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.

Kipp (Turner) School

Governance	DISTRICT	Report Type	Middle
Address	5900 Baltimore Ave. Philadelphia, Pa 19143	Enrollment Grade Range	99 '09-12'
Phone/Fax	215-294-2973 / 215-294-8707	Admissions Category	Citywide With Criteria
Website	www.kippphiladelphia.org/schools/kwpp	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	**35.57%**	**$37,009,437**	**$104,051,510**
Building	36.07 %	$36,451,268	$101,051,660
Grounds	18.61 %	$558,169	$2,999,850

Major Building Systems

Building System	System FCI	Repair Costs	Replacement Cost
Roof (Shows physical condition of roof)	89.48 %	$3,719,770	$4,156,919
Exterior Walls (Shows condition of the structural condition of the exterior facade)	12.00 %	$998,455	$8,318,200
Windows (Shows functionality of exterior windows)	63.61 %	$2,586,250	$4,066,000
Exterior Doors (Shows condition of exterior doors)	26.87 %	$74,037	$275,500
Interior Doors (Classroom doors)	105.57 %	$704,026	$666,900
Interior Walls (Paint and Finishes)	00.00 %	$0	$3,737,300
Plumbing Fixtures	14.39 %	$369,595	$2,568,800
Boilers	00.00 %	$0	$3,547,300
Chillers/Cooling Towers	10.54 %	$490,305	$4,651,200
Radiators/Unit Ventilators/HVAC	88.15 %	$7,200,032	$8,168,100
Heating/Cooling Controls	132.71 %	$3,404,129	$2,565,000
Electrical Service and Distribution	93.17 %	$1,717,050	$1,843,000
Lighting	27.61 %	$1,818,961	$6,589,200
Communications and Security (Cameras, Pa System and Fire Alarm)	57.63 %	$1,422,396	$2,468,100

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

S116001;Turner

Final

Site Assessment Report

February 2, 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):	190,000
Year Built:	1969
Last Renovation:	
Replacement Value:	$104,051,510
Repair Cost:	$37,009,437.20
Total FCI:	35.57 %
Total RSLI:	80.08 %

Description:

Facility Assessment
September 17th, 2015

School District of Philadelphia
Turner Middle School housing

- **Motivation High School, and**
- **KIPP West Philadelphia Preparatory Charter School**

5900 Baltimore Avenue
Philadelphia, PA 19143

190,000 SF / 1,512 Students / LN 01

GENERAL

The 3 story, 190,000 square foot building was originally constructed in 1969. There have been no additions. The building does not

have a basement.

The building is occupied by:

- Motivation High School serving grades 9-12 on the first and third floors with a 2015 enrolment of approximately 360 students. The principal would like to grow their enrolment to 5-600. The main entrance to Motivation High School faces Baltimore Avenue.
- KIPP West Philadelphia Preparatory Charter School serving grades 5-8 on the second floor with an enrolment of approximately 375 students. The main entrance to KIPP faces play area courtyard.
- SOCCA community program, which is scheduled to leave the premises in 6 months.
- Head start in the connecting corridor between the gym block and the main block. The Head Start entrance faces Sixtieth St.

The school plan includes three roughly square blocks with connecting wide corridors: Block A is one story and houses the gym, swimming pool, locker rooms and related spaces; Block B at 3 stories contains classrooms and labs, the IMC, cafeteria, offices and boiler room; Block C is one story housing the auditorium, music rooms and art rooms.

Mr. Dave Loftus FAC, provided input to the assessment team on current problems. Mr. Anthony Davis Building Engineer accompanied us on our tour of the school and provided us with detailed information on the building systems and maintenance history.

ARCHITECTURAL/STRUCTURAL SYSTEMS

Foundations are presumed to be standard concrete and visible areas are in good condition with some slab on grade cracking visible in the mechanical space. There are not accessible ramps between various levels of the building on grade. There is some cracking in masonry walls throughout the building that may indicate some settlement. The superstructure is cast-in-place concrete with no apparent damage. Floor and roof construction are concrete with no apparent damage. The IMC is located in the center of the main building block, intermediate between levels 2 and 3, with steep lecture hall style rooms at each end. The IMC does not have accessible ramps. Exterior walls are brick and are in fair condition. Mortar joints, particularly at relief angles, are in need of pointing. There is some cracking noted in brick at the main entrance. The first floor has an anti-graffiti coating that is flaking off of the building and has turned milky. A large mural is painted on the exterior art lab wall facing Baltimore Avenue. The pool wall facing the parking lot is painted and patchy to obliterate graffiti. Low roof areas are protected by picket fencing with outward curving tips. Painted concrete surfaces are generally peeling. Exterior windows are slightly recessed original aluminum frame with fixed and operable single pane glass and acrylic glazing. Sloped glazing occurs at the art lab facing Baltimore Avenue. First floor windows are protected with security grilles. Spandrel areas above and below windows are accented with pre-cast concrete panels. Windows are in poor condition. Exterior doors are typically painted hollow metal in hollow metal frames with glazing and have been replaced once in the lifetime of the building. Doors are in generally fair condition and are not ADA compliant. There is not at least one handicap entrance. Roofing is low sloped with a built-up membrane with a granular cap sheet. There are some reported and apparent leaks. The roof is in poor condition and should be replaced. Poor roof conditions include loss of granules on the cap sheet, bubbling in the cap sheet, splitting, and apparent ponding areas. Exterior walls are protected with metal cap flashing. Trees overhang roofs in many areas. Roof drainage is via interior piped roof drains. There are no overflow drains. Roof openings include roof hatches. Roof access is via fixed ladders at hatches and fixed exterior ladders to most minor roof areas.

Interior partitions include CMU, glazed block at locker rooms, exposed brick at the interior of some exterior walls, gypsum wallboard on metal studs, moveable partitions at the gym, auditorium and at some classrooms, and glazed openings. Interior partitions are in fair condition with some cracking. Interior doors are typically solid core wood in hollow metal frames. Classroom doors typically have glazing in the door, wood transoms and/or sidelights with wired glass or clear acrylic glazing. Other interior doors include hollow metal in hollow metal frames with glazing at stairwells and exit ways, and access doors. Doors to rooms with a large number of computers have security gates. Doors are generally in poor condition and are not ADA compliant. Doors swing in the direction of exit. Classroom doors are semi-recessed and do not reduce exit width. Fittings include: chalkboards that are outdated; marker boards; tack boards; interior signage that is typically stenciled on doors or on walls adjacent to doors; metal lockers that are beginning to rust, have some denting ad broken hardware; locker room benches; toilet accessories and metal or plastic toilet partitions, many in poor condition; and fixed storage shelving.

Exit stair construction is concrete filled metal pans. Stair treads and landings are sealed concrete with integral metal nosings. Handrails are painted tubular steel and have returns at landings but no extensions. Barrier rails are 37” above finished floor and railing spacing exceeds 4”. Circulation stairs typically have VCT/resilient treads with nosings, or terrazzo treads towards the auditorium. Handrails from the main entry to the office area are wood and do not provide a good handgrip.

Interior wall finishes are typically paint. Large murals decorate the auditorium lobby. Wall finishes are generally in fair condition. Interior floor finishes are typically VCT in classrooms and corridors. VCT is not original to the building. It is well maintained in fair condition with some mismatched replacement tiles. Other floor finishes include carpet in auditorium aisles in poor condition with wear,

staining, and loose threads, and in the Head Start area in good condition; wood flooring in the gym and on the stage in good condition; terrazzo in the cafeteria and kitchen, in entrances and connecting corridors on the first floor in good condition; sealed concrete in mechanical spaces, under auditorium seating, and in locker rooms; and ceramic tile in restrooms in fair condition.

Interior ceilings include: painted structure in classrooms in generally good condition, the gym in good condition, and the locker rooms in poor condition; 2 x 4 acoustical tile in metal grid in the lecture halls, corridors and offices, portions of the cafeteria and kitchen in well maintained (i.e. no missing/broken tile) but fair to poor condition with yellowed grid and mis-matched tile; painted gyp board in toilet rooms and showers; exposed structure in the pool and service rooms room; and 12" glued-on acoustical tile in the IMC, cafeteria, and music rooms in fair condition with some trim pieces failing.

One elevator serves the 3-story block. There is no elevator service to the intermediate level IMC. Interior cab finishes are egg crate ceiling, VCT flooring, and plastic laminate wall panels. The interior of the doors is deteriorated.

Institutional equipment includes: library shelving in good condition; theatrical lighting; instrument storage in need of locks; Promethean systems in some classrooms; pull-down projection screens; laboratory equipment and casework; gym equipment – basketball backstops. Other equipment includes kitchen equipment and loading dock bumpers in functional condition.

Furnishings include: fixed wood and plastic laminate casework in fair to poor condition with broken hardware, delamination etc.; window shades in poor condition; and fixed auditorium seating in worn condition with some broken components.

Special construction includes the swimming pool and related spaces. The pool is abandoned. Equipment is in poor condition. Humidity has caused failure of finishes in adjacent spaces.

MECHANICAL SYSTEMS

Toilet room fixtures on each floor consist of porcelain wall hung water closets and urinals with flush valves installed in pipe chases. Toilet room lavatories are cast iron with separate hot and cold spouts. The toilet room plumbing fixtures are in fair condition, except in the pool area where they are in poor condition. Some are stained and leaking, so the district should budget to replace 10% of fixtures: 8 lavatories, 7 water closets, 4 urinals.

The building has heat-and-serve food service only. The main kitchen has a 3 basin, floor standing, and stainless steel, commercial sink with chemical injection without grease trap or disposal. There is also a wall hung stainless steel lavatory. The Head Start program has its own kitchen in a former office outside the gym. This kitchen has a 2 basin, stainless steel, floor standing, and commercial sink without chemical injection, grease trap, or disposal. (There is an adjacent toilet room with lavatory, water closet, and shower remaining from when the kitchen was a gym office.) Kitchen sinks are of unknown age, but they are in good condition and will not need repair or replacement for 5 to 10 years.

Science classrooms are located on the second and third floors and have multiple laboratory sinks each. Drain traps for these sinks are lead pipe. Traps should be replaced with nontoxic material when sanitary drain pipe for the whole building is repaired. About half the sinks do not have working faucets. The principal stated students had science classes elsewhere due to lack of operable facilities. Lab sinks should have 4 sinks and 4 faucets replaced. There is no safety shower or eye wash in the science classrooms. Science rooms have natural gas supply plumbing, but the gas is turned off.

There are 2 stainless steel wall sinks with dual faucets in the SOCCA (community food program) area that are both severely rusted and should be replaced. Second and third floor classrooms had sinks with hot and cold faucets and drinking fountains, but mostly the faucets and fountains have been removed and the pipes plugged and labeled "DO NOT USE". Classroom sinks can be removed when the cabinets they are in or the unit vents they are next to are replaced. The art room beside the auditorium has multiple stainless steel, countertop sinks with many rusted or missing faucets. These should be repaired or replaced: 2 sinks, 12 faucets.

Service sinks in janitor closets are floor mounted cast iron with stainless steel rims and integral backsplash and trap. They have short neck mixing faucets with vacuum breakers. They are beyond their service life, stained and rusted, with corroded faucets, and they should be replaced.

There were multiple shower rooms throughout the school: student gym locker rooms, pool locker rooms, gym teacher toilet rooms. None of them appear to be in use currently. The student shower rooms have had most shower nozzles and valves removed. There are 60 showers, total. The showers should be renovated along with the locker rooms.

Drinking fountains throughout the building are a mixture of various type and age. They are not ADA compliant, generally beyond their expected lifespan, and some are out of order. Fountains should be replaced with refrigerated, accessible fountains.

Water service enters the building along the south side of the boiler room from 60th St. through a 6" line. There is a 6" compound water meter with a 3" bypass. The school domestic water is supplied by a 3" backflow preventer and the rooftop cooling tower and hydronics has an 8" backflow preventer. They and the adjoining gate valves are in good condition. There is a second 4" water line for the pool and gym area. Domestic hot and cold water distribution piping is copper with soldered connections. Pipe is in fair condition and should last 5 to 10 more years. There are three domestic water heaters. In the boiler room is an A.O. Smith 85 gallon natural gas burning water heater manufactured 2014 with inoperative 1/12 HP circulation pump, likely due to a failed aquastat. In a mechanical room at the south west corner of the auditorium is an 82 gallon State Industries electric water heater with circulation pump. The gym has a 50 gallon, 6 element, 18 kW (total) electric A.O. Smith water heater manufactured in 2002 with 1/25 HP circulator pump. The aquastat should be replaced, and otherwise the water heaters are in good condition and can be expected to last 5 more years despite their age.

The sanitary sewer piping is threaded galvanized steel pipe and hub and spigot cast iron pipe. The pipe appears original to the building. First floor toilets back up during heavy rains, according to the principal. The sanitary drain piping should be entirely inspected and repaired where needed based on age, material, and reported failures. There is no sewage ejector.

Rain water drain pipes are threaded galvanized steel and most likely original to the building. The roof does not have overflow drains. Like the sanitary pipe, the rain water drainage system should be inspected due to age and reports of problems during rain storms.

The swimming pool is completely inoperable. The pump room equipment is entirely rusted. The pool is 100 feet long and 60 feet wide, estimated 225,000 gallons. The principal would like the pool renovated.

The school classrooms are heated and ventilated by unit ventilators and radiators, while larger areas have multiple air handlers. Outside air supplied by unit vents was discharged to hallways through grilles in door, but the doors have been replaced without transfer grilles.

The building is heated by water from 3 Weil McLain model 94, 19 section, 4,543 MBH (136 HP) capacity, cast iron boilers with Weil McLain gas burners. Natural gas is supplied via a 6" line entering the building at the south-west corner in the electrical room through two 4" gas meters. There is no oil tank. Boilers were installed in 1998 and have 18 years lifespan remaining. Boiler #3 was in the process of having sections replaced and new section seals installed at the time of the inspection. Hot water supply line has an air separator manufactured in 1969. There is a chemical treatment injection system for the water. The system runs water only, not ethylene glycol.

Cooling for classrooms and auditorium is provided by a York MaxE centrifugal chiller approximately 250 ton capacity located in the boiler room. It was installed in 2010 and uses R-134a. The chiller has 23 years useful life remaining. Heat rejection is handled by an Evapco, roof top, stainless steel, evaporative cooling tower. There are two 25 HP Armstrong cooling water pumps located in the boiler room. An 85 ton capacity cooling system should be added for the gym block.

There are 4 hot water circulation pumps with 7.5 HP motors in the boiler room. Two pumps supply the classrooms and auditorium blocks, and the other two pumps supply the gym block. Chilled water is distributed to the classrooms and auditorium by two pairs of pumps. The chilled water pumps are 15 HP each, and the dual temperature pumps are 5 HP each. Most of the pumps appear to be replacements for the original equipment but they are at least 15 years old, and generally are in fair condition. The district should budget to replace 1 pump and 1 motor in the next 5 years due to anticipated lifecycle failure. There is no chilled water supply to the gym block. Hydronic piping is threaded steel throughout the building. Chilled water lines are missing insulation in many areas, and condensation has caused them to rust and also damaged ceiling tiles and floor finishes.

