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.

Adaire School

Governance	DISTRICT	Report Type	Elementarymiddle
Address	1300 E. Palmer St.	Enrollment	344
	Philadelphia, Pa 19125	Grade Range	'00-08'
Phone/Fax	215-291-4712 / 215-291-6350	Admissions Category	Neighborhood
Website	Www.Philasd.Org/Schools/Adaire	Turnaround Model	N/A

Building/System FCI Tiers

Facility Condition Index (FCI) = Cost of Assessed Deficiencies / Replacement Value

< 15%	15 to 25%	25 to 45%	45 to 60%	> 60%
Buildings				
Minimal Current Capital Funding Required	Refurbish Systems in building	Replace Systems in building.	Building should be considered for major renovation.	Building should be considered for closing/replacement.
Systems				
Perform routine maintenance on system	System requires minor repairs	System should be studied to determine repair vs. replacement.	System is nearing end of its life expectancy and should be considered for replacement	System should be replaced as part of the Capital Program

Building and Grounds

	FCI	Repair Costs	Replacement Cost
Overall	**52.87%**	**$13,881,256**	**$26,254,183**
Building	53.75 %	$13,555,311	$25,217,224
Grounds	31.43 %	$325,945	$1,036,959

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	89.57 %	$1,074,816	$1,199,985
Exterior Walls (Shows condition of the structural condition of the exterior facade)	01.85 %	$34,127	$1,841,440
Windows (Shows functionality of exterior windows)	185.19 %	$1,663,999	$898,519
Exterior Doors (Shows condition of exterior doors)	00.00 %	$0	$72,341
Interior Doors (Classroom doors)	54.34 %	$95,151	$175,114
Interior Walls (Paint and Finishes)	06.29 %	$52,721	$838,651
Plumbing Fixtures	00.00 %	$0	$674,513
Boilers	115.95 %	$1,079,984	$931,446
Chillers/Cooling Towers	60.64 %	$740,611	$1,221,307
Radiators/Unit Ventilators/HVAC	167.15 %	$3,585,062	$2,144,771
Heating/Cooling Controls	158.90 %	$1,070,245	$673,515
Electrical Service and Distribution	164.74 %	$797,241	$483,933
Lighting	25.47 %	$440,738	$1,730,185
Communications and Security (Cameras, Pa System and Fire Alarm)	46.02 %	$298,248	$648,071

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

S520001;Adaire

Final

Site Assessment Report

January 31, 2017

PARSONS

Table of Contents

Site Executive Summary

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

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

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

Gross Area (SF):	49,890
Year Built:	1957
Last Renovation:	
Replacement Value:	$26,254,183
Repair Cost:	$13,881,256.42
Total FCI:	52.87 %
Total RSLI:	75.13 %

Description:

Facility Assessment, July 2015

School District of Philadelphia
Adaire Elementary School
1300 E. Palmer St.
Philadelphia, PA 19125

49,890 SF / 437 Students / LN 03

The Adaire Elementary school building is located at 1300 E. Palmer St. in Philadelphia, PA. The 2 story with basement, approximately 49,890 square foot building was originally constructed in 1957.

Mr. Tom Sharer, Facility Area Coordinator provided input to the Parsons assessment team on current problems and planned renovation projects. Ms. Orionna Adams, building engineer, accompanied us on our tour of the school and provided limited information on the building systems and recent maintenance history.

STRUCTURAL/ EXTERIOR CLOSURE:

The original building typically rests on concrete foundations and concrete bearing walls that are not showing signs of settlement. There are no signs of moisture penetration through basement walls. Mechanical and electrical spaces in the basement have concrete slab in good

The main structure consists typically of combination of cast-in-place concrete columns, beams and concrete slabs in the basement; and structural steel framing, columns and bar joists supporting concrete slabs over metal deck. The roof structure consists of bar joists supporting precast concrete roof panels. The superstructure is in good condition.

The building envelope is typically face brick masonry with CMU backup. Some brick parapet walls were rebuilt in mid 2000's. In general, masonry is in fair to good condition. The Auditorium wing has a stone clad 2 story portico with some missing mortar. Water penetration through walls has been reported.

The original building windows were replaced in 1990's with extruded aluminum double hung windows single, acrylic glazed. All windows are generally in poor condition with some of the windows inoperable; at the end of service life. First and second floor windows have security screens in fair condition. The leaks around the windows perimeters have not been reported.

The exterior doors are typically hollow metal doors and frames, painted; most with glazed transoms. The doors are generally in fair condition; no weather-stripping is installed; some doors have vision glazing with security screens.

Roofing system is a ballasted built-up system, very old and in poor condition; all roofing and flashing is typically in poor condition with some counter flashing separated from parapet walls; leaks have not been reported. The roof hatch is old and damaged.

INTERIORS:

The building partition wall types include painted CMU; Toilets have structural glazed facing tile (SGFT) wainscot. Partitions are generally in good condition; however, some grout is missing in SGFT in toilets.

Interior doors are generally solid core wood doors, some glazed, with hollow metal frames, in fair to poor condition, some doors have damaged finish (40%). Doors generally do not have accessible hardware. The doors leading to exit stairways are hollow metal doors and frames in good condition.

Fittings include toilet accessories and toilet partitions, generally in poor condition, some toilet accessories are missing, no accessible compartments; chalkboards in good condition. Handrails and ornamental metals are generally in good condition. Built-in cabinets are steel and wood in poor condition. Interior identifying signage is typically directly painted on wall or door surfaces generally in poor condition; some signage is missing.

Stair construction is generally painted steel with concrete filled steel pans and cast iron non-slip treads in good condition. Stair to the basement is concrete with non-slip cast iron nosings, in good condition

The interior wall finishes in the original building are generally painted CMU. Generally, paint is in good condition throughout the building.

Most ceilings in the building are exposed, painted; auditorium has and 1x1 concealed grid acoustic tiles. The suspension system and tile are old and approaching the end of their useful life.

Flooring in classrooms and auditorium is VAT (approximately 70% of floor area); the balance of the floor is VCT in portion of Kindergarten installed in 2000's; and painted concrete and terrazzo in toilets. Most flooring is in fair to good condition; however, the VAT tile flooring will need to be replaced at the end of its useful life.

Stair construction is generally concrete with cast iron non-slip treads in good condition.

Institutional and Commercial equipment includes: stage equipment, generally in good condition; A/V equipment in very good condition; gym equipment – basketball backstops, scoreboards, etc.; generally in fair condition.

Furnishings include fixed casework in classrooms, corridors and library, generally in poor condition; window shades/blinds, generally in good condition; fixed auditorium seating is original, generally in poor condition; some seats are damaged or missing.

CONVEYING SYSTEMS:

The building has no elevator.

PLUMBING:

Plumbing Fixtures - Many of the original plumbing fixtures have been upgraded in the last decade. Fixtures in the restrooms on each floor consist of wall and floor mounted flush valve water closets, wall hung urinals and lavatories with wheel handle faucets. A few of the fixtures are not in service and several flush valves require maintenance. With repairs these fixtures should provide reliable service for the next 10-15 years. However, the older units should be replaced as part of any renovation of the spaces.

Drinking fountains in the corridors and at the restrooms are wall hung with integral refrigerated coolers. The fountains are within their service life some most are accessible type.

A service sink is available in a janitor closet in the corridor on each floor for use by the janitorial staff.

Domestic Water Distribution - A 4" city water service enters the building from Earl Street near the intersection with E. Thompson Street. The meter is 3" and located in the basement boiler room. A reduced pressure backflow preventer is installed on the incoming domestic line. The domestic hot and cold water distribution piping is copper piping and sweat fittings. The maintenance staff reports no significant problems with scale build up in the domestic piping and the supply is adequate to the fixtures.

A single Paloma instant hot water heater connected to hot water storage tank by a circulating pump, installation date unknown, supplies hot water for domestic use. The Paloma unit provides hot water to the hot water storage tank which distributes water to the building with a circulating pump. The heater and tank are located in the basement boiler room. The heater should be regularly serviced.

Sanitary Waste - The original storm and sanitary sewer piping is a mixture of heavy weight cast iron with hub and spigot fittings and galvanized piping with threaded fittings. Some of the original piping has been replaced with cast iron piping with no-hub couplings.

A sewage ejector pit, located in basement boiler room, receives water from the basement area. It has one pump that is within its service life. The pit is not sealed.

The maintenance staff reported mostly minor problems with the sanitary waste piping systems. However, the sewer piping has been in service for six decades and will require more frequent attention from the maintenance staff as time passes. The District should hire a qualified contractor to examine the sanitary waste piping using video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.

Rain Water Drainage - Rain water from the roof is routed down through pipe chases in the interior of the building by both cast iron hub and spigot piping and threaded galvanized piping. The drain piping should be inspected by a qualified contractor and repaired as necessary.

MECHANICAL:

Energy Supply - An 8" city gas service enters the building from Earl Street near the intersection with E. Thompson Street. The meter is 6" and located in the room adjacent to the boiler room.

Heat Generating Systems - Building heating hot water is generated by two HB Smith Series 44 cast iron sectional boilers. There are three boilers, but one is defunct. The boilers are original to the building and are almost 60 years old. One boiler is required to hold the building load in normal winter weather conditions. Each boiler is equipped with an Auburn burner designed to operate on natural gas and is well beyond its useful service life. The gas train serving the boilers does appear to have code required venting of the regulators and dual solenoid valves with venting of the chamber between. Cast iron sectional boilers have an anticipated service life of 35 years or more; these units have been in service for almost 60 years and need to be replaced.

The heating hot water system is equipped with two Armstrong in-line hot water circulating pumps in the boiler room. An expansion tank and air separator are located in the boiler room. The hot water piping is not covered with insulation and has rust on its exterior.

Distribution Systems - Hot water distribution piping is black steel (ASTM A53) with welded fittings coming off the boilers; none of the piping off the boilers was insulated. The main building heating distribution piping is Schedule 80 black steel with threaded fittings. The piping mains from the basement level run up through the building to the unit ventilators on both floors. The distribution piping has been in use well beyond its service life and will require more frequent attention from the maintenance staff to address pipe/valve failures as time passes. The District should hire a qualified contractor to examine the hot water distribution piping and perform

additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures. The District should budget for replacing this piping over the next 10 years.

Two pipe unit ventilators and fin tube radiators provide heating for classrooms, offices, and hallways. The unit ventilators are well beyond their service life and should be replaced. A new heating system should be installed to meet ventilation requirements and achieve more efficient operation. The new units should be designed for quiet operation and equipped with hot water coils, chilled water coils, and integral heat exchangers, where applicable, to introduce sufficient outdoor air to the building.

The school Gymnasium/Lunch Room is supplied ventilation by opening windows, which do not provide sufficient code required ventilation. The existing ductwork is from a defunct system. Provide sufficient ventilation for the Gymnasium/Lunch Room by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings. For the administration offices install a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings. The Auditorium has a heating and ventilation unit that provides heated outside air only during the winter. Provide ventilation for the Auditorium by installing a constant volume air handling unit with distribution ductwork and registers. These units would be equipped with hot water heating coils and chilled water cooling coils.

Two exhaust fans serving the first and second floor restrooms are operational according to the Building Engineer and are located in closets on the second floor. Seven (7) roof mounted exhaust fans pull transfer air from the classrooms to the hallways and exhaust it out of the building. These fans were installed in 2007 and are within their service life.

Terminal & Package Units - Several of the classrooms in the school building have window air conditioning units that have an anticipated service life of only 10 years. Installing a 125 ton air-cooled chiller with pumps located in a mechanical room and chilled water distribution piping would supply more reliable air conditioning for the building with a much longer service life.

A Mitsubishi split system air conditioning system provides cooling to the LAN room located on the first floor off of the Main Office. The installation date of this unit is unknown; the anticipated service life of a split system air conditioner is 15 years. The district should budget to replace this unit within the next 7-10 years.

A Goodman ARUF036 heat pump/air conditioning unit provides conditioned outdoor air to the Kindergarten room on the first floor. The heat pump is located on the roof of the Kindergarten room. This unit is in good condition and should be serviced regularly by the district.

Controls & Instrumentation - The original pneumatic systems still provide basic control functions. Pneumatic room thermostats are intended to control the steam radiator control valves. In reality the radiator control valves are wide open and heating control is achieved via the boilers. Pneumatic control air is supplied from a Champion compressor and Hankisan air dryer located in the boiler room. The maintenance staff reports no problems with oil, moisture, or dirt in the pneumatic copper tubing. The pneumatic systems are beyond their service life and require too much attention from the maintenance staff. The original control valves and pneumatic actuators are beyond their service life and should be rebuilt or replaced. These controls should be converted to DDC.

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

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

ELECTRICAL:

Site Electrical Service - The present electrical service is from Medium Voltage overhead lines (13.2KV) on wooden poles along East Palmer St. The overhead lines feed a pole top transformer to step down the voltage to 120V/240V. The power is brought down on the face of the pole and run underground in conduit into the school and into the basement in the electrical room (part of the basement boiler room). The electrical service disconnect switch is old fused switch with a utility metering (PECO 222 MUC-38270). There is much other electrical equipment also housed in the electrical room. These include the main distribution switchboard, and a 15KW emergency generator, as well as the Fire Alarm Panel and controller. The main switchboard is at maximum capacity and has no more room for growth. They have reached their useful life (50 years), and needs to be replaced.

