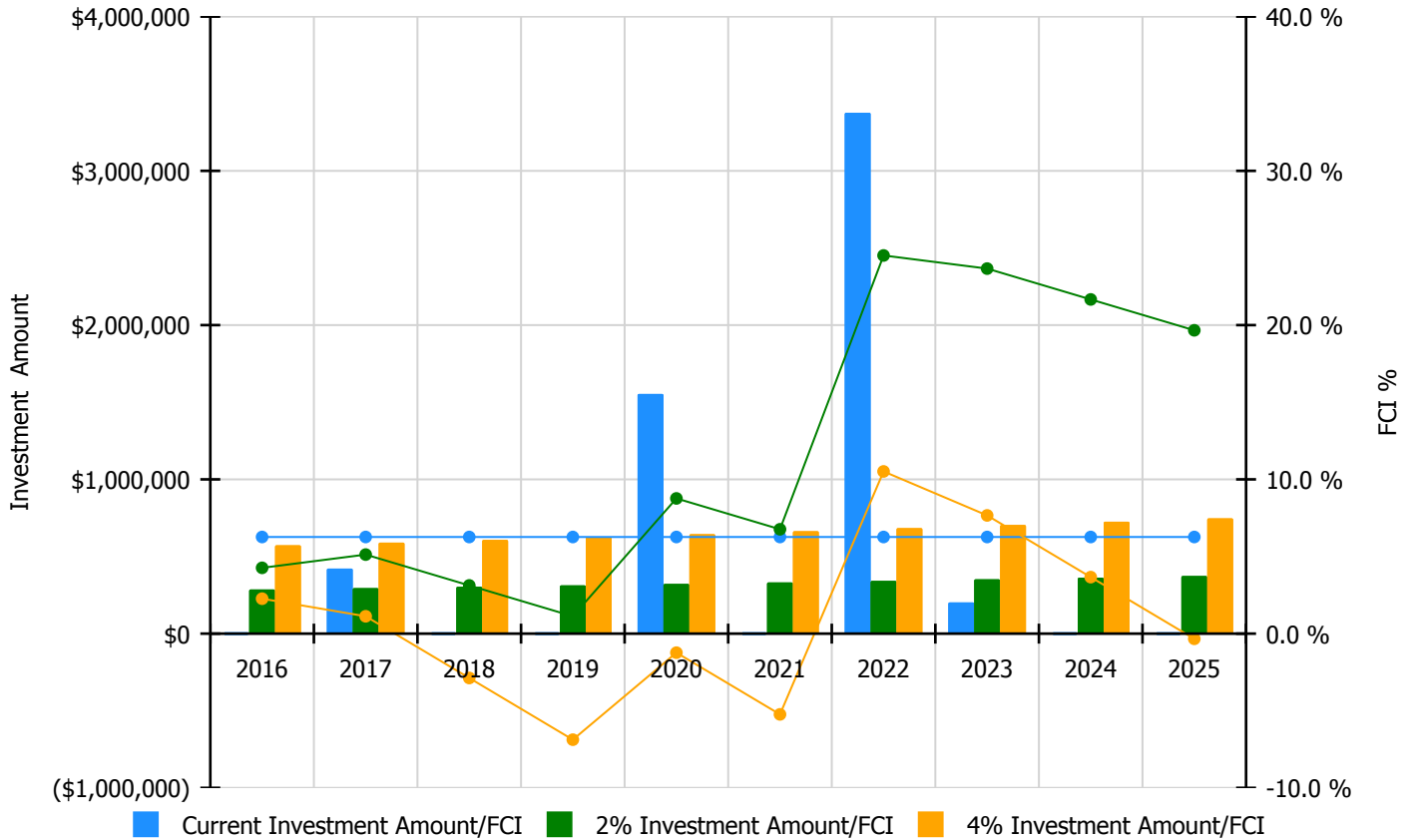


## 10 Year FCI Forecast by Investment Scenario

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

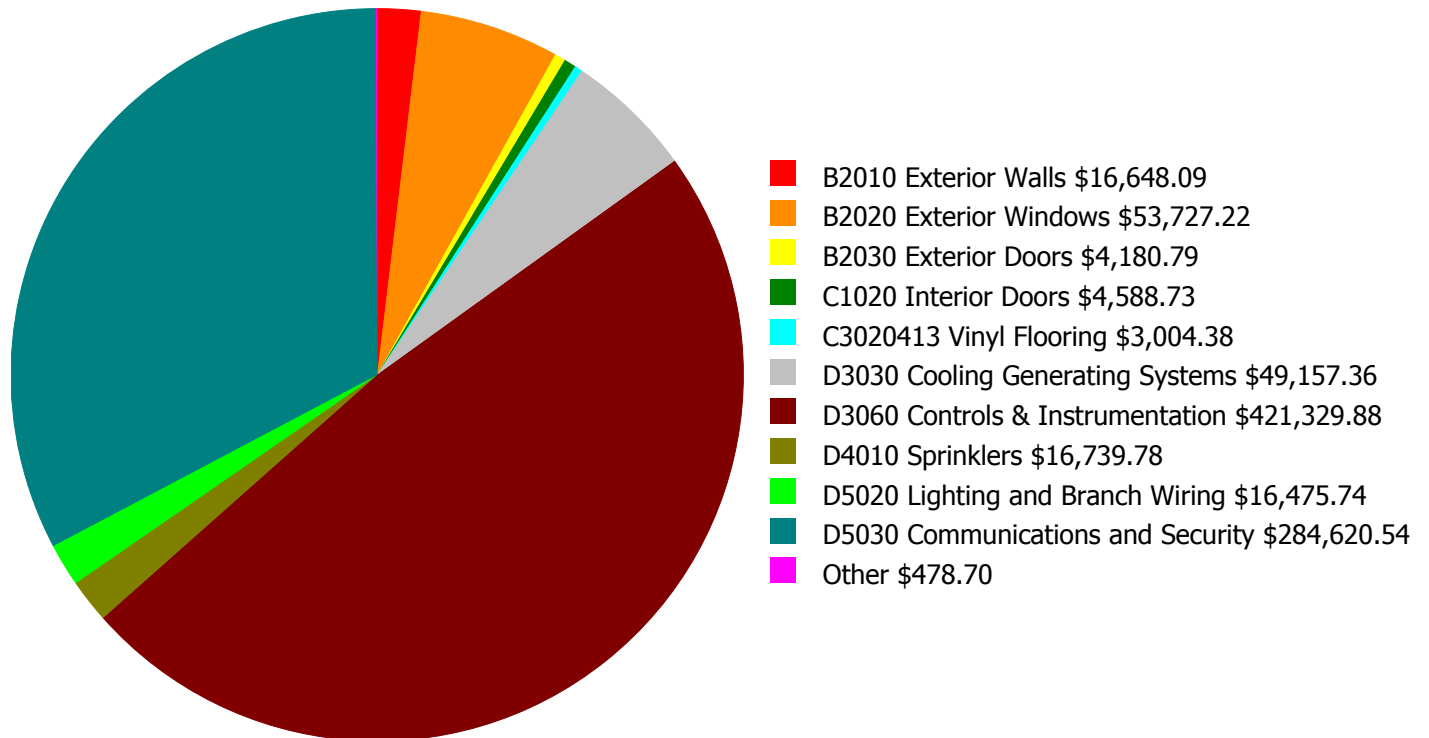
**Facility Investment vs. FCI Forecast**