Interior building spaces (including IMC, toilet rooms, cafeteria, offices, auditorium, gymnasium (4), and swimming pool) are conditioned by approximately 17 fan coil units located in 10 mechanical rooms. Fan motors are 5 or 7.5 HP, and hydronic booster pumps are fractional horsepower. Based on style and maintenance labels dated in the 1980s, these units are all original 1969 equipment. They are in good condition (aside from the pool area), but they have surpassed their life expectancy and they lack modern controls. The units for the gym block lack cooling coils. For these reasons, they should all be replaced.

Classrooms and other rooms with outside walls have unit ventilators, approximately 80 total. The fresh air dampers do not operate to allow outside air to enter the building, likely due to failure of pneumatic actuators. Finned tube radiators are located along side unit vents to supplement heating. Like the AHUs, these are also original equipment. Unit vents and radiators should be replaced due to age and lack of fresh air. Classroom exhaust air previously discharged through grilles in the doors to the hallway. New grilles should be installed in transoms above doors to restore air flow path.

The original pneumatic HVAC control system by Johnson Controls is obsolete and failing. The building engineer stated there is no

modulation for heating or cooling; the hydronics are either on or off entirely. The remote control relay for power to AHUs 7 and 8 for the IMC is inoperable so the engineer must enter the mechanical space and turn them on and off locally every day. The access door is in a stair case and entry requires climbing on the stair railing which is highly unsafe. Some hydronic flow control valves are corroded so badly they have broken into multiple pieces. Many control switches, mechanical and electrical, are missing knobs. The entire control system should be replaced with modern digital controls. Compressed air is provided by a Gardner Denver duplex pump with tank and refrigerated filter-dryer. And old dryer and two old air tanks are still installed but unused.

The building does not have fire sprinklers or standpipes. A fire protection sprinkler system should be installed, including a fire pump if needed. There is a fire damper activated in a transfer grille from the cafeteria to the adjacent mechanical room, but it jammed open with an empty fire extinguisher bracket. This should be corrected when mechanical room equipment is renovated.

ELECTRICAL SYSTEMS

A Square D, 750KVA, 13.2KV-120/208V, unit substation and 500KVA, 13.2KV-480V transformer serve this facility. The Square D, 750KVA unit substation serves the lighting, receptacle and small motor loads, the 500KVA transformer serves a chiller. The Square D unit substation and the transformer are located on the first floor. A transformer nameplate does not exist. The Square D 750KVA unit substation is original installation and has already exceeded its 40 years of useful service life and the 500KVA transformer has no extra capacity for new Heating, Ventilation, and Air Conditioning (HVAC) system. Two new unit substations are required to feed this facility, one 1500KVA, 13.2KV-277/480V unit substation for HVAC equipment and large motor loads and another 750 KVA, 13.2KV-120/208V unit substation for receptacles, lighting and small motor loads.

There are panel-boards in each floor for lighting and receptacles. Majority of the panelboards are part of the original installation, they look in good condition however they have exceeded the end of their useful service life. They need to be replaced.

The number of receptacles in 70% of the classrooms are inadequate most of them do not work. Teachers use extension cords. The teacher's whiteboard wall and the opposite of it need to be provided with double compartment surface raceways, the other two walls with minimum two duplex outlets each, when feasible.

Most of the classrooms, band/coral rooms, offices are illuminated with fluorescent fixtures, with T-12 lamps. Corridors and stairways are illuminated with fluorescent fixtures with T-8 lamps. The cafeteria and the auditorium are illuminated with surface mounted HID decorative cylinders. The Gymnasium is illuminated with pendant mounted HID fixtures. T-12 lamps are becoming more expensive, consume more energy and are difficult to find. Fluorescent fixtures with T-12 lamps represent approximate 70% of the fluorescent fixtures in this facility and they need to be replaced.

The Fire Alarm system is manufactured by Edwards System Technology EST2 and is approximately 10 years old. The present Fire Alarm system does not provide audio/visual devices in classrooms. Provide a new fire alarm control panel and add audio/visual devices in the classrooms

The present telephone system is adequate. During the assessment, randomly, we verified that each wall mounted handset is provided with dial tone.

An independent and separate PA system does not exist. School uses the telephone systems for public announcement. The system is working adequately for the most part.

The present clock control system is manufactured by Simplex Time Control Center. The system is old and difficult to find parts and repair. Replace clock system with wireless, battery operated, clock system.

There is no television system.

The security system consists of motion sensors at exit doors. Principal indicated that a surveillance system is needed in the school. Provide a surveillance CCTV system.

The emergency power system consists of a gas powered generator, manufactured by ONAN 30KW/37.5KVA, 120/208V. The emergency panel is not provided with a directory to identify the loads served by the generator. The gas powered generator is approximately 20 years old and is expected to provide 10 more years of useful service life. For future emergency loads requirements the emergency generator is undersize. Provide an outdoor mounted diesel powered 200KW generator.

There is adequate UPS in the IT room.

The emergency lighting is obtained with dedicated fixtures connected to the emergency generator. Exit signs are located at each exit door and corridors and are connected to the school emergency system.

This facility is not provided with a lightning protection system. Provide a lightning protection system.

The school has one Otis Elevator Company hydraulic elevator rated 25HP at 208V. Elevator and controllers are part of the original installation and they already exceeded their 40 years of useful service life. Provide new hydraulic elevator motor and controller.

The stage theatrical lighting is composed of one row of pendant mounted theatrical lighting that are controlled by Major Lighting Control Equipment. Dimming controller is original installation and has already exceeded its useful service life. Provide new dimming and theatrical lighting system.

The auditorium sound system is provided by Rauland. System is original installation and has already exceeded its useful service life. Provide a new sound system.

GROUNDS SYSTEMS

Parking lots are asphalt in fair condition with some cracking with vegetation in the cracks, and settled areas. A trench drain at the west vehicle entrance is sunken. Parking lots are not striped, there is no signage and no designated accessible spaces with an accessible route to the building. It appears that the parking lot capacity far exceeds the day-to-day requirements for on-site parking. Auditorium or gym/pool events may require the capacity that is provided. Pedestrian pavements are concrete in fair condition and are generally maintained to minimize trip hazards with some replacement slabs noted. Site steps are in fair condition with some chipping on nosings. There are no handicap ramps to the KIPP or Head Start entries. Fencing near the building is painted aluminum picket in good condition. Fencing along the railroad tracks at the rear of the property, and adjacent to residential properties is chain link in good condition. Retaining walls, planter walls and curbs, and site feature walls are concrete in good condition with little physical damage or settlement, except that paint is peeling and unsightly. There is a flagpole on the site. Fixed wooden benches are in very poor condition and should be removed and replaced.

Landscaping consists mostly of mature trees that, while providing good shade in the summer, are overgrown, overhang roof areas, and obscure the building. Many trees in the courtyard planters are missing or in poor condition.

The school perimeter is illuminated with wall mounted HID fixtures and pole mounted floodlights providing complete coverage.

There are not surveillance CCTV cameras around the building perimeter. Provide outdoor surveillance CCTV cameras.

There is no wall mounted loud speaker. Since there is not a playground area, loud speaker is not required.

RECOMMENDATIONS

- Install interior handicap ramps at main entrance lobby to auditorium level and to office level, and from main block to the gym block.
- Install interior handicap ramps from levels 2 & 3 to the IMC.
- Repair exterior walls: point brick. Repair cracked brick. Replace caulk joints. Remove flaking anti-graffiti coating and replace with a better product. Paint unsightly wall at pool and areas where paint is failing.
- Replace windows
- Paint exterior doors and install handicap accessible hardware at three main entrances
- Replace all roofs, flashing, etc.
- Repair cracking interior walls and repaint
- Replace interior doors and hardware in existing frames
- Provide white marker boards in classrooms with only chalkboards
- Install code compliant signage
- Replace student lockers in corridors
- Replace toilet partitions
- Provide code compliant handrails and guardrails at stairs
- Replace auditorium carpet
- Replace 2 x 4 suspended ceilings where existing
- Modernize the elevator and replace door panels
- Install locking hardware at musical instrument storage
- Replace laboratory equipment and casework

- Renovate the swimming pool and adjacent spaces
- Install exterior handicap ramps to KIPP and Head Start entrances
- Remove and replace trees around the building and in courtyard
- Replace rusty sinks and lavatories, 8 lavatories, 10 sinks

- Replace stained water closets, 7
- Replace stained urinals, 4
- Replace leaking, damaged, or missing faucets, 20
- Replace rusty service sinks, 10
- Remodel shower rooms, 60 shower heads
- Replace drinking fountains due to age, damage, and lack of accessibility, 10 pairs
- Replace damaged aquastat on domestic water heater in boiler room
- Replace sanitary drain pipe due to age and reported failures
- Inspect and repair rain water drainage pipe due to age and reported problems
- Install 85 ton capacity cooling generating system for gymnasium and pool
- Replace 1 hydronic pump and 1 motor due to expected lifecycle failure
- Install moisture resistant insulation on chilled water pipes to prevent condensation
- Conduct steam trap survey to identify and replace failed traps based upon report of lots of steam returning in condensate
- Replace air handlers for auditorium, music, and art rooms due to age and controls, 1,320 seats
- Replace air handlers for gymnasium, pool, and locker rooms to add cooling capability, 33,000 sq. ft. area
- Replace air handlers for main kitchen and cafeteria due to age and controls, 1,600 students
- Replace air handlers for IMC to age and controls
- Replace unit ventilators and radiators due to age and lack of fresh air, 80
- Convert obsolete and failing pneumatic controls to DDC
- Install a fire protection sprinkler system

- Two new unit substations are required to feed this facility, one 1500KVA, 13.2KV-277/480V substation for HVAC equipment and large motor loads and another 750KVA, 13.2KV-120/208V unit substation for receptacles, lighting and small motor loads
- Replace the entire distribution system with new panelboards and new wiring/conduits. Approximate (25) 208/120V panelboards
- Provide (2)25FT of surface raceways with receptacles spaced 24” on center and 4 wall mount receptacles per classroom. Approximate 450 receptacles
- Replace 70% of the existing fluorescent fixtures. Approximately 1800 fixtures
- Provide a new fire alarm control panel and audio/visual devices in the classrooms. Approximately 250 devices
- Replace existing clock and bell system with wireless, battery operated system
- Provide an indoor surveillance CCTV system. Approximately 100
- Provide an outdoor 200KW diesel powered generator.
- Provide a lightning protection system
- Provide a new hydraulic elevator motor and controller
- Provide the auditorium with stage theatrical lighting and dimming system
- Provide the auditorium with a sound system
- Provide an outdoor surveillance CCTV system. Approximately 30

Attributes:

General Attributes:

Active:	Open	Bldg Lot Tm:	Lot 3 / Tm 3
Status:	Accepted by SDP	Team:	Tm 3
Site ID:	S116001		

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	54.00 %	4.48 %	$240,887.43
A20 - Basement Construction	54.00 %	0.00 %	$0.00
A30 - Pool Construction	32.73 %	0.00 %	$0.00
B10 - Superstructure	54.00 %	2.46 %	$444,514.67
B20 - Exterior Enclosure	71.56 %	28.90 %	$3,658,742.18
B30 - Roofing	109.83 %	89.48 %	$3,719,770.47
C10 - Interior Construction	67.78 %	102.25 %	$4,767,514.95
C20 - Stairs	54.00 %	42.16 %	$112,952.37
C30 - Interior Finishes	92.48 %	6.47 %	$702,716.91
D10 - Conveying	105.71 %	136.20 %	$395,931.06
D20 - Plumbing	42.60 %	53.49 %	$2,036,732.12
D30 - HVAC	93.53 %	52.49 %	$11,094,465.22
D40 - Fire Protection	105.71 %	177.49 %	$2,718,036.25
D50 - Electrical	110.11 %	48.04 %	$5,365,173.11
E10 - Equipment	105.71 %	38.98 %	$1,179,215.69
E20 - Furnishings	105.00 %	3.61 %	$14,615.99
G20 - Site Improvements	106.28 %	24.18 %	$558,168.78
G40 - Site Electrical Utilities	31.77 %	0.00 %	$0.00
Totals:	**80.08 %**	**35.57 %**	**$37,009,437.20**

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)
B116001;Turner	190,000	36.07	$3,983,217.94	$16,198,882.71	$9,942,345.38	$2,577,937.48	$3,748,884.91
G116001;Grounds	159,000	18.61	$0.00	$339,566.65	$218,602.13	$0.00	$0.00
Total:		**35.57**	**$3,983,217.94**	**$16,538,449.36**	**$10,160,947.51**	**$2,577,937.48**	**$3,748,884.91**

Deficiencies By Priority

- 1 - Response Time (< 2 yr) - $3,983,217.94
- 2 - Response Time (2-3 yrs) - $16,538,449.36
- 3 - Response Time (3-4 yrs) - $10,160,947.51
- 4 - Response Time (4-5 yrs) - $2,577,937.48
- 5 - Response Time (> 5 yrs) - $3,748,884.91

Budget Estimate Total: $37,009,437.20

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:	Middle Secondary
Gross Area (SF):	190,000
Year Built:	1969
Last Renovation:	
Replacement Value:	$101,051,660
Repair Cost:	$36,451,268.42
Total FCI:	36.07 %
Total RSLI:	79.81 %

Description:

Attributes:

General Attributes:

Active:	Open	Bldg ID:	B116001
Sewage Ejector:	No	Status:	Accepted by SDP
Site ID:	S116001		

Condition Summary

The Table below shows the CI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	54.00 %	4.48 %	$240,887.43
A20 - Basement Construction	54.00 %	0.00 %	$0.00
A30 - Pool Construction	32.73 %	0.00 %	$0.00
B10 - Superstructure	54.00 %	2.46 %	$444,514.67
B20 - Exterior Enclosure	71.56 %	28.90 %	$3,658,742.18
B30 - Roofing	109.83 %	89.48 %	$3,719,770.47
C10 - Interior Construction	67.78 %	102.25 %	$4,767,514.95
C20 - Stairs	54.00 %	42.16 %	$112,952.37
C30 - Interior Finishes	92.48 %	6.47 %	$702,716.91
D10 - Conveying	105.71 %	136.20 %	$395,931.06
D20 - Plumbing	42.60 %	53.49 %	$2,036,732.12
D30 - HVAC	93.53 %	52.49 %	$11,094,465.22
D40 - Fire Protection	105.71 %	177.49 %	$2,718,036.25
D50 - Electrical	110.11 %	48.04 %	$5,365,173.11
E10 - Equipment	105.71 %	38.98 %	$1,179,215.69
E20 - Furnishings	105.00 %	3.61 %	$14,615.99
Totals:	**79.81 %**	**36.07 %**	**$36,451,268.42**