Distribution System and Raceway System- The distribution system is both 120V single phase and 120V/208V three phase. There are two distribution panels in each floor for lighting and receptacles. These panels are old and have reached their useful life. The raceway

is mainly conduits run above the ceiling.

Receptacles - There is inadequate receptacles in classrooms, multi-purpose room, computer room, etc. We recommend two receptacles in each wall of class rooms and other purpose rooms. Also, it is recommended adding a wire-mold system with receptacles on every 3' in the computer room.

Lighting- The majority of building has outdated lighting with fixtures that are obsolete (T-12).

Fire Alarm System – The present Fire Alarm system is inadequate and is not addressable. A new Automated Fire Alarm System is needed.

Telephone/LAN – The present telephone system is adequate.

Public Address/Intercom/Paging – Although the PA system is not working, the school uses the telephone systems for public announcement. This system is working adequately for most part.

Clock and Program System – The present clocks are not functioning properly.

Television System - The present Television system is adequate.

Security System - The present security system is adequate.

Emergency Power System – The present emergency power system is inadequate, old and undersized. A larger emergency power system (30 KVA) is needed.

UPS – There was adequate UPS in the IT room near the Principals Office.

Emergency Lighting System / Exit Lighting- The emergency lighting and exit lighting is inadequate throughout each floor and stairways.

Lightning Protection System- There is a Lightning Protection System that works but needs minor repairs.

Grounding System - The present grounding system is adequate

Site Lighting - The present Site Lighting System is adequate

Site Video Surveillance - The present Site Video Surveillance System is adequate.

Site Paging - The present Site Paging System is adequate.

GROUNDS (SITE):

Portion of the playground has been converted into a parking for 30 vehicles, including 2 accessible stalls. The pavement is generally in good condition; however, most of the stall markings are faded. Playground pavement adjacent to the building is in good condition; there is no playground equipment, except for a single basket ball backstop in poor condition. Perimeter fence separating the playground from the street is generally in good condition. There is no landscaping, except for a single, mature tree near the corner of Kindergarten playground.

ACCESSIBILITY:

Generally, the building has an accessible route per ADA requirements with ramp leading from parking to portico entrance. The second floor of the building, however, is not accessible due to lack of an elevator. Toilets are not equipped with accessible fixtures, and accessories, such as grab bars, and accessible partitions. None of the doors in the building have ADA required door handles.

RECOMMENDATIONS:

- Tuck-point stone clad portico at Auditorium entrance
- Install all new roofing system including insulation within next 5 to 10 years; tear-down existing roofing; install flashing, and

counter flashing
- Replace roof access hatch
- Replace all windows within next 4 to 5 years
- Re-grout wainscot in toilets
- Replace interior doors hardware for ADA accessibility
- Refinish damaged interior doors
- Reconfigure toilets on each floor for accessibility, provide new toilet partitions
- Provide new toilet accessories including grab bars
- Replace signage throughout the building
- Replace all VAT flooring including cove base within 5 years
- Replace all suspended acoustical ceilings
- Replace built-in cabinets
- Install 2500 lb hydraulic elevator serving all floors and basement
- Restripe parking lot
- Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for almost twenty years, and replace any damaged piping.
- Hire a qualified contractor to perform a detailed examination of the rain water drainage piping using visual inspection and video cameras to locate and replace any damaged piping and to further quantify the extent of potential failures.
- 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.
- Hire a qualified contractor to examine the hot water distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.
- Replace the existing cast iron boilers which are well beyond their service life.
- Remove the existing unit ventilators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.
- Remove the window air conditioning units and install a 125 ton air-cooled chiller with chilled water distribution piping and pumps located in a mechanical room to supply more reliable air conditioning for the building with a much longer service life.
- Provide ventilation for the Gymnasium/Lunch Room by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings.
- Provide ventilation for the administration offices by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in window openings.
- Provide ventilation for the Auditorium by installing a constant volume air handling unit with distribution ductwork and registers.
- Replace the pneumatic controls for the HVAC systems with modern DDC modules, valves and actuators to improve reliability and energy efficiency. Provide a new building automation system (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. A fire pump may be required depending on the available city water pressure.
- Upgrade the existing electrical service to a new service with a new 1000 KVA dry-type Transformer, 13.2KV to 480V/277V, 3Ph. Install a new 1200A, 480V, 3 Ph. switchboard. The new Main switchboard shall be sized to handle the existing loads plus any new HVAC loads.
- Install a new step down transformer from 480V to 120V/208V, and a main 120V/208V Panel Board for all the lighting/receptacle loads.
- Install two 120V/208V panels to replace the existing panels in each floor. Also replace the power feeders; conduit & wire to the four panels from the new 120V/208V three phase main panel board.
- Install two receptacles in all of class rooms and other purpose rooms. Add a wire-mold system with receptacles on every 3' for the computer room.
- Install new lighting fixtures for all the class rooms, and other rooms. New fluorescent lighting (T-5) will be adequate; however, using the state-of-the-art LED lighting will improve the energy usage.
- Install a new Automated Fire Alarm System to be located in the new Electrical Room.
- Install a new clock system.
- Install a new emergency power system (30 KVA generator).
- Install new battery packed emergency lights and exit lights in all the hallways, stairways, and in each class room or other purpose rooms.

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 1 / Tm 4
Status:	Accepted by SDP	Team:	Tm 4
Site ID:	S520001		

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	42.00 %	0.00 %	$0.00
A20 - Basement Construction	42.00 %	0.00 %	$0.00
B10 - Superstructure	42.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	63.83 %	60.38 %	$1,698,125.76
B30 - Roofing	110.00 %	89.57 %	$1,074,816.33
C10 - Interior Construction	52.27 %	18.72 %	$229,165.59
C20 - Stairs	42.00 %	0.00 %	$0.00
C30 - Interior Finishes	90.62 %	22.72 %	$505,732.85
D10 - Conveying	105.71 %	280.25 %	$497,751.74
D20 - Plumbing	48.82 %	51.96 %	$529,361.03
D30 - HVAC	100.06 %	116.69 %	$6,475,901.96
D40 - Fire Protection	105.71 %	177.49 %	$713,698.70
D50 - Electrical	110.11 %	57.42 %	$1,683,781.53
E10 - Equipment	0.00 %	0.00 %	$0.00
E20 - Furnishings	105.00 %	138.31 %	$146,975.99
G20 - Site Improvements	106.27 %	6.01 %	$44,931.79
G40 - Site Electrical Utilities	106.67 %	97.32 %	$281,013.15
Totals:	**75.13 %**	**52.87 %**	**$13,881,256.42**

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)
B520001;Adaire	49,890	53.75	$1,793,682.31	$2,419,370.77	$2,969,221.73	$1,511,354.39	$4,861,682.28
G520001;Grounds	48,500	31.43	$0.00	$0.00	$215,058.98	$72,352.48	$38,533.48
Total:		**52.87**	**$1,793,682.31**	**$2,419,370.77**	**$3,184,280.71**	**$1,583,706.87**	**$4,900,215.76**

Deficiencies By Priority

1 - Response Time (< 2 yr) - $1,793,682.31
2 - Response Time (2-3 yrs) - $2,419,370.77
3 - Response Time (3-4 yrs) - $3,184,280.71
4 - Response Time (4-5 yrs) - $1,583,706.87
5 - Response Time (> 5 yrs) - $4,900,215.76

Budget Estimate Total: $13,881,256.42

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):	49,890
Year Built:	1957
Last Renovation:	
Replacement Value:	$25,217,224
Repair Cost:	$13,555,311.48
Total FCI:	53.75 %
Total RSLI:	73.84 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B520001
Sewage Ejector:	Yes	Status:	Accepted by SDP
Site ID:	S520001		

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	42.00 %	0.00 %	$0.00
A20 - Basement Construction	42.00 %	0.00 %	$0.00
B10 - Superstructure	42.00 %	0.00 %	$0.00
B20 - Exterior Enclosure	63.83 %	60.38 %	$1,698,125.76
B30 - Roofing	110.00 %	89.57 %	$1,074,816.33
C10 - Interior Construction	52.27 %	18.72 %	$229,165.59
C20 - Stairs	42.00 %	0.00 %	$0.00
C30 - Interior Finishes	90.62 %	22.72 %	$505,732.85
D10 - Conveying	105.71 %	280.25 %	$497,751.74
D20 - Plumbing	48.82 %	51.96 %	$529,361.03
D30 - HVAC	100.06 %	116.69 %	$6,475,901.96
D40 - Fire Protection	105.71 %	177.49 %	$713,698.70
D50 - Electrical	110.11 %	57.42 %	$1,683,781.53
E10 - Equipment	0.00 %	0.00 %	$0.00
E20 - Furnishings	105.00 %	138.31 %	$146,975.99
Totals:	**73.84 %**	**53.75 %**	**$13,555,311.48**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
A1010	Standard Foundations	$18.40	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$917,976
A1030	Slab on Grade	$7.73	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$385,650
A2010	Basement Excavation	$6.55	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$326,780
A2020	Basement Walls	$12.70	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$633,603
B1010	Floor Construction	$75.10	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$3,746,739
B1020	Roof Construction	$13.88	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$692,473
B2010	Exterior Walls	$36.91	S.F.	49,890	100	1957	2057		42.00 %	1.85 %	42		$34,126.94	$1,841,440
B2020	Exterior Windows	$18.01	S.F.	49,890	40	1957	1997	2057	105.00 %	185.19 %	42		$1,663,998.82	$898,519
B2030	Exterior Doors	$1.45	S.F.	49,890	25	1957	1982	2042	108.00 %	0.00 %	27			$72,341
B3010105	Built-Up	$37.76	S.F.	31,700	20	1957	1977	2037	110.00 %	89.73 %	22		$1,074,059.76	$1,196,992
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		25				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	49,890	20	1957	1977	2037	110.00 %	25.28 %	22		$756.57	$2,993
C1010	Partitions	$17.91	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$893,530
C1020	Interior Doors	$3.51	S.F.	49,890	40	1957	1997	2047	80.00 %	54.34 %	32		$95,151.45	$175,114
C1030	Fittings	$3.12	S.F.	49,890	40	1957	1997	2047	80.00 %	86.10 %	32		$134,014.14	$155,657
C2010	Stair Construction	$1.41	S.F.	49,890	100	1957	2057		42.00 %	0.00 %	42			$70,345

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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.	49,890	10	2005	2015	2027	120.00 %	0.00 %	12			$659,047
C3010231	Vinyl Wall Covering	$0.97	S.F.	49,890	15				0.00 %	0.00 %				$48,393
C3010232	Wall Tile	$2.63	S.F.	49,890	30	1957	1987	2047	106.67 %	40.18 %	32		$52,721.21	$131,211
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.	34,700	20	1957	1977	2037	110.00 %	109.72 %	22		$368,550.03	$335,896
C3020414	Wood Flooring	$22.27	S.F.		25				0.00 %	0.00 %				$0
C3020415	Concrete Floor Finishes	$0.97	S.F.	5,200	50	1957	2007	2067	104.00 %	0.00 %	52			$5,044
C3030	Ceiling Finishes	$20.97	S.F.	49,890	25	1957	1982	2032	68.00 %	8.07 %	17		$84,461.61	$1,046,193
D1010	Elevators and Lifts	$3.56	S.F.	49,890	35			2052	105.71 %	280.25 %	37		$497,751.74	$177,608
D2010	Plumbing Fixtures	$13.52	S.F.	49,890	35	1957	1992	2025	28.57 %	0.00 %	10			$674,513
D2020	Domestic Water Distribution	$1.68	S.F.	49,890	25	1990	2015	2042	108.00 %	301.63 %	27		$252,810.56	$83,815
D2030	Sanitary Waste	$2.90	S.F.	49,890	25	1957	1982	2042	108.00 %	169.16 %	27		$244,747.83	$144,681
D2040	Rain Water Drainage	$2.32	S.F.	49,890	30	1957	1987	2030	50.00 %	27.48 %	15		$31,802.64	$115,745
D3020	Heat Generating Systems	$18.67	S.F.	49,890	35	1957	1992	2052	105.71 %	115.95 %	37		$1,079,983.61	$931,446
D3030	Cooling Generating Systems	$24.48	S.F.	49,890	28	1957	1985	2045	107.14 %	60.64 %	30		$740,611.27	$1,221,307
D3040	Distribution Systems	$42.99	S.F.	49,890	25	1957	1982	2042	108.00 %	167.15 %	27		$3,585,062.24	$2,144,771
D3050	Terminal & Package Units	$11.60	S.F.	49,890	20	1957	1977	2022	35.00 %	0.00 %	7			$578,724
D3060	Controls & Instrumentation	$13.50	S.F.	49,890	20	1957	1977	2037	110.00 %	158.90 %	22		$1,070,244.84	$673,515
D4010	Sprinklers	$7.05	S.F.	49,890	35	1957	1992	2052	105.71 %	202.91 %	37		$713,698.70	$351,725
D4020	Standpipes	$1.01	S.F.	49,890	35	1957	1992	2052	105.71 %	0.00 %	37			$50,389
D5010	Electrical Service/Distribution	$9.70	S.F.	49,890	30	1957	1987	2047	106.67 %	164.74 %	32		$797,240.99	$483,933
D5020	Lighting and Branch Wiring	$34.68	S.F.	49,890	20	1957	1977	2037	110.00 %	25.47 %	22		$440,737.72	$1,730,185
D5030	Communications and Security	$12.99	S.F.	49,890	15	1957	1972	2032	113.33 %	46.02 %	17		$298,248.30	$648,071
D5090	Other Electrical Systems	$1.41	S.F.	49,890	30	1957	1987	2047	106.67 %	209.76 %	32		$147,554.52	$70,345
E1020	Institutional Equipment	$4.82	S.F.	49,890	35				0.00 %	0.00 %				$240,470
E1090	Other Equipment	$11.10	S.F.	49,890	35				0.00 %	0.00 %				$553,779
E2010	Fixed Furnishings	$2.13	S.F.	49,890	40	1957	1997	2057	105.00 %	138.31 %	42		$146,975.99	$106,266
								Total	**73.84 %**	**53.75 %**			**$13,555,311.48**	**$25,217,224**

System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

System:	C3010 - Wall Finishes	This system contains no images
Note:	Paint 95% Glazed block 5%	
System:	C3020 - Floor Finishes	This system contains no images
Note:	VAT 61% VCT 26% Concrete 13%	
System:	D5010 - Electrical Service/Distribution	This system contains no images
Note:	Two additional 75 KVA phase changer (single phase to three phase).	

Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$13,555,311**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$782,933**	**$0**	**$0**	**$997,138**	**$15,335,382**
*** A - Substructure**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A10 - Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1010 - Standard Foundations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A1030 - Slab on Grade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A20 - Basement Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2010 - Basement Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A2020 - Basement Walls	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B - Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B10 - Superstructure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1010 - Floor Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B1020 - Roof Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B20 - Exterior Enclosure	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B2010 - Exterior Walls	$34,127	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$34,127**
B2020 - Exterior Windows	$1,663,999	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,663,999**
B2030 - Exterior Doors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B30 - Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010 - Roof Coverings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010105 - Built-Up	$1,074,060	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,074,060**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$757	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$757**
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

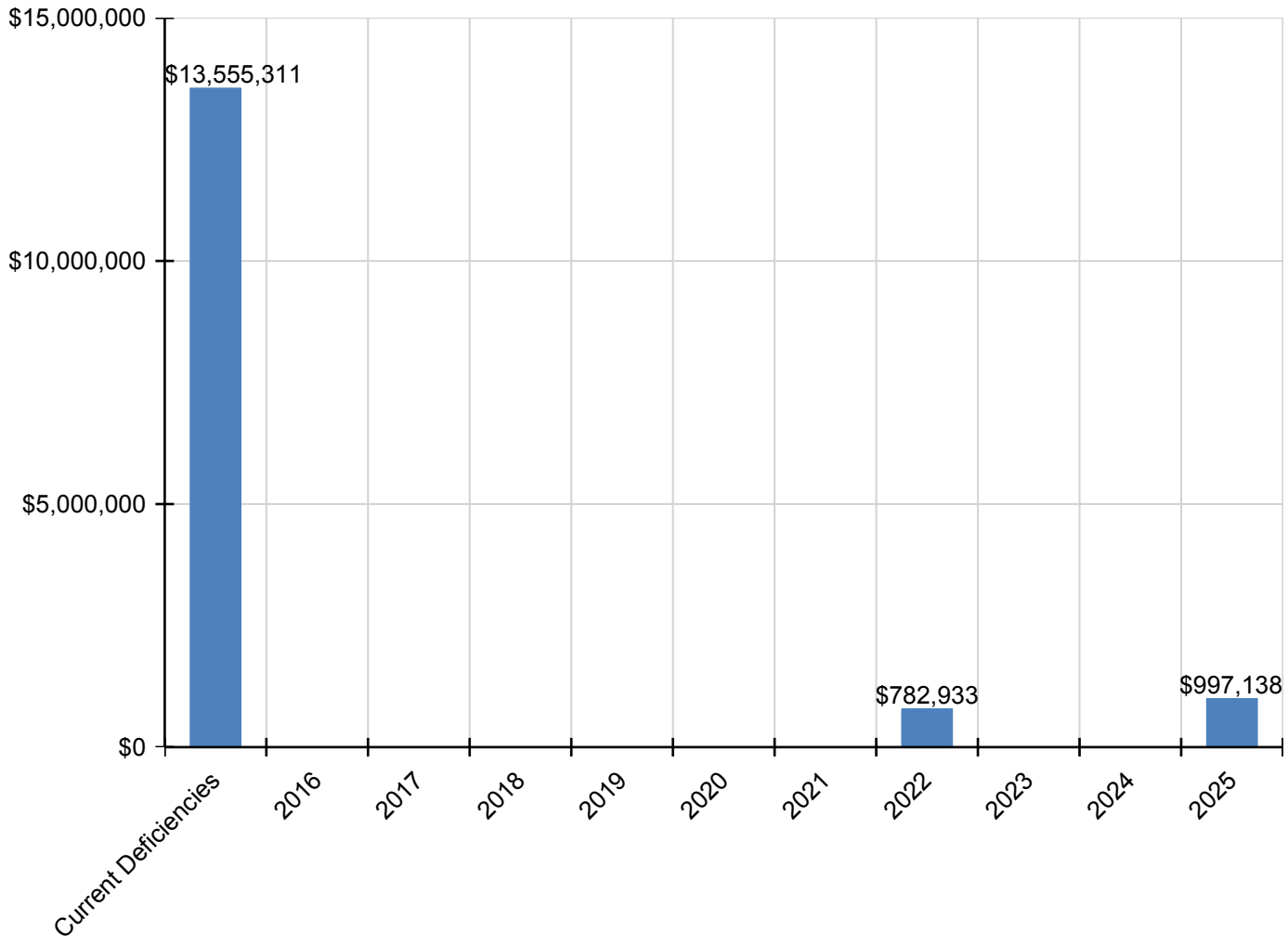
C1020 - Interior Doors	$95,151	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$95,151**
C1030 - Fittings	$134,014	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$134,014**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C30 - Interior Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010 - Wall Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010230 - Paint & Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010231 - Vinyl Wall Covering	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3010232 - Wall Tile	$52,721	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$52,721**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$368,550	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$368,550**
C3020414 - Wood Flooring	$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**
C3030 - Ceiling Finishes	$84,462	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$84,462**
D - Services	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D10 - Conveying	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D1010 - Elevators and Lifts	$497,752	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$497,752**
D20 - Plumbing	$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	$997,138	**$997,138**
D2020 - Domestic Water Distribution	$252,811	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$252,811**
D2030 - Sanitary Waste	$244,748	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$244,748**
D2040 - Rain Water Drainage	$31,803	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,803**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$1,079,984	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,079,984**
D3030 - Cooling Generating Systems	$740,611	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$740,611**
D3040 - Distribution Systems	$3,585,062	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,585,062**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$782,933	$0	$0	$0	**$782,933**
D3060 - Controls & Instrumentation	$1,070,245	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,070,245**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$713,699	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$713,699**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$797,241	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$797,241**
D5020 - Lighting and Branch Wiring	$440,738	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$440,738**
D5030 - Communications and Security	$298,248	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$298,248**
D5090 - Other Electrical Systems	$147,555	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$147,555**
E - Equipment & Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E10 - Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1020 - Institutional Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E1090 - Other Equipment	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$146,976	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$146,976**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

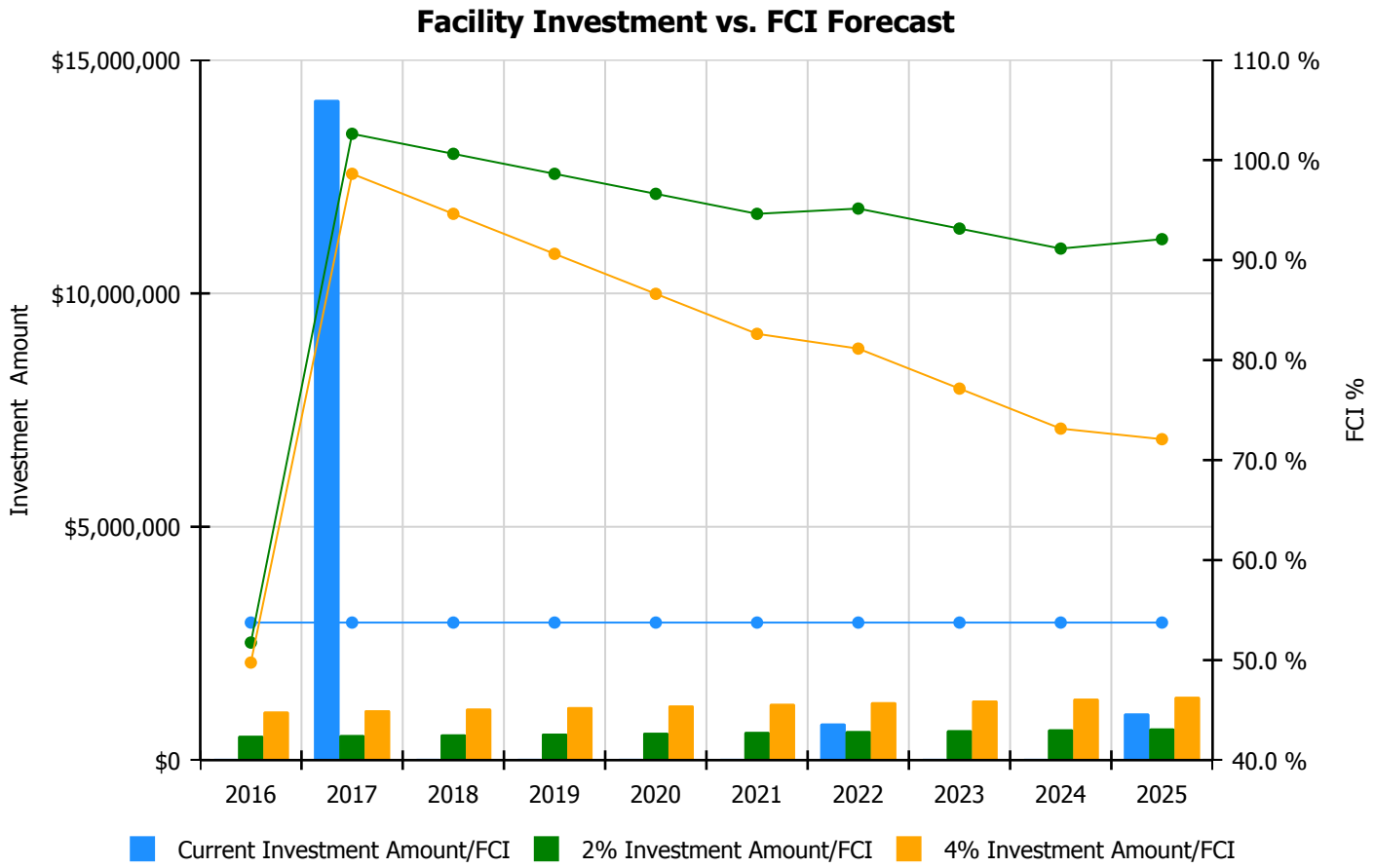
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

