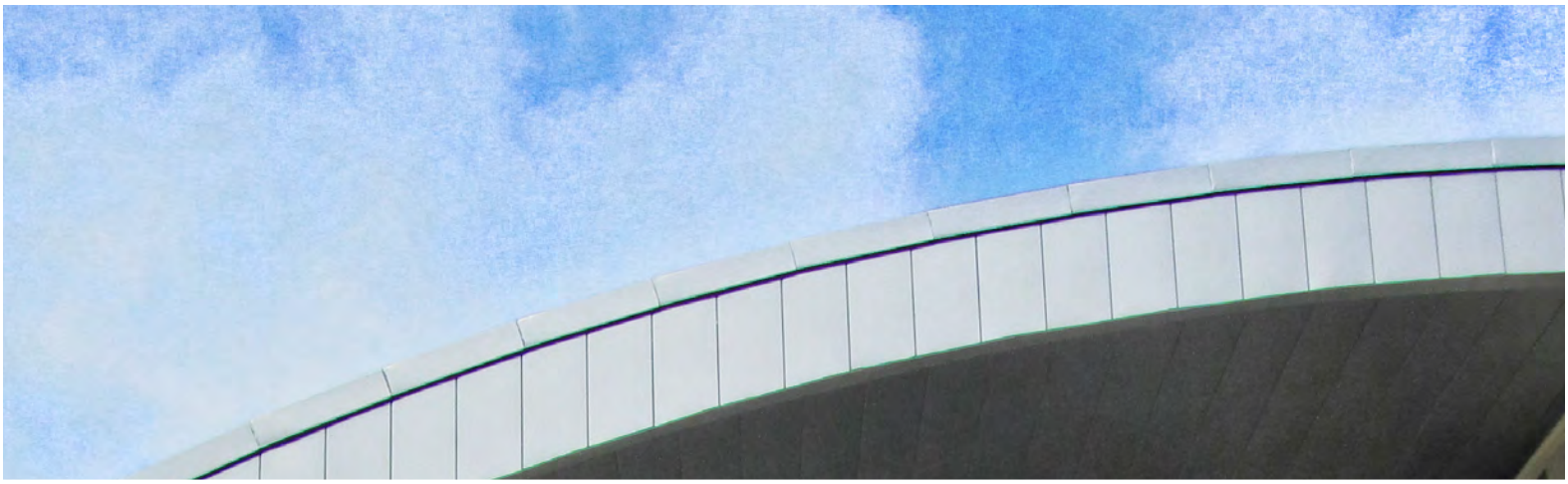

Eanes Independent School District

Facility Condition Assessment

FINAL REPORT: June 5, 2013

Alpha™ Facilities Solutions

Date: June 5, 2013
Version: 1.0

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NOMENCLATURE

ADA	Americans with Disabilities Act
ACBM	Asbestos Containing Building Material
AHERA	Asbestos Hazard Emergency Response Act
ALPHA	ALPHA Facilities Solutions, LLC
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASTM	American Society for Testing and Materials
BOMA	Building Owners and Managers Association
CO2	Carbon dioxide
CPSC	U.S. Consumer Product Safety Commission
CRV	Current Replacement Value
DDC	Direct digital control
DX	Direct-expansion
FCA	Facility Condition Assessment
FCI	Facility Condition Index
FPE	Federal Pacific Electric
GSF	Gross Square Feet
HVAC	Heating, Ventilation and Air Conditioning
IAQ	Indoor air quality
K-12	Kindergarten Through Twelfth Grade
LBP	Lead-based Paint
MEP	Mechanical, Electrical and Plumbing
NFPA	National Fire Protection Association
O&M	Operations and Maintenance
PCB	Polychlorinated Biphenyls
PVC	Polyvinyl chloride
Q-RATING	Quality Rating
ROM	Rough Order of Magnitude
SAMPLE	SAMPLE School District
RT	Resilient Tile

EXECUTIVE SUMMARY

Background

Eanes Independent School District executed a contract with ALPHA Facilities Solutions, LLC (ALPHA), in December 2012, to help determine current and future capital renewal needs and to help ensure that levels of investment in the District are aligned with performance requirements. The scope of work included in ALPHA's assessment effort included:

1. Performing a Facility Condition Assessment (FCA) to document physical conditions
    - Conducting a system-levelevaluationof major building systems that included visual observations and validation of system life-cycles on facilities that are older than 25 years at the time of this report:
        - Eanes Elementary School
        - Cedar Creek Elementary School
        - Valley View Elementary School
        - Forest Trail Elementary School

      And the portions of the following facilities that are newer than 25 years old at the time of this report:
        - Westlake High School
        - Hill Country Middle School
    - Conducting a component-level evaluationto determine condition based on visual observations and validation of system life-cycles and identification of major mechanical, electrical, plumbing, and limited architectural components needs on facilities newer than 25 years old:
        - West Ridge Middle School
        - Barton Creek Elementary School
        - Bridge Point Elementary School
        - Administration Building
        - Eanes Bus Garage
2. Developing a facility condition index (FCI) for each facility using SchoolDude's commercial off-the-shelf PlanningDirect Application

Note: Exterior features such as pavements and site utilities, athletic facilities and roof covering systems were not included in ALPHA's scope of work.

A project kick-off meeting was conducted on Eanes ISD Maintenance and Operations offices on January 10, 2013,to discuss project standards, procedures, and timelines. A four-person assessment team from ALPHA was deployed to Austin on January 21, 2013, to perform the assessment.

Acknowledgements

ALPHA would like to thank the custodial, maintenance, and administrative staff located at each school for their support.

Condition Indices

Major building systems were evaluated during the assessment to determine current and predicted conditions based on expected service life. The expected service life for major systems was determined using statistical methods developed by the Building Owners and Managers Association (BOMA); a few system life cycles were adjusted based on local conditions. Refer to Appendix A for detail information on Life Cycles used for this project. Data obtained during the assessment was entered into PlanningDirect, a powerful capital-planning tool that simplifies planning for future capital needs.

As part of the project analysis, a facility condition index (FCI) was calculated for each facility. The FCI was used to quantify a facility's physical condition at a specific point in time by creating a ratio of the estimated "total cost of maintenance and repair requirements" over a facility's "current replacement value" (CRV).

Example: Total cost of maintenance & repair requirements= $3,000,000

Facility's current replacement value = $10,000,000

$$FCI = 1 - \frac{\$3{,}000{,}000\ Requirements}{\$10{,}000{,}000\ CRV} X\ 100 = 70\%$$

Maintenance and repair requirements consist of work that is necessary to restore the facility to a condition substantially equivalent to its original capability.

The FCI is utilized to assign the condition of a facility with a Quality Rating (Q-rating) of one through four - see Table 1. Q-ratings were developed by the Department of Defense to group FCIs into bands to provide a clear picture of where each facility is within the portfolio. Q-ratings also provide the baseline necessary to develop future facility investment strategies.

Table 1.Q-rating Descriptions

Rating Band	Calculated Rating (FCI)	General Description
Q-1	100% to 90%	Facility is new or in good condition
Q-2	<90% to 80%	Facility is in satisfactory condition
Q-3	<80% to 60%	Facility is in poor condition
Q-4	<60% to 0%	Facility should be considered for replacement

It is important to note that poor Q-ratings are seldom the result of a single factorsuch as poor maintenance practices, but are frequently the result of a combination of factors including facility age, the environment, and operations and maintenance (O&M) funding.

A survey of 69 K-12 schools in the eastern United States yielded an average FCI of 73%, while the average FCI in five years is estimated to be 59% assuming current facility sustainment funding levels.

System States

The design life of a building system or component describes the manufacturers anticipated duration for which a system is expected to perform within expected operational parameters. The design life may be shortened for a variety of reasons including, neglect, inadequate maintenance, overburdened, or vandalism.

The useful life of a building system or component describes the duration for which the system or component operates from its optimum (100%) level of performance from installation down to its minimally accepted level of performance at which time it would fail or be replaced. Useful life may extend significantly beyond design life for a variety of reasons including, irregular use or a comprehensive preventative maintenance program.

As illustrated in the figure below, a facility condition assessment will make an appraisal of systems and components and recommend one of a series of actions necessary to maintain the building in functional use:

- **Extended:** The lifecycle of a system or component may be extended beyond its anticipated design life if the element is deemed to be performing adequately. This extension beyond design life is described as a system or component’s useful life.
- **Expired:** A system or component may be recommended for replacement (at any time) if the element is deemed to be performing inadequately. To prevent double-counting costs, if a deficient component is part of an expired system, only system-level costs are used in the FCI calculation.

- **Missing:** A system or component may be deemed missing if the element absent, but is required for the operation f a facility (ADA requirements for accessible ramps).
- **Not applicable:** A system or component that is neither present, nor required for the operation f a facility (An elevator in a single story building).

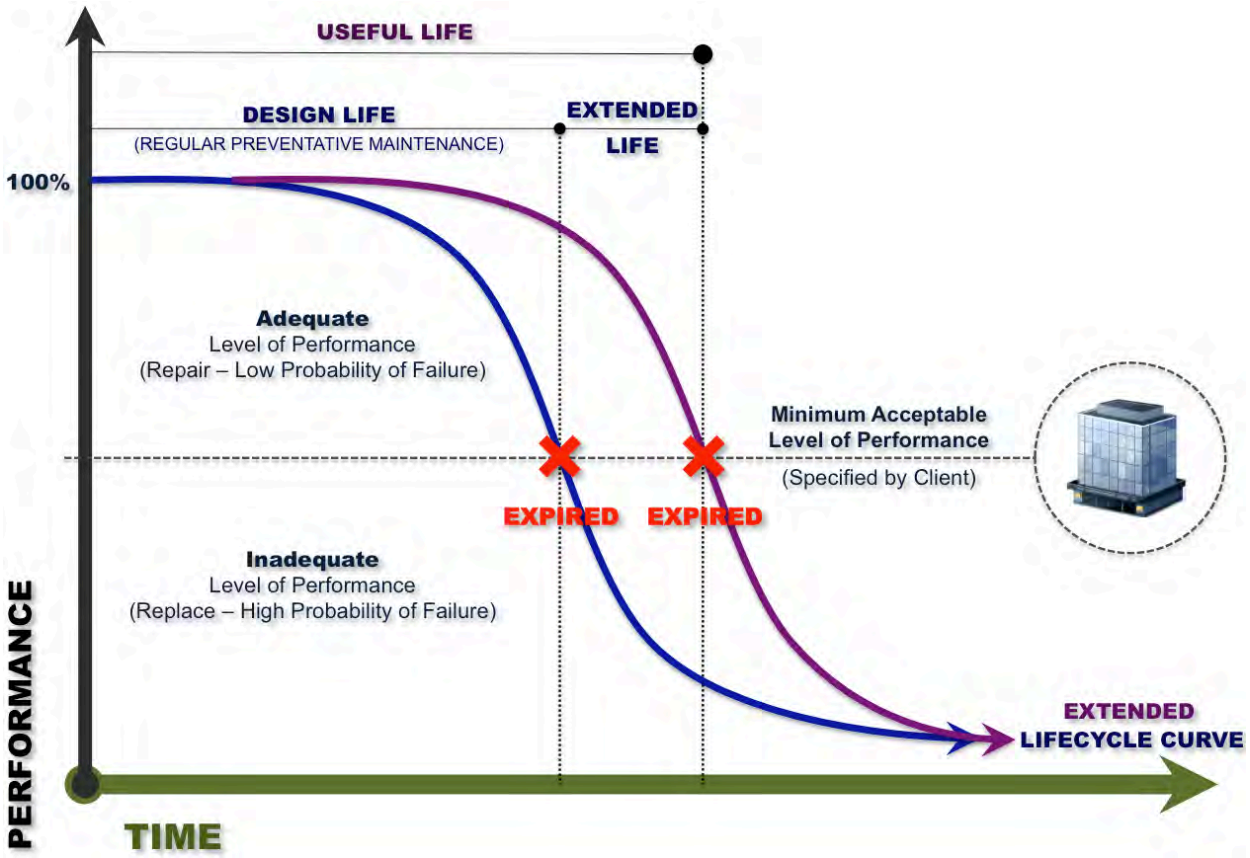

Figure 1. System or Component Lifecycle Curve

Overview of Findings

During the course of the FCA ALPHA Facilities Solutions, evaluated 36 buildings, totaling 1.4 million square feet. The average FCI for the facilities evaluated is 86% while the average FCI in five years is estimated to be 66%, and the 10 year average FCI is expected to be 57%, assuming that no capital investment is made within the 10 year reporting period. The median FCI for the facilities evaluated is 92%, while the median FCI in five years is estimated to be 69% and the 10 year median FCI is expected to be 59%, assuming that no capital investment is made within the 10 year reporting period. It is important to note, that the roofing systems were not included in the scope of this project and roofing need may affect the FCI of the portfolio.