Year	Investment Amount Current FCI - 6.26%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$286,384.00	4.26 %	\$572,768.00	2.26 %
2017	\$421,705	\$294,976.00	5.12 %	\$589,951.00	1.12 %
2018	\$0	\$303,825.00	3.12 %	\$607,650.00	-2.88 %
2019	\$0	\$312,940.00	1.12 %	\$625,879.00	-6.88 %
2020	\$1,553,725	\$322,328.00	8.76 %	\$644,655.00	-1.24 %
2021	\$0	\$331,998.00	6.76 %	\$663,995.00	-5.24 %
2022	\$3,376,775	\$341,957.00	24.51 %	\$683,915.00	10.51 %
2023	\$202,329	\$352,216.00	23.66 %	\$704,432.00	7.66 %
2024	\$0	\$362,783.00	21.66 %	\$725,565.00	3.66 %
2025	\$0	\$373,666.00	19.66 %	\$747,332.00	-0.34 %
<b>Total:</b>	<b>\$5,554,533</b>	<b>\$3,283,073.00</b>		<b>\$6,566,142.00</b>	

## Deficiency Summary by System

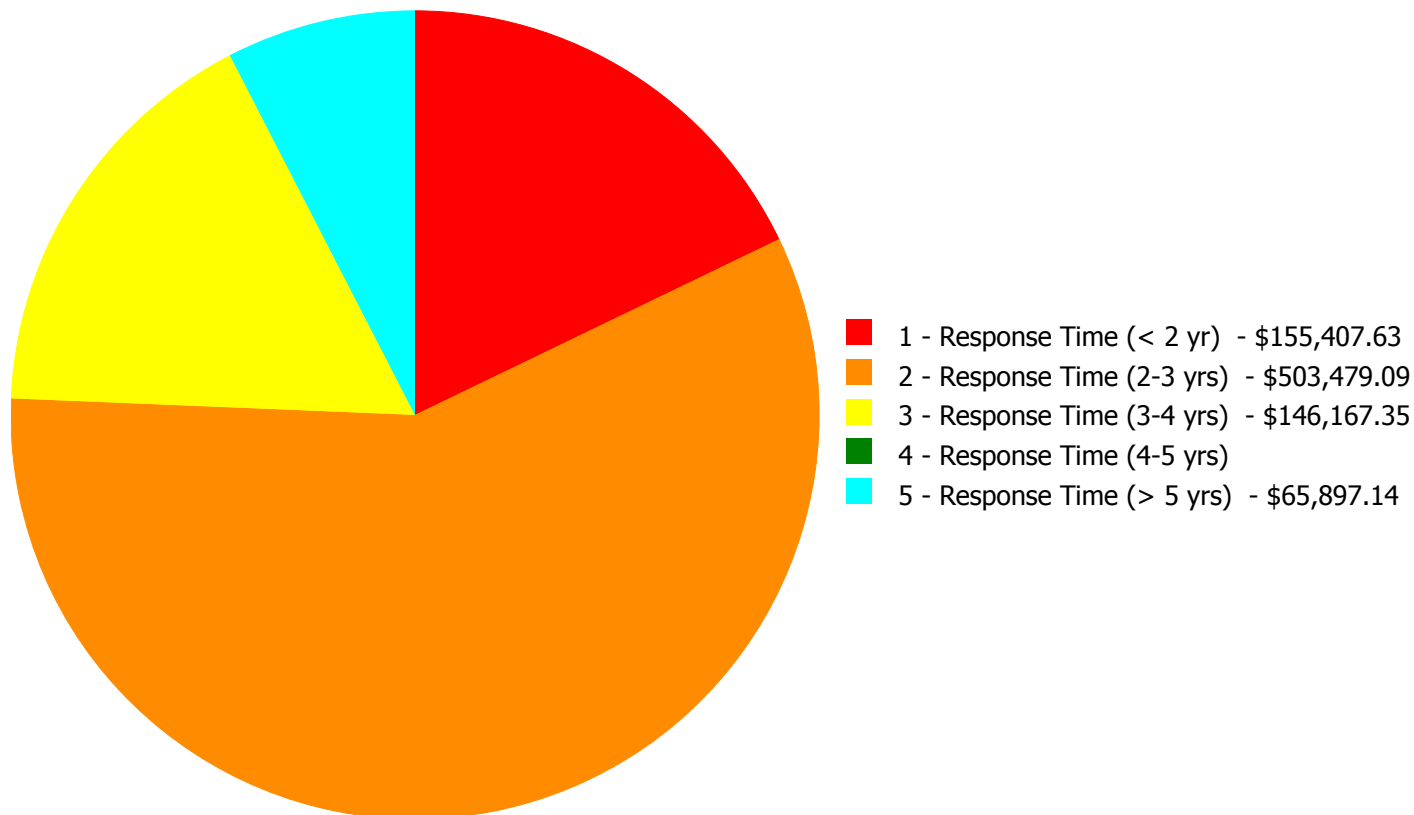
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