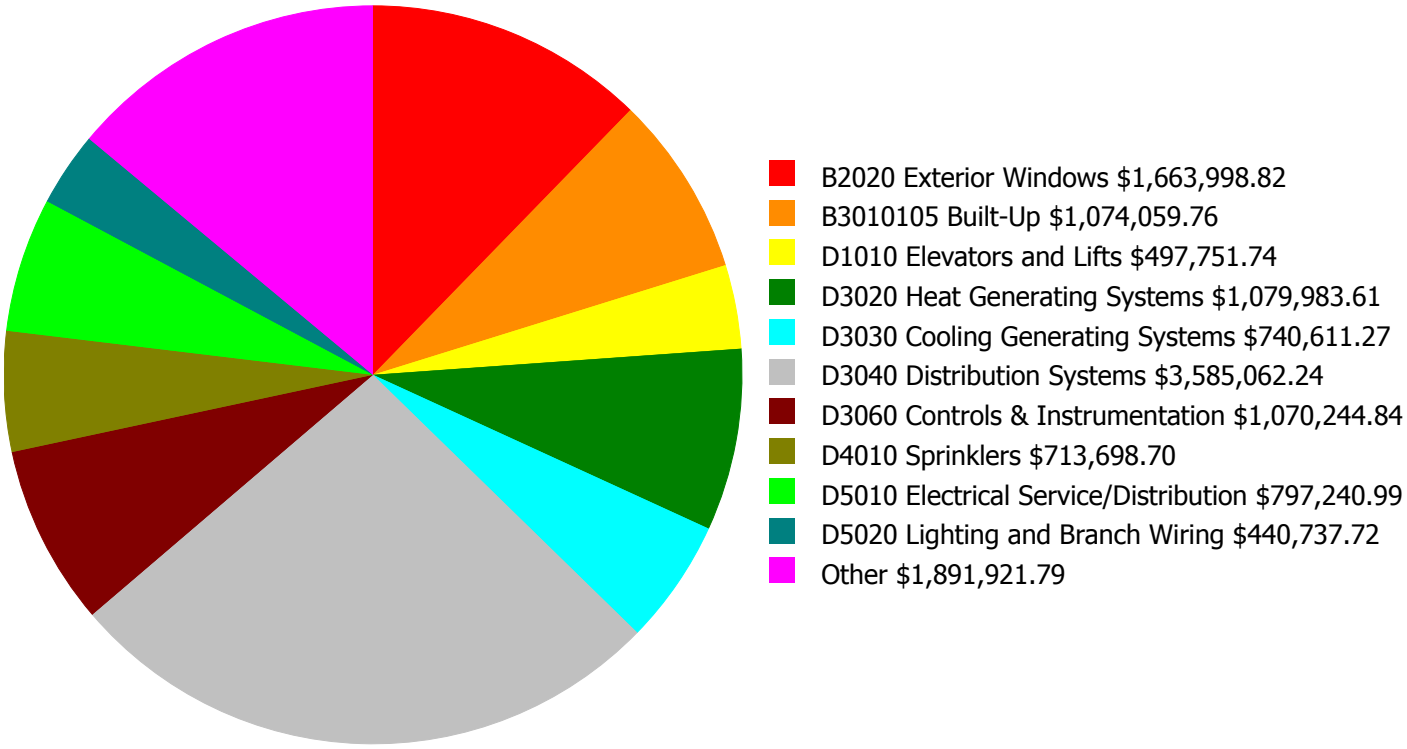
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 53.75%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$519,475.00	51.75 %	$1,038,950.00	49.75 %
2017	$14,144,037	$535,059.00	102.62 %	$1,070,118.00	98.62 %
2018	$0	$551,111.00	100.62 %	$1,102,222.00	94.62 %
2019	$0	$567,644.00	98.62 %	$1,135,288.00	90.62 %
2020	$0	$584,673.00	96.62 %	$1,169,347.00	86.62 %
2021	$0	$602,214.00	94.62 %	$1,204,427.00	82.62 %
2022	$782,933	$620,280.00	95.15 %	$1,240,560.00	81.15 %
2023	$0	$638,888.00	93.15 %	$1,277,777.00	77.15 %
2024	$0	$658,055.00	91.15 %	$1,316,110.00	73.15 %
2025	$997,138	$677,797.00	92.09 %	$1,355,594.00	72.09 %
Total:	**$15,924,107**	**$5,955,196.00**		**$11,910,393.00**	

Deficiency Summary by System

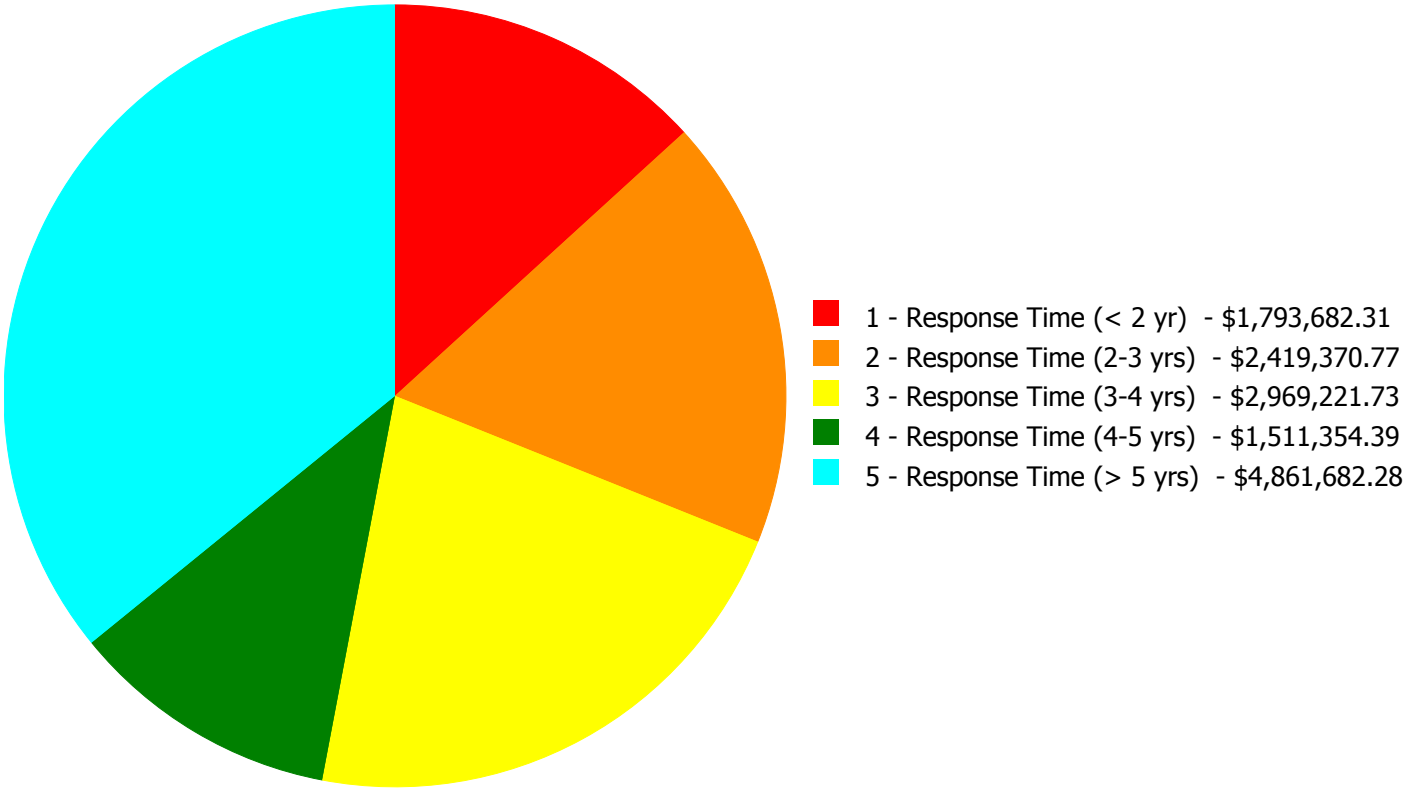
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $13,555,311.48

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: $13,555,311.48

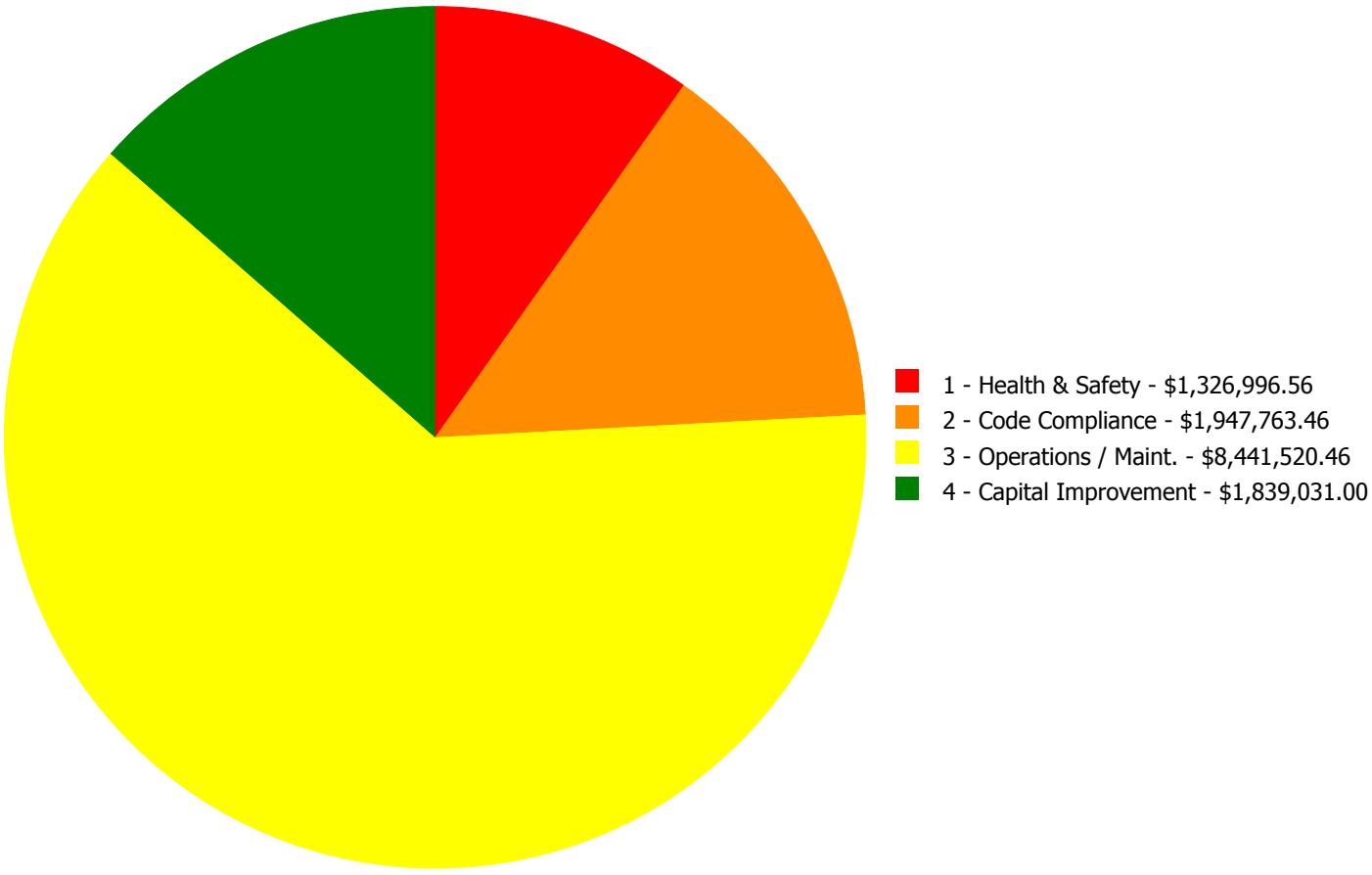
Deficiency By Priority Investment Table

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	$0.00	$0.00	$34,126.94	$0.00	$34,126.94
B2020	Exterior Windows	$0.00	$0.00	$0.00	$0.00	$1,663,998.82	$1,663,998.82
B3010105	Built-Up	$0.00	$0.00	$1,074,059.76	$0.00	$0.00	$1,074,059.76
B3020	Roof Openings	$0.00	$0.00	$0.00	$756.57	$0.00	$756.57
C1020	Interior Doors	$0.00	$57,883.22	$0.00	$0.00	$37,268.23	$95,151.45
C1030	Fittings	$0.00	$0.00	$64,958.34	$0.00	$69,055.80	$134,014.14
C3010232	Wall Tile	$0.00	$0.00	$0.00	$0.00	$52,721.21	$52,721.21
C3020413	Vinyl Flooring	$0.00	$0.00	$0.00	$368,550.03	$0.00	$368,550.03
C3030	Ceiling Finishes	$0.00	$0.00	$0.00	$0.00	$84,461.61	$84,461.61
D1010	Elevators and Lifts	$0.00	$0.00	$497,751.74	$0.00	$0.00	$497,751.74
D2020	Domestic Water Distribution	$0.00	$0.00	$252,810.56	$0.00	$0.00	$252,810.56
D2030	Sanitary Waste	$0.00	$244,747.83	$0.00	$0.00	$0.00	$244,747.83
D2040	Rain Water Drainage	$0.00	$0.00	$31,802.64	$0.00	$0.00	$31,802.64
D3020	Heat Generating Systems	$1,079,983.61	$0.00	$0.00	$0.00	$0.00	$1,079,983.61
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$0.00	$740,611.27	$740,611.27
D3040	Distribution Systems	$0.00	$2,116,739.72	$471,978.01	$0.00	$996,344.51	$3,585,062.24
D3060	Controls & Instrumentation	$0.00	$0.00	$0.00	$0.00	$1,070,244.84	$1,070,244.84
D4010	Sprinklers	$713,698.70	$0.00	$0.00	$0.00	$0.00	$713,698.70
D5010	Electrical Service/Distribution	$0.00	$0.00	$0.00	$797,240.99	$0.00	$797,240.99
D5020	Lighting and Branch Wiring	$0.00	$0.00	$245,035.03	$195,702.69	$0.00	$440,737.72
D5030	Communications and Security	$0.00	$0.00	$183,271.13	$114,977.17	$0.00	$298,248.30
D5090	Other Electrical Systems	$0.00	$0.00	$147,554.52	$0.00	$0.00	$147,554.52
E2010	Fixed Furnishings	$0.00	$0.00	$0.00	$0.00	$146,975.99	$146,975.99
	Total:	$1,793,682.31	$2,419,370.77	$2,969,221.73	$1,511,354.39	$4,861,682.28	$13,555,311.48

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: $13,555,311.48

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: D3020 - Heat Generating Systems

Location: Boiler room
Distress: Failing
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Replace boiler, cast iron sectional (150 HP)
Qty: 3.00
Unit of Measure: Ea.
Estimate: $1,079,983.61
Assessor Name: System
Date Created: 08/11/2015

Notes: Replace the three existing cast iron boilers which are well beyond their service life.