Our team made the following general observations:

1. Activities such as routine maintenance and painting appear to be conducted in an effective and consistent manner throughout the District. It is for this reason that building components have, at times, exceeded their expected design life and continue to perform at the intended service level.
2. Although only a sample of emergency wall-packs and exit signs were observed, a large percentage of the sample failed.
3. Large portions of the District's exterior doors are in fair condition or are at the end of their design life.
4. Fire detection and alarm systems have a 10-year designed life but many of the systems are in a good condition and have been extended for capital planning.
5. Facilities classified for individual needs assessment have MEP building systems expiring due to age. Those systems have been placed in a renewal status for capital planning rather than creation of individual needs.

A summary of physical condition assessment findings by campus is provided in Table 2.

Table 2. Summary of Assessment Findings by Campus

				Current Composite Rating		Forecast Composite Rating (2018)		Forecast Composite Rating (2023)	
Campus	**Year Built**	**Age (Years)**	**Area (SF)**	**FCI**	**Q-rating**	**FCI**	**Q-rating**	**FCI**	**Q-rating**
Administration Building	1989	24	28,690	75%	Q3	50%	Q4	44%	Q4
Barton Creek Elementary	1991	22	88,712	95%	Q1	87%	Q2	74%	Q3
Bridge Point Elementary	1997	16	94,230	91%	Q1	76%	Q3	72%	Q3
Cedar Creek Elementary	1978	35	75,990	88%	Q2	69%	Q3	59%	Q4
Eanes Elementary	1937	76	67,350	94%	Q1	78%	Q3	70%	Q3
Forest Trail Elementary	1985	28	79,431	95%	Q1	52%	Q4	43%	Q4
Hill Country Middle School	1975	38	142,458	98%	Q1	78%	Q3	67%	Q3
Maintenance & Tranportation Offices	1970	43	5,000	92%	Q1	75%	Q3	75%	Q3
Rockhouse	1960	53	2,400	37%	Q4	34%	Q4	26%	Q4
Valley View Elementary	1982	31	72,916	97%	Q1	58%	Q4	51%	Q4
Warehouse	1970	43	6,350	78%	Q3	46%	Q4	40%	Q4
Westlake High School	1969	44	573,776	95%	Q1	88%	Q2	72%	Q3
Westridge Middle School	1986	27	178,570	90%	Q1	62%	Q3	55%	Q4
Eanes ISD (Average)				**86%**	**Q2**	**66%**	**Q3**	**57%**	**Q4**
Eanes ISD (Median)				**92%**	**Q1**	**69%**	**Q3**	**59%**	**Q4**

Note: Potential cost associated with hazardous material inspection, evaluation, and mitigation, including asbestos abatement, is not included in FCI calculations. It should also be noted that major renovations might trigger mandated requirements for compliance with provisions of the Americans with Disabilities Act (ADA) and other building codes.

It can be useful to view facility conditions in a graphic manner in order to clearly demonstrate the relationship between a facility's age and it's physical condition. The diamond data points shown in Figure 1 below depicts current (2013) physical condition in relationship to age for each building, while the square data points show the predicted physical condition for each building by the year 2018 and the triangle data points show the predicted physical condition for each building by the year 2023.

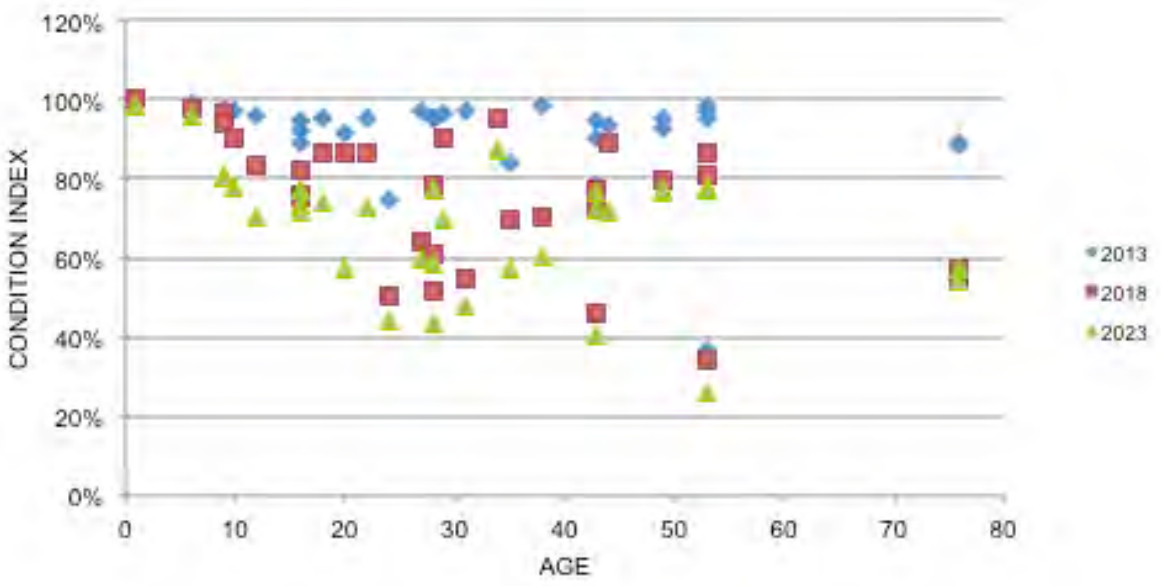

Figure 2. Facility Condition vs. Facility Age

Cost Assumptions

Although building systems judged to be beyond useful service life (also referred to as expired systems) are often marginally functional, they should be considered for replacement for reasons such as:

6. Electrical systems with obsolete components or inadequate capacity to meet technology needs should be replaced in order to handle demands of 21st century school facilities
7. Galvanized domestic water piping that has deteriorated or copper piping installed prior to the prohibition of lead solder should be replaced to mitigate risk of contaminated drinking water.
8. Cast iron and galvanized wastewater piping that leaks or has become increasingly difficult to maintain should be replaced at the time of next major renovation or replacement of fixtures.
9. Mechanical Systems that have reached the end of their expected useful life are important energy conservation opportunities, and should be considered for system replacement with modern energy efficient systems in lieu of constant component repairs.

Each system judged to be beyond useful service life or requiring replacement was given a rough order of magnitude Rough Order of Magnitude (ROM) cost estimate. Cost estimates were developed using data contained in PlanningDirect's cost modeling software, which is based on construction cost data from multiple sources. Cost estimates were also adjusted using regional area cost factors. Additional information regarding cost models is contained in Appendix B.

The figures below depict the distribution of costs for systems in all facilities assessed that are currently beyond useful service life and systems that are projected to be beyond useful service life by the years 2018 and 2023 respectively. Assessed systems have been grouped as follows:

- Interiors
- Exteriors
- Electrical
- Mechanical
- Plumbing
- Built-in Specialties
- Individual Needs

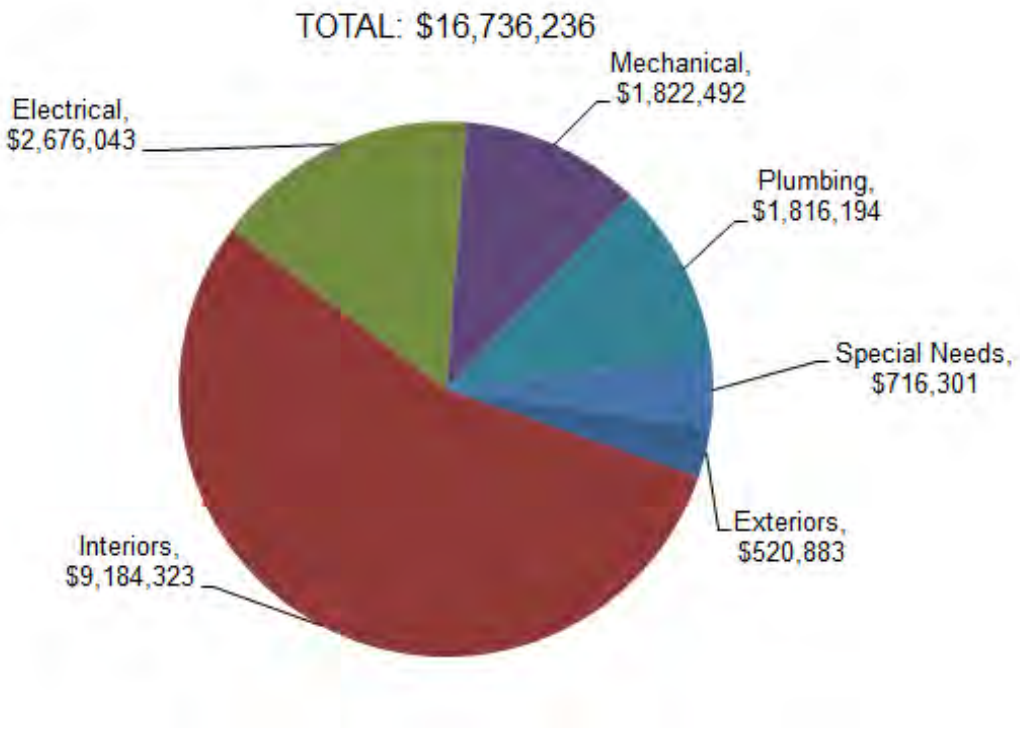

Figure 3. Current Needs (2013**)**

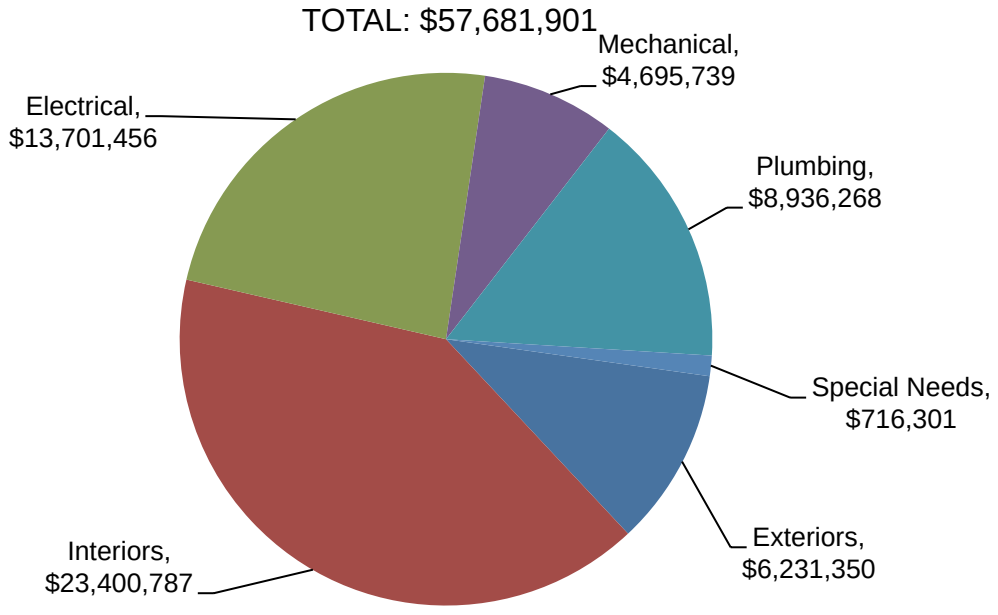

Figure 4. Extended Cumulative Needs 5-year forecast (2018**)**

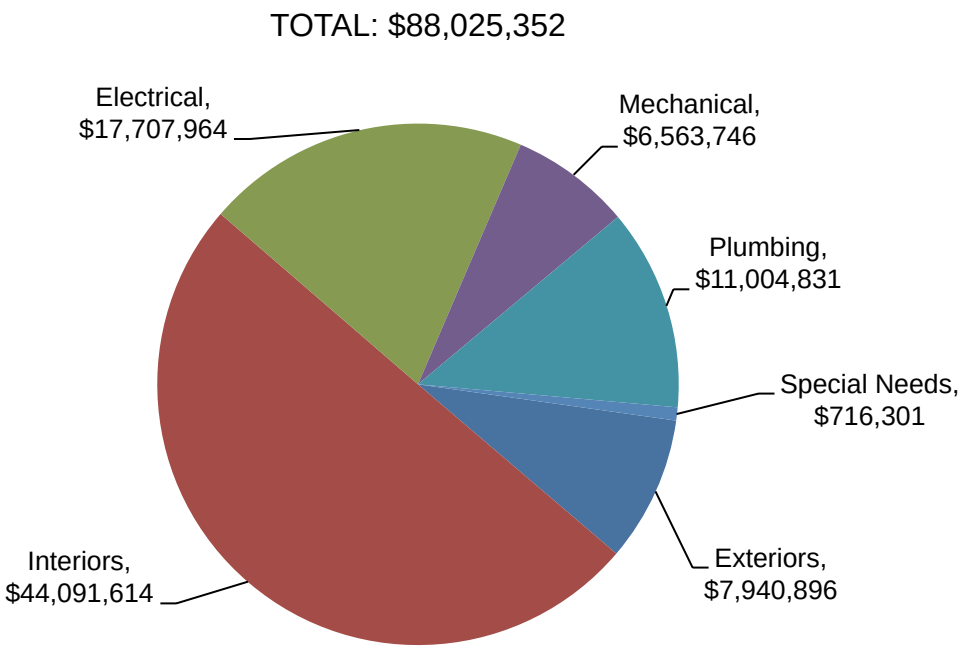

Figure 5. Extended Cumulative Needs 10-year forecast (2023)

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. the following figures show the District's needs grouped by priority on a current (2013), 5-year (2018) and 10-year forecast (2023).