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	$23.16	S.F.	190,000	100	1969	2069		54.00 %	0.00 %	54			$4,400,400
A1030	Slab on Grade	$5.17	S.F.	190,000	100	1969	2069		54.00 %	24.52 %	54		$240,887.43	$982,300
A2010	Basement Excavation	$4.36	S.F.	190,000	100	1969	2069		54.00 %	0.00 %	54			$828,400
A2020	Basement Walls	$10.05	S.F.	190,000	100	1969	2069		54.00 %	0.00 %	54			$1,909,500
A3010	Pool Excavation	$38.73	S.F.	6,000	100	1969	2069		54.00 %	0.00 %	54			$232,380
A3020	Pool Shell	$106.51	S.F.	6,000	40	1969	2009	2025	25.00 %	0.00 %	10			$639,060
B1010	Floor Construction	$85.94	S.F.	190,000	100	1969	2069		54.00 %	2.72 %	54		$444,514.67	$16,328,600
B1020	Roof Construction	$9.26	S.F.	190,000	100	1969	2069		54.00 %	0.00 %	54			$1,759,400
B2010	Exterior Walls	$43.78	S.F.	190,000	100	1969	2069		54.00 %	12.00 %	54		$998,455.14	$8,318,200
B2020	Exterior Windows	$21.40	S.F.	190,000	40	1969	2009	2057	105.00 %	63.61 %	42		$2,586,250.19	$4,066,000
B2030	Exterior Doors	$1.45	S.F.	190,000	25	1995	2020	2042	108.00 %	26.87 %	27		$74,036.85	$275,500
B3010105	Built-Up	$37.76	S.F.	109,786	20	1995	2015	2037	110.00 %	89.73 %	22		$3,719,770.47	$4,145,519
B3010120	Single Ply Membrane	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3010130	Preformed Metal Roofing	$54.22	S.F.		30				0.00 %	0.00 %				$0
B3010140	Shingle & Tile	$38.73	S.F.		20				0.00 %	0.00 %				$0
B3020	Roof Openings	$0.06	S.F.	190,000	30	1969	1999	2029	46.67 %	0.00 %	14			$11,400
C1010	Partitions	$17.91	S.F.	190,000	100	1969	2069		54.00 %	78.25 %	54		$2,662,708.10	$3,402,900
C1020	Interior Doors	$3.51	S.F.	190,000	40	1969	2009	2057	105.00 %	105.57 %	42		$704,026.19	$666,900

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 $
C1030	Fittings	$3.12	S.F.	190,000	40	1969	2009	2057	105.00 %	236.30 %	42		$1,400,780.66	$592,800
C2010	Stair Construction	$1.41	S.F.	190,000	100	1969	2069		54.00 %	42.16 %	54		$112,952.37	$267,900
C3010230	Paint & Covering	$19.67	S.F.	190,000	10	2005	2015	2027	120.00 %	0.00 %	12			$3,737,300
C3010231	Vinyl Wall Covering	$0.97	S.F.		15				0.00 %	0.00 %				$0
C3010232	Wall Tile	$2.63	S.F.		30				0.00 %	0.00 %				$0
C3020411	Carpet	$7.30	S.F.	3,800	10	1995	2005	2027	120.00 %	86.54 %	12		$24,007.55	$27,740
C3020412	Terrazzo & Tile	$75.52	S.F.	19,000	50	1969	2019	2029	28.00 %	0.00 %	14			$1,434,880
C3020413	Vinyl Flooring	$9.68	S.F.	143,630	20	1995	2015	2025	50.00 %	0.00 %	10			$1,390,338
C3020414	Wood Flooring	$22.27	S.F.	5,700	25	1969	1994	2025	40.00 %	0.00 %	10			$126,939
C3020415	Concrete Floor Finishes	$0.97	S.F.	15,200	50	1969	2019	2025	20.00 %	0.00 %	10			$14,744
C3030	Ceiling Finishes	$20.97	S.F.	190,000	25	1995	2020	2042	108.00 %	17.03 %	27		$678,709.36	$3,984,300
C3040	Pool Finishes	$24.21	S.F.	6,000	20	1969	1989	2025	50.00 %	0.00 %	10			$145,260
D1010	Elevators and Lifts	$1.53	S.F.	190,000	35	1969	2004	2052	105.71 %	136.20 %	37		$395,931.06	$290,700
D2010	Plumbing Fixtures	$13.52	S.F.	190,000	35	1969	2004	2025	28.57 %	14.39 %	10		$369,595.41	$2,568,800
D2020	Domestic Water Distribution	$1.68	S.F.	190,000	25	1969	1994	2025	40.00 %	0.00 %	10			$319,200
D2030	Sanitary Waste	$2.52	S.F.	190,000	30	1969	1999	2047	106.67 %	172.22 %	32		$824,594.99	$478,800
D2040	Rain Water Drainage	$2.32	S.F.	190,000	30	1969	1999	2032	56.67 %	191.14 %	17		$842,541.72	$440,800
D3020	Heat Generating Systems	$18.67	S.F.	190,000	35	1998	2033		51.43 %	0.00 %	18			$3,547,300
D3030	Cooling Generating Systems	$24.48	S.F.	190,000	30	2010	2040		83.33 %	10.54 %	25		$490,305.01	$4,651,200
D3040	Distribution Systems	$42.99	S.F.	190,000	25	1969	1994	2042	108.00 %	88.15 %	27		$7,200,031.51	$8,168,100
D3050	Terminal & Package Units	$11.60	S.F.	190,000	20	1969	1989	2037	110.00 %	0.00 %	22			$2,204,000
D3060	Controls & Instrumentation	$13.50	S.F.	190,000	20	1969	1989	2037	110.00 %	132.71 %	22		$3,404,128.70	$2,565,000
D4010	Sprinklers	$7.05	S.F.	190,000	35			2052	105.71 %	202.91 %	37		$2,718,036.25	$1,339,500
D4020	Standpipes	$1.01	S.F.	190,000	35			2052	105.71 %	0.00 %	37			$191,900
D5010	Electrical Service/Distribution	$9.70	S.F.	190,000	30	1969	1999	2047	106.67 %	93.17 %	32		$1,717,049.53	$1,843,000
D5020	Lighting and Branch Wiring	$34.68	S.F.	190,000	20	1969	1989	2037	110.00 %	27.61 %	22		$1,818,961.23	$6,589,200
D5030	Communications and Security	$12.99	S.F.	190,000	15	1969	1984	2032	113.33 %	57.63 %	17		$1,422,396.35	$2,468,100
D5090	Other Electrical Systems	$1.41	S.F.	190,000	30	1969	1999	2047	106.67 %	151.84 %	32		$406,766.00	$267,900
E1020	Institutional Equipment	$4.82	S.F.	190,000	35	1969	2004	2052	105.71 %	124.11 %	37		$1,136,641.45	$915,800
E1090	Other Equipment	$11.10	S.F.	190,000	35	1969	2004	2052	105.71 %	2.02 %	37		$42,574.24	$2,109,000
E2010	Fixed Furnishings	$2.13	S.F.	190,000	40	1969	2009	2057	105.00 %	3.61 %	42		$14,615.99	$404,700
								Total	**79.81 %**	**36.07 %**			**$36,451,268.42**	**$101,051,660**

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: A30 - Pool Construction — This system contains no images

Note: Turner MS had a pool that was not in use. Plaster was OK. Equipment was destroyed.

System: C3010 - Wall Finishes — This system contains no images

Note: Paint 100%
Some exposed brick and glazed block are not considered in wall finishes, rather are in partitions.

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

Note:
Carpet 2%
Terrazzo and Tile 10%
Vinyl 77%
Wood 3%
Concrete 8%

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

Note:
Acoustical tile 30%
Painted structure 60%
Painted gyp/plaster 5%
Unfinished 5%

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:	**$36,451,268**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$7,693,619**	**$44,144,887**
*** 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	$240,887	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$240,887**
*** 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**
A30 - Pool Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A3010 - Pool Excavation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
A3020 - Pool Shell	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$944,728	**$944,728**
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	$444,515	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$444,515**
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	$998,455	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$998,455**
B2020 - Exterior Windows	$2,586,250	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,586,250**
B2030 - Exterior Doors	$74,037	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$74,037**
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	$3,719,770	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,719,770**
B3010120 - Single Ply Membrane	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010130 - Preformed Metal Roofing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3010140 - Shingle & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
B3020 - Roof Openings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

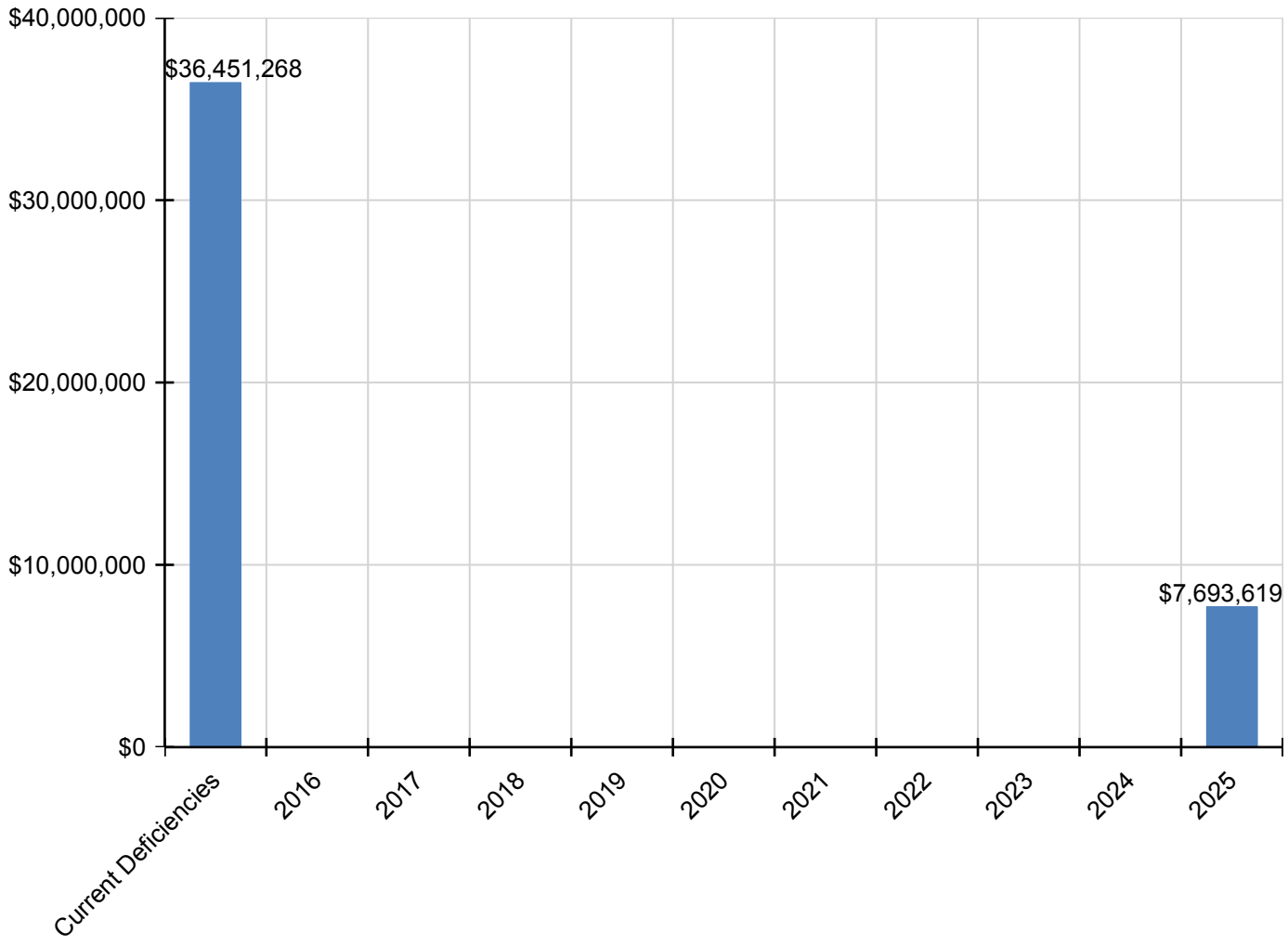
C - Interiors	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C10 - Interior Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C1010 - Partitions	$2,662,708	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,662,708**
C1020 - Interior Doors	$704,026	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$704,026**
C1030 - Fittings	$1,400,781	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,400,781**
C20 - Stairs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C2010 - Stair Construction	$112,952	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$112,952**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020 - Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020411 - Carpet	$24,008	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$24,008**
C3020412 - Terrazzo & Tile	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
C3020413 - Vinyl Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,055,348	**$2,055,348**
C3020414 - Wood Flooring	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$187,655	**$187,655**
C3020415 - Concrete Floor Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$21,796	**$21,796**
C3030 - Ceiling Finishes	$678,709	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$678,709**
C3040 - Pool Finishes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$214,739	**$214,739**
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	$395,931	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$395,931**
D20 - Plumbing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D2010 - Plumbing Fixtures	$369,595	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,797,478	**$4,167,073**
D2020 - Domestic Water Distribution	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$471,876	**$471,876**
D2030 - Sanitary Waste	$824,595	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$824,595**
D2040 - Rain Water Drainage	$842,542	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$842,542**
D30 - HVAC	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3020 - Heat Generating Systems	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D3030 - Cooling Generating Systems	$490,305	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$490,305**
D3040 - Distribution Systems	$7,200,032	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$7,200,032**
D3050 - Terminal & Package Units	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

D3060 - Controls & Instrumentation	$3,404,129	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$3,404,129**
D40 - Fire Protection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D4010 - Sprinklers	$2,718,036	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,718,036**
D4020 - Standpipes	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D50 - Electrical	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
D5010 - Electrical Service/Distribution	$1,717,050	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,717,050**
D5020 - Lighting and Branch Wiring	$1,818,961	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,818,961**
D5030 - Communications and Security	$1,422,396	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,422,396**
D5090 - Other Electrical Systems	$406,766	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$406,766**
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	$1,136,641	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,136,641**
E1090 - Other Equipment	$42,574	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$42,574**
E20 - Furnishings	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
E2010 - Fixed Furnishings	$14,616	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$14,616**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