**Budget Estimate Total: \$870,951.21**

## Deficiency Summary by Priority

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



**Budget Estimate Total: \$870,951.21**

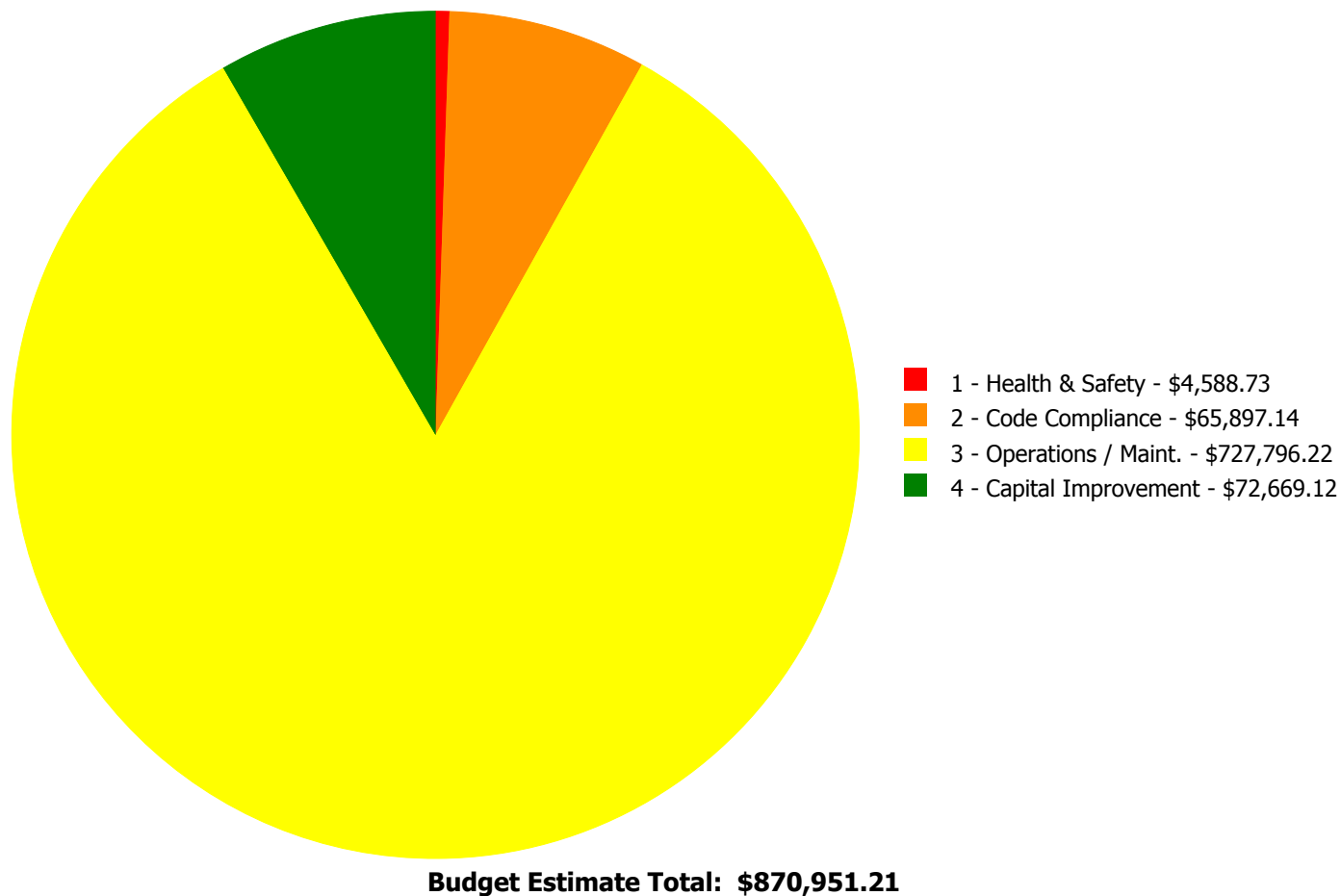
## Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
B2010	Exterior Walls	\$0.00	\$16,648.09	\$0.00	\$0.00	\$0.00	\$16,648.09
B2020	Exterior Windows	\$0.00	\$53,727.22	\$0.00	\$0.00	\$0.00	\$53,727.22
B2030	Exterior Doors	\$0.00	\$4,180.79	\$0.00	\$0.00	\$0.00	\$4,180.79
C1020	Interior Doors	\$0.00	\$4,588.73	\$0.00	\$0.00	\$0.00	\$4,588.73
C3020413	Vinyl Flooring	\$0.00	\$3,004.38	\$0.00	\$0.00	\$0.00	\$3,004.38
C3030	Ceiling Finishes	\$0.00	\$0.00	\$478.70	\$0.00	\$0.00	\$478.70
D3030	Cooling Generating Systems	\$0.00	\$0.00	\$0.00	\$0.00	\$49,157.36	\$49,157.36
D3060	Controls & Instrumentation	\$0.00	\$421,329.88	\$0.00	\$0.00	\$0.00	\$421,329.88
D4010	Sprinklers	\$0.00	\$0.00	\$0.00	\$0.00	\$16,739.78	\$16,739.78
D5020	Lighting and Branch Wiring	\$16,475.74	\$0.00	\$0.00	\$0.00	\$0.00	\$16,475.74
D5030	Communications and Security	\$138,931.89	\$0.00	\$145,688.65	\$0.00	\$0.00	\$284,620.54
	<b>Total:</b>	\$155,407.63	\$503,479.09	\$146,167.35	\$0.00	\$65,897.14	\$870,951.21

## Deficiency Summary by Category

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



## 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: D5020 - Lighting and Branch Wiring



**Location:** LSH - 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:** \$16,475.74

**Assessor Name:** Craig Anding

**Date Created:** 08/13/2015

**Notes:** Replace existing receptacles with GFCI receptacle in the areas subject to kid access. Estimated 100 each.

#### System: D5030 - Communications and Security

This deficiency has no image.