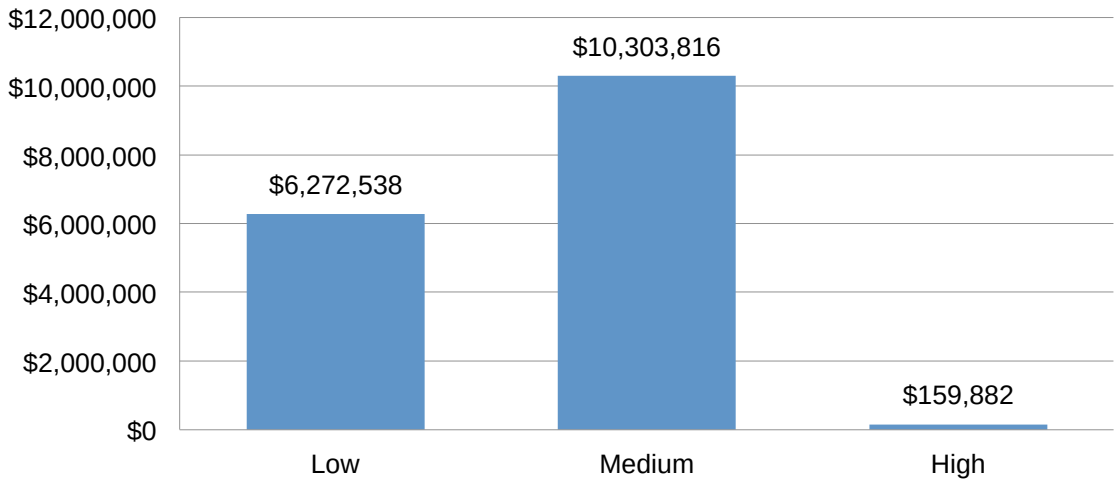

Figure 6. Current (2013) Needs by Priority

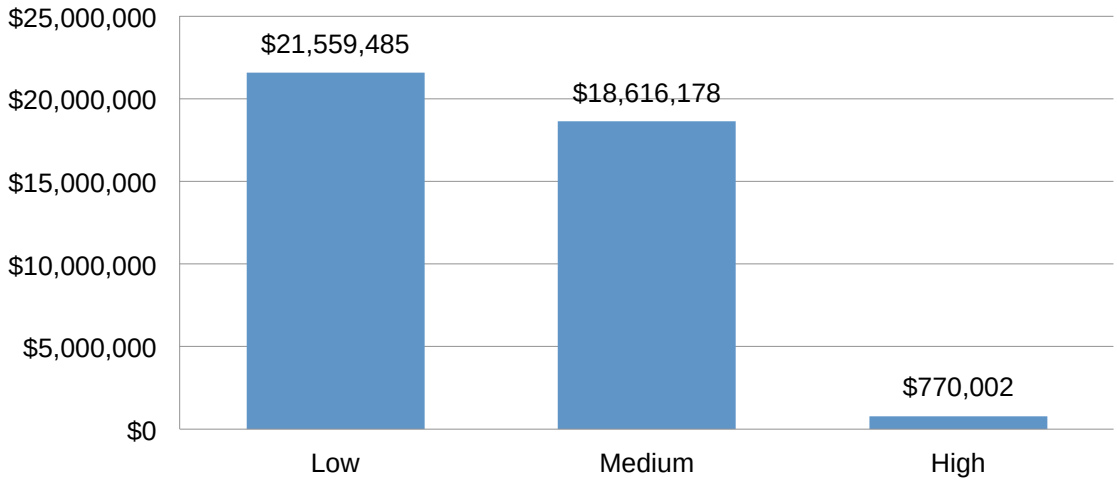

Figure 7. Extended 5-year (2018) Needs by Priority

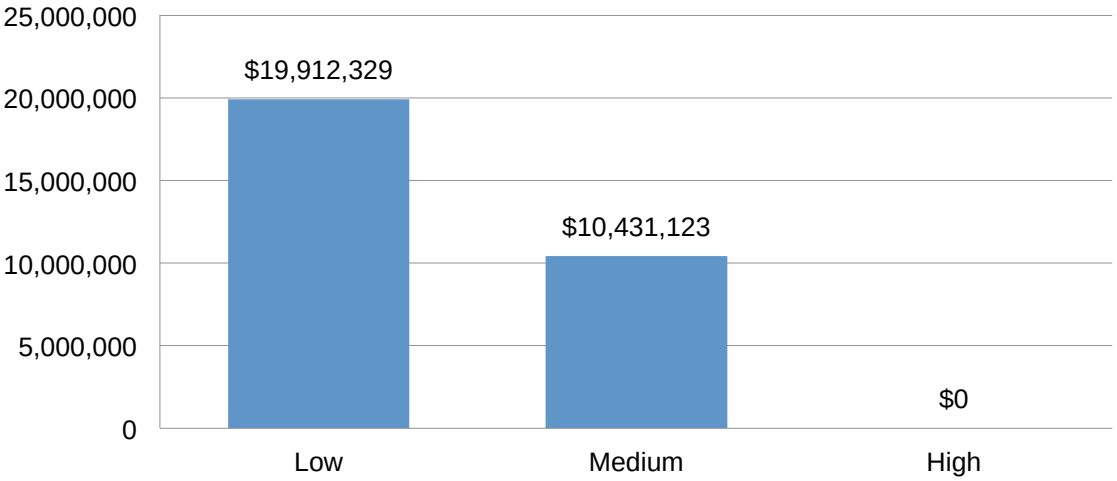

Figure 8. Extended 10-year forecast (2023) Needs by Priority

Renewal Forecast

An important product of this initiative is the development of a renewal forecast. The renewal forecast describes the current maintenance and repair backlog as well projected facility sustainment requirements. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation and mitigation, including asbestos abatement; and National Fire Protection Association (NFPA) and ADA upgrades that might be required. The 10-year renewal forecast for all facilities is illustrated in the following figure.

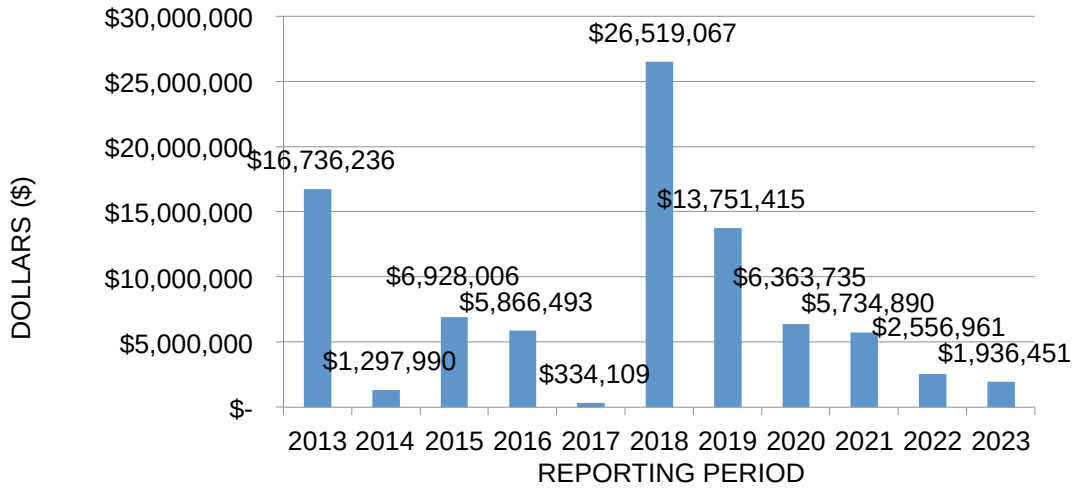

Figure 9. Renewal Forecast

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods. Please note that any individual need of a non-expired system has been cataloged under the “Special Needs” category.

Table 3. Forecasted Needs Table

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$16,736,236**	**$40,945,665**	**$30,343,451**
B20	**Building Exterior**	**$520,883**	**$5,710,467**	**$1,709,546**
B2010	Exterior Walls	$4,247	$64,182	$1,051,897
B2020	Exterior Windows	$451,911	$4,667,154	$632,278
B2030	Exterior Doors	$64,725	$979,131	$25,371
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$71,985**	**$6,598,727**	**$13,061,968**
C1020	Interior Doors	$43,424	$2,390,971	$1,455,694
C1030	Fittings	$28,561	$4,207,756	$11,606,274
C30	**Interior Finishes**	**$9,112,338**	**$7,617,737**	**$7,628,859**
C3010	Wall Finishes	$7,380,411	$967,076	$-
C3020	Floor Finishes	$365,481	$5,670,071	$4,982,939
C3030	Ceiling Finishes	$1,366,446	$980,590	$2,645,920
D10	**Conveying Systems**	**$-**	**$559,697**	**$1,442,389**
D1010	Elevators & Lifts	$-	$559,697	$1,442,389
D20	**Plumbing**	**$1,816,194**	**$6,954,667**	**$1,826,879**
D2010	Plumbing Fixtures	$14,000	$2,088,841	$638,418
D2020	Plumbing Rough-in	$1,802,194	$4,865,826	$1,188,461
D30	**HVAC**	**$1,822,492**	**$2,313,550**	**$425,618**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$1,080,940	$-	$134,288
D3040	Distribution System	$741,552	$2,289,878	$22,080
D3060	Controls & Instrumentation	$-	$23,672	$269,250
D40	**Fire Protection**	**$2,240,617**	**$710,837**	**$2,545,754**
D4010	Fire Alarm & Detection	$2,240,617	$545,430	$2,304,070
D4040	Fire Sprinklers	$-	$165,407	$241,684
D50	**Electrical**	**$435,426**	**$10,479,983**	**$1,702,438**
D5010	Electrical Equipment	$39,801	$4,905,931	$181,610
D5020(01)	Wiring	$381,149	$1,984,352	$89,050
D5090(02)	Lighting	$14,476	$3,589,700	$1,431,778
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	$716,300.81	$-	$-

Recommendations

1. Systems that have been expired due to age were a common occurrence in the majority of the District. It is recommended to place these systems on an extended five-year replacement or reevaluation cycle due to good condition.
2. Non-operational exit signage and wall-packs should be fully evaluated and placed on a periodic maintenance or replacement schedule.
3. Refurbishing exterior door components, such as protective coatings, seals, gaskets, and hardware, rather than replacement, can avoid costly system replacement.
4. Upgrading window systems can offer energy conservation opportunities. Although most expired window systems are set to a medium priority and renewal extended due to condition, replacement should be considered over refurbishment. Bridge Point and Hill Country facilities have been identified to have a higher urgency to replace window systems because deteriorating locks and seals.
5. The District's oldest school, Eanes Elementary, has been maintained at a high level of condition with many renewal projects completed. This campus has two historic buildings that are still used for classroom instruction. Some of these building's systems are in need of renewal. It is important to consider that special pricing considerations should be designated for historical building upgrades identified during the assessment in order to maintain the historic appearance of the facility.
6. Most campuses' Ceiling systems appear to have been renewed as required. It is recommended that the buildings identified for ceiling tile replacement be scheduled concurrently with lighting upgrades. Ceiling tiles can be replaced on a scheduled 10-year cycle while the Ceiling grid and tiles replaced every 20 years.

APPENDIX A – BUILDING SYSTEMS DESCRIPTIONS AND EXPECTED LIFE CYCLES

Systems Descriptions

Building System	Description
Building Exterior	
Exterior Doors	Doors at exterior walls
Exterior Walls (Not structural)	Brick veneer, stucco, wood siding, etcetera
Exterior Windows	Windows at exterior walls
Interior Finishes	
Interior Doors	Doors at interior walls
Ceiling Finishes	Painted drywall or plaster; suspended and glued-on acoustical tile
Wall Finishes	Painted drywall, plaster or masonry; ceramic tile
Floor Finishes	Carpet, resilient, wood, concrete
Fittings	
Fittings	Sometimes referred to as millwork; cabinetry in bathrooms, kitchens and other spaces, as well as signage, bathroom equipment and bathroom partitions
Conveying Systems	
Elevators	Hydraulic or traction elevators for transporting personnel and freight
Plumbing	
Plumbing Rough-in (Piping)	Piping associated with domestic water, gas and sanitary sewer
Plumbing Fixtures	Bathroom and kitchen fixtures
Fire Sprinklers	Includes riser, piping and sprinkler heads associated with fire suppression system
HVAC	
Controls	Includes thermostats; pneumatic and direct digital controls
Equip	Heating or cooling equipment such as boilers, heat exchangers, chillers, cooling towers, etcetera
Rough-in (Piping and Ductwork)	Hydronic piping, radiators, circulating pumps, air handling units, ductwork, etcetera
Electrical	
Fire Detection	Smoke/heat detectors, annunciator panels, and audible/visual notifiers
Service and Distribution	Main switchgear, transformers, bus ducts, feeders, transfer switches, etcetera
Wiring	Electrical subpanels to include lighting circuits and branch circuits
Lighting	Lighting within a structure excluding emergency lighting and exit lights

Systems Life Cycles

System	Lifecycle Years
Building Exterior	
Exterior Doors	25
Exterior Walls (Not structural)	50
Exterior Windows	25
Interior Finishes	
Interior Doors	25
Ceiling Finishes	10
Wall Finishes	5
Floor Finishes	12
Built-in Equip/Specialties	
Built-in Equip/Specialties	20
Conveying Systems	
Elevators	25
Plumbing	
Plumbing Rough-in (Piping)	30
Plumbing Fixtures	30
Plumbing Sprinklers	25
HVAC	
Controls	20
Equip	30
Rough-in (Piping and Ductwork)	30
Electrical	
Fire Detection	10
Service and Distribution	30
Wiring	30
Lighting	20

APPENDIX B – BUILDING COST MODELS

Cost Models

Cost models used for the project were developed using traditional life cycle cost analysis methodology, and are intended to develop a baseline from which to establish an FCI for each facility. It is not unusual for those new to the life cycle cost analysis process to have expectations that are not completely in alignment with what the process is intended to yield. For example, the life cycle cost analysis process generates ROM budgeting-level costs. More detailed costs are derived during formal preliminary design and final design cost estimating processes.