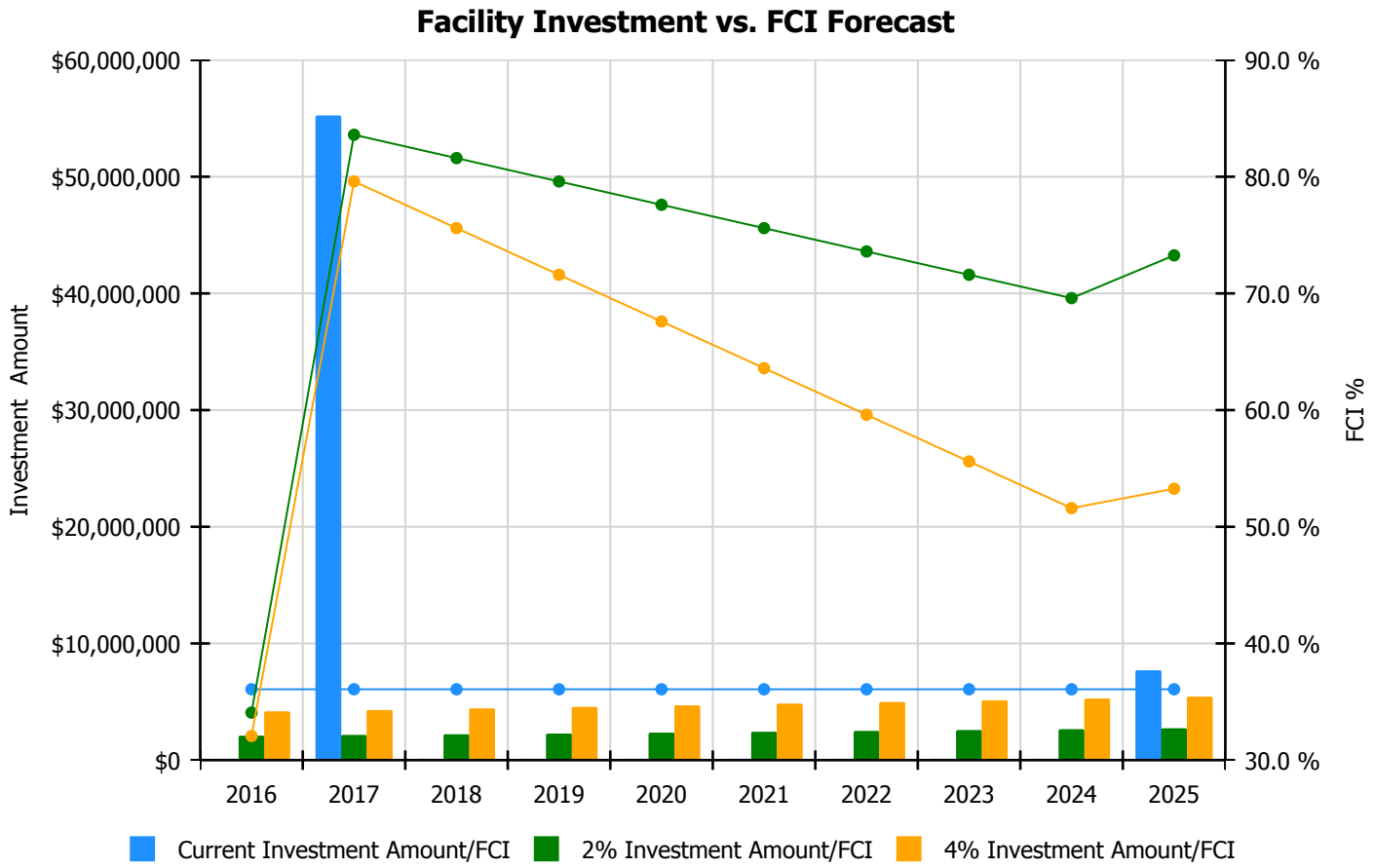
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



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:

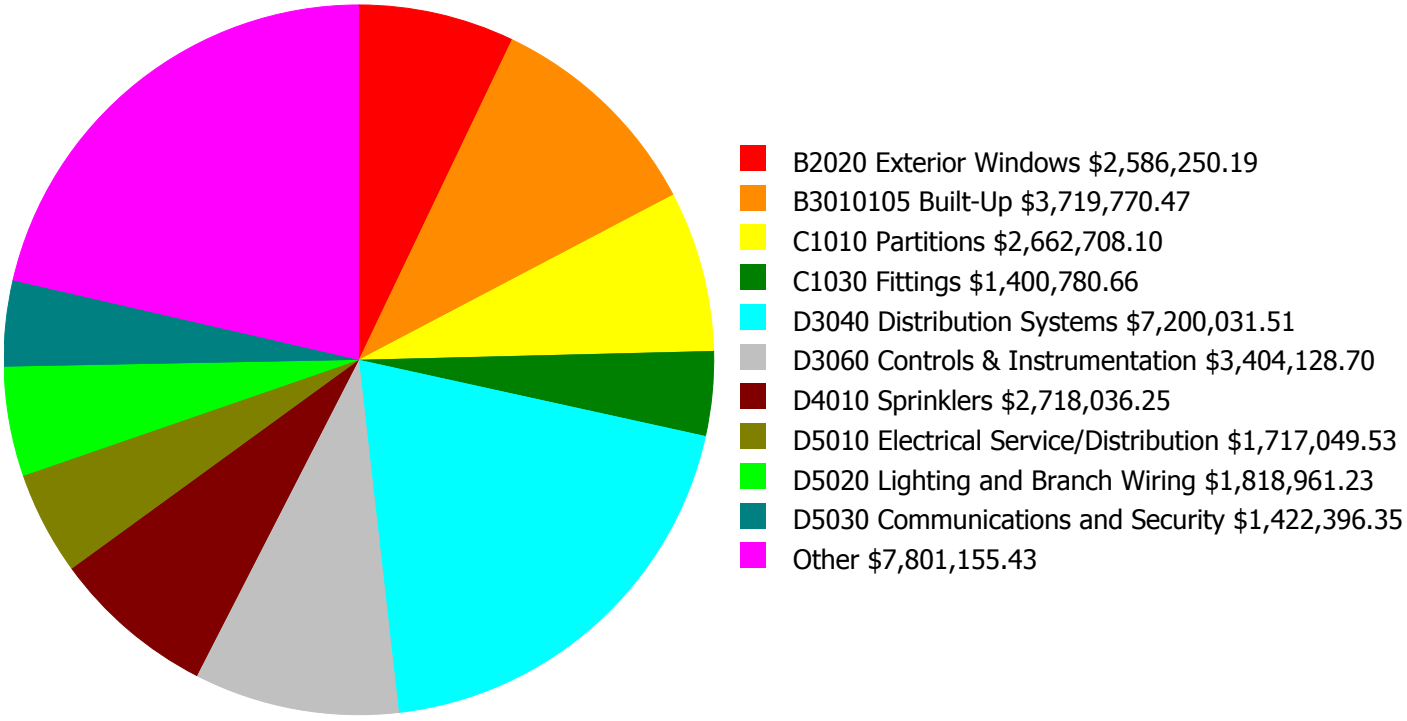
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 36.07%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$2,081,664.00	34.07 %	$4,163,328.00	32.07 %
2017	$55,235,690	$2,144,114.00	83.60 %	$4,288,228.00	79.60 %
2018	$0	$2,208,438.00	81.60 %	$4,416,875.00	75.60 %
2019	$0	$2,274,691.00	79.60 %	$4,549,381.00	71.60 %
2020	$0	$2,342,931.00	77.60 %	$4,685,863.00	67.60 %
2021	$0	$2,413,219.00	75.60 %	$4,826,439.00	63.60 %
2022	$0	$2,485,616.00	73.60 %	$4,971,232.00	59.60 %
2023	$0	$2,560,184.00	71.60 %	$5,120,369.00	55.60 %
2024	$0	$2,636,990.00	69.60 %	$5,273,980.00	51.60 %
2025	$7,693,619	$2,716,100.00	73.26 %	$5,432,199.00	53.26 %
Total:	**$62,929,308**	**$23,863,947.00**		**$47,727,894.00**	

Deficiency Summary by System

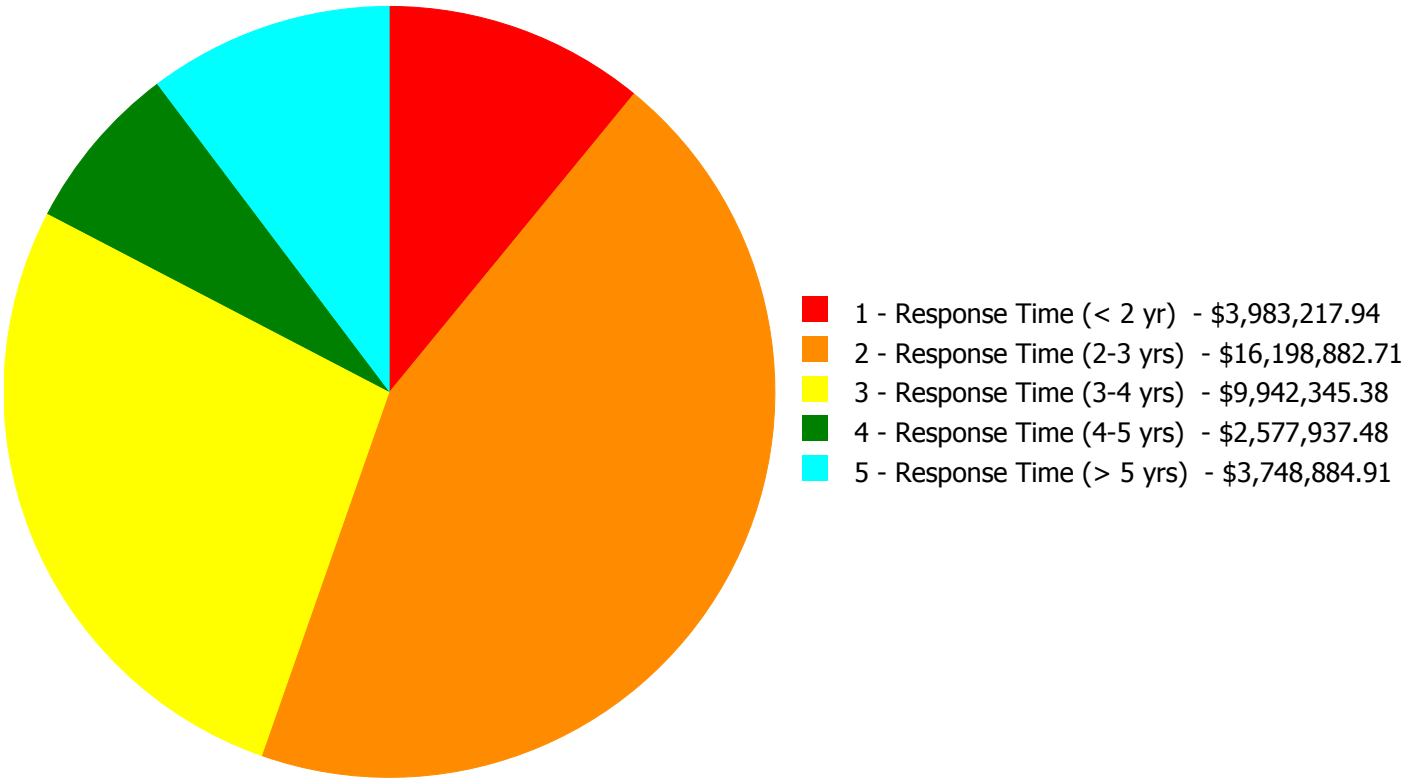
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $36,451,268.42