System: D4010 - Sprinklers

Location: Throughout buliding
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 1 - Response Time (< 2 yr)
Correction: Install a fire protection sprinkler system
Qty: 49,890.00
Unit of Measure: S.F.
Estimate: $713,698.70
Assessor Name: System
Date Created: 08/11/2015

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

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

System: C1020 - Interior Doors

Location: Interior

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace door knobs with compliant lever type

Qty: 104.00

Unit of Measure: Ea.

Estimate: $57,883.22

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace interior doors hardware for ADA accessibility

System: D2030 - Sanitary Waste

Location: Throughout building

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

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

Qty: 49,890.00

Unit of Measure: S.F.

Estimate: $244,747.83

Assessor Name: System

Date Created: 08/11/2015

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: D3040 - Distribution Systems

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 49,890.00

Unit of Measure: S.F.

Estimate: $2,116,739.72

Assessor Name: System

Date Created: 08/11/2015

Notes: Remove the existing unit ventilators and install units with hot and chilled water coils and integral heat exchangers to introduce outdoor air to the building.

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

System: B3010105 - Built-Up

Location: Exterior

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

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

Correction: Remove and Replace Built Up Roof

Qty: 31,700.00

Unit of Measure: S.F.

Estimate: $1,074,059.76

Assessor Name: System

Date Created: 09/28/2015

Notes: Install all new roofing system including insulation within next 5 to 10 years; tear-down existing roofing; install flashing, and counter flashing

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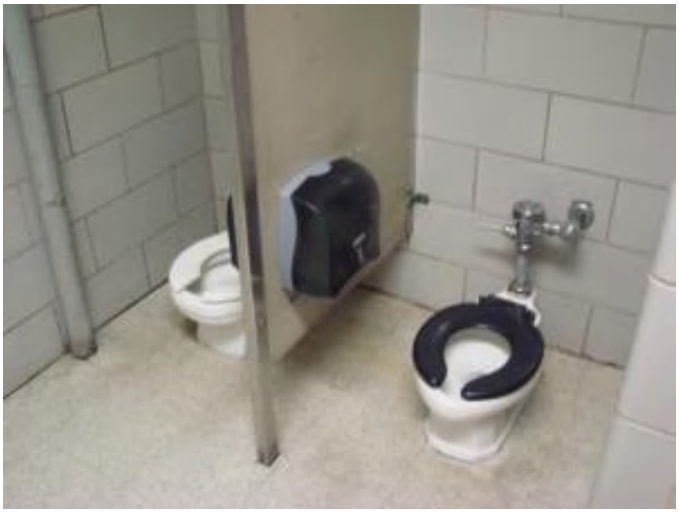
System: C1030 - Fittings



Location: Interior

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Remove and replace damaged toilet paritions - handicap units

Qty: 20.00

Unit of Measure: Ea.

Estimate: $64,958.34

Assessor Name: System

Date Created: 09/28/2015

Notes: Reconfigure toilets on each floor for accessibility, provide new toilet partitions

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System: D1010 - Elevators and Lifts

This deficiency has no image.

Location: Interior

Distress: Accessibility

Category: 2 - Code Compliance

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $497,751.74

Assessor Name: System

Date Created: 09/28/2015

Notes: Install 2500 lb hydraulic elevator serving all floors and basement

System: D2020 - Domestic Water Distribution

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace domestic water piping (75 KSF)

Qty: 49,890.00

Unit of Measure: S.F.

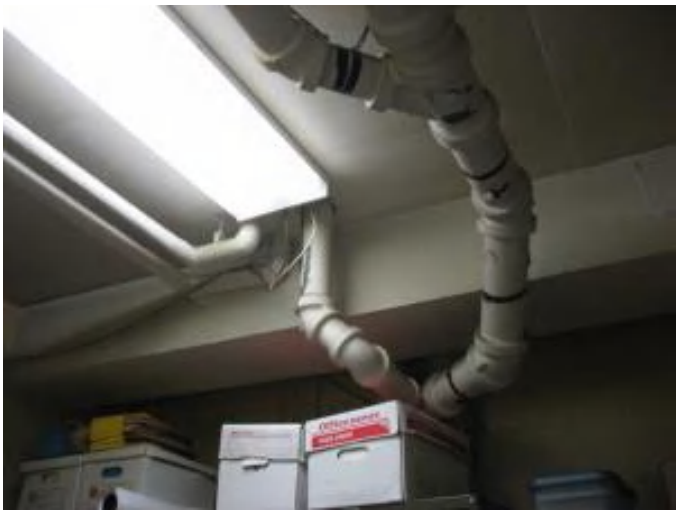
Estimate: $252,810.56

Assessor Name: System

Date Created: 11/17/2015

Notes: Hire a qualified contractor to perform a detailed inspection of the domestic water piping, in use for almost twenty years, and replace any damaged piping.

System: D2040 - Rain Water Drainage



Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace roof drains - per drain including piping

Qty: 6.00

Unit of Measure: Ea.

Estimate: $31,802.64

Assessor Name: System

Date Created: 08/11/2015

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

System: D3040 - Distribution Systems

Location: Throughout building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Perform testing to identify and replace damaged steam and condensate piping.

Qty: 49,890.00

Unit of Measure: S.F.

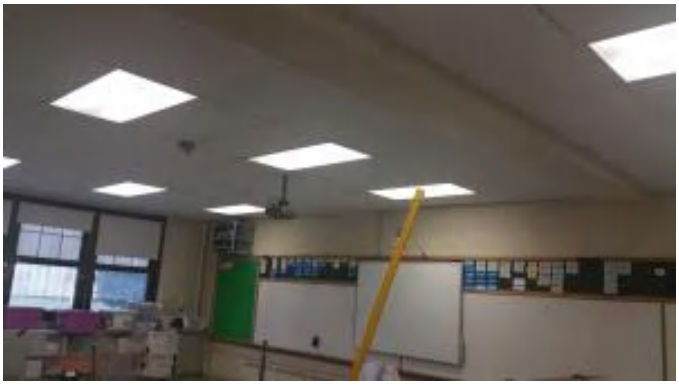
Estimate: $471,978.01

Assessor Name: System

Date Created: 08/11/2015

Notes: Hire a qualified contractor to examine the hot water distribution piping and perform additional testing to locate and replace any damaged piping and to further quantify the extent of potential failures.

System: D5020 - Lighting and Branch Wiring



Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace lighting fixtures

Qty: 1.00

Unit of Measure: Ea.

Estimate: $245,035.03

Assessor Name: System

Date Created: 08/07/2015

Notes: Install new lighting fixtures for all the class rooms, and other rooms. New fluorescent lighting (T-5) will be adequate, however, using the state-of-the-art LED lighting will improve the energy usage.

System: D5030 - Communications and Security

Location: Throughout the building

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Replace fire alarm system

Qty: 1.00

Unit of Measure: S.F.

Estimate: $183,271.13

Assessor Name: System

Date Created: 08/07/2015

Notes: Install a new Automated Fire Alarm System to be located in the new Electrical Room.

System: D5090 - Other Electrical Systems

Location: Electrical room in the basement

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

Correction: Add Standby Generator System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $147,554.52

Assessor Name: System

Date Created: 08/07/2015

Notes: Install a new emergency power system (30 KVA generator). Install new battery packed emergency lights and exit lights in all the hallways, stairways, and in each class room or other purpose rooms

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

System: B2010 - Exterior Walls

Location: Exterior

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Repoint horizontal or vertical joints at limestone coping

Qty: 2,000.00

Unit of Measure: L.F.

Estimate: $34,126.94

Assessor Name: System

Date Created: 09/28/2015

Notes: Tuck-point stone clad portico at Auditorium entrance

System: B3020 - Roof Openings

Location: Exterior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace roof hatch - pick the closest size

Qty: 1.00

Unit of Measure: Ea.

Estimate: $756.57

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace roof access hatch

System: C3020413 - Vinyl Flooring

Location: Interior

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

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

Qty: 24,300.00

Unit of Measure: S.F.

Estimate: $368,550.03

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace all VAT flooring including cove base within 5 years

System: D5010 - Electrical Service/Distribution

Location: Electrical room in the basement.

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Electrical DIstribution System (U1)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $631,142.51

Assessor Name: System

Date Created: 08/07/2015

Notes: Upgrade the existing electrical service with a new 1000 KVA dry-type Transformer, 13.2KV to 480V/277V, 3Ph. Install a new 1200A, 480V, 3 Ph. Switchboard. The new Main switchboard shall be sized to handle the existing loads plus any new HVAC loads. Install a new step down transformer from 480V to 120V/208V, and a new 600 Amp main 120V/208V Panel Board for all the lighting/receptacle loads.

System: D5010 - Electrical Service/Distribution

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Electrical DIstribution System (U1)

Qty: 1.00

Unit of Measure: Ea.

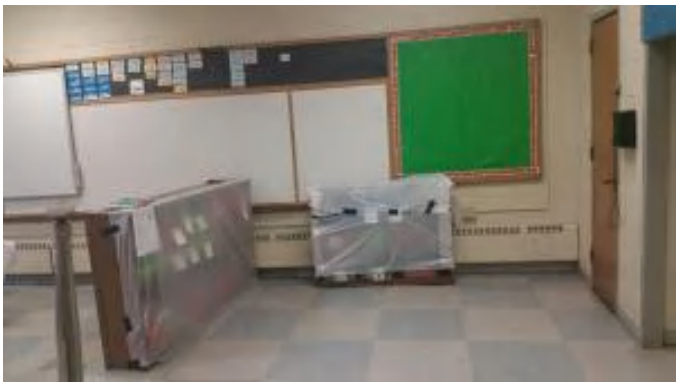
Estimate: $166,098.48

Assessor Name: System

Date Created: 08/07/2015

Notes: Install two 120V/208V panels in each floor to replace the existing panels. Also replace the power feeders, conduit wire to the four panels from the new 120V/208V three phase main Panel Board.

System: D5020 - Lighting and Branch Wiring



Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Provide surface raceway system and wiring devices

Qty: 1.00

Unit of Measure: L.F.

Estimate: $195,702.69

Assessor Name: System

Date Created: 08/07/2015

Notes: Install two receptacles in all of class rooms and other purpose rooms. Add a wire-mold system with receptacles on every 3’ for the computer room.

System: D5030 - Communications and Security

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Clock System or Components

Qty: 0.00

Unit of Measure: Ea.

Estimate: $114,977.17

Assessor Name: System

Date Created: 08/07/2015

Notes: Install a new clock system.

Priority 5 - Response Time (> 5 yrs):

System: B2020 - Exterior Windows

Location: Exterior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 240.00

Unit of Measure: Ea.

Estimate: $1,663,998.82

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace all windows within next 4 to 5 years

System: C1020 - Interior Doors

Location: Inderior

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Refinish interior doors

Qty: 45.00

Unit of Measure: Ea.

Estimate: $37,268.23

Assessor Name: System

Date Created: 09/28/2015

Notes: Refinish damaged doors

System: C1030 - Fittings

Location: Interior

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace toilet accessories - select accessories and quantity

Qty: 24.00

Unit of Measure: Ea.

Estimate: $40,880.91

Assessor Name: System

Date Created: 09/28/2015

Notes: Provide new toilet accessories including grab bars

System: C1030 - Fittings

Location: Interior

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 104.00

Unit of Measure: Ea.

Estimate: $28,174.89

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace signage throughout the building

System: C3010232 - Wall Tile

Location: Interior/ toilets

Distress: Damaged

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace and regrout wall tiles - based on the SF of area

Qty: 1,500.00

Unit of Measure: S.F.

Estimate: $52,721.21

Assessor Name: System

Date Created: 09/28/2015

Notes: Re-grout wainscot in toilets

System: C3030 - Ceiling Finishes

Location: Interior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 5,600.00

Unit of Measure: S.F.

Estimate: $84,461.61

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace all suspended acoustical ceilings

System: D3030 - Cooling Generating Systems

Location: Throughout building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 49,890.00

Unit of Measure: S.F.

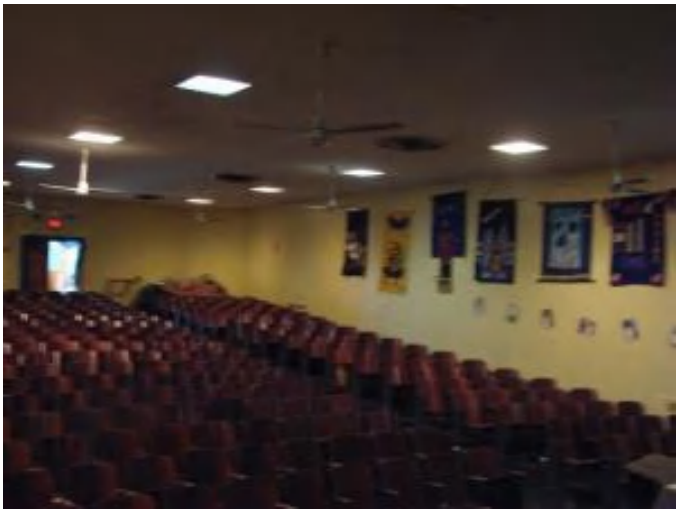
Estimate: $740,611.27

Assessor Name: System

Date Created: 08/11/2015

Notes: Remove the window air conditioning units and install a 125 ton air-cooled chiller with chilled water distribution piping and pumps located in a mechanical room to supply more reliable air conditioning for the building with a much longer service life.