Cost Models available within the capabilities of PD are a product of the selections made during the creation of a building type.

Of the multiple construction types and considerations available within PD ALPHA has selected a combination that produces the cost models in tables 1, 2 and 3. Costs are for planning purposes and are not intended to be an exact project estimates. A limited number of line items have been adjusted manually to adequately estimate a systems renewal cost and life cycle.

In the case of the interior ceiling system the life cycle has been reduced to from 15 to10 years. This was done to place the system in a renewal cycle of tiles every 10 years and Grid and tiles every 20 yrs. The cost associated with the system for this cycle is for the tile replacement at the end of its life cycle.

In the case of the roofing and elevator system the amount will need to be adjusted on a building-specific need, as PD does not adjust for the number of floors a building has. The amount entered will be more closely related to true replacement cost rather than a parametric cost per square foot.

Detailed information on the setup of cost models in PlanningDirect can be found in the PlaningDirect User Manual attached to this report.

EISD PD Cost Models

Table 4. Elementary Schools, CRV $160/Sqft

Renewable Systems	System %	Life Cycle	Estimated Cost /Sqft
Roofing	Roofing (100%)	25	TBD
Exterior Doors	Building Exteriors (20%)	30	$0.55
Exterior Walls	Building Exteriors (50%)	50	$1.37
Exterior Windows	Building Exteriors (30%)	30	$4.50
Interior Doors	Interior Finishes (20%)	20	$2.03
Interior Walls	Interior Finishes (15%)	5	$4.70
Floor Finishes	Interior Finishes (40%)	15	$4.06
Ceiling Finishes	Interior Finishes (25%)	10	$2.54
Built-in Equipment/Specialties	Built-in Equipment/Specialties (100%)	15	$7.62
Elevators	Elevators (100%)	20	TBD
Plumbing Rough-in	Plumbing Rough-in (100%)	30	$10.96
Plumbing Fixtures	Plumbing Fixtures (100%)	30	$6.60
Plumbing Sprinklers	Plumbing Sprinklers (100%)	25	$4.11
HVAC Controls	HVAC Controls (100%)	20	$5.08
HVAC Equipment	HVAC Equipment (100%)	25	$7.92
HVAC Rough-in	HVAC Rough-in (100%)	30	$15.76
Fire Detection	Fire Detection (100%)	10	$2.86
Electrical Equipment	Electrical Equipment (100%)	30	$13.97
Wiring	Wiring (100%)	30	$6.85
Lighting	Lighting (100%)	20	$5.08

Table 5. PAC or Gymnasium, CRV $197/Sqft

System	System %	Life Cycle	Estimated Cost /Sqft
Roofing	Roofing (100%)	25	TBD
Exterior Doors	Building Exteriors (20%)	30	$0.69
Exterior Walls	Building Exteriors (50%)	50	$1.74
Exterior Windows	Building Exteriors (30%)	30	$1.04
Interior Doors	Interior Finishes (20%)	20	$4.19
Interior Walls	Interior Finishes (27%)	5	$5.76
Floor Finishes	Interior Finishes (40%)	15	$8.37
Ceiling Finishes	Interior Finishes (12%)	10	$2.62
Built-in Equipment/Specialties	Built-in Equipment/Specialties (100%)	15	$18.42
Elevators	Elevators (100%)	20	TBD
Plumbing Rough-in	Plumbing Rough-in (100%)	30	$11.40
Plumbing Fixtures	Plumbing Fixtures (100%)	30	$7.13
Plumbing Sprinklers	Plumbing Sprinklers (100%)	25	$4.27
HVAC Controls	HVAC Controls (100%)	20	$9.62
HVAC Equipment	HVAC Equipment (100%)	25	$20.19
HVAC Rough-in	HVAC Rough-in (100%)	30	$11.06
Fire Detection	Fire Detection (100%)	10	$3.82
Electrical Equipment	Electrical Equipment (100%)	30	$23.36
Wiring	Wiring (100%)	30	$8.50
Lighting	Lighting (100%)	20	$6.80

Table 6. Middle School and High School Classrooms, CRV $191/Sqft

System	System %	Life Cycle	Estimated Cost /Sqft
Roofing	Roofing (100%)	25	TBD
Exterior Doors	Building Exteriors (20%)	30	$2.21
Exterior Walls	Building Exteriors (35%)	50	$3.86
Exterior Windows	Building Exteriors (45%)	30	$4.97
Interior Doors	Interior Finishes (20%)	20	$5.37
Interior Walls	Interior Finishes (27%)	5	$7.38
Floor Finishes	Interior Finishes (40%)	15	$10.73
Ceiling Finishes	Interior Finishes (12%)	10	$3.35
Built-in Equipment/Specialties	Built-in Equipment/Specialties (100%)	15	$12.35
Elevators	Elevators (100%)	20	TBD
Plumbing Rough-in	Plumbing Rough-in (100%)	30	$4.47
Plumbing Fixtures	Plumbing Fixtures (100%)	30	$2.80
Plumbing Sprinklers	Plumbing Sprinklers (100%)	25	$1.68
HVAC Controls	HVAC Controls (100%)	20	$19.44
HVAC Equipment	HVAC Equipment (100%)	25	$40.82
HVAC Rough-in	HVAC Rough-in (100%)	30	$22.36
Fire Detection	Fire Detection (100%)	10	$3.39
Electrical Equipment	Electrical Equipment (100%)	30	$16.58
Wiring	Wiring (100%)	30	$7.54
Lighting	Lighting (100%)	20	$6.03

APPENDIX C – CAMPUS ASSESSMENT REPORTS

BARTON CREEK ELEMENTARY SCHOOL

Assessment Findings		
Size (SF)	88,712	
Date of construction	1991	
Type of Construction	One-Story Masonry Structure	
Roof	Ballasted Built-up Roof	
Ceilings	Acoustical Tile	
Lighting	Surface-Mounted and Lay-In Fluorescent Fixtures	
Additions/ Renovations	2012	
HVAC	Four-pipe Chiller and Boiler System	

Condition Summary

Barton Creek Elementary School is in good overall condition and appears to be well maintained. The campus consists of the original 1991 building and a new 2012 HVAC building.

EXTERIORS

The windows are original single pane and in good condition, this system might possibly be an energy conservation opportunity when in need of replacement. Exterior doors are original and in fair condition; refurbishment is recommended for gaskets painting and hardware. All exterior walls are of original brick veneer and in good condition. The exterior painted finishes are in need of renewal.

INTERIORS

The interior wall finishes are in in fair condition; however, high traffic areas are in need of re-painting. Floor finishes are a combination of carpet and VCT flooring, and are in good condition. The ceiling finishes consist of acoustical tiles, which were replaced in 2012. The interior doors in Hallway 300 are delaminated, the paint is failing, and it is recommended to replace them.

MECHANICAL

The HVAC system for the building consists of a four-pipe system with a cooling tower and chiller system; a boiler provides heating. The HVAC system was updated in 2012 with the construction of the new HVAC building. The campus has DDC controls for all major mechanical systems. The campus has no elevators.

ELECTRICAL

The electrical system was updated for the needs of the new mechanical equipment. The original portion of the system is in good condition. The light fixtures were replaced with the ceilings in 2012 and are in good condition. The fire alarm system appears to have been updated and is in good condition.

PLUMBING

The plumbing fixtures and piping are original and in good condition. No leaks were observed.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 7. Barton Creek Elementary School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		**CRV**
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Barton Creek Elementary	1991	22	88,712	95	Q1	87	Q2	74	Q3	$13,994,640

A summary of the physical condition assessment findings at Barton Creek Elementary School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

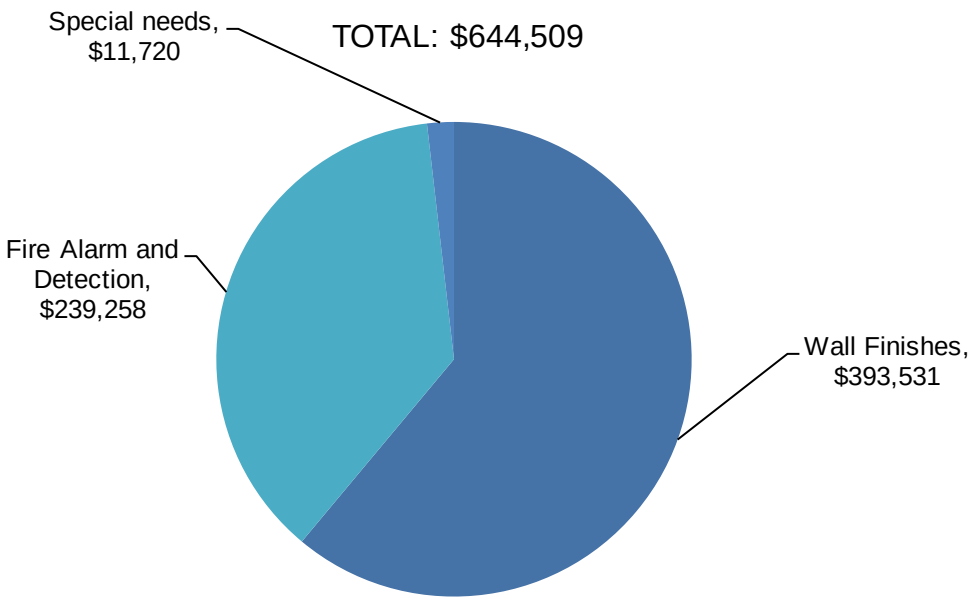

Figure 10. Current Needs (2013) – Barton Creek Elementary School

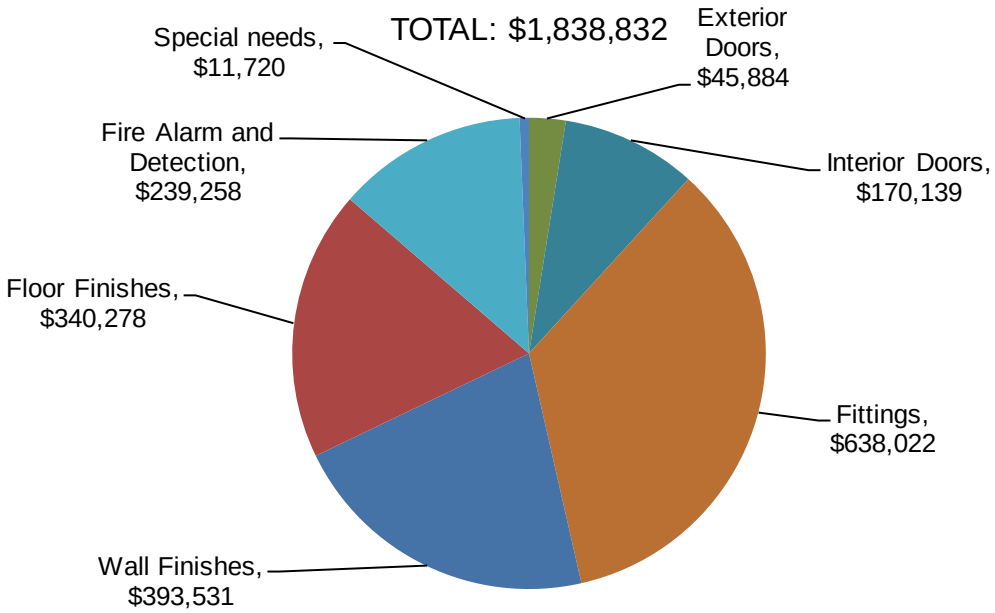

Figure 11. Cumulative projected Cost of Expired Systems (2018) – Barton Creek Elementary School