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: $36,451,268.42

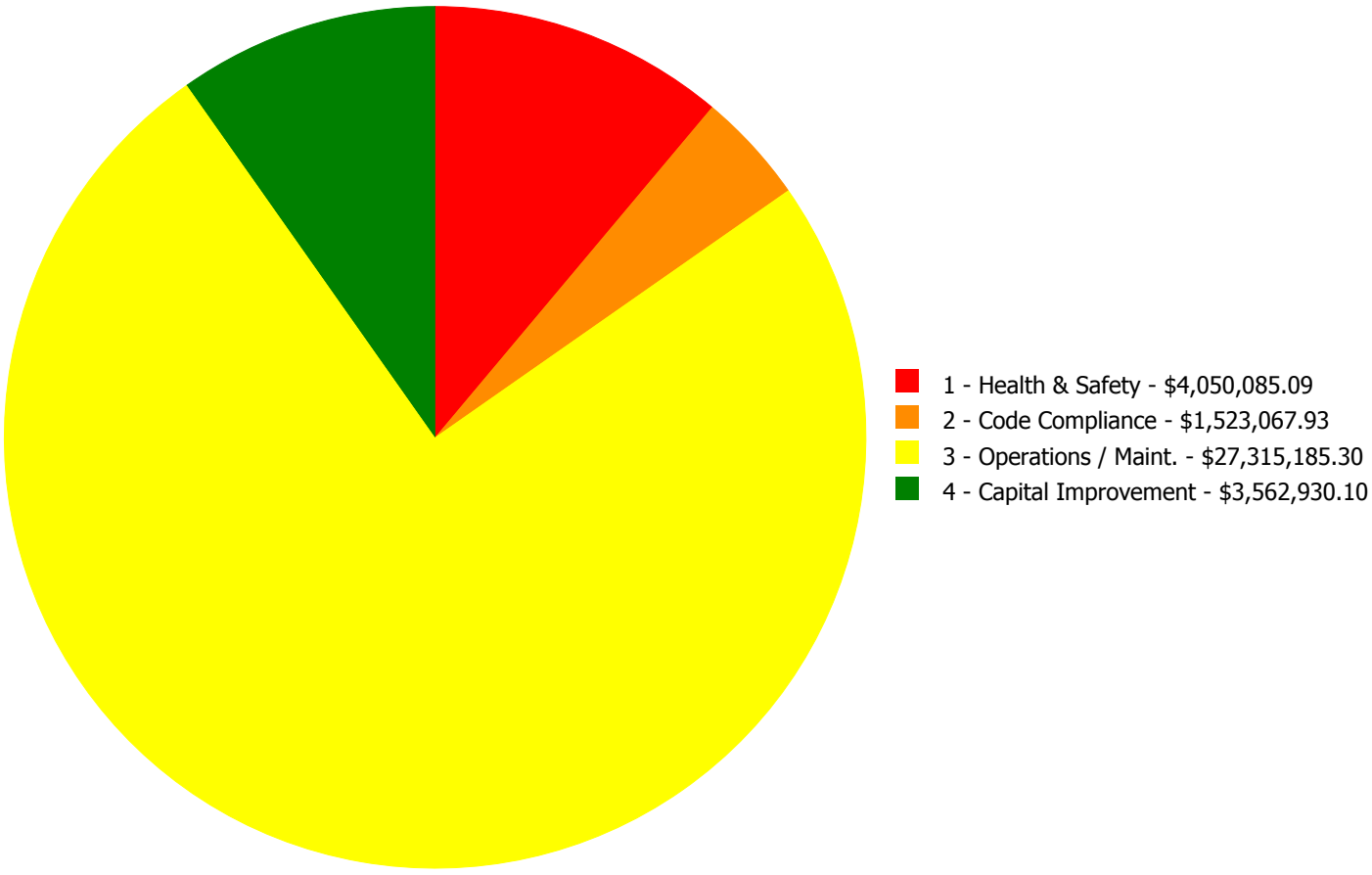
Deficiency By Priority Investment Table

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
A1030	Slab on Grade	$0.00	$0.00	$240,887.43	$0.00	$0.00	$240,887.43
B1010	Floor Construction	$0.00	$0.00	$444,514.67	$0.00	$0.00	$444,514.67
B2010	Exterior Walls	$150,495.10	$645,789.44	$202,170.60	$0.00	$0.00	$998,455.14
B2020	Exterior Windows	$0.00	$2,586,250.19	$0.00	$0.00	$0.00	$2,586,250.19
B2030	Exterior Doors	$0.00	$74,036.85	$0.00	$0.00	$0.00	$74,036.85
B3010105	Built-Up	$3,719,770.47	$0.00	$0.00	$0.00	$0.00	$3,719,770.47
C1010	Partitions	$0.00	$2,662,708.10	$0.00	$0.00	$0.00	$2,662,708.10
C1020	Interior Doors	$0.00	$0.00	$704,026.19	$0.00	$0.00	$704,026.19
C1030	Fittings	$0.00	$323,837.05	$0.00	$1,076,943.61	$0.00	$1,400,780.66
C2010	Stair Construction	$112,952.37	$0.00	$0.00	$0.00	$0.00	$112,952.37
C3020411	Carpet	$0.00	$24,007.55	$0.00	$0.00	$0.00	$24,007.55
C3030	Ceiling Finishes	$0.00	$678,709.36	$0.00	$0.00	$0.00	$678,709.36
D1010	Elevators and Lifts	$0.00	$395,931.06	$0.00	$0.00	$0.00	$395,931.06
D2010	Plumbing Fixtures	$0.00	$369,595.41	$0.00	$0.00	$0.00	$369,595.41
D2030	Sanitary Waste	$0.00	$0.00	$824,594.99	$0.00	$0.00	$824,594.99
D2040	Rain Water Drainage	$0.00	$842,541.72	$0.00	$0.00	$0.00	$842,541.72
D3030	Cooling Generating Systems	$0.00	$0.00	$0.00	$80,790.47	$409,514.54	$490,305.01
D3040	Distribution Systems	$0.00	$4,177,693.27	$2,401,004.12	$0.00	$621,334.12	$7,200,031.51
D3060	Controls & Instrumentation	$0.00	$3,403,166.72	$0.00	$961.98	$0.00	$3,404,128.70
D4010	Sprinklers	$0.00	$0.00	$0.00	$0.00	$2,718,036.25	$2,718,036.25
D5010	Electrical Service/Distribution	$0.00	$0.00	$1,717,049.53	$0.00	$0.00	$1,717,049.53
D5020	Lighting and Branch Wiring	$0.00	$0.00	$1,818,961.23	$0.00	$0.00	$1,818,961.23
D5030	Communications and Security	$0.00	$0.00	$392,771.87	$1,029,624.48	$0.00	$1,422,396.35
D5090	Other Electrical Systems	$0.00	$0.00	$310,743.76	$96,022.24	$0.00	$406,766.00
E1020	Institutional Equipment	$0.00	$0.00	$843,046.75	$293,594.70	$0.00	$1,136,641.45
E1090	Other Equipment	$0.00	$0.00	$42,574.24	$0.00	$0.00	$42,574.24
E2010	Fixed Furnishings	$0.00	$14,615.99	$0.00	$0.00	$0.00	$14,615.99
	Total:	$3,983,217.94	$16,198,882.71	$9,942,345.38	$2,577,937.48	$3,748,884.91	$36,451,268.42

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:



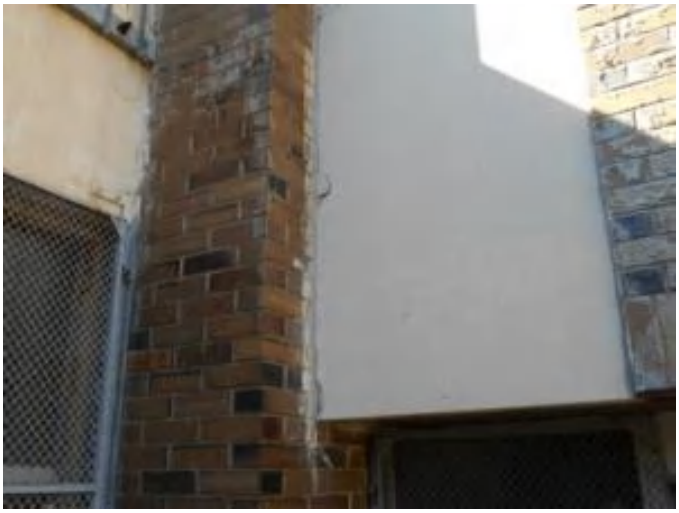
Budget Estimate Total: $36,451,268.42

Deficiency Details by Priority

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

Priority 1 - Response Time (< 2 yr):

System: B2010 - Exterior Walls



Location: Exterior walls.
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Re-caulk exterior control joints and other caulk joints
Qty: 7,500.00
Unit of Measure: L.F.
Estimate: $150,495.10
Assessor Name: Craig Anding
Date Created: 01/14/2016

Notes: Re-caulk joints in exterior walls.

System: B3010105 - Built-Up

Location: Roofs
Distress: Beyond Service Life
Category: 3 - Operations / Maint.
Priority: 1 - Response Time (< 2 yr)
Correction: Remove and Replace Built Up Roof
Qty: 109,786.00
Unit of Measure: S.F.
Estimate: $3,719,770.47
Assessor Name: Craig Anding
Date Created: 01/13/2016

Notes: Replace all roofs, flashing, etc.

System: C2010 - Stair Construction

Location: Stairs

Distress: Building / MEP Codes

Category: 2 - Code Compliance

Priority: 1 - Response Time (< 2 yr)

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

Qty: 200.00

Unit of Measure: L.F.

Estimate: $112,952.37

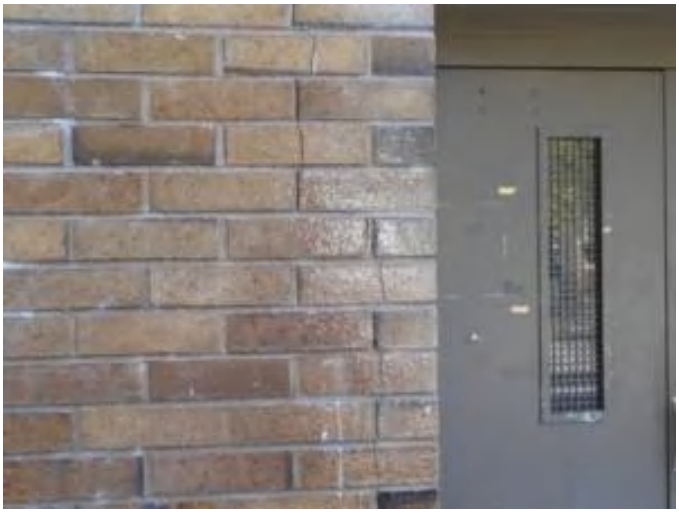
Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Guardrails should have screening or pickets with clear spacing not greater than 4". Handrails shall be graspable. Add handrails at 2x6 wood handrails.

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

System: B2010 - Exterior Walls



Location: Exterior walls

Distress: Building Envelope Integrity

Category: 3 - Operations / Maint.

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

Correction: Repair cracks in masonry - replace missing mortar and repoint - SF of wall area

Qty: 20,000.00

Unit of Measure: S.F.

Estimate: $645,789.44

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Brick walls are in need of re-pointing mortar joints. Some bricks are cracked and should be replaced.

System: B2020 - Exterior Windows

Location: Exterior windows

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 448.00

Unit of Measure: Ea.

Estimate: $2,586,250.19

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace exterior windows. Operable windows do not operate smoothly. All windows are energy inefficient.

System: B2030 - Exterior Doors

Location: Exterior doors

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Refinish and repaint exterior doors - per leaf

Qty: 45.00

Unit of Measure: Ea.

Estimate: $74,036.85

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Paint exterior doors and install handicap accessible hardware at three main entrances

System: C1010 - Partitions

Location: Gym and pool locker rooms.

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Remodel and refurbish shower room - based on approximately 8 showers

Qty: 8.00

Unit of Measure: Ea.

Estimate: $1,888,003.18

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Remodel shower rooms, 60 shower heads. Existing shower heads are at elementary school height. Current enrolment is middle school and high school. Locker rooms are in poor condition. Repair ceilings and walls. (door replacement is addressed elsewhere in this assessment). Replace lockers and benches.

System: C1010 - Partitions

Location: Each floor

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Build new single restroom to meet code requirements

Qty: 6.00

Unit of Measure: Ea.

Estimate: $421,955.84

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Provide unisex accessible faculty/staff restrooms, 1 per floor per block, plus one at school nurse area.

System: C1010 - Partitions

This deficiency has no image.

Location: High School

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Remodel existing classroom for lab use - approx 900 GSF - with chemical storage room, 15 tables + instructors table

Qty: 1.00

Unit of Measure: Ea.

Estimate: $352,749.08

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Add a science classroom per request of principal.

System: C1030 - Fittings

Location: 1st and 3rd Floor Toilet Rms.

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Remove and replace toilet partitions

Qty: 56.00

Unit of Measure: Ea.

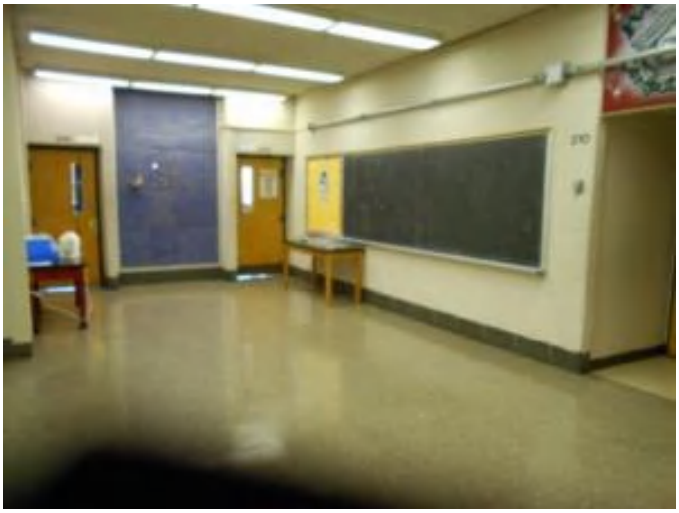
Estimate: $156,996.01

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Toilet partitions in student and staff toilet rooms are in poor condition with rusted panels, mismatched doors and pilasters, and are not ADA compliant. Toilet partitions on the 2nd floor at the KIPP program appear to have been uniformly upgraded.

System: C1030 - Fittings



Location: Classrooms

Distress: Obsolete

Category: 3 - Operations / Maint.

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

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

Qty: 60.00

Unit of Measure: Ea.

Estimate: $95,049.23

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Provide white markerboards at classrooms with chalkboards.

System: C1030 - Fittings

Location: Building wide

Distress: Building / MEP Codes

Category: 2 - Code Compliance

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

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

Qty: 265.00

Unit of Measure: Ea.

Estimate: $71,791.81

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Install code compliant signage.

System: C3020411 - Carpet

Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace carpet

Qty: 1,850.00

Unit of Measure: S.F.

Estimate: $24,007.55

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace worn, frayed carpet.

System: C3030 - Ceiling Finishes

Location: Corridors, offices, lecture halls, misc. areas

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 45,000.00

Unit of Measure: S.F.

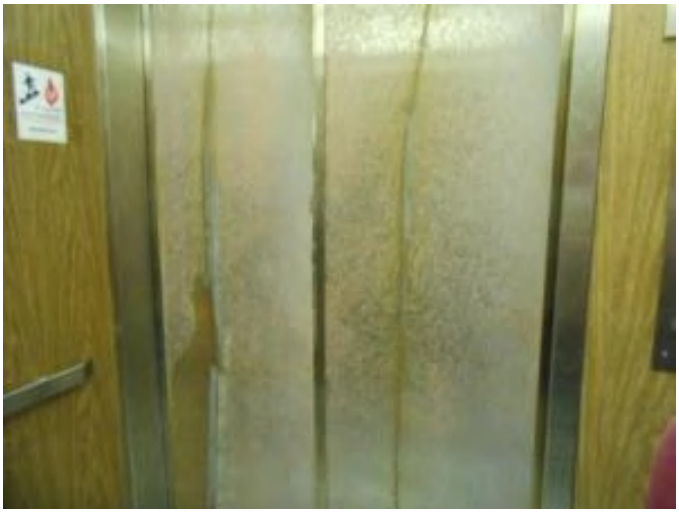
Estimate: $678,709.36

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace 2 x 4 suspended ceilings where existing.

System: D1010 - Elevators and Lifts



Location: First Floor elevator machine room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 1.00

Unit of Measure: Ea.

Estimate: $395,931.06

Assessor Name: Craig Anding

Date Created: 12/16/2015

Notes: Provide a new hydraulic elevator motor and controller. Replace elevator cab door.

System: D2010 - Plumbing Fixtures

Location: Entire building

Distress: Accessibility

Category: 2 - Code Compliance

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

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

Qty: 10.00

Unit of Measure: Ea.

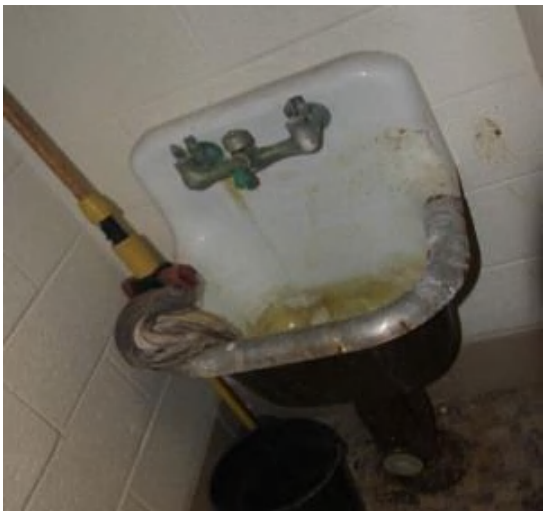
Estimate: $156,928.96

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace drinking fountains due to age, damage, and lack of accessibility, 10 pairs.

System: D2010 - Plumbing Fixtures



Location: Janitor closets

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 10.00

Unit of Measure: Ea.

Estimate: $78,647.07

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace rusty service sinks, 10.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms

Distress: Appearance

Category: 3 - Operations / Maint.

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

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

Qty: 7.00

Unit of Measure: Ea.

Estimate: $52,235.03

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace stained water closets, 7.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms, classrooms

Distress: Appearance

Category: 3 - Operations / Maint.

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

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

Qty: 14.00

Unit of Measure: Ea.

Estimate: $46,637.50

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace rusty sinks and lavatories, 8 lavatories, 10 sinks.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms

Distress: Appearance

Category: 3 - Operations / Maint.

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

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

Qty: 4.00

Unit of Measure: Ea.

Estimate: $29,848.59

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace stained urinals, 4.

System: D2010 - Plumbing Fixtures

Location: Toilet rooms, classrooms

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace lavatory faucet

Qty: 20.00

Unit of Measure: Ea.

Estimate: $5,298.26

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace leaking, damaged, or missing faucets, 20.

System: D2040 - Rain Water Drainage

Location: Entire building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Inspect internal rain water drainage piping and replace pipe - based on SF of multi-story building - insert SF of building

Qty: 190,000.00

Unit of Measure: S.F.