**Location:** LSH - Entire Building

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Add/Replace Clock System or Components

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$82,738.51

**Assessor Name:** Craig Anding

**Date Created:** 08/13/2015

**Notes:** Replace existing master clock system.



**System: D5030 - Communications and Security**



**Location:** LSH - Exterior Building

**Distress:** Inadequate

**Category:** 4 - Capital Improvement

**Priority:** 1 - Response Time (< 2 yr)

**Correction:** Add/Replace Video Surveillance System

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$56,193.38

**Assessor Name:** Craig Anding

**Date Created:** 08/13/2015

**Notes:** Provide sufficient number of cameras on LSH exterior wall and connect them to main building CCTV system. Estimated 3each.

---

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

**System: B2010 - Exterior Walls**



**Location:** LSH - Godfrey St entrance

**Distress:** Failing

**Category:** 3 - Operations / Maint.

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

**Correction:** Rebuild brick parapets at original building roof perimeter; re-set stone coping - change qty. for LF of coping if necessary

**Qty:** 100.00

**Unit of Measure:** S.F.

**Estimate:** \$16,648.09

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Repair brick posts and building corner at Godfrey St entrance (200sf)

---

**System: B2020 - Exterior Windows**



**Location:** LSH - exterior windows

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

**Correction:** Replace security screens

**Qty:** 350.00

**Unit of Measure:** S.F.

**Estimate:** \$53,727.22

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Replace security screens (oxidized frames) – 12 4x8 screens

---

**System: B2030 - Exterior Doors**



**Location:** LSH - exterior  
**Distress:** Damaged  
**Category:** 3 - Operations / Maint.  
**Priority:** 2 - Response Time (2-3 yrs)  
**Correction:** Refinish and repaint exterior doors - per leaf  
**Qty:** 7.00  
**Unit of Measure:** Ea.  
**Estimate:** \$4,180.79  
**Assessor Name:** Craig Anding  
**Date Created:** 09/03/2015

**Notes:** Repaint exterior doors and graffiti clerestory (5) 3x7 + 100sf (clerestory, similar to 2 doors in size)

---

**System: C1020 - Interior Doors**



**Location:** LSH - all classrooms and 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:** 20.00  
**Unit of Measure:** Ea.  
**Estimate:** \$4,588.73  
**Assessor Name:** Craig Anding  
**Date Created:** 09/03/2015

**Notes:** Provide security hardware for classrooms and offices (20 sets)

---

**System: C3020413 - Vinyl Flooring**



**Location:** LSH - corridors and multipurpose rm

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

**Correction:** Remove and replace VCT

**Qty:** 250.00

**Unit of Measure:** S.F.

**Estimate:** \$3,004.38

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Repair cracks in VCT (200lf)

---

**System: D3060 - Controls & Instrumentation**



**Location:** LSH - 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:** 23,523.00

**Unit of Measure:** S.F.

**Estimate:** \$421,329.88

**Assessor Name:** Craig Anding

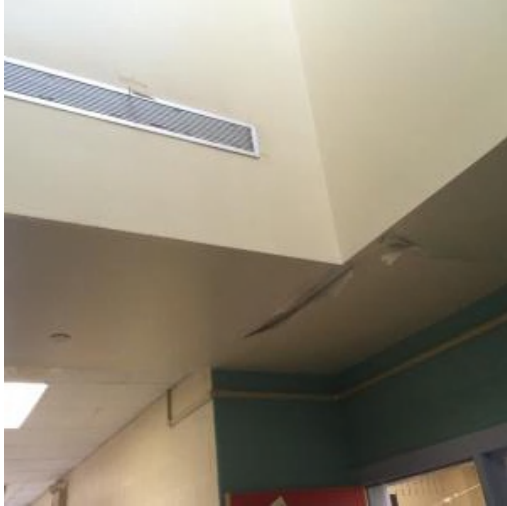
**Date Created:** 10/12/2015

**Notes:** Install a new DDC system, re-commission, and provide training for maintenance personnel.

---

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

**System: C3030 - Ceiling Finishes**



**Location:** LSH - clerestory interior

**Distress:** Damaged

**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:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Repair Gyp bd under clerestory that had leaked (100sf)

---

**System: D5030 - Communications and Security**



**Location:** LSH - Entire Building

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Replace fire alarm system

**Qty:** 1.00

**Unit of Measure:** S.F.

**Estimate:** \$145,688.65

**Assessor Name:** Craig Anding

**Date Created:** 08/13/2015

**Notes:** Replace existing fire alarm system of the building.

---

**Priority 5 - Response Time (> 5 yrs):**

**System: D3030 - Cooling Generating Systems**

This deficiency has no image.

**Location:** LSH - mechanical area

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Convert air-cooled chiller to alternative refrigerant (80T)

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$49,157.36

**Assessor Name:** Craig Anding

**Date Created:** 10/12/2015

**Notes:** Convert the chiller over to a new refrigerant or replace with a new air cooled chiller.

---

**System: D4010 - Sprinklers**



**Location:** LSH - Kitchen

**Distress:** Building / MEP Codes

**Category:** 2 - Code Compliance

**Priority:** 5 - Response Time (> 5 yrs)

**Correction:** Provide kitchen hood fire suppression system (8 FT)

**Qty:** 1.00

**Unit of Measure:** Ea.

**Estimate:** \$16,739.78

**Assessor Name:** Craig Anding

**Date Created:** 10/12/2015

**Notes:** Install chemical sprinkler system for kitchen hood.

---

## Equipment Inventory

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

Subsystem	Inventory	Qty	UoM	Location	Manufacturer	Model Number	Serial Number	Barcode	Life	Install Date	Next Renewal	Raw Cost	Inventory Cost
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 1084 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler Mechanical Equipment Room	Burnham	V1106W			35	1997	2032	\$29,823.90	\$65,612.58
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, steam, gross output, 1084 MBH, includes burners, controls and insulated jacket, packaged	2.00	Ea.	Boiler Mechanical Equipment Room	Burnham	V1106W			35	1997	2032	\$29,823.90	\$65,612.58
D3030 Cooling Generating Systems	Water chiller, reciprocating, packaged, air cooled, 85 ton cooling, includes standard controls, excludes remote air cooled condensers	1.00	Ea.		Carrier	30GN-080			30	1997	2027	\$66,495.00	\$73,144.50
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 800 A	1.00	Ea.	Electrical Room					30	1997	2027	\$21,766.05	\$23,942.66
												<b>Total:</b>	<b>\$228,312.32</b>