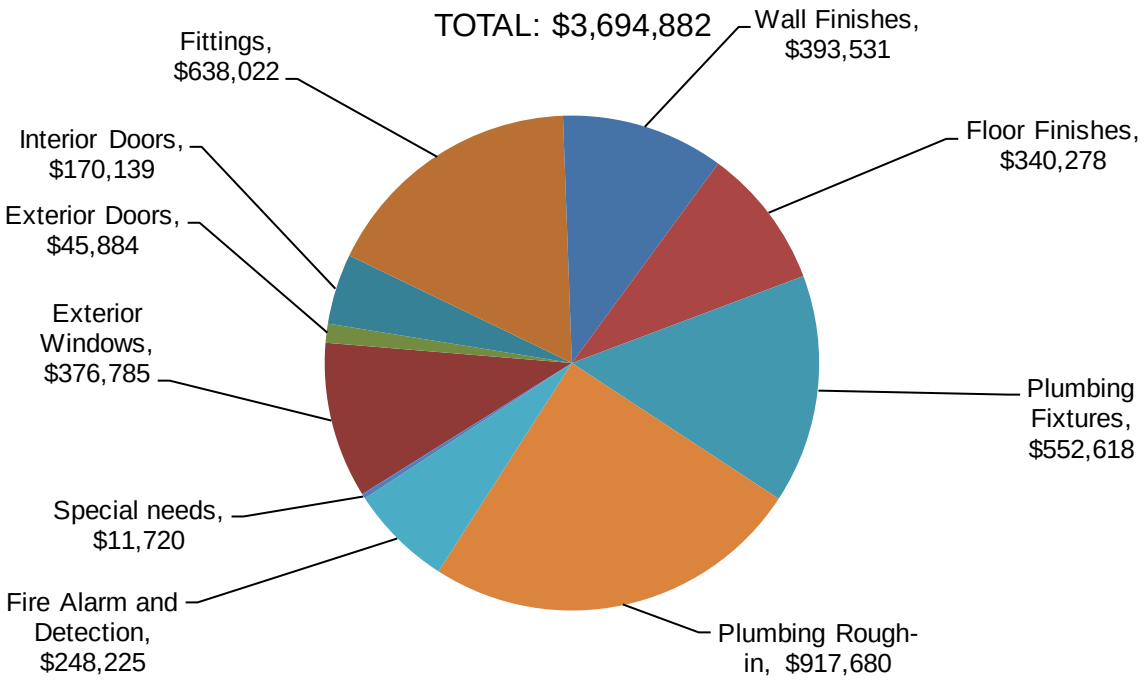

Figure 12. Cumulative projected Cost of Expired Systems (2023) – Barton Creek Elementary School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below shows the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

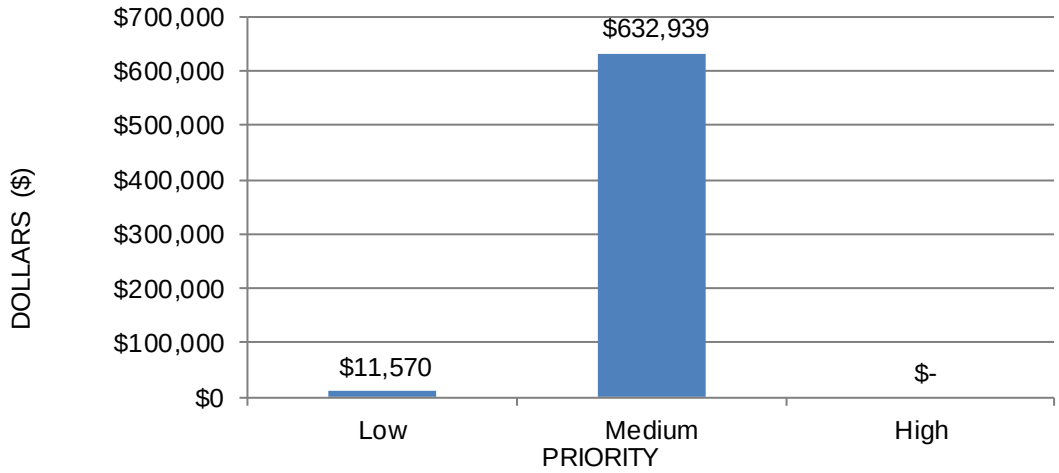

Figure 13. Current (2013) Needs By Priority – Barton Creek Elementary School

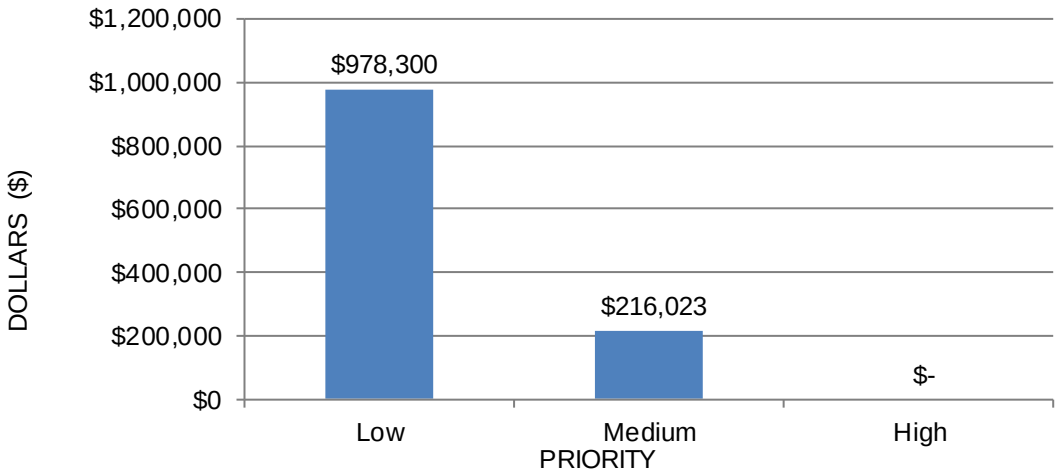

Figure 14. Extended (2018) Needs By Priority – Barton Creek Elementary School

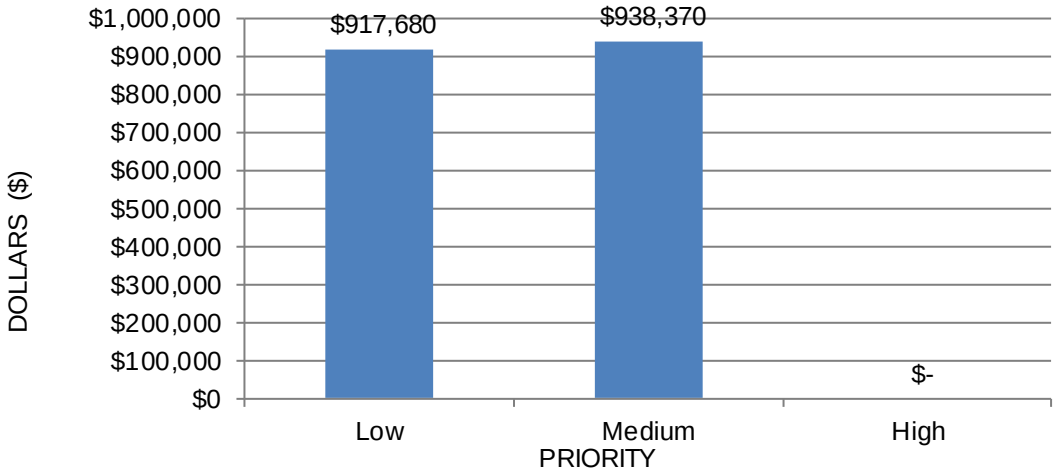

Figure 15. Extended (2023) Needs By Priority – Barton Creek Elementary School

Renewal Forecast

The renewal forecast for Barton Creek Elementary School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

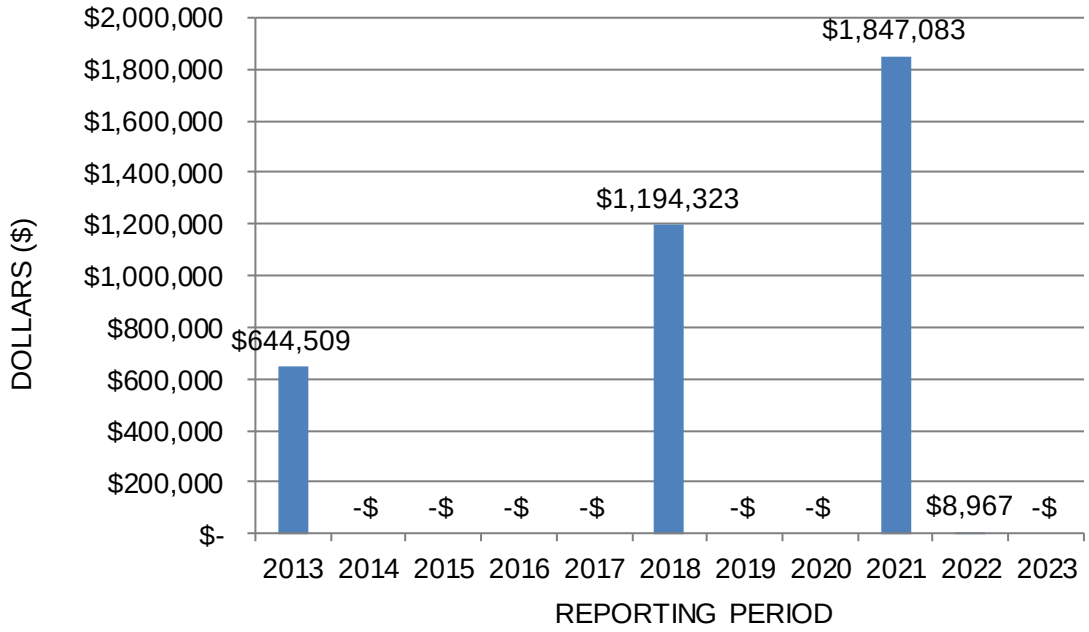

Figure 16. Renewal Forecast – Barton Creek Elementary School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 8. Forecasted Needs Table Barton Creek Elementary School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$632,789**	**$1,194,323**	**$1,856,050**
B20	**Building Exterior**	**$-**	**$45,884**	**$376,785**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$-	$376,785
B2030	Exterior Doors	$-	$45,884	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$808,161**	**$-**
C1020	Interior Doors	$-	$170,139	$-
C1030	Fittings	$-	$638,022	$-
C30	**Interior Finishes**	**$393,531**	**$340,278**	**$-**
C3010	Wall Finishes	$393,531	$-	$-
C3020	Floor Finishes	$-	$340,278	$-
C3030	Ceiling Finishes	$-	$-	$-
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$-**	**$-**	**$1,470,298**
D2010	Plumbing Fixtures	$-	$-	$552,618
D2020	Plumbing Rough-in	$-	$-	$917,680
D30	**HVAC**	**$-**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$239,258**	**$-**	**$8,967**
D4010	Fire Alarm & Detection	$239,258	$-	$8,967
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$-**	**$-**
D5010	Electrical Equipment	$-	$-	$-
D5020(01)	Wiring	$-	$-	$-
D5090(02)	Lighting	$-	$-	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$11,720**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated and individual needs.

Table 9. Barton Creek Elementary School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$3,694,882
D4010	Fire Detection	Barton Creek Elementary-HVAC Building	(D4010) New, good condition	10	2023	$8,967
B2030	Building Exteriors	Barton Creek Elementary-Main Building	(B2030) Exterior Doors: Doors need to be refinished and hardware needs to be replaced	30	2018	$45,884
C1030	Built-in Equipment/Specialties	Barton Creek Elementary-Main Building	(C1030) Casework in good condition	15	2018	$638,022
D2020	Plumbing Rough-in	Barton Creek Elementary-Main Building	(D2020) In good condition	30	2021	$917,680
D2010	Plumbing Fixtures	Barton Creek Elementary-Main Building	(D2010) In good condition	30	2021	$552,618
D4010	Fire Detection	Barton Creek Elementary-Main Building	(D4010) In good condition	10	2001	$239,258

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Barton Creek Elementary-Main Building	(B2020) Exterior Windows: Original, single paned and in good condition. Potential for energy savings	30	2021	$376,785
C1020	Interior Finishes	Barton Creek Elementary-Main Building	(C1020) Interior Doors: Interior doors in 300 wing are delaminating, need to be refinished. Entire system is expired.	20	2018	$170,139
C3010	Interior Finishes	Barton Creek Elementary-Main Building	(C3010) Interior Walls: Corridors need paint	5	1996	$393,531
C3020	Interior Finishes	Barton Creek Elementary-Main Building	(C3020) Floor Finishes: Floors in good condition	15	2018	$340,278
S1000	Special Need	Barton Creek Elementary-Main Building	(S1000) Room 435 has stained/ worn carpet that need to be replaced.	0	2013	$2,820

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Need	Barton Creek Elementary-Main Building	(S1000) Room 116 needs heat sensor installed properly.	0	2013	$150
S1000	Special Need	Barton Creek Elementary-Main Building	(S1000) Stucco and cinder block portions of the exterior finish need to be repainted.	0	2013	$8,750

BRIDGE POINT ELEMENTARY SCHOOL

Assessment Findings		
Size (SF)	94,230	
Date of construction	1997	
Type of Construction	One and Two Story Masonry Structures	
Roof	Standing Seam and Modified Bitumen	
Ceilings	Acoustical Tile	
Lighting	Surface-Mounted and Lay-In Fluorescent Fixtures	
Additions/ Renovations	N/A	
HVAC	Heat pumps and Split Units with Gas Heat	

Condition Summary

Bridge Point Elementary campus is overall in fair condition. Multiple major building systems are nearing the end of their life cycle or have reached the end and are not performing as designed; replacement is recommended and should be scheduled.