Estimate: $842,541.72

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Inspect and repair rain water drainage pipe due to age and reported problems.

System: D3040 - Distribution Systems

Location: Classrooms

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace classroom unit ventilator (htg/clg coils, 5 tons, 2,000 CFM)

Qty: 80.00

Unit of Measure: Ea.

Estimate: $4,125,322.08

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Replace unit ventilators and radiators due to age and lack of fresh air, 80.

System: D3040 - Distribution Systems

Location: Entire building

Distress: Maintenance Required

Category: 3 - Operations / Maint.

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

Correction: Replace hydronic distribution piping insulation - 100 LF of piping

Qty: 1,500.00

Unit of Measure: L.F.

Estimate: $52,371.19

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Install moisture resistant insulation on chilled water pipes to prevent condensation.

System: D3060 - Controls & Instrumentation

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Replace pneumatic controls with DDC (150KSF)

Qty: 190,000.00

Unit of Measure: S.F.

Estimate: $3,403,166.72

Assessor Name: Craig Anding

Date Created: 12/24/2015

Notes: Convert obsolete and failing pneumatic controls to DDC.

System: E2010 - Fixed Furnishings

Location: Music area

Distress: Security Issue

Category: 4 - Capital Improvement

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

Correction: Remove and replace casework - per LF - insert quantities for cabinets in the estimate

Qty: 1.00

Unit of Measure: L.F.

Estimate: $14,615.99

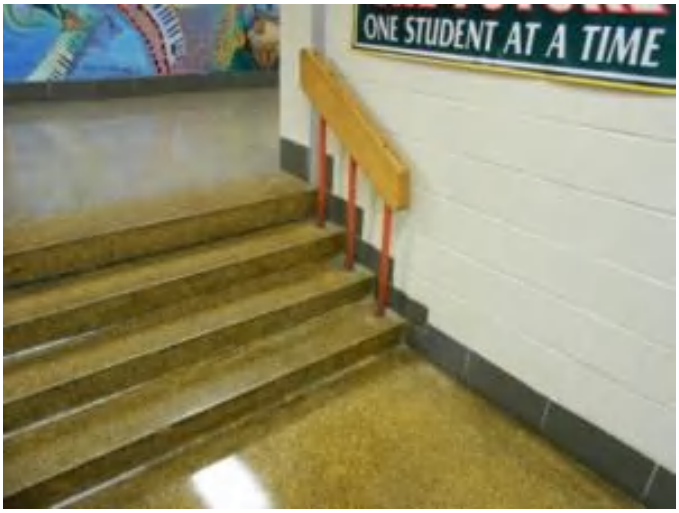
Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Provide locking hardware at instrument storage casework.

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

System: A1030 - Slab on Grade



Location: Connecting corridors between building blocks

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Install interior handicap ramp - per LF 5' wide - insert the LF in the quantity

Qty: 120.00

Unit of Measure: L.F.

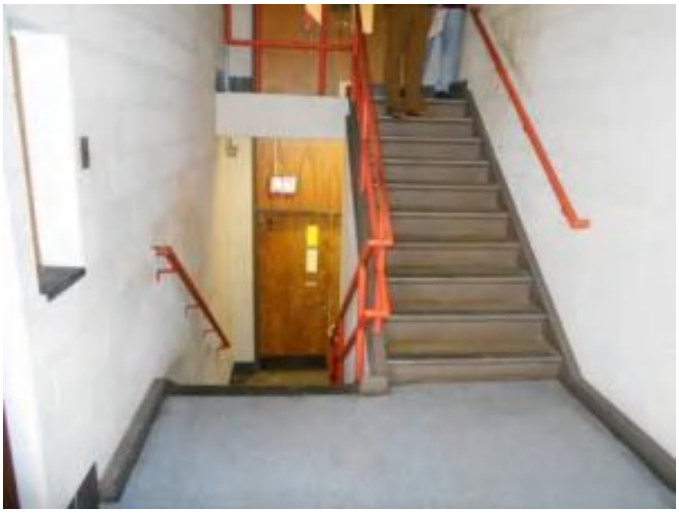
Estimate: $240,887.43

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Install interior handicap ramps at main entrance lobby to auditorium level and to office level, and from main block to the gym block. The building is laid out in three blocks at different elevations to conform to the overall site slope. Stairs are used for interior circulation. Ramps are needed for accessibility.

System: B1010 - Floor Construction



Location: 3rd Floor to IMC, 2nd Floor to IMC

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Install interior handicap ramp - per LF 5' wide - insert the LF in the quantity

Qty: 140.00

Unit of Measure: L.F.

Estimate: $444,514.67

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Install interior handicap ramps from level s 2 3 to the IMC. The IMC is constructed a half-level between floors 2 and 3 in Block B, and is accessed by stairs from two sides. There is no handicap access to this central resource that is currently shared between two academic programs on levels 2 and 3. (It does not appear that adding an elevator stop at the intermediate level is feasible without significant mechanical equipment relocations).

System: B2010 - Exterior Walls

Location: Exterior walls

Distress: Appearance

Category: 3 - Operations / Maint.

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

Correction: Remove graffiti - power wash and paint

Qty: 30,000.00

Unit of Measure: S.F.

Estimate: $202,170.60

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Existing anti-graffiti coating is hazed and peeling, creating an unsightly appearance. Walls at the pool building have painted over graffiti. Paint at miscellaneous areas is peeling.

System: C1020 - Interior Doors

Location: Throughout the building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

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

Qty: 200.00

Unit of Measure: Ea.

Estimate: $704,026.19

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Replace interior doors and hardware in existing frames

System: D2030 - Sanitary Waste

Location: Entire building

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Inspect sanitary waste piping and replace damaged sections. (+200KSF)

Qty: 190,000.00

Unit of Measure: S.F.

Estimate: $824,594.99

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace sanitary drain pipe due to age and reported failures.

System: D3040 - Distribution Systems

Location: Gym and pool

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace HVAC unit for Gymnasium (single station)

Qty: 33,000.00

Unit of Measure: S.F.

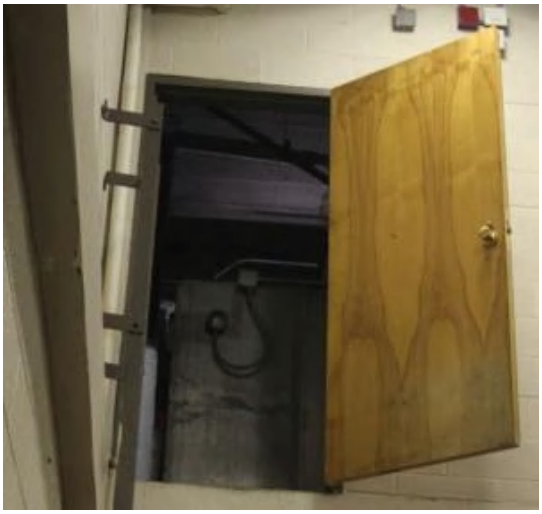
Estimate: $1,227,245.55

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Replace air handlers for gymnasium, pool, and locker rooms to add cooling capability, 33,000 sq. ft. area.

System: D3040 - Distribution Systems



Location: Auditorium

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Install / replace HVAC unit for Auditorium (800 seat).

Qty: 1,320.00

Unit of Measure: Seat

Estimate: $738,234.72

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Replace air handlers for auditorium, music, and art rooms due to age and controls, 1,320 seats.

System: D3040 - Distribution Systems

Location: Cafeteria

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace HVAC unit for Cafeteria (850)

Qty: 1,600.00

Unit of Measure: S.F.

Estimate: $435,523.85

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Replace air handlers for main kitchen and cafeteria due to age and controls, 1,600 students.

System: D5010 - Electrical Service/Distribution

Location: First Floor electrical room

Distress: Inadequate

Category: 4 - Capital Improvement

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

Correction: Replace unit substation

Qty: 1.00

Unit of Measure: Ea.

Estimate: $1,028,025.40

Assessor Name: Craig Anding

Date Created: 12/15/2015

Notes: Two new unit substations are required to feed this facility, one 1500KVA, 13.2KV-277/480V substation for HVAC equipment and large motor loads and another 750KVA, 13.2KV-120/208V unit substation for receptacles, lighting and small motor loads.

System: D5010 - Electrical Service/Distribution

Location: Entire Building

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace Electrical Distribution System (U)

Qty: 25.00

Unit of Measure: Ea.

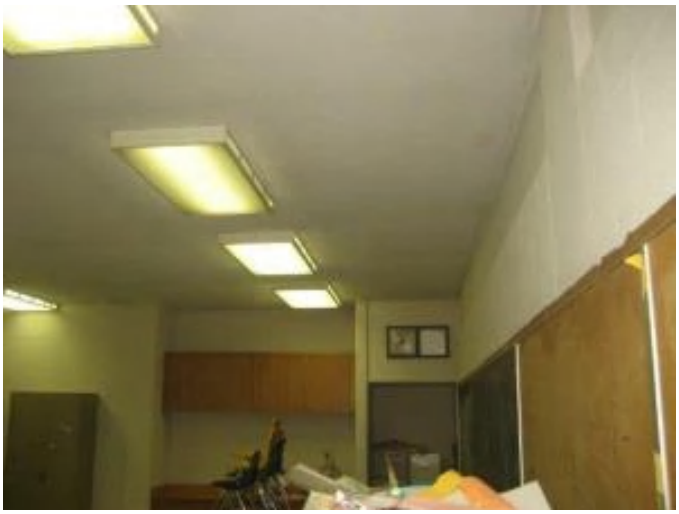
Estimate: $689,024.13

Assessor Name: Craig Anding

Date Created: 12/16/2015

Notes: Replace the entire distribution system with new panelboards and new wiring/conduits. Approximate (25) 208/120V panelboards.

System: D5020 - Lighting and Branch Wiring



Location: Entire Building
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace lighting fixtures
Qty: 1,800.00
Unit of Measure: Ea.
Estimate: $1,598,925.45
Assessor Name: Craig Anding
Date Created: 12/16/2015

Notes: Replace 70% of the existing fluorescent fixtures. Approximate 1800 fixtures.

System: D5020 - Lighting and Branch Wiring

Location: Entire Building
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add wiring device
Qty: 450.00
Unit of Measure: Ea.
Estimate: $220,035.78
Assessor Name: Craig Anding
Date Created: 12/16/2015

Notes: Provide (2)25FT of surface raceways with receptacles spaced 24” on center and 4 wall mount receptacles per classroom. Approximate 450 receptacles

System: D5030 - Communications and Security

Location: Entire Building
Distress: Life Safety / NFPA / PFD
Category: 1 - Health & Safety
Priority: 3 - Response Time (3-4 yrs)
Correction: Replace fire alarm system
Qty: 1.00
Unit of Measure: S.F.
Estimate: $392,771.87
Assessor Name: Craig Anding
Date Created: 12/16/2015

Notes: Provide a new fire alarm control panel and audio/visual devices in the classrooms. Approximate 250 devices

System: D5090 - Other Electrical Systems

Location: Outdoor
Distress: Inadequate
Category: 4 - Capital Improvement
Priority: 3 - Response Time (3-4 yrs)
Correction: Add Standby Generator System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $310,743.76
Assessor Name: Craig Anding
Date Created: 12/16/2015

Notes: Provide an outdoor 200KW diesel powered generator

System: E1020 - Institutional Equipment

Location: Science classrooms

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace lab base cabinets and countertops - per LF - add sinks in plumbing fixtures if required

Qty: 480.00

Unit of Measure: L.F.

Estimate: $843,046.75

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Science classroom casework is original to the building. Surfaces are worn and hardware is failing.

System: E1090 - Other Equipment

Location: Pool

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace pool circulation and filtering equipment - per 6000 gal/hr

Qty: 5.00

Unit of Measure: Ea.

Estimate: $42,574.24

Assessor Name: Craig Anding

Date Created: 01/16/2016

Notes: Pool pump room equipment is entirely rusty, including access ladder

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

System: C1030 - Fittings

Location: Corridors

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Remove and replace lockers - select size

Qty: 1,635.00

Unit of Measure: Ea.

Estimate: $1,076,943.61

Assessor Name: Craig Anding

Date Created: 01/13/2016

Notes: Student lockers are rusty, dented, and have malfunctioning hardware. Replacement is recommended.

System: D3030 - Cooling Generating Systems

Location: Boiler room

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

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

Correction: Replace base mounted, end suction CHW pump (4" size, 7-1/2 HP, to 350 GPM)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $80,790.47

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Replace 1 hydronic pump and 1 motor due to expected lifecycle failure.

System: D3060 - Controls & Instrumentation

Location: Boiler room

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Replace temperature, pressure gauges (enter estimate)

Qty: 1.00

Unit of Measure: Ea.

Estimate: $961.98

Assessor Name: Craig Anding

Date Created: 12/27/2015

Notes: Replace damaged aquastat on domestic water heater in boiler room.

System: D5030 - Communications and Security

Location: Entire Building

Distress: Security Issue

Category: 1 - Health & Safety

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

Correction: Add/Replace Video Surveillance System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $505,330.64

Assessor Name: Craig Anding

Date Created: 12/16/2015

Notes: Provide an indoor surveillance CCTV system. Approximate 100

System: D5030 - Communications and Security

Location: Building perimeter
Distress: Security Issue
Category: 1 - Health & Safety
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Video Surveillance System
Qty: 1.00
Unit of Measure: Ea.
Estimate: $337,924.09
Assessor Name: Craig Anding
Date Created: 12/16/2015

Notes: Provide an outdoor surveillance CCTV system. Approximate 30

System: D5030 - Communications and Security

Location: Entire Building
Distress: Obsolete
Category: 3 - Operations / Maint.
Priority: 4 - Response Time (4-5 yrs)
Correction: Add/Replace Clock System or Components
Qty: 70.00
Unit of Measure: Ea.
Estimate: $160,422.37
Assessor Name: Craig Anding
Date Created: 12/16/2015

Notes: Replace existing clock and bell system with wireless, battery operated system. Approximate 70

System: D5030 - Communications and Security

Location: Auditorium

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Sound System

Qty: 1.00

Unit of Measure: LS

Estimate: $25,947.38

Assessor Name: Craig Anding

Date Created: 12/16/2015

Notes: Provide the auditorium with a sound system

System: D5090 - Other Electrical Systems

Location: Roof

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

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

Correction: Provide Lightning Protection System

Qty: 1.00

Unit of Measure: LS

Estimate: $96,022.24

Assessor Name: Craig Anding

Date Created: 12/16/2015

Notes: Provide a lightning protection system

System: E1020 - Institutional Equipment

Location: Auditorium

Distress: Obsolete

Category: 3 - Operations / Maint.

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

Correction: Add/Replace Stage Theatrical Lighting System

Qty: 1.00

Unit of Measure: Ea.

Estimate: $293,594.70

Assessor Name: Craig Anding

Date Created: 12/16/2015

Notes: Provide the auditorium with stage theatrical lighting and dimming system

Priority 5 - Response Time (> 5 yrs):

System: D3030 - Cooling Generating Systems

Location: Gym block

Distress: Inadequate

Category: 4 - Capital Improvement

Priority: 5 - Response Time (> 5 yrs)

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

Qty: 25,500.00

Unit of Measure: S.F.