**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):	117,600
Year Built:	1930
Last Renovation:	
Replacement Value:	\$2,566,176
Repair Cost:	\$256,995.50
Total FCI:	10.01 %
Total RSLI:	41.66 %



**Description:**

**Attributes:**

**General Attributes:**

Bldg ID:	S727001	Site ID:	S727001
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## 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	42.07 %	12.51 %	\$256,995.50
G40 - Site Electrical Utilities	40.00 %	0.00 %	\$0.00
<b>Totals:</b>	<b>41.66 %</b>	<b>10.01 %</b>	<b>\$256,995.50</b>

## 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 the system 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.	10,000	30	1997	2027		40.00 %	0.00 %	12			\$115,200
G2020	Parking Lots	\$7.65	S.F.	60,000	30	1997	2027		40.00 %	37.35 %	12		\$171,430.39	\$459,000
G2030	Pedestrian Paving	\$11.52	S.F.	84,000	40	1997	2037		55.00 %	5.13 %	22		\$49,672.08	\$967,680
G2040	Site Development	\$4.36	S.F.	117,600	25	1954	1979	2020	20.00 %	7.00 %	5		\$35,893.03	\$512,736
G2050	Landscaping & Irrigation	\$3.78	S.F.		15				0.00 %	0.00 %				\$0
G4020	Site Lighting	\$3.58	S.F.	117,600	30	1954	1984	2027	40.00 %	0.00 %	12			\$421,008
G4030	Site Communications & Security	\$0.77	S.F.	117,600	30	1954	1984	2027	40.00 %	0.00 %	12			\$90,552
<b>Total</b>									<b>41.66 %</b>	<b>10.01 %</b>			<b>\$256,995.50</b>	<b>\$2,566,176</b>

## 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.

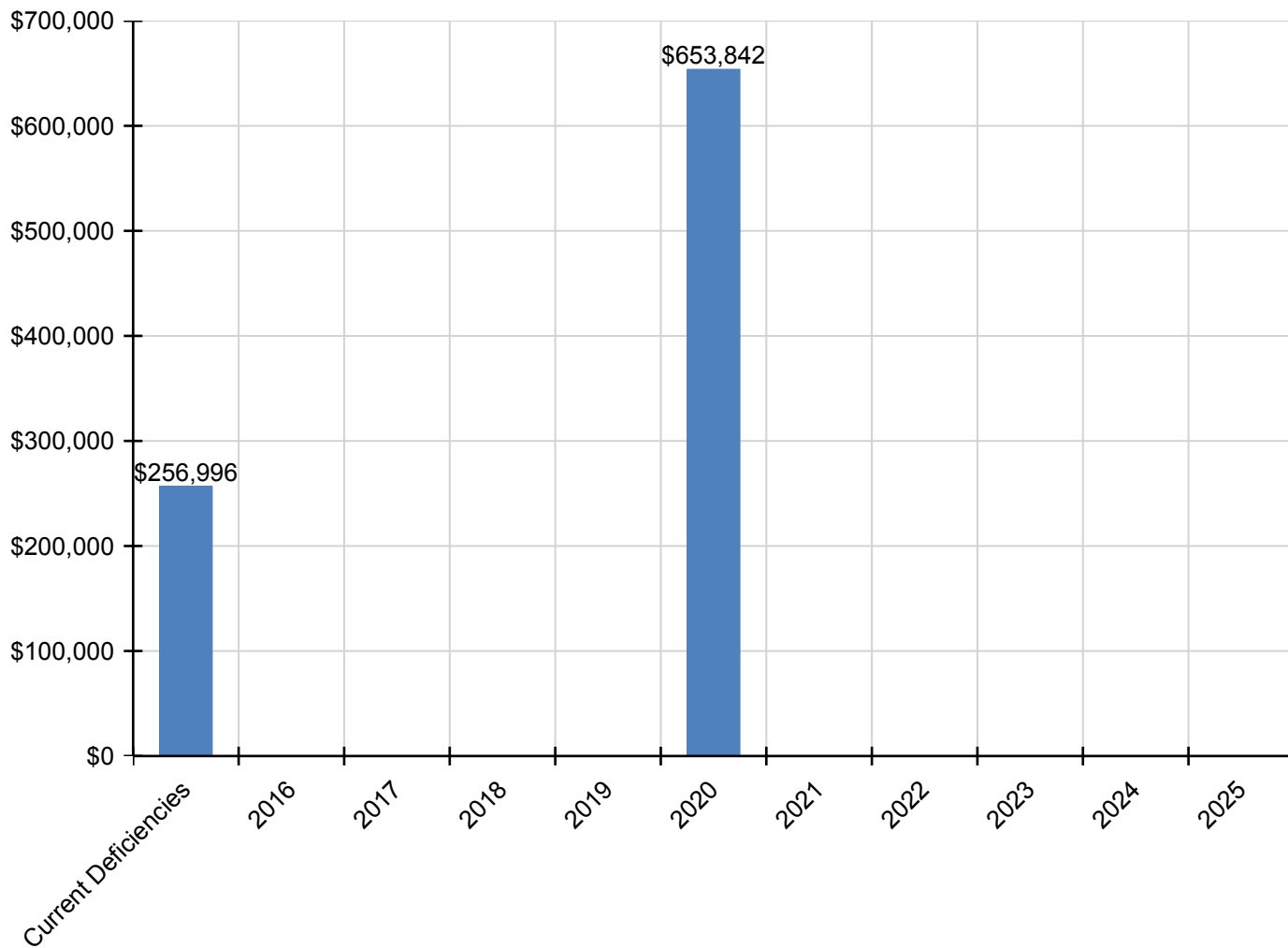
*Inflation Rate: 3%*

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
<b>Total:</b>	<b>\$256,996</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$653,842</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$910,838</b>
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	\$171,430	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$171,430
G2030 - Pedestrian Paving	\$49,672	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,672
G2040 - Site Development	\$35,893	\$0	\$0	\$0	\$0	\$653,842	\$0	\$0	\$0	\$0	\$0	\$689,735
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.