Although upgrades have been observed, a majority of the minor building systems have expired and are in need of replacement. Many of the systems are on the lower range of commercial grade and are expiring at an accelerated rate. A fire egress study is recommended due to the observations of exit lights not operating or incorrectly placed within the campus.

EXTERIORS

The windows are original and in fair-poor condition. Useful Life decreased from 30 years to 20 years. System does not appear to be commercial grade materials. System components such as springs, slides, and mullions are failing and keeping a majority of the windows from closing or operating correctly. This is a security concern, as well as an energy conservation concern. A more energy efficient system should be scheduled for replacement. Refurbishment is recommended for gaskets, painting on exterior doors, and metal handrails exterior and interior. Exterior walls are split face CMU, which are original and in good condition. Caulking and general maintenance is recommended on all exterior components to assure useful life. There is an isolated area of concern by the loading dock. An engineering study is recommended before repairs are made.

The roofing system was not assessed under this contract, nevertheless it was noted that the flashings and gutters are in fair condition. A leaf guard system over the gutters is recommended, due to the amount of trees in the area.

INTERIORS

Overall interior finishes are in good condition and well maintained. The food preparation and serving area is the most deteriorated and should be scheduled for refurbishment sooner than the other areas of the campus.

Floor finishes are a combination of carpet and VCT tiles. System is in fair condition with the only current renewal being in the Gymnasium in 2012 approximately 5000 square feet. The VCT and carpet flooring is expired and in need of replacement due to condition and age.

The wall and ceiling finishes are in fair-good condition with wall finishes requiring renewal. The 24”x24” acoustic ceiling tiles throughout the campus are nearing the end of their useful life and should be scheduled for replacement.

Interior doors are in good working condition, but cosmetically are in fair-poor condition. Manual doors stops have chipped and damaged over 50% of the doors on campus. Metal door sweeps or magnetic door catches are recommended.

MECHANICAL

The school uses heat pumps for the majority of the systems. Most of the HVAC components are original; except for the heat pump for the Cafeteria. The supply and return lines from the condenser have deteriorated insulation and are at the end of their useful life. Staff personnel report that the temperature in classrooms is very warm even when units are on high cool.

ELECTRICAL

The majority of the lighting is original; however, the fixtures were updated with electronic ballast and T8 bulbs. New lighting was installed in the gymnasium. Many Exit signs are beyond their expected useful life.

PLUMBING

Plumbing fixtures and piping are original and are in good condition. No leaks were reported or observed.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 10. Bridge Point Elementary School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Bridge Point Elementary	1997	16	94,230	91	Q1	76	Q3	73	Q3	$15,076,800

A summary of the physical condition assessment findings at Bridge Point Elementary School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

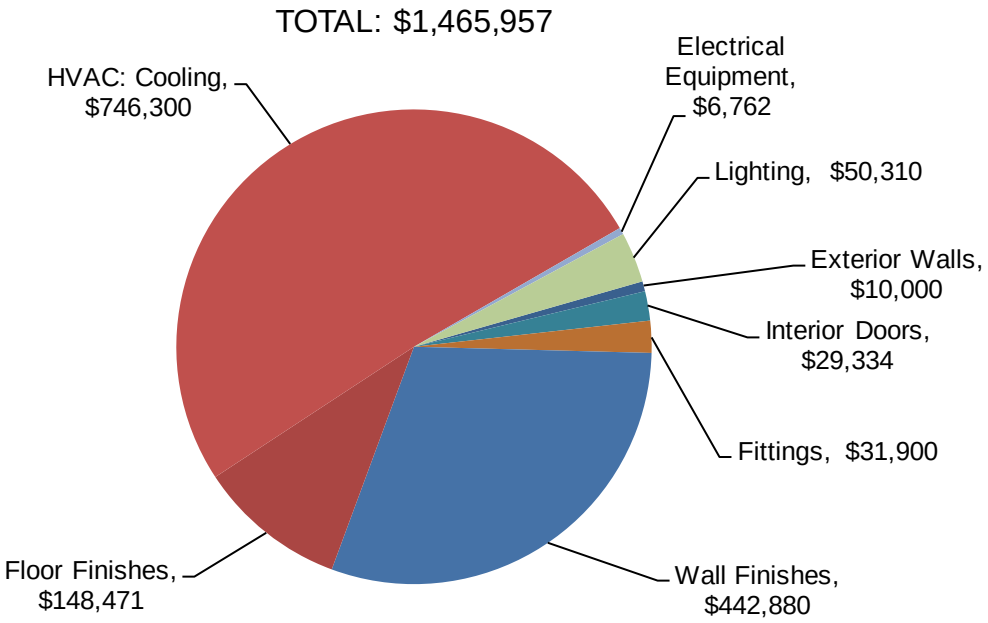

Figure 17. Current Needs (2013) – Cedar Creek Elementary School

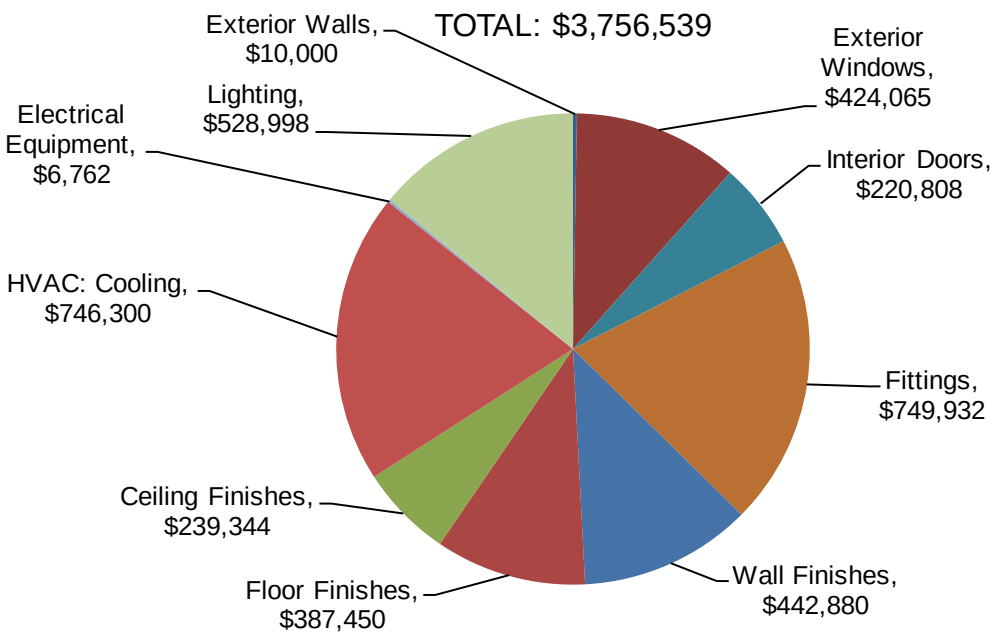

Figure 18. Cumulative projected Cost of Expired Systems (2018) – Cedar Creek Elementary School

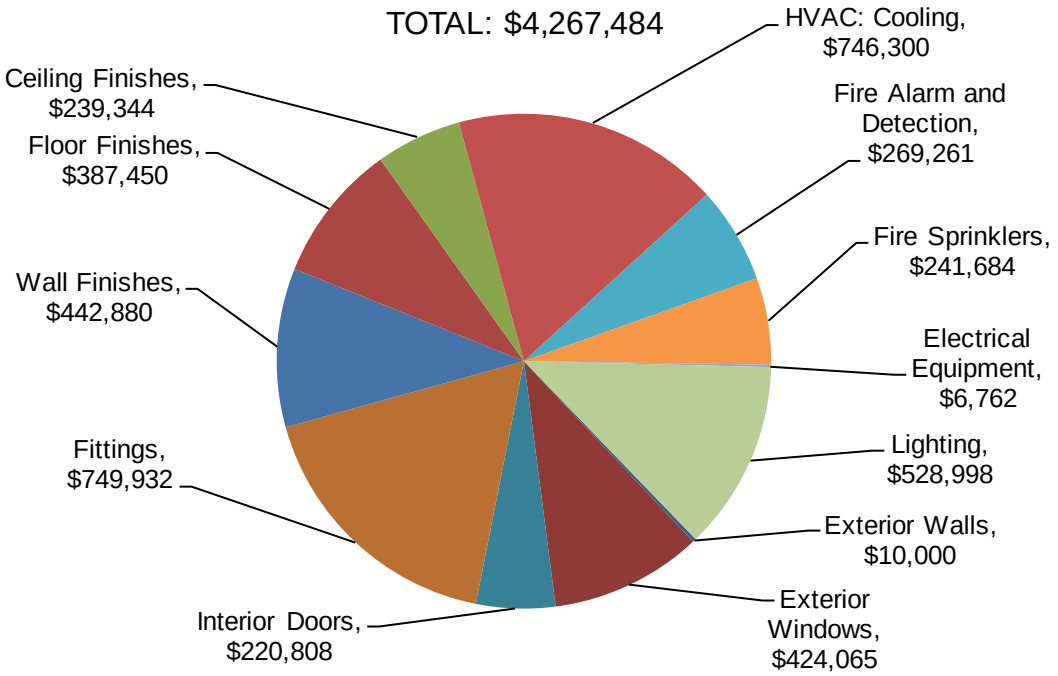

Figure 19. Cumulative projected Cost of Expired Systems (2023) – Cedar Creek Elementary School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figures below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

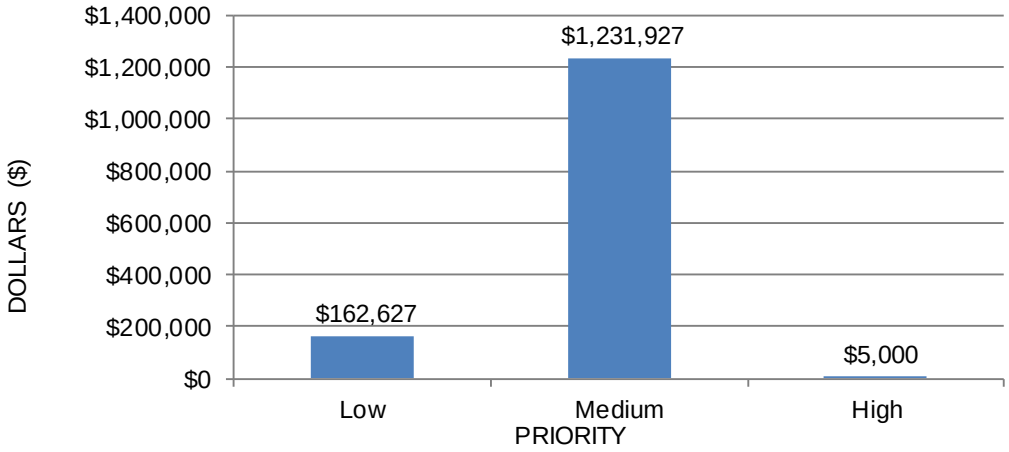

Figure 20. Current (2013) Needs By Priority – Cedar Creek Elementary School

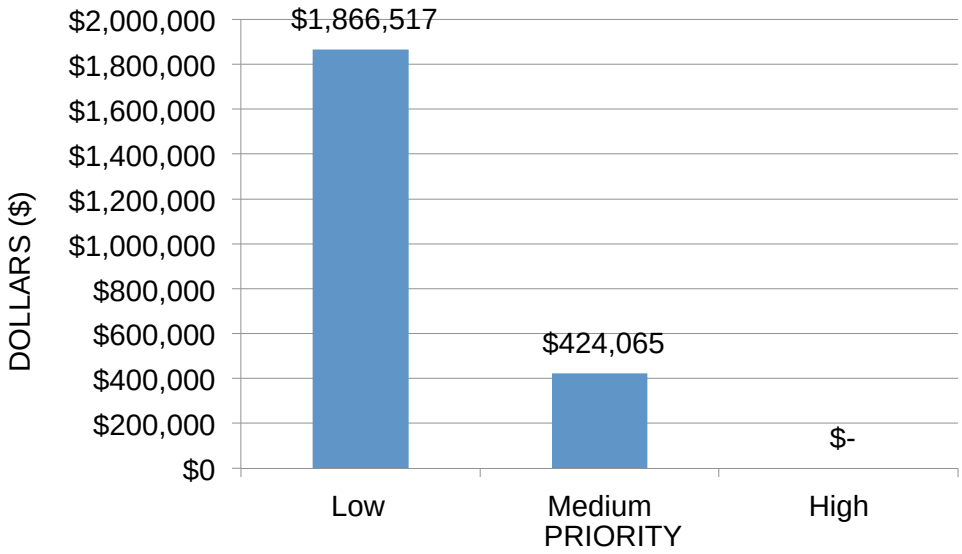

Figure 21. Extended (2018) Needs By Priority – Cedar Creek Elementary School

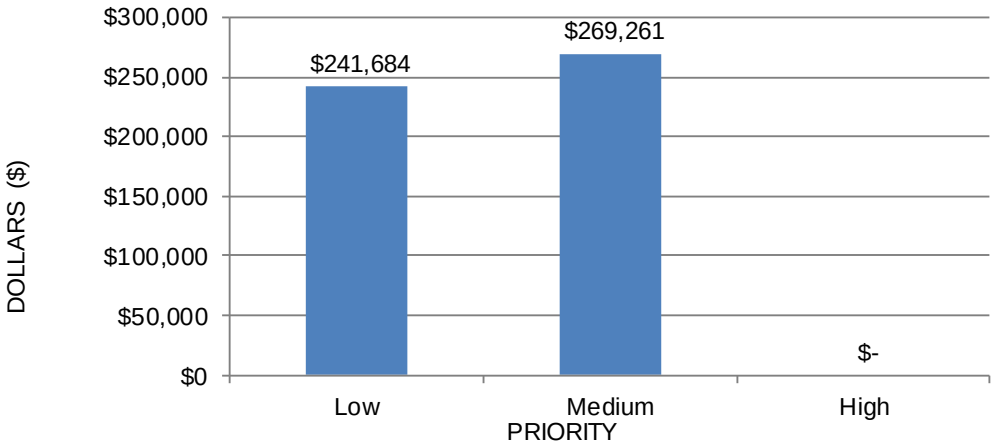

Figure 22. Extended (2023) Needs By Priority – Cedar Creek Elementary School

Renewal Forecast

The renewal forecast for Bridge Point Elementary School shown in the following figure describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