Estimate: $409,514.54

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Install 85 ton capacity cooling generating system for gymnasium and pool.

System: D3040 - Distribution Systems

Location: IMC

Distress: Beyond Service Life

Category: 3 - Operations / Maint.

Priority: 5 - Response Time (> 5 yrs)

Correction: Install HVAC unit for IMC (850 students)

Qty: 1,200.00

Unit of Measure: Pr.

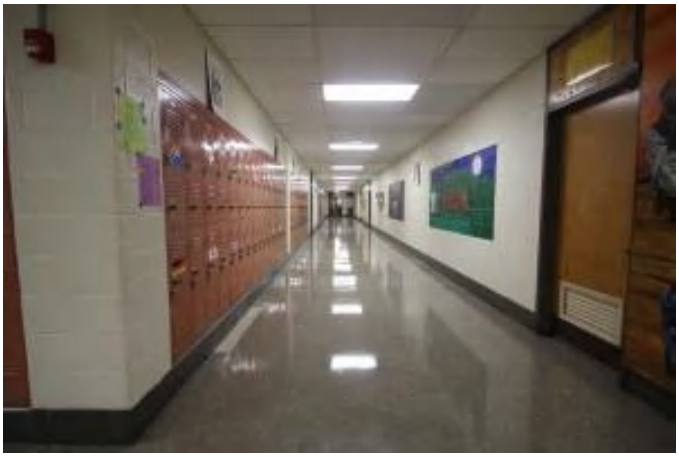
Estimate: $621,334.12

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Replace air handlers for IMC due to age and controls.

System: D4010 - Sprinklers



Location: Entire building

Distress: Life Safety / NFPA / PFD

Category: 1 - Health & Safety

Priority: 5 - Response Time (> 5 yrs)

Correction: Install a fire protection sprinkler system

Qty: 190,000.00

Unit of Measure: S.F.

Estimate: $2,718,036.25

Assessor Name: Craig Anding

Date Created: 12/28/2015

Notes: Add fire protection sprinkler system.

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
D1010 Elevators and Lifts	Hydraulic passenger elevators, base unit, standard finish, 1500 lb, 100 fpm, 2 stop	1.00	Ea.	First Floor					35	1969	2017	$61,999.00	$68,198.90
D3020 Heat Generating Systems	Boiler, gas/oil combination, cast iron, hot water, gross output, 4672 MBH, includes burners, controls and insulated jacket, packaged	3.00	Ea.	Boiler room					35	1998	2033	$102,205.50	$337,278.15
D3030 Cooling Generating Systems	Chiller, centrifugal, water cooled, packaged hermetic, standard controls, 200 ton	1.00	Ea.	Boiler room					30	2010	2040	$152,640.80	$167,904.88
D3030 Cooling Generating Systems	Cooling tower, packaged unit, stainless steel, induced draft, crossflow, horizontal, gear drive, 297 ton, includes standard controls, excludes pumps and piping	1.00	Ea.	Roof top					30	2010	2040	$71,098.50	$78,208.35
D3040 Distribution Systems	Pump, circulating, cast iron, base mounted, coupling guard, bronze impeller, flanged joints, 15 H.P., to 1000 GPM, 5" size	2.00	Ea.	Boiler room					25	2010	2035	$21,432.00	$47,150.40
D3040 Distribution Systems	Pump, circulating, cast iron, close coupled, end suction, bronze impeller, flanged joints, 25 H.P., to 1550 GPM, 5" size	2.00	Ea.	Boiler room					25	2010	2035	$10,858.50	$23,888.70
D5010 Electrical Service/Distribution	Load interrupter switch, 2 position, 300 kVA & below, 13.8 kV, 600 amp w/CLF fuses, NEMA 1	2.00	Ea.	First Floor electrical room					30	1969	2017	$42,600.60	$93,721.32
D5010 Electrical Service/Distribution	Switchboards, distribution section, aluminum bus bars, 4 W, 120/208 or 277/480 V, 3000 amp, excl breakers	2.00	Ea.	First Floor Electrical Room					30	1969	2017	$10,743.30	$23,635.26
D5010 Electrical Service/Distribution	Transformer, oil-filled, 15 kV with taps, 480 V secondary 3 phase, 500 kVA, pad mounted	1.00	Ea.	First Floor Electrical Room					30	1969	2017	$31,174.20	$34,291.62
D5010 Electrical Service/Distribution	Transformer, oil-filled, 15 kV with taps, 480 V secondary 3 phase, 750 kVA, pad mounted	1.00	Ea.	First Floor electrical room					30	1969	2017	$38,253.60	$42,078.96
E1090 Other Equipment	Special construction, swimming pool equipment, filter system, sand, including pump, 6000 gal/hr	5.00	Ea.	Pool					35	1969	2050	$3,030.23	$16,666.27
												Total:	**$933,022.81**

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):	159,000
Year Built:	1969
Last Renovation:	
Replacement Value:	$2,999,850
Repair Cost:	$558,168.78
Total FCI:	18.61 %
Total RSLI:	89.10 %

Description:

Attributes:

General Attributes:

Bldg ID:	S116001	Site ID:	S116001

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	106.28 %	24.18 %	$558,168.78
G40 - Site Electrical Utilities	31.77 %	0.00 %	$0.00
Totals:	**89.10 %**	**18.61 %**	**$558,168.78**

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	$7.65	S.F.		30				0.00 %	0.00 %				$0
G2030	Pedestrian Paving	$11.52	S.F.	131,000	40	1969	2009	2057	105.00 %	23.35 %	42		$352,396.91	$1,509,120
G2040	Site Development	$4.36	S.F.	159,000	25	1969	1994	2042	108.00 %	25.08 %	27		$173,857.42	$693,240
G2050	Landscaping & Irrigation	$3.78	S.F.	28,000	15	1969	1984	2032	113.33 %	30.15 %	17		$31,914.45	$105,840
G4020	Site Lighting	$3.58	S.F.	159,000	30	1969	1999	2024	30.00 %	0.00 %	9			$569,220
G4030	Site Communications & Security	$0.77	S.F.	159,000	30	1969	1999	2027	40.00 %	0.00 %	12			$122,430
								Total	**89.10 %**	**18.61 %**			**$558,168.78**	**$2,999,850**

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.

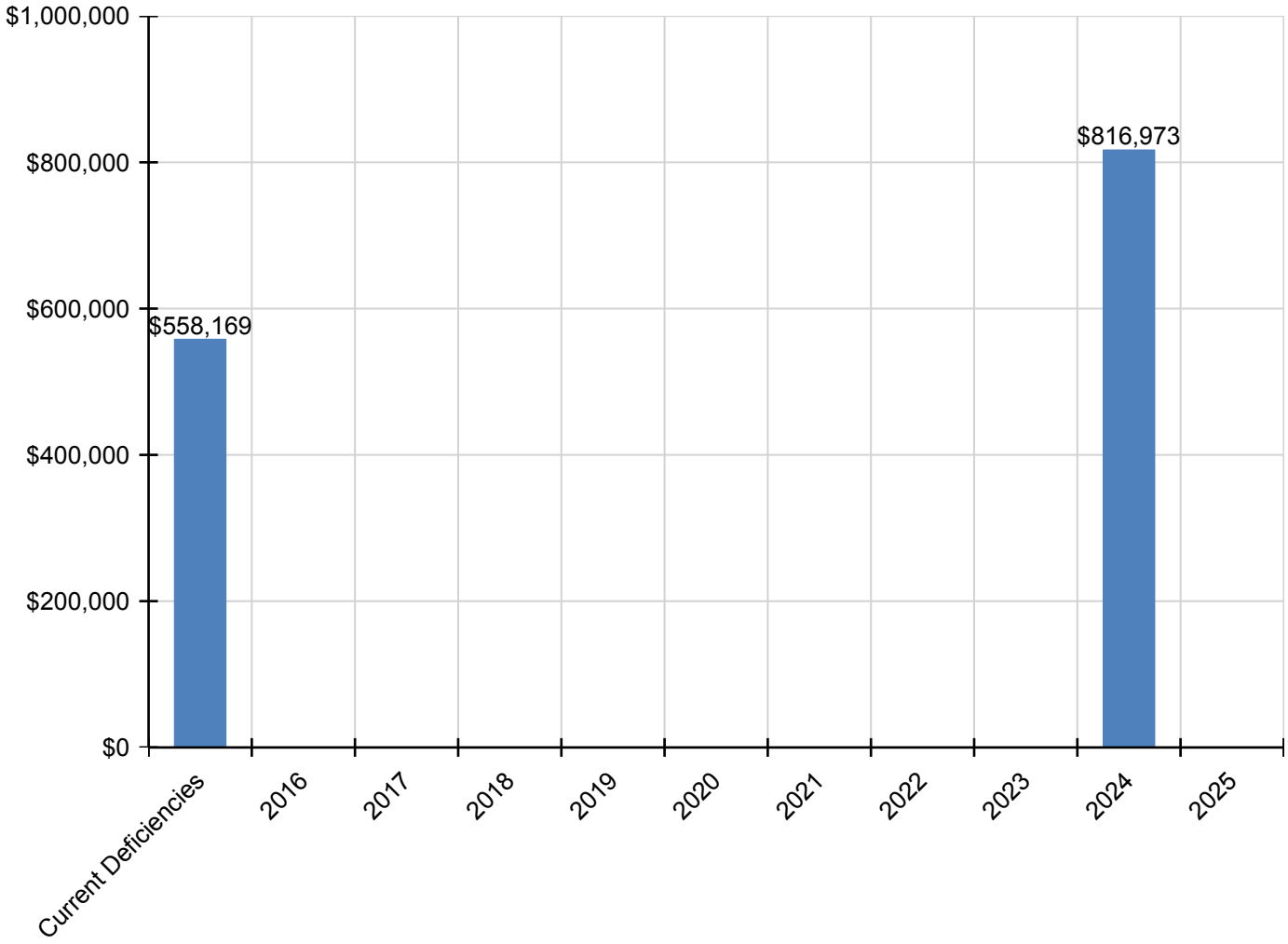
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	**$558,169**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$816,973**	**$0**	**$1,375,142**
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	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G2030 - Pedestrian Paving	$352,397	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$352,397**
G2040 - Site Development	$173,857	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$173,857**
G2050 - Landscaping & Irrigation	$31,914	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$31,914**
G40 - Site Electrical Utilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
G4020 - Site Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$816,973	$0	**$816,973**
G4030 - Site Communications & Security	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

** Indicates non-renewable system*

Forecasted Sustainment Requirement

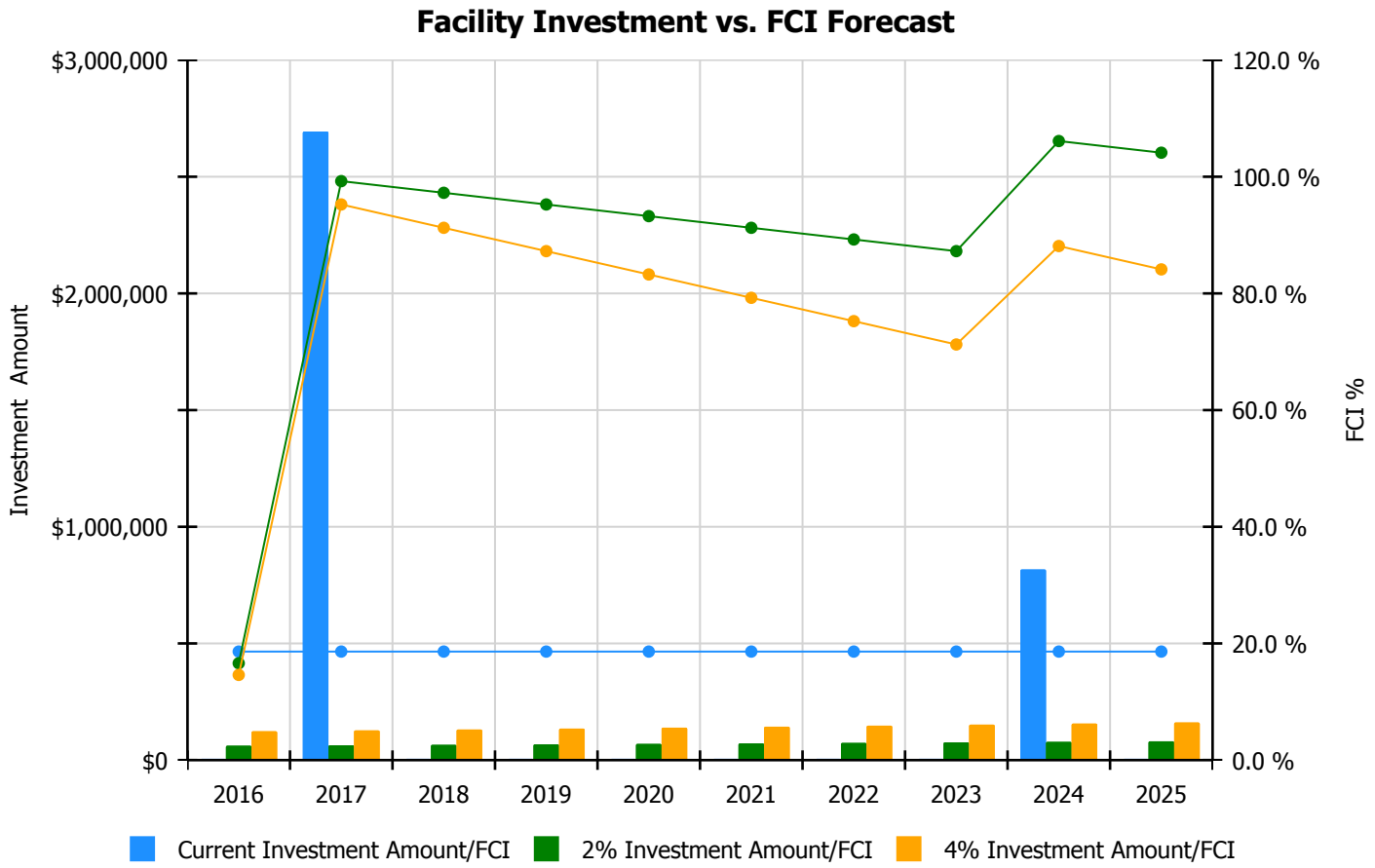
The following chart shows the current building deficiencies and forecasting sustainment requirements over the next ten years.