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: 350.00

Unit of Measure: Seat

Estimate: $498,899.53

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide ventilation for the Auditorium by installing a constant volume air handling unit with distribution ductwork and registers.

System: D3040 - Distribution Systems

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: 08/11/2015

Notes: Provide ventilation for the Gymnasium/Lunch Room by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in the window openings.

System: D3040 - Distribution Systems

Location: Administration

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for Administration (2000 students).

Qty: 437.00

Unit of Measure: Pr.

Estimate: $189,143.94

Assessor Name: System

Date Created: 08/11/2015

Notes: Provide ventilation for the administration offices by installing a fan coil air handling unit hung from the structure with outdoor air ducted to the unit from louvers in window openings.

System: D3060 - Controls & Instrumentation

Location: Throughout building

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace pneumatic controls with DDC (75KSF)

Qty: 49,890.00

Unit of Measure: S.F.

Estimate: $1,070,244.84

Assessor Name: System

Date Created: 08/11/2015

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

System: E2010 - Fixed Furnishings

Location: Interior

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Replace book cases - pick the closest book case size and number

Qty: 50.00

Unit of Measure: Ea.

Estimate: $146,975.99

Assessor Name: System

Date Created: 09/28/2015

Notes: Replace built-in cabinets

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, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	Series 44			35	1957	1992	$75,956.00	$250,654.80
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	Series 44			35	1957	1992	$75,956.00	$250,654.80
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 3210 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler Room	HB Smith	Series 44			35	1957	1992	$75,956.00	$250,654.80
D5010 Electrical Service/Distribution	Circuit breaker, 3 pole, 600 volt, 1200 amp, enclosed (NEMA 1)	1.00	Ea.	electrical; room					30	1957	2017	$13,662.00	$15,028.20
D5010 Electrical Service/Distribution	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 800 A	1.00	Ea.	electrical room					20	1957	2017	$21,766.05	$23,942.66
												Total:	**$790,935.26**

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):	48,500
Year Built:	1957
Last Renovation:	
Replacement Value:	$1,036,959
Repair Cost:	$325,944.94
Total FCI:	31.43 %
Total RSLI:	106.38 %

Description:

Attributes:

General Attributes:

Bldg ID:	S520001	Site ID:	S520001

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	106.27 %	6.01 %	$44,931.79
G40 - Site Electrical Utilities	106.67 %	97.32 %	$281,013.15
Totals:	**106.38 %**	**31.43 %**	**$325,944.94**

Condition Detail

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

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

System Listing

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

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

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

System Code	System Description	Unit Price $	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency $	Replacement Value $
G2010	Roadways	$11.52	S.F.		30				0.00 %	0.00 %				$0
G2020	Parking Lots	$8.50	S.F.	21,000	30	1990	2020	2047	106.67 %	3.58 %	32		$6,398.31	$178,500
G2030	Pedestrian Paving	$12.30	S.F.	28,700	40	1957	1997	2057	105.00 %	0.00 %	42			$353,010
G2040	Site Development	$4.36	S.F.	49,700	25	1990	2015	2042	108.00 %	17.78 %	27		$38,533.48	$216,692
G2050	Landscaping & Irrigation	$4.36	S.F.		15				0.00 %	0.00 %				$0
G4020	Site Lighting	$4.84	S.F.	49,700	30	1957	1987	2047	106.67 %	64.76 %	32		$155,782.71	$240,548
G4030	Site Communications & Security	$0.97	S.F.	49,700	30	1957	1987	2047	106.67 %	259.77 %	32		$125,230.44	$48,209
								Total	**106.38 %**	**31.43 %**			**$325,944.94**	**$1,036,959**

System Notes

The facility description in the site executive summary contains an overview of each system. The notes listed below provide additional information on select systems found within the facility.

No data found for this asset

Renewal Schedule

eCOMET forecasts future Capital Renewal funding needed to address expiring systems based on the Next Renewal year found in the Cost Models. A 3% annual inflation factor is applied to the costs for systems expiring in future years. The table below reflects recommended Capital Renewal funding needs over the next 10 years. Note: Cells with a zero value indicate systems for which renewal is not scheduled in that year.

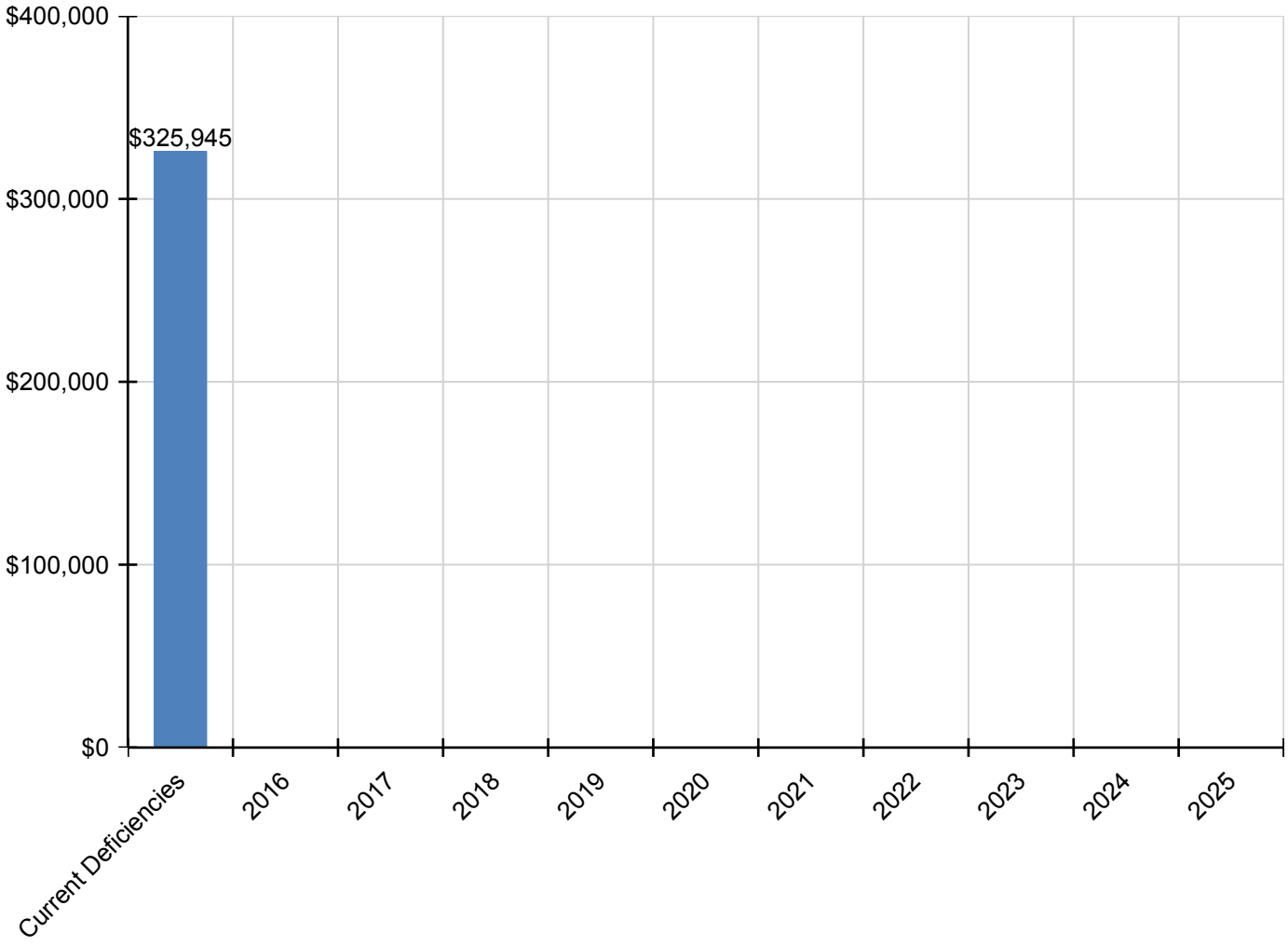
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$325,945**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$325,945**
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	$6,398	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$6,398**
G2030 - Pedestrian Paving	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2040 - Site Development	$38,533	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$38,533**
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	$155,783	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$155,783**
G4030 - Site Communications & Security	$125,230	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$125,230**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