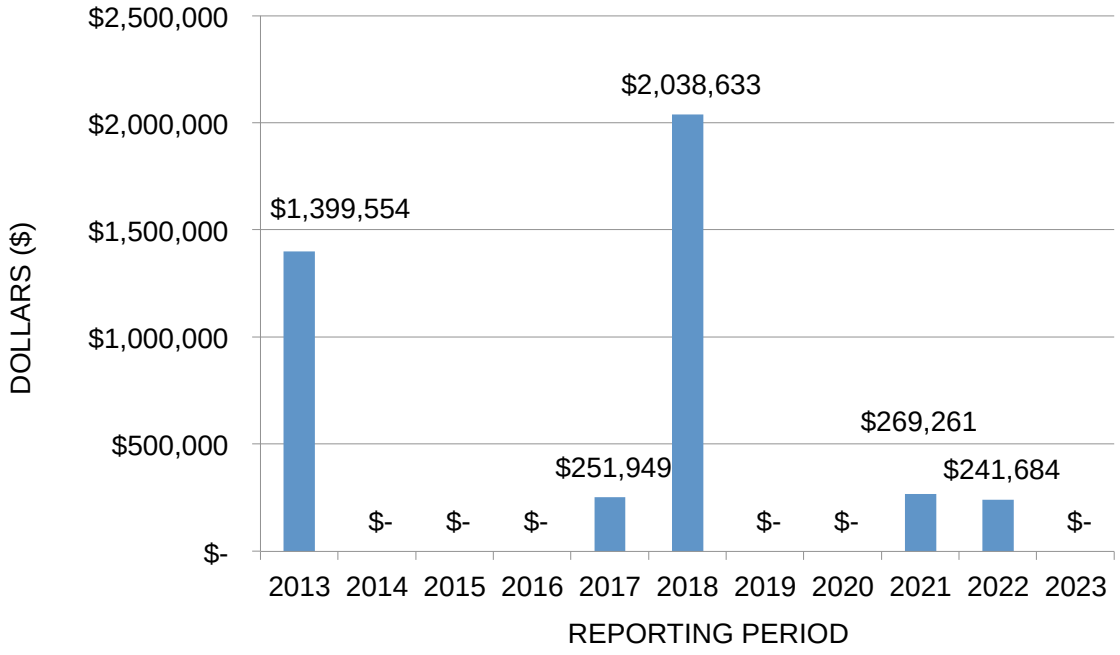

Figure 23. Renewal Forecast – Bridge Point Elementary School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 11. Forecasted Needs Table

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$1,333,151**	**$2,290,582**	**$510,945**
B20	**Building Exterior**	**$-**	**$424,065**	**$-**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$424,065	$-
B2030	Exterior Doors	$-	$-	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$909,506**	**$-**
C1020	Interior Doors	$-	$191,474	$-
C1030	Fittings	$-	$718,032	$-
C30	**Interior Finishes**	**$586,851**	**$478,323**	**$-**
C3010	Wall Finishes	$442,880	$-	$-
C3020	Floor Finishes	$143,971	$238,979	$-
C3030	Ceiling Finishes	$-	$239,344	$-
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$-**	**$-**	**$-**
D2010	Plumbing Fixtures	$-	$-	$-
D2020	Plumbing Rough-in	$-	$-	$-
D30	**HVAC**	**$746,300**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$746,300	$-	$-
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$-**	**$-**	**$510,945**
D4010	Fire Alarm & Detection	$-	$-	$269,261
D4040	Fire Sprinklers	$-	$-	$241,684
D50	**Electrical**	**$-**	**$478,688**	**$-**
D5010	Electrical Equipment	$-	$-	$-
D5020(01)	Wiring	$-	$-	$-
D5090(02)	Lighting	$-	$478,688	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$66,403**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 12. Bridge Point Elementary School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$4,201,081
C3030	Interior Finishes	Bridge Point Elementary-Classrooms	(C3030) Ceiling Finishes: Acoustic tile system is in fair condition. Renewal should be scheduled.	10	2018	$149,362
C1030	Built-in Equipment/Specialties	Bridge Point Elementary-Classrooms	(C1030) System is in fair condition. Useful life extended to 2018.	15	2018	$448,086
D4040	Plumbing Sprinklers	Bridge Point Elementary-Classrooms	(D4040) Original aging as expected	25	2022	$241,684
D3030	HVAC Equipment	Bridge Point Elementary-Classrooms	(D3030) Heat Pumps in the majority of the spaces; there are some larger split-units. Most of the refrigerant supply and return lines are run underground and the pipe insulation is failing or has failed.	15	2012	$465,727

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D4010	Fire Detection	Bridge Point Elementary-Classrooms	(D4010) Replaced in 2011 per equipment documentation.	10	2021	$168,032
D5090	Lighting	Bridge Point Elementary-Classrooms	(D5090) Fixtures were upgraded to electronic ballast and use T8 bulbs. System should be programed for replacement.	20	2018	$298,724
B2020	Building Exteriors	Bridge Point Elementary-Classrooms	(B2020) Exterior Windows: Useful Life decreased from 30yrs to 20yrs. System does not appear to be commercial grade materials. System components are failing and a more energy efficient system should be scheduled for replacement	20	2018	$264,648

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C1020	Interior Finishes	Bridge Point Elementary-Classrooms	(C1020) Interior Doors: System is in good working condition but cosmetically is fair-poor condition. Manual doors stops have chipped and damaged over 50% of the doors on campus. Metal door sweeps or magnetic door catches are recommended.	20	2018	$119,489
C3010	Interior Finishes	Bridge Point Elementary-Classrooms	(C3010) Interior Walls: System is expired and renewal is recommended	5	2012	$276,378
C3020	Interior Finishes	Bridge Point Elementary-Classrooms	(C3020) Floor Finishes: System is expired and renewal is recommended	15	2018	$238,979
S1000	Special Needs	Bridge Point Elementary-Classrooms	(S1000) Loose handrail located near Classroom 100 and library.	0	2013	$400

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Bridge Point Elementary-Classrooms	(S1000) Replace all existing exit signs as many or inoperative. Additionally study the need for additional signs.	0	2013	$4,700
S1000	Special Needs	Bridge Point Elementary-Classrooms	(S1000) Serving line laminate is cracked and peeling in multiple areas. Replacement recommended. Approximately 65 Lft of counter and cabinet length.	0	2013	$14,625
S1000	Special Needs	Bridge Point Elementary-Classrooms	(S1000) Counter-top laminate peeling and counter-top swelling with water penetration.	0	2013	$925
S1000	Special Needs	Bridge Point Elementary-Classrooms	(S1000) Bathroom tile lifting and cracking around floor drain. Possible drain connection problem. Boys restroom near #407	0	2013	$2,250

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3030	Interior Finishes	Bridge Point Elementary-Main Building	(C3030) Ceiling Finishes: Acoustic tile system is in fair condition. Renewal should be scheduled.	10	2018	$89,982
C1030	Built-in Equipment/Specialties	Bridge Point Elementary-Main Building	(C1030) System is in fair condition. Useful life extended to 2018.	15	2018	$269,946
D3030	HVAC Equipment	Bridge Point Elementary-Main Building	(D3030) Some single room heat pumps in this building, the majority are larger split-units to AHUs. Most of the refrigerant supply and return line pipe insulation is failing or has failed.	15	2012	$280,573
D4010	Fire Detection	Bridge Point Elementary-Main Building	(D4010) Replaced in 2011 per equipment documentation.	10	2021	$101,229

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5090	Lighting	Bridge Point Elementary-Main Building	(D5090) The majority of the lighting is original; however, the fixtures were updated with electronic ballast and T8 bulbs. Many Exit signs are beyond their expected useful life.	20	2017	$179,964
B2020	Building Exteriors	Bridge Point Elementary-Main Building	(B2020) Exterior Windows: Useful life decreased from 30yrs to 20yrs. System does not appear to be commercial grade materials. System components are failing and a more energy efficient system should be scheduled for replacement.	20	2018	$159,417

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C1020	Interior Finishes	Bridge Point Elementary-Main Building	(C1020) Interior Doors: System is in good working condition but cosmetically is fair-poor condition. Manual doors stops have chipped and damaged over 50% of the doors on campus. Metal door sweeps or magnetic door catches are recommended.	20	2017	$71,985
C3010	Interior Finishes	Bridge Point Elementary-Main Building	(C3010) Interior Walls: System is expired and renewal is recommended	5	2002	$166,502
C3020	Interior Finishes	Bridge Point Elementary-Main Building	(C3020) Floor Finishes: System is expired and renewal is recommended	15	2012	$143,971
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Emergency lighting and exit sign study. No panic hardware or exit signs on administration office exit doors.	0	2013	$5,000

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Replace all existing exit signs as many or inoperative. Additionally study the need for additional signs.	0	2013	$14,805
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) School clock system is inoperative.	0	2013	$3,225
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Two-tube lights fixture on ceiling is missing bulbs and cover which exposes ballast and wiring.	0	2013	$650
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Electrical junction boxes are missing cover plates. Building code violation. Mechanical Room under kitchen. Janitors closet (near A101)	0	2013	$156

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Approximately 146 interior doors need door catches installed to prevent increased damage to laminated doors.	0	2013	$3,942
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Replacement of 65 interior laminated doors due to damage cause by doors stops.	0	2013	$10,725
S1000	Special Needs	Bridge Point Elementary-Main Building	(S1000) Retaining wall near loading dock is cracked and showing signs of foundation footing movement. Engineering study is recommended before repair is calculated.	0	2013	$5,000

CEDAR CREEK ELEMENTARY SCHOOL

Assessment Findings		
Size (SF)	75,982	
Date of construction	1978	
Type of Construction	One-Story Masonry Structure	
Roof	Ballasted Built-up Roof	
Ceilings	Acoustical Tile	
Lighting	Surface-Mounted and Lay-In Fluorescent Fixtures	
Additions/ Renovations	1978, 1986, 1995	
HVAC	Roof Top Units with Gas Heat	

Condition Summary

Cedar Creek Elementary School appears to be well maintained. Although the facility appears to be sound, there is evidence of deferential movement in all three of the campus buildings. An engineering study is recommended for proper evaluation of the issue.

EXTERIORS

The windows are original and in fair condition; replacement should be scheduled with a more energy efficient system. Exterior doors are original and in fair condition; refurbishment is recommended for gaskets and painting. All exterior walls are of original masonry stone veneer and in good condition. Wooden lintel trim and wall siding has reached the end of their useful life and should be replaced. Caulking and sealants are expired and failing; replacement is recommended.

INTERIORS

The interior wall finishes are in need or renewal. Floor finishes are a combination of carpet tiles and VCT flooring and are in fair to poor condition; replacement is recommended due to condition and age. The gymnasium floor is in good condition and no replacement has been scheduled. The ceiling finishes consist of acoustical tiles and are in good to fair condition due to recent renewal. Approximately 20% of tiles have water damage and should be replaced. The ceiling system will expire in the 10-year forecast; a renewal cycle of the tile replacement every 10 years and grid replacement every 20 is recommended.

MECHANICAL

Gas-powered roof top package units are the primary providers of cooling and heating properties. The HVAC systems for the main building and library addition were replaced in 2002, while the gymnasium/annex building were replaced in 2012. The campus has DDC controls for all major mechanical systems. The campus has no elevators.