10 Year FCI Forecast by Investment Scenario

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

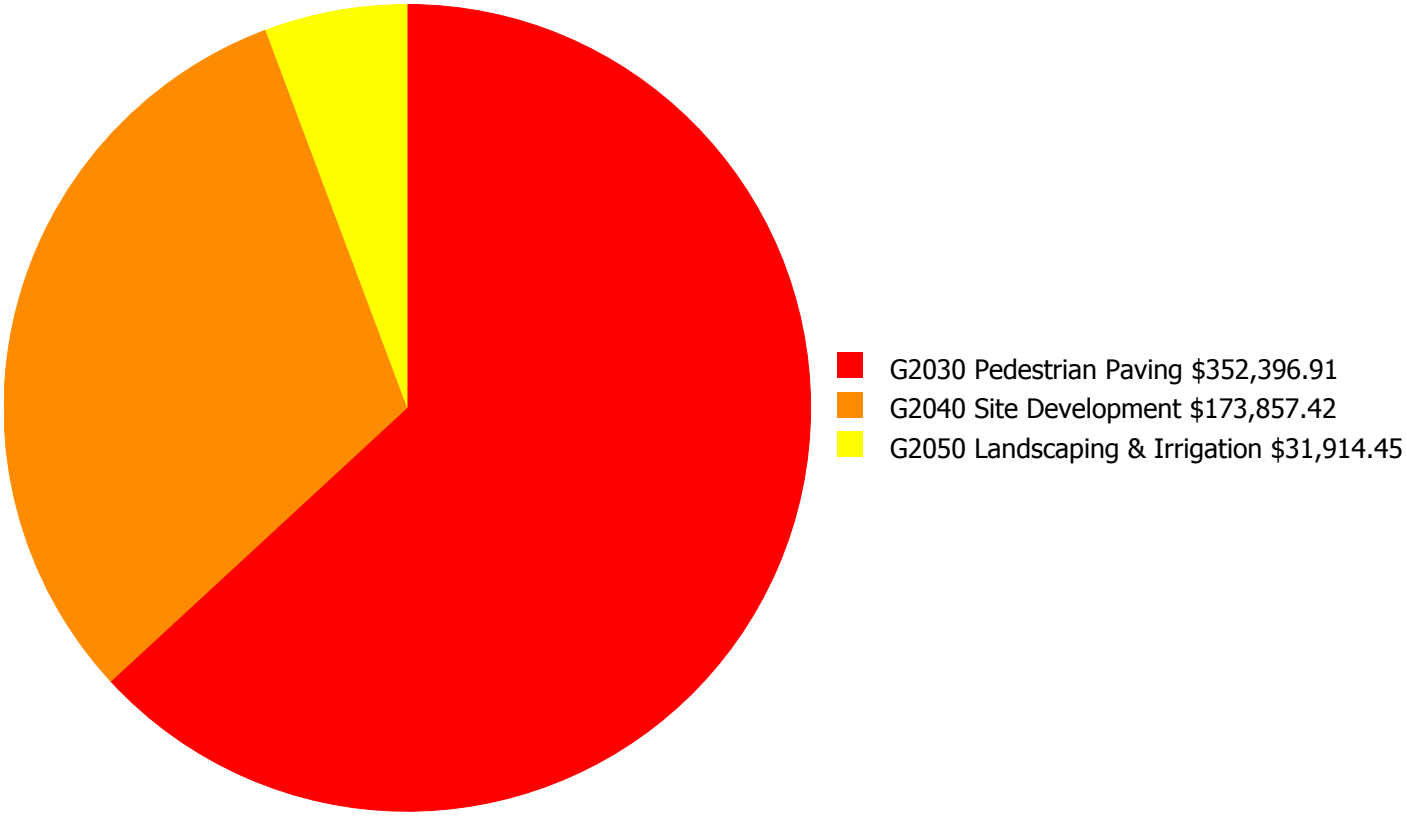
- Current FCI: a variable investment amount based on renewing expired systems to maintain the current FCI for the building
- 2% Investment: an annual investment of 2% of the replacement value of the building, escalated for inflation
- 4% Investment: an annual investment of 4% of the replacement value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



Year	Investment Amount Current FCI - 18.61%	2% Investment		4% Investment	
		Amount	FCI	Amount	FCI
2016	$0	$61,797.00	16.61 %	$123,594.00	14.61 %
2017	$2,693,646	$63,651.00	99.24 %	$127,302.00	95.24 %
2018	$0	$65,560.00	97.24 %	$131,121.00	91.24 %
2019	$0	$67,527.00	95.24 %	$135,054.00	87.24 %
2020	$0	$69,553.00	93.24 %	$139,106.00	83.24 %
2021	$0	$71,640.00	91.24 %	$143,279.00	79.24 %
2022	$0	$73,789.00	89.24 %	$147,577.00	75.24 %
2023	$0	$76,002.00	87.24 %	$152,005.00	71.24 %
2024	$816,973	$78,282.00	106.12 %	$156,565.00	88.12 %
2025	$0	$80,631.00	104.12 %	$161,262.00	84.12 %
Total:	**$3,510,620**	**$708,432.00**		**$1,416,865.00**	

Deficiency Summary by System

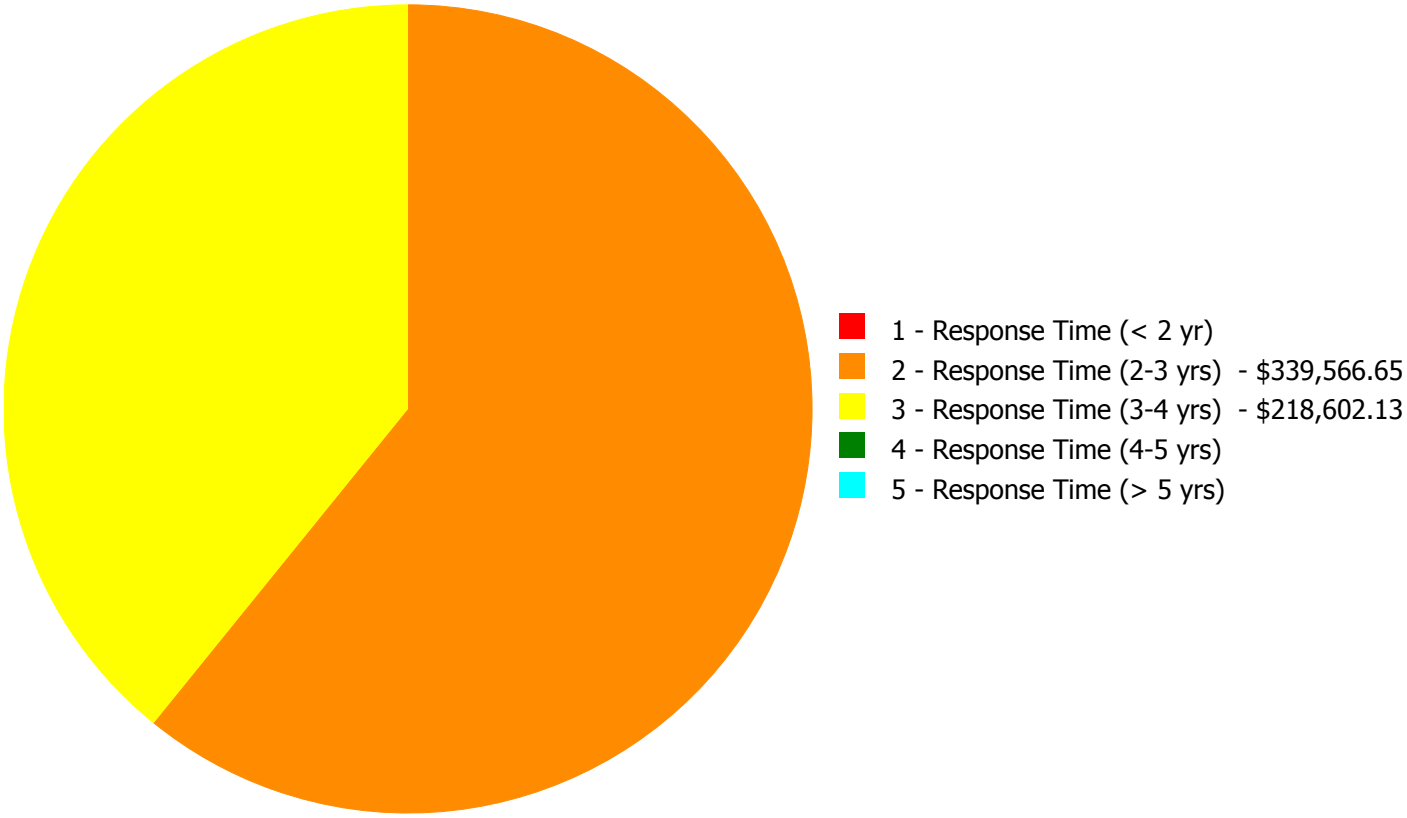
Current deficiencies included assemblies that have reached or exceeded their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Useful Life'. The following chart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



Budget Estimate Total: $558,168.78

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: $558,168.78

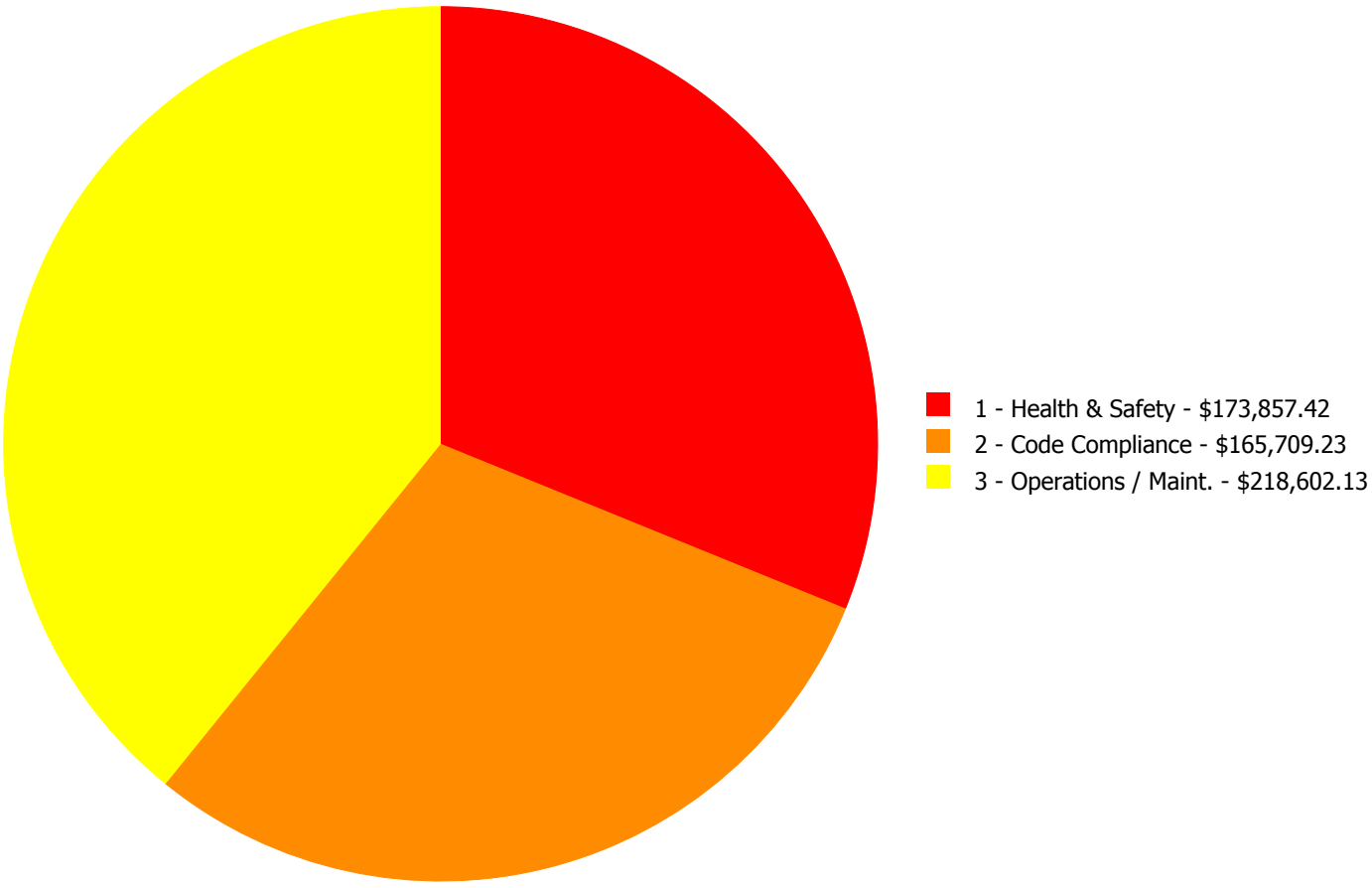
Deficiency By Priority Investment Table

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

System Code	System Description	1 - Response Time (< 2 yr)	2 - Response Time (2-3 yrs)	3 - Response Time (3-4 yrs)	4 - Response Time (4-5 yrs)	5 - Response Time (> 5 yrs)	Total
G2030	Pedestrian Paving	$0.00	$165,709.23	$186,687.68	$0.00	$0.00	$352,396.91
G2040	Site Development	$0.00	$173,857.42	$0.00	$0.00	$0.00	$173,857.42
G2050	Landscaping & Irrigation	$0.00	$0.00	$31,914.45	$0.00	$0.00	$31,914.45
	Total:	$0.00	$339,566.65	$218,602.13	$0.00	$0.00	$558,168.78

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: $558,168.78

Deficiency Details by Priority

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

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

System: G2030 - Pedestrian Paving

Location: Entrances to KIPP and Head Start

Distress: Accessibility

Category: 2 - Code Compliance

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

Correction: Install an exterior ADA ramp - based on 5' wide by the linear foot - up to 84" rise - per LF of ramp - figure 1 LF of ramp per inch of rise

Qty: 70.00

Unit of Measure: L.F.

Estimate: $165,709.23

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Provide handicap ramps from parking lot to building entrances.

System: G2040 - Site Development

Location: Courtyards

Distress: Health Hazard / Risk

Category: 1 - Health & Safety

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

Correction: Repair or replace elements of school play structures - pick the appropriate items quantities

Qty: 28.00

Unit of Measure: Ea.

Estimate: $173,857.42

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Site benches are badly deteriorated with splinters and rotted slats. Replacement for safety reasons is recommended.

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

System: G2030 - Pedestrian Paving

Location: Parking Lots/Play Areas

Distress: Damaged

Category: 3 - Operations / Maint.

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

Correction: Resurface AC pedestrian paving - grind and resurface

Qty: 52,300.00

Unit of Measure: S.F.

Estimate: $186,687.68

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Perform crack repair in asphalt parking lots. Stripe parking lots. Provide handicap designated parking spaces. Trench drain at gated entrance is sunken at Sixteenth street.

System: G2050 - Landscaping & Irrigation

Location: Exterior

Distress: Failing

Category: 3 - Operations / Maint.

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

Correction: Remove and replace tree

Qty: 16.00

Unit of Measure: Ea.

Estimate: $31,914.45

Assessor Name: Craig Anding

Date Created: 01/14/2016

Notes: Trees at Baltimore and 16th street facades are overgrown. They obscure views of the building, creating security concerns. They overhang the roof, causing deterioration and maintenance issues. Small trees in planters at courtyards are in poor condition, with several dead or missing.

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