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

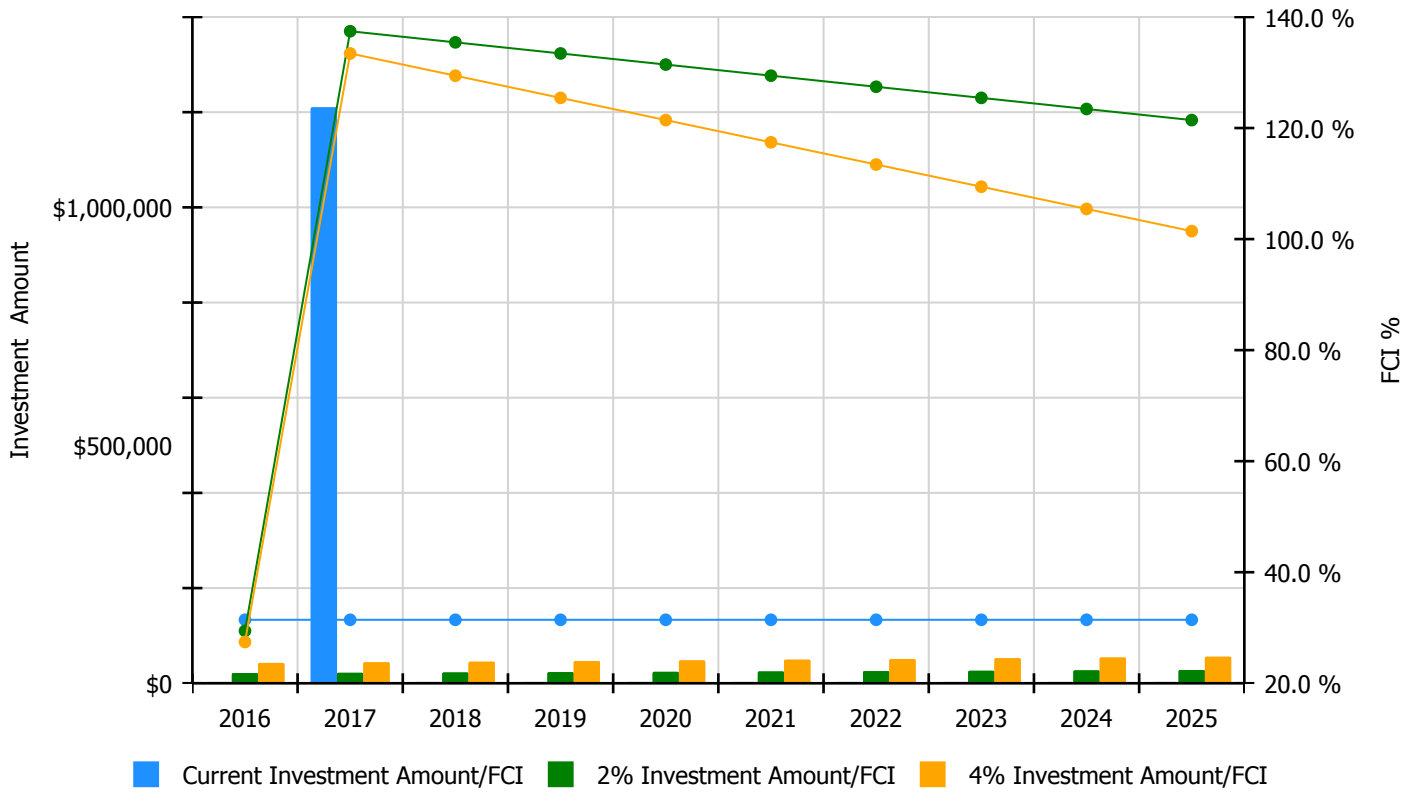


10 Year FCI Forecast by Investment Scenario

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

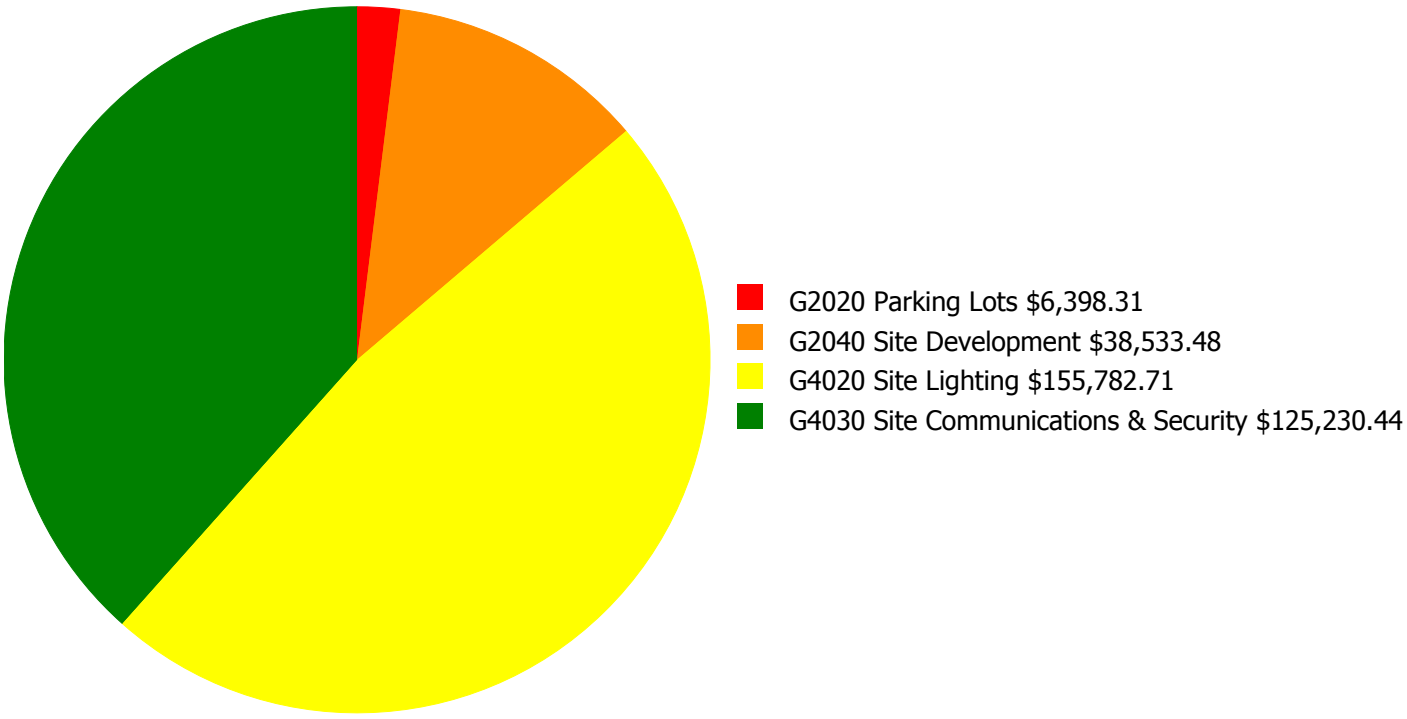
Facility Investment vs. FCI Forecast



Year	Investment Amount Current FCI - 31.43%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$21,361.00	29.43 %	$42,723.00	27.43 %
2017	$1,210,121	$22,002.00	137.43 %	$44,004.00	133.43 %
2018	$0	$22,662.00	135.43 %	$45,325.00	129.43 %
2019	$0	$23,342.00	133.43 %	$46,684.00	125.43 %
2020	$0	$24,042.00	131.43 %	$48,085.00	121.43 %
2021	$0	$24,764.00	129.43 %	$49,527.00	117.43 %
2022	$0	$25,507.00	127.43 %	$51,013.00	113.43 %
2023	$0	$26,272.00	125.43 %	$52,544.00	109.43 %
2024	$0	$27,060.00	123.43 %	$54,120.00	105.43 %
2025	$0	$27,872.00	121.43 %	$55,743.00	101.43 %
Total:	**$1,210,121**	**$244,884.00**		**$489,768.00**	

Deficiency Summary by System

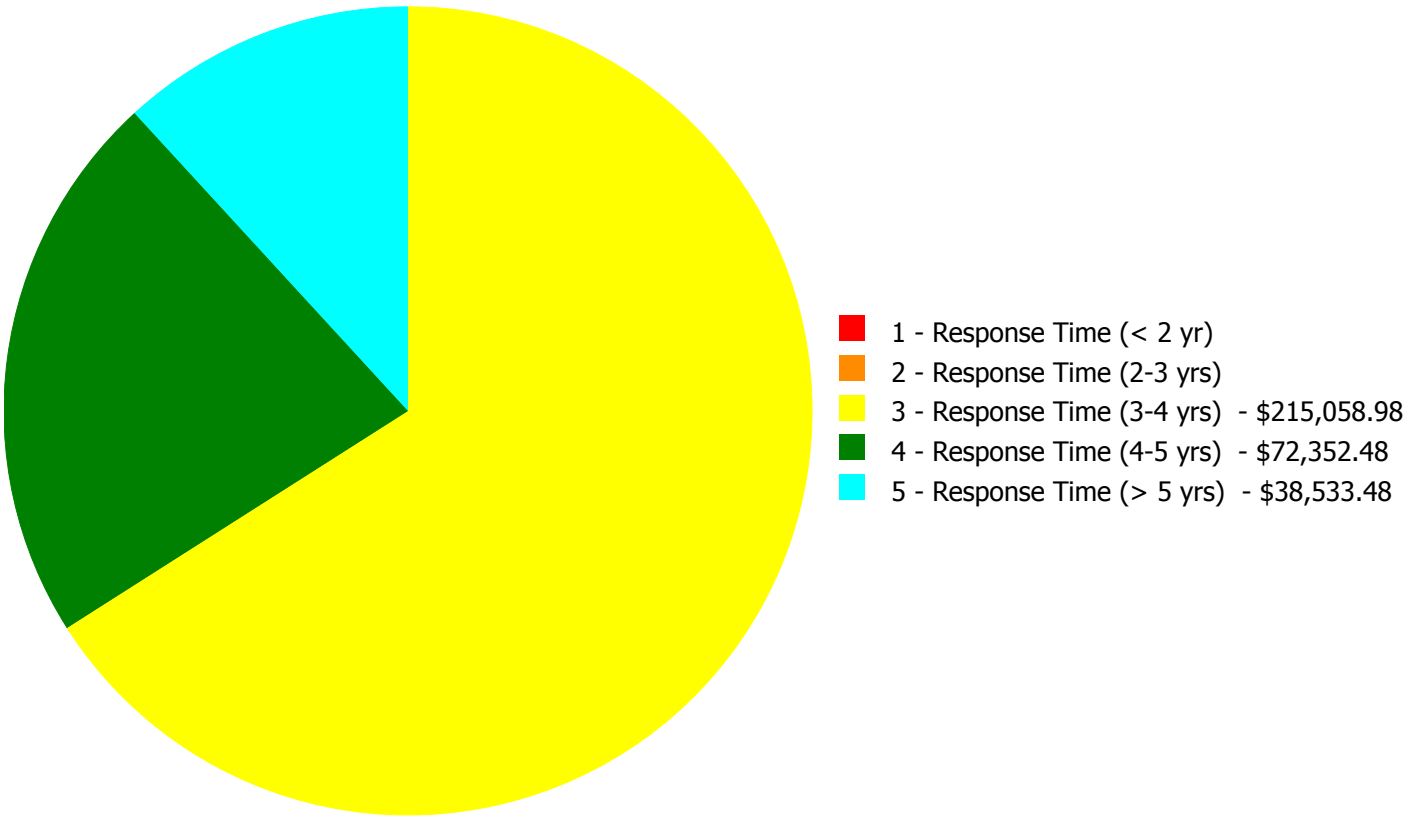
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $325,944.94

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: $325,944.94

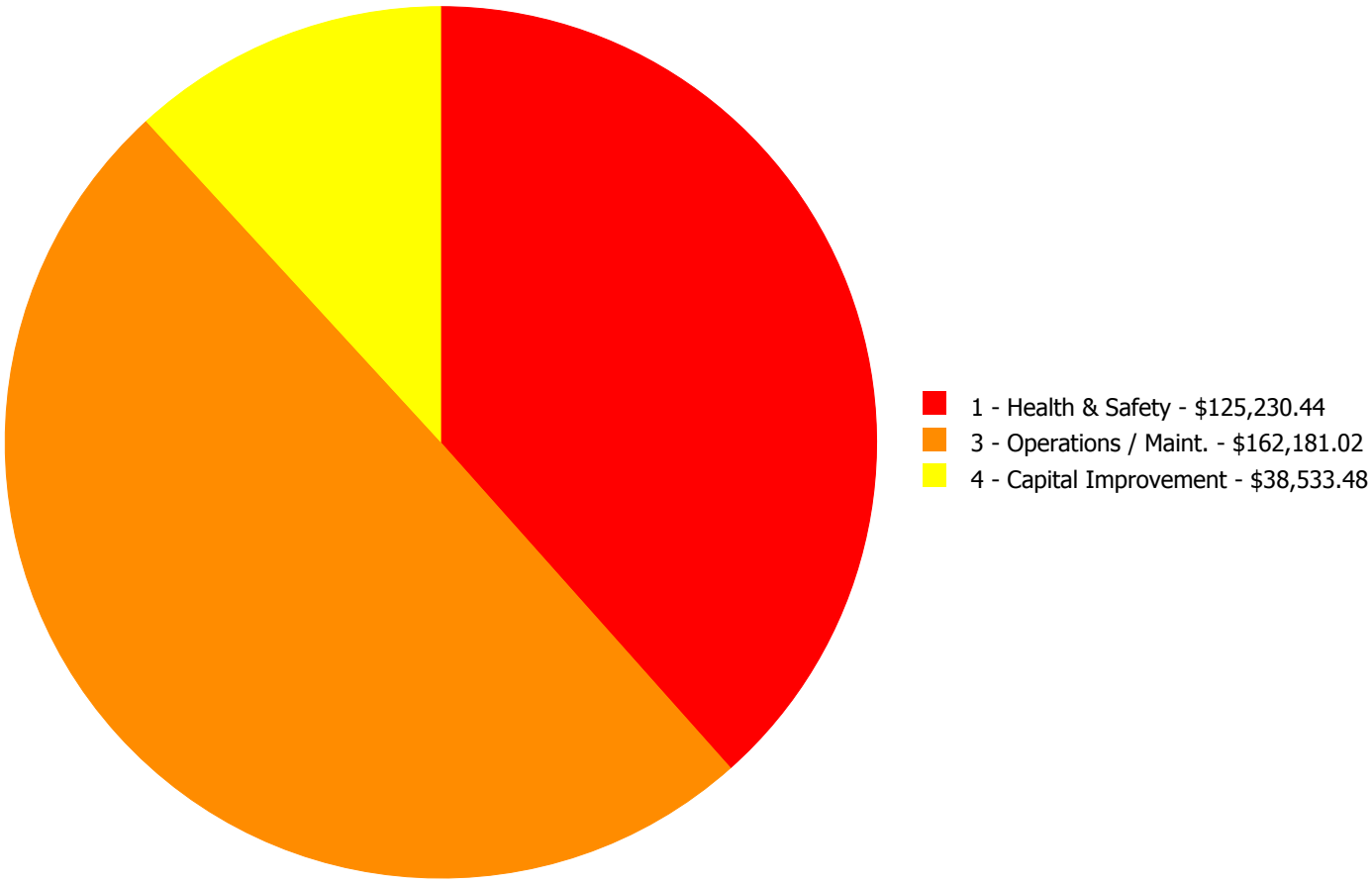
Deficiency By Priority Investment Table

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	$0.00	$6,398.31	$0.00	$6,398.31
G2040	Site Development	$0.00	$0.00	$0.00	$0.00	$38,533.48	$38,533.48
G4020	Site Lighting	$0.00	$0.00	$155,782.71	$0.00	$0.00	$155,782.71
G4030	Site Communications & Security	$0.00	$0.00	$59,276.27	$65,954.17	$0.00	$125,230.44
	Total:	$0.00	$0.00	$215,058.98	$72,352.48	$38,533.48	$325,944.94

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: $325,944.94

Deficiency Details by Priority

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

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

System: G4020 - Site Lighting

Location: Grounds

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $155,782.71

Assessor Name: Tom Moe

Date Created: 11/17/2015

Notes: Install two new pole-mounted Lighting fixtures for the grounds. The existing lights have reached the end of their useful service.

System: G4030 - Site Communications & Security

Location: Grounds

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Video Surveillance System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $59,276.27

Assessor Name: Tom Moe

Date Created: 11/17/2015

Notes: Install site security system

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

System: G2020 - Parking Lots

Location: Grounds/ site

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Stripe parking stalls, install parking bumpers, provide handicap symbol and handicap post mounted sign - insert proper quantities in estimate

Qty: 30.00

Unit of Measure: Ea.

Estimate: $6,398.31

Assessor Name: Ben Nixon

Date Created: 09/28/2015

Notes: Restripe parking lot

System: G4030 - Site Communications & Security

Location: Grounds

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add Site Paging System

Qty: 0.00

Unit of Measure: Ea.

Estimate: $65,954.17

Assessor Name: Tom Moe

Date Created: 11/17/2015

Notes: Install new site communication

Priority 5 - Response Time (> 5 yrs):

System: G2040 - Site Development

This deficiency has no image.