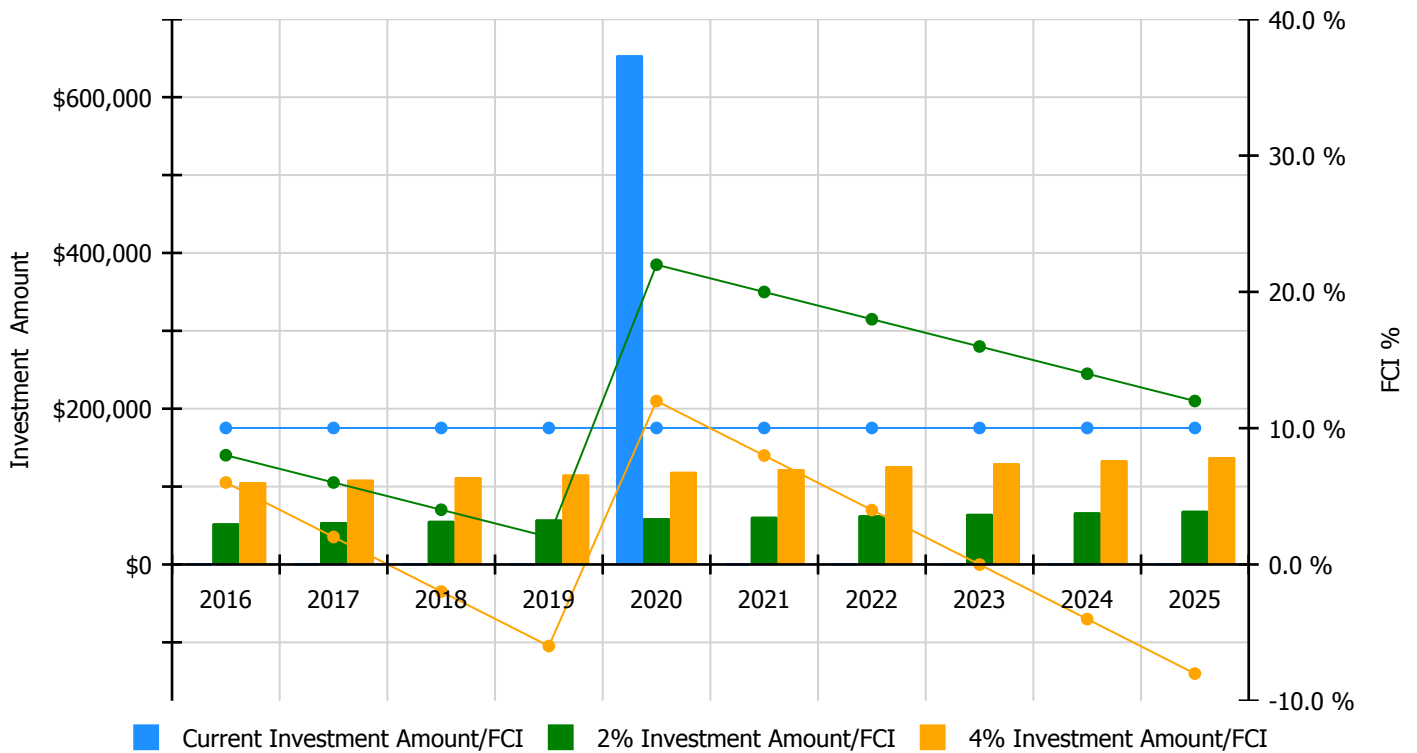


## 10 Year FCI Forecast by Investment Scenario

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

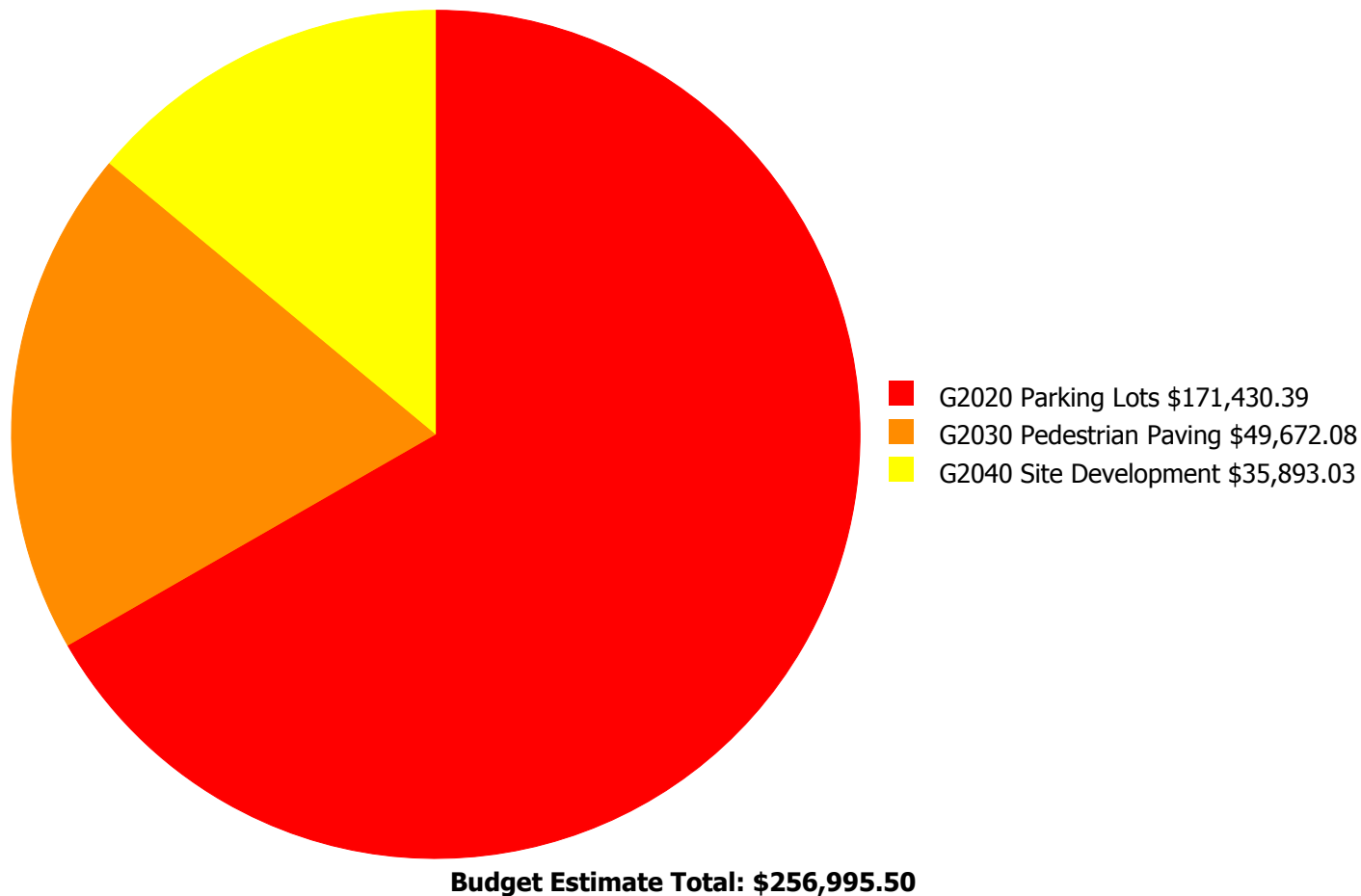
### Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 10.01%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	\$0	\$52,863.00	8.01 %	\$105,726.00	6.01 %
2017	\$0	\$54,449.00	6.01 %	\$108,898.00	2.01 %
2018	\$0	\$56,083.00	4.01 %	\$112,165.00	-1.99 %
2019	\$0	\$57,765.00	2.01 %	\$115,530.00	-5.99 %
2020	\$653,842	\$59,498.00	21.99 %	\$118,996.00	11.99 %
2021	\$0	\$61,283.00	19.99 %	\$122,566.00	7.99 %
2022	\$0	\$63,121.00	17.99 %	\$126,243.00	3.99 %
2023	\$0	\$65,015.00	15.99 %	\$130,030.00	-0.01 %
2024	\$0	\$66,966.00	13.99 %	\$133,931.00	-4.01 %
2025	\$0	\$68,975.00	11.99 %	\$137,949.00	-8.01 %
<b>Total:</b>	<b>\$653,842</b>	<b>\$606,018.00</b>		<b>\$1,212,034.00</b>	