Location:	G520001;Grounds
Distress:	Beyond Service Life
Category:	4 - Capital Improvement
Priority:	5 - Response Time (> 5 yrs)
Correction:	Repair or replace elements of school play structures - pick the appropriate items quantities
Qty:	4.00
Unit of Measure:	Ea.
Estimate:	$38,533.48
Assessor Name:	Tom Moe
Date Created:	11/22/2015

Notes: Replace basketball backstop and install additional backstops

Equipment Inventory

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

No data found for this asset

Glossary

ABMA	American Boiler Manufacturers Association http://www.abma.com/
ACEEE	American Council for an Energy-Efficient Economy
ACGIH	American Council of Governmental and Industrial Hygienists
AEE	Association of Energy Engineers
AFD	Adjustable Frequency Drive
AFTC	After Tax Cash Flow
AGA	American Gas Association
AHU	Air Handling Unit
Amp	Ampere
ANSI	American National Standards Institute
ARI	Air Conditioning and Refrigeration Institute
ASD	Adjustable Speed Drive
ASHRAE	American Society of Heating Refrigerating and Air-Conditioning Engineers Inc.
ASME	American Society of Mechanical Engineers
Assessment	Visual survey of a facility to determine its condition. It involves looking at the age of systems reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or equipment for functionality.
ATS	After Tax Savings
AW	Annual worth
BACNET	Building Automation Control Network
BAS	Building Automation System
BCR	Benefit Cost Ratio
BEP	Business Energy Professional (AEE)
BF	Ballast Factor
BHP	Boiler Horsepower (boilers)
BHP	Brake Horsepower (motors)
BLCC	Building Life Cycle Cost analysis program (FEMP)
BOCA	Building Officials and Code Administrators
BTCF	Before Tax Cash Flow

BTS	Before Tax Savings
Btu	British thermal unit
Building Addition	An area space or component of a building added to a building after the original building's year built date.
CAA	Clean Air Act
CAAA-90	Clean Air Act Amendments of 1990
CABO	Council of American Building Officials
CAC	Conventional Air Conditioning
CADDET	Center for the Analysis and Dissemination of Demonstrated Energy Technologies
Calculated Next Renewal	The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system.
Capital Renewal	Capital renewal is condition work (excluding suitability and energy audit work) that includes the replacement of building systems or elements (as they become obsolete or beyond their useful life) not normally included in an annual operating budget. Calculated next renewal The year a system or element would be expected to expire based solely on the date it was installed and the expected useful lifetime for that kind of system. Next renewal The assessor adjusted expected useful life of a system or element based on on-site inspection.
CDD	Cooling Degree Days
CDGP	Certified Distributed Generation Professional
CEC	California Energy Commission
CEM	Certified Energy Manager
CEP	Certified Energy Procurement Professional
CFC	Chlorofluorocarbon
CFD	Cash Flow Diagram
CFL	Compact Fluorescent Light
CFM cfm	Cubic Feet per Minute
CHP	Combined Heat and Power (a.k.a. cogeneration)
CHW	Chilled Water
Condition	Condition refers to the state of physical fitness or readiness of a facility system or system element for its intended use.
COP	Coefficient of Performance
Cp	Heat Capacity of Material
CPUC	California Public Utility Commission
CRI	Color Rendering Index
CRT	Cathode Ray Tube VDT HMI

CTC	Competitive Transition Charge
Cu	Coefficient of Utilization
Current Replacement Value (CRV)	CRV represents the hypothetical total cost of rebuilding or replacing an existing facility in current dollars to its optimal condition (excluding auxiliary facilities) under current codes and construction standards.
Cv	Value Coefficient
CWS	Chilled Water System
D d	Distance (usually feet)
DB	Dry Bulb
DCV	Demand Control Ventilation
DD	Degree Day
DDB	Double Declining Balance
DDC	Direct Digital Controls
Deferred maintenance	Deferred maintenance is condition work (excluding suitability and energy audit needs) deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.
Deficiency	A deficiency is a repair item that is damaged missing inadequate or insufficient for an intended purpose.
Delta	Difference
Delta P	Pressure Difference
Delta T	Temperature Difference
DG	Distributed Generation
DOE	Department of Energy
DP	Dew Point
DR	Demand Response
DX	Direct Expansion Air Conditioner
EA	Energy Audit
EBITDA	Earnings before Interest Taxes Depreciation and Amortization
ECI	Energy Cost Index
ECM	Energy Conservation Measure
ECO	Energy Conservation Opportunity
ECPA	Energy Conservation and Production Act
ECR	Energy Conservation Recommendation
ECS	Energy Control System

EER	Energy Efficiency Ratio
EERE	Energy Efficiency and Renewable Energy division of US DOE
EIA	Energy Information Agency
EIS	Energy Information System
EMCS	Energy Management Computer System
EMO	Energy Management Opportunity
EMP	Energy Management Project
EMR	Energy Management Recommendation
EMS	Energy Management System
Energy Utilization Index (EUI)	EUI is the measure of total energy consumed in the cooling or heating of a building in a period expressed as British thermal unit (BTU) per (cooled or heated) gross square foot.
EO	Executive Order
EPA	Environmental Protection Agency
EPACT	Energy Policy Act of 1992
EPCA	Energy Production and Conservation Act of 1975
EPRI	Electric Power Research Institute
EREN	Efficiency and Renewable Energy (Division of USDOE)
ERV	Energy Recovery Ventilator
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
EUI	Energy Use Index
EWG	Exempt Wholesale Generators
Extended Facility Condition Index (EFCI)	EFCI is calculated as the condition needs for the current year plus facility system renewal needs going out to a set time in the future divided by Current Replacement Value.
f	Frequency
F	Fahrenheit
Facility	A facility refers to site(s) building(s) or building addition(s) or combinations thereof that provide a particular service.
Facility Condition Assessment (FCA)	FCA is a process for evaluating the condition of buildings and facilities for programming and budgetary purposes through an on site inspection and evaluation process.
Facility Condition Index (FCI)	FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities. The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

FC	Footcandle
FCA	Fuel Cost Adjustment
FEMIA	Federal Energy Management Improvement Act of 1988
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FESR	Fuel Energy Savings Ratio
FLA	Full Load Amps
FLF	Facility Load Factor (usually monthly)
FLRPM	Full Load Revolutions per Minute
FMS	Facility Management System
FPM fpm	Feet per Minute (velocity)
FSEC	Florida Solar Energy Center
Ft	Foot
GPM gpm	Gallons per Minute
GRI	Gas Research Institute
Gross Square Feet (GSF)	The size of the enclosed floor space of a building in square feet measured to the outside face of the enclosing wall.
GUI	Graphical User Interface
H h	Enthalpy Btu/lb
HCFC	Hydrochlorofluorocarbons
HDD	Heating Degree days
HFC	Hydrofluorocarbons
HHV	Higher Heating Value
HID	High Intensity Discharge (lamp)
HMI	Human Machine Interface
HMMI	Human Man Machine Interface
HO	High Output (lamp)
HP Hp hp	Horsepower
HPS	High Pressure Sodium (lamp)
HR	Humidity Ratio
Hr hr	Hour

HRU	Heat Recovery Unit
HVAC	Heating Ventilation and Air-Conditioning
Hz	Hertz
I	Intensity (lumen output of lamp)
I i	Interest rate or Discount rate
IAQ	Indoor Air Quality
ICA	International Cogeneration Alliance
ICBO	International Conference of Buildings Officials
ICC	International Code Council
ICP	Institutional Conservation Program
IECC	International Energy Conservation Code
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
Install year	The year a building or system was built or the most recent major renovation date (where a minimum of 70 of the system?s Current Replacement Value (CRV) was replaced).
IRP	Integrated Resource Planning
IRR	Internal Rate of Return
ISO	Independent System Operator
ITA	Independent Tariff Administrator
k	Kilo multiple of thousands in SI system
K	Kelvins (color temperature of lamp)
K k	Thermal Conductivity of Material
KVA	Kilovolt Ampere
KVAR	Kilovolt Ampere Reactive
kW	kiloWatt
kWh	kiloWatt hour
L	Length (usually feet)
LCC	Life Cycle Costing
LDC	Local Distribution Company
LEED	Leadership in Energy and Environmental Design
LEED EB	LEED for Existing Buildings

LEED NC	LEED for new construction
LF	Load Factor
LHV	Lower Heating Value
Life cycle	The period of time that a building or site system or element can be expected to adequately serve its intended function.
LPS	Low Pressure Sodium (lamp)
Lu	Lumen Output of a Lamp or Fixture
M	Mega multiple of millions in SI system
M&V	Measurement and Verification
MACRS	Modified Accelerated Cost Recovery System
MARR	Minimum Attractive Rate of Return
Mbtu	Thousand Btu
MCF	Thousand Cubic Feet (usually of gas)
MEC	Model Energy Code
Mm	Multiple of Thousands in I/P System
MMBtu	Million Btu
MMCS	Maintenance Management Computer System
MMI	Man Machine Interface
MMS	Maintenance Management System
MSE 2000	Management System for Energy 2000 (ANSI Georgia Tech Univ)
MW	MegaWatt
MWH MWh	MegaWatt hour
NAAQS	National Ambient Air Quality Standards
NAESCO	National Association of Energy Service Companies
NAIMA	North American Insulation Manufacturers Association
NEA	National Energy Act of 1978
NECPA	National Energy Conservation Policy Act
NEMA	National Electrical Manufacturer's Association
NERC	North American Electric Reliability Council
Next Renewal	The Next Renewal date is an override of the 'Calculated Next Renewal' date and is based upon the assessor?s visual inspection.

NFPA	National Fire Protection Association
NGPA	National Gas Policy Act of 1978
NLRPM	No Load Revolutions per Minute (speed)
Nn	Equipment or Project lifetime in economic analysis
NOPR	Notice of Proposed Rule Making from FERC
NOx	Nitrogen Oxide Compounds
NPV	Net present value in economic analysis
NREL	National Renewable Energy Laboratory
NUG	Non-Utility Generator
O&M	Operation and Maintenance
OA	Outside Air
ODP	Ozone Depletion Potential
OPAC	Off-Peak Air Conditioning
P	Present value in economic analysis
PBR	Performance Based Rates
PEA	Preliminary Energy Audit
PF	Power Factor
PID	Proportional plus integral plus derivative (control system)
PM	Portfolio Manager in Energy Star rating system
PM	Preventive Maintenance
PoolCo	Power Pool Company or Organization
POU	Point of Use
PQ	Power Quality
PSC	Public Service Commission
PSIA psia	Pounds per square inch absolute (pressure)
PSIG psig	Pounds per square inch gauge (pressure)
PUC	Public Utility Commission
PUHCA	Public Utilities Holding Company Act of 1935
PURPA	Public Utilities Regulatory Policies of 1978
PV	Photovotaic system

PV	Present Value
PW	Present Worth
PX	Power Exchange
q	Rate of heat flow in Btu per hour
Q	Heat load due to conduction using degree days
QF	Qualifying Facility
R	Electrical resistance
R	Thermal Resistance
RC	Remote controller
RCR	Room Cavity Ratio
RCRA	Resource Conservation and Recovery Act
Remaining Service Life (RSL)	RSL is the number of years service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the 'Calculated Next Renewal' date or the 'Next Renewal' date whichever one is the later date.
Remaining Service Life Index (RSLI)	RSLI is defined as a percentage ratio of the remaining service life of a system. It usually ranges from 0 to 100
REMR	Repair Evaluation Maintenance Rehabilitation (REMR) is a scale used to objectively rank systems based on their condition
Renewal Schedule	A timeline that provides the items that need repair the year in which the repair is needed and the estimated price of the renewal.
RH	Relative Humidity
RLA	Running Load Amps
RMS	Root Mean Square
RO	Reverse Osmosis
ROI	Return on Investment
RPM	Revolutions Per Minute
RTG	Regional Transmission Group
RTO	Regional Transmission Organization
RTP	Real Time Pricing
SBCCI	Southern Building Code Congress International
SC	Scheduling Coordinator
SC	Shading Coefficient
SCADA	Supervisory Control and Data Acquisition Systems

SEER	Seasonal Energy Efficiency Ratio
SHR	Sensible Heat Ratio
Site	The grounds and utilities roadways landscaping fencing and other typical land improvements needed to support the facility.
Soft Cost	An expense item that is not considered direct construction cost. Soft cost includes architectural engineering financing legal fees and other pre-and-post construction expenses.
SOx	Sulfur Oxide Compounds
SP	Static Pressure
SP SPB	Simple Payback
SPP	Simple Payback Period
SPP	Small Power Producers
STR	Stack Temperature Rise
SV	Specific Volume
System	System refers to building and related site work elements as described by ASTM Uniformat II Classification for Building Elements (E1557-97) a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design specification construction method or materials used. See also Uniformat II.
T	Temperature
T	Tubular (lamps)
TAA	Technical Assistance Audit
TCP/IP	Transmission Control Protocol/Internet Protocol
TES	Thermal Energy Storage
THD	Total Harmonic Distortion
TOD	Time of Day
TOU	Time of Use
TQM	Total Quality Management
TransCo	Transmission Company
U	Thermal Conductance
UDC	Utility Distribution Company
UL	Underwriters Laboratories
UNIFORMAT II	The ASTM UNIFORMAT II Classification for Building Elements (E1557-97) a format for classifying major facility components common to most buildings.
USGBC	US Green Building Council
v	Specific Volume

V	Volts Voltage
V	Volume
VAV	Variable Air Volume
VDT	Video Display Terminal
VFD	Variable Frequency Drive
VHO	Very High Output
VSD	Variable Speed Drive
W	Watts
W	Width
WB	Wet bulb
WH Wh	Watt Hours
Year built	The year that a building or addition was originally built based on substantial completion or occupancy.
Z	Electrical Impedance