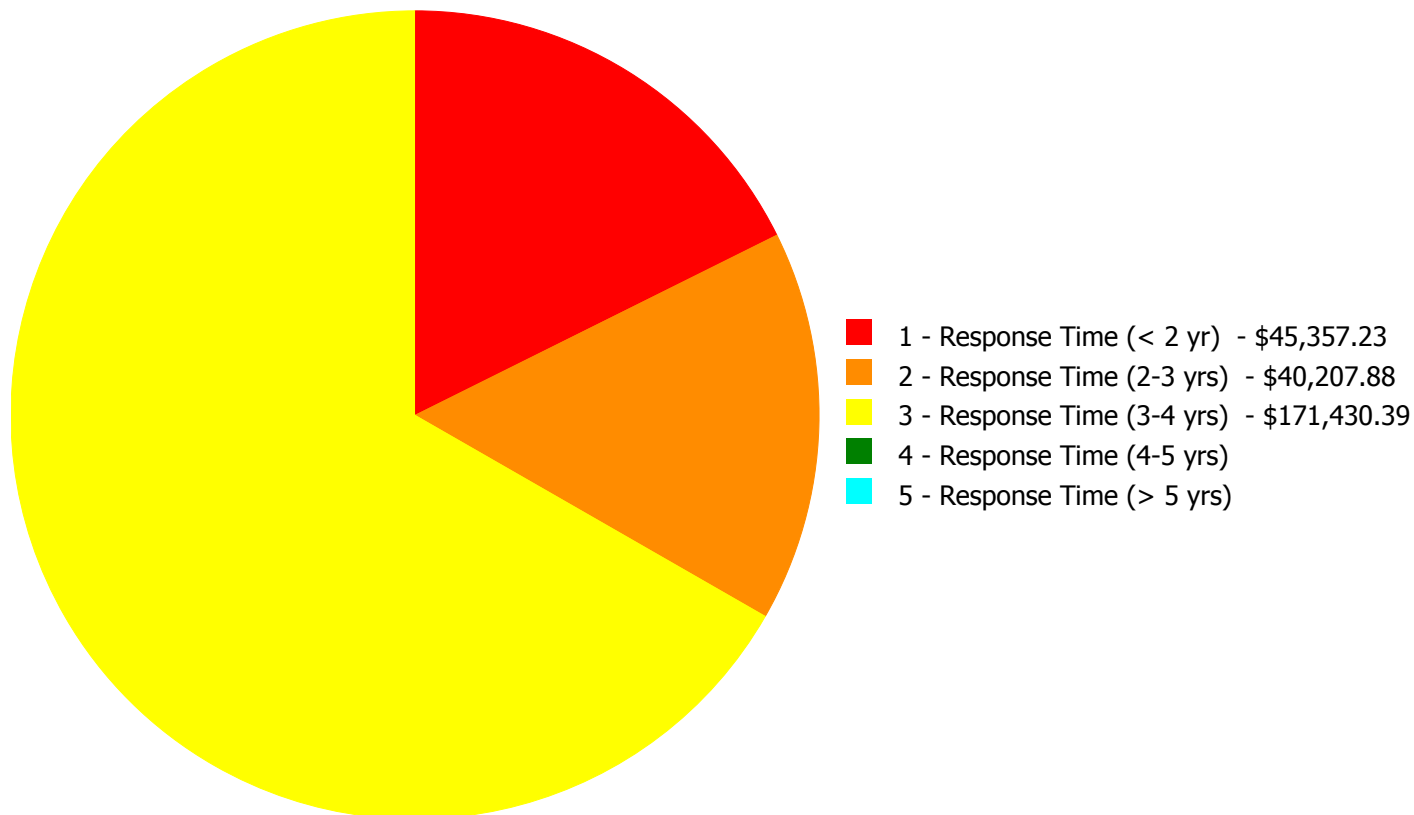
## Deficiency Summary by System

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.



## 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: \$256,995.50**

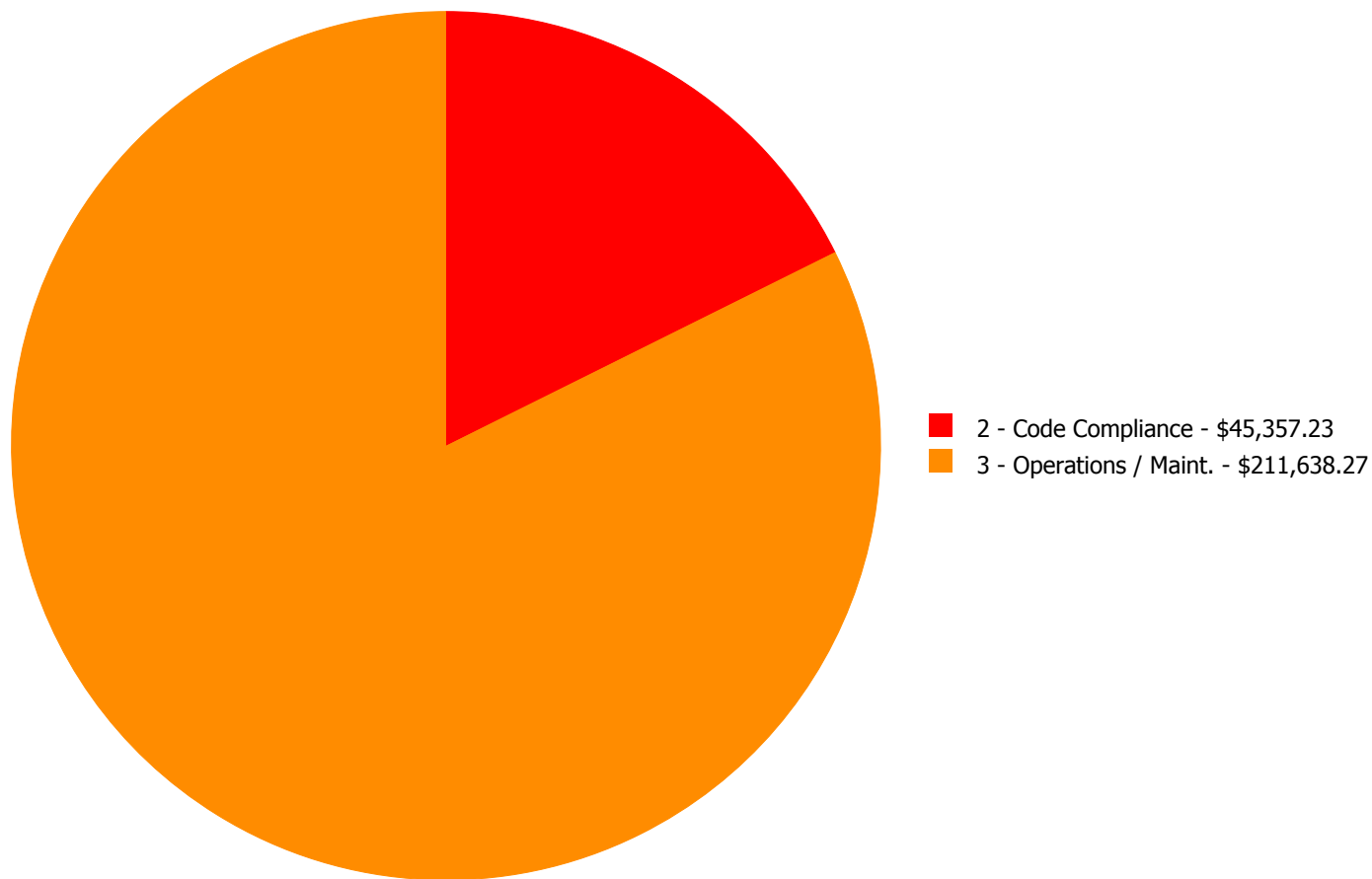
## Deficiency By Priority Investment Table

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	\$171,430.39	\$0.00	\$0.00	\$171,430.39
G2030	Pedestrian Paving	\$45,357.23	\$4,314.85	\$0.00	\$0.00	\$0.00	\$49,672.08
G2040	Site Development	\$0.00	\$35,893.03	\$0.00	\$0.00	\$0.00	\$35,893.03
<b>Total:</b>		\$45,357.23	\$40,207.88	\$171,430.39	\$0.00	\$0.00	\$256,995.50

### 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: \$256,995.50**

## 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**

This deficiency has no image.

**Location:** front entrance

**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:** 40.00

**Unit of Measure:** L.F.

**Estimate:** \$45,357.23

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Add handicap ramp to front door (up 30") including railings

---

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

**System: G2030 - Pedestrian Paving**



**Location:** Front Street (front door)

**Distress:** Damaged

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 300.00

**Unit of Measure:** S.F.

**Estimate:** \$4,314.85

**Assessor Name:** Craig Anding

**Date Created:** 09/04/2015

**Notes:** Repave cracking concrete sidewalk panels in front of the building (300sf)

---

**System: G2040 - Site Development**



**Location:** site fence

**Distress:** Appearance

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 500.00

**Unit of Measure:** L.F.

**Estimate:** \$32,630.03

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Repaint damaged wrought iron fencing (500lf)

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**System: G2040 - Site Development**



**Location:** low roof over boiler room

**Distress:** Appearance

**Category:** 3 - Operations / Maint.

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

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

**Qty:** 50.00

**Unit of Measure:** L.F.

**Estimate:** \$3,263.00

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Replace rusted rooftop security railing and railing at window wells(500sf)

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

**System: G2020 - Parking Lots**



**Location:** parking lot / playground

**Distress:** Beyond Service Life

**Category:** 3 - Operations / Maint.

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

**Correction:** Resurface parking lot - grind and resurface including striping

**Qty:** 45,000.00

**Unit of Measure:** S.F.

**Estimate:** \$171,430.39

**Assessor Name:** Craig Anding

**Date Created:** 09/03/2015

**Notes:** Repave parking / playground with asphalt(45,000sf)

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## 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 <a href="http://www.abma.com/">http://www.abma.com/</a>
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

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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

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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

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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.

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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

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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



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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.

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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	Photovoltaic system

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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

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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

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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