ELECTRICAL

The electrical system has had several upgrades to support new loads. All fluorescent lights appear to have been upgraded with electronic ballasts and use T8 tubes. Although there have been upgrades to the electrical equipment and wiring systems, the majority of the system is expired.

PLUMBING

Plumbing fixtures appear to have had some upgrades while piping seems to be original. It is recommended to replace lavatories, sinks, and faucets at the time the classroom cabinetry is replaced. No leaks were observed.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 13. Cedar Creek Elementary School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		**CRV**
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Cedar Creek Elementary	1978	35	75,990	88	Q2	69	Q3	59	Q4	$12,158,400

A summary of the physical condition assessment findings at Cedar Creek Elementary School is shown below. The figures depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

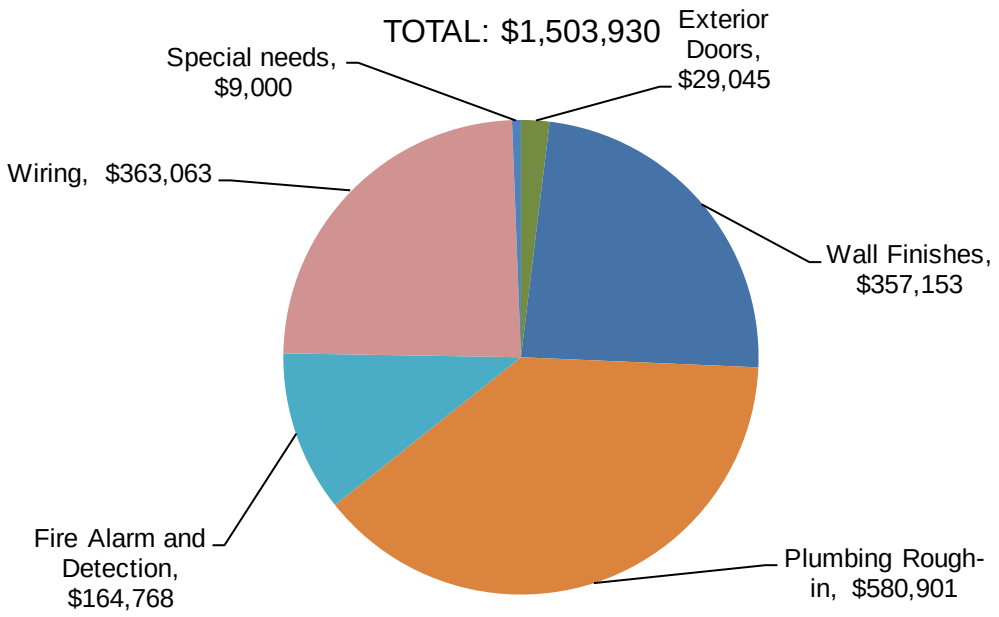

Figure 24. Current Needs (2013) – Cedar Creek Elementary School

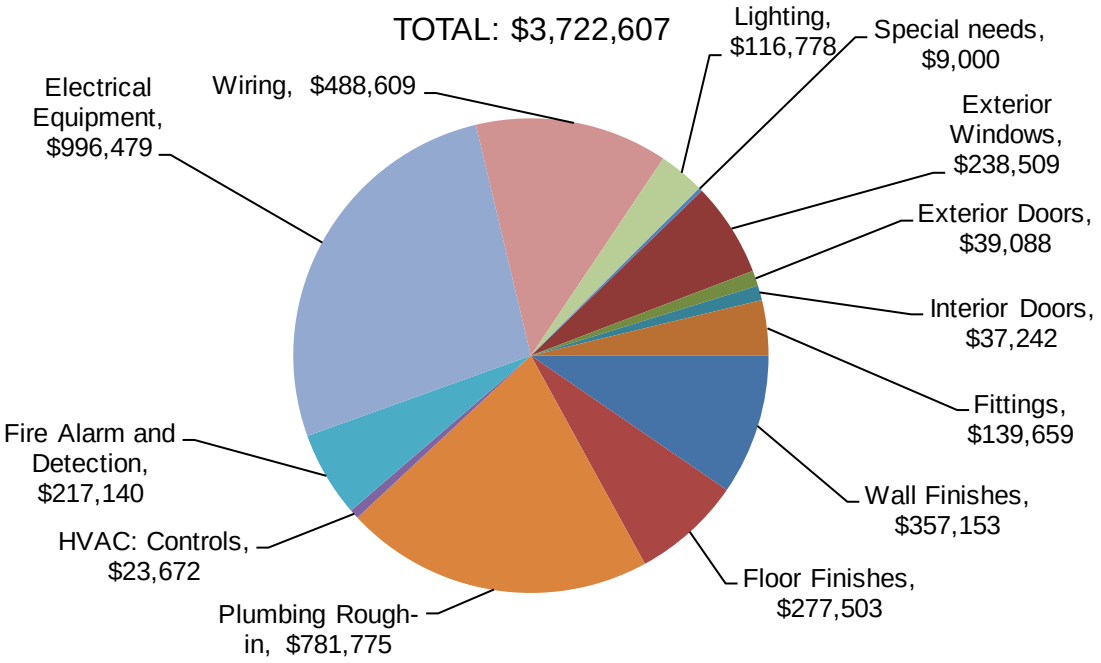

Figure 25. Cumulative projected Cost of Expired Systems (2018) – Cedar Creek Elementary School

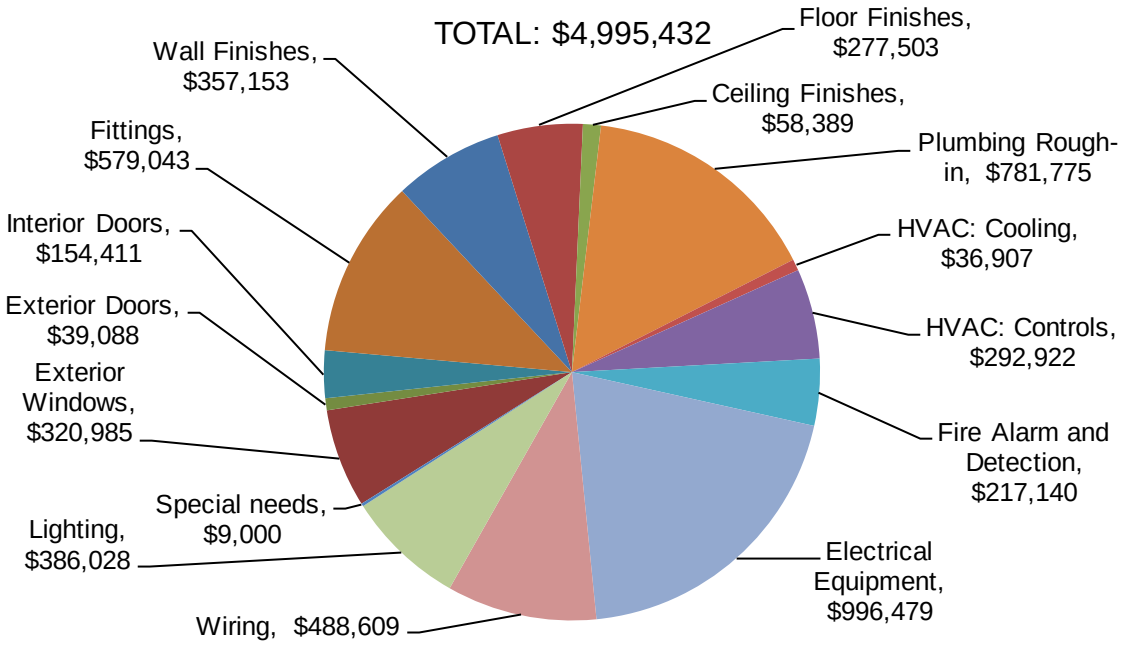

Figure 26. Cumulative projected Cost of Expired Systems (2023) – Cedar Creek Elementary School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below shows the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

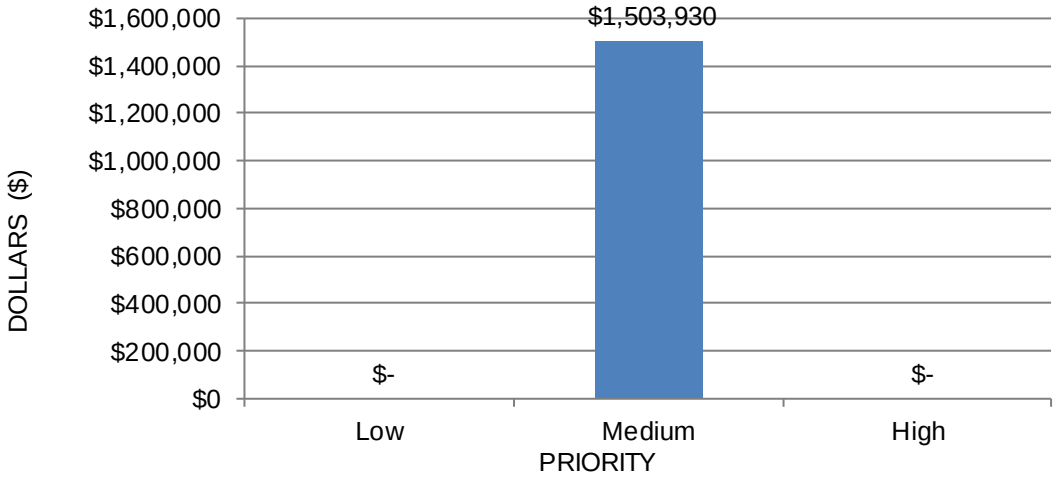

Figure 27. Current (2013) Needs By Priority – Cedar Creek Elementary School

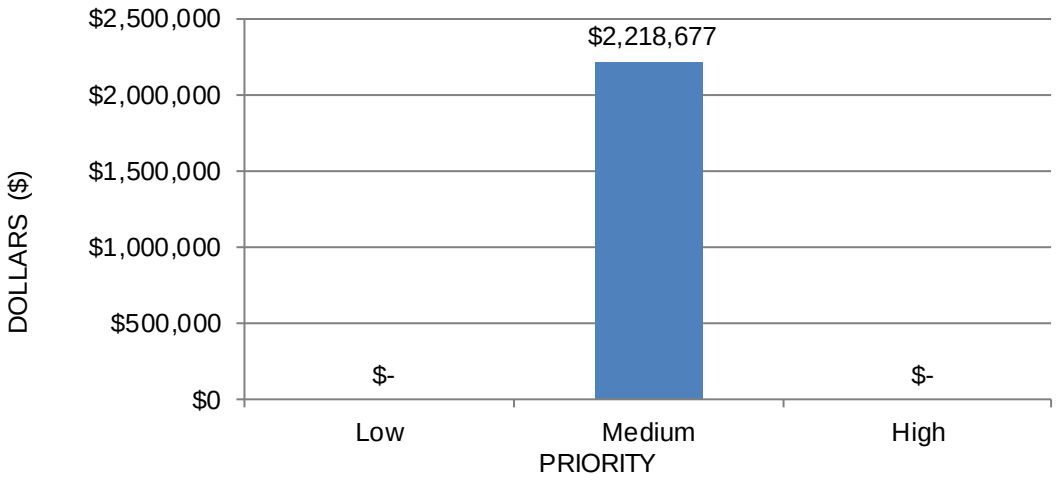

Figure 28. Extended (2018) Needs By Priority – Cedar Creek Elementary School

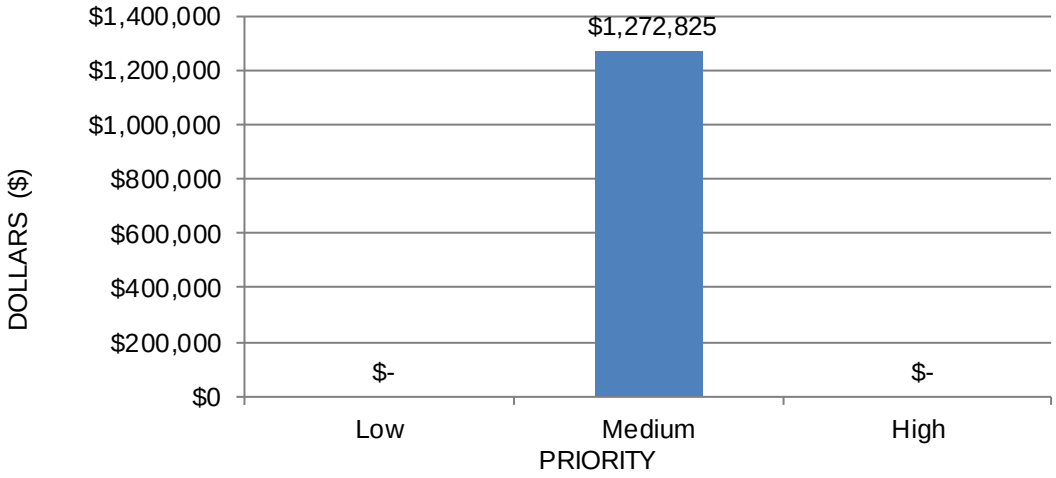

Figure 29. Extended (2023) Needs By Priority – Cedar Creek Elementary School

Renewal Forecast

The renewal forecast for Cedar Creek Elementary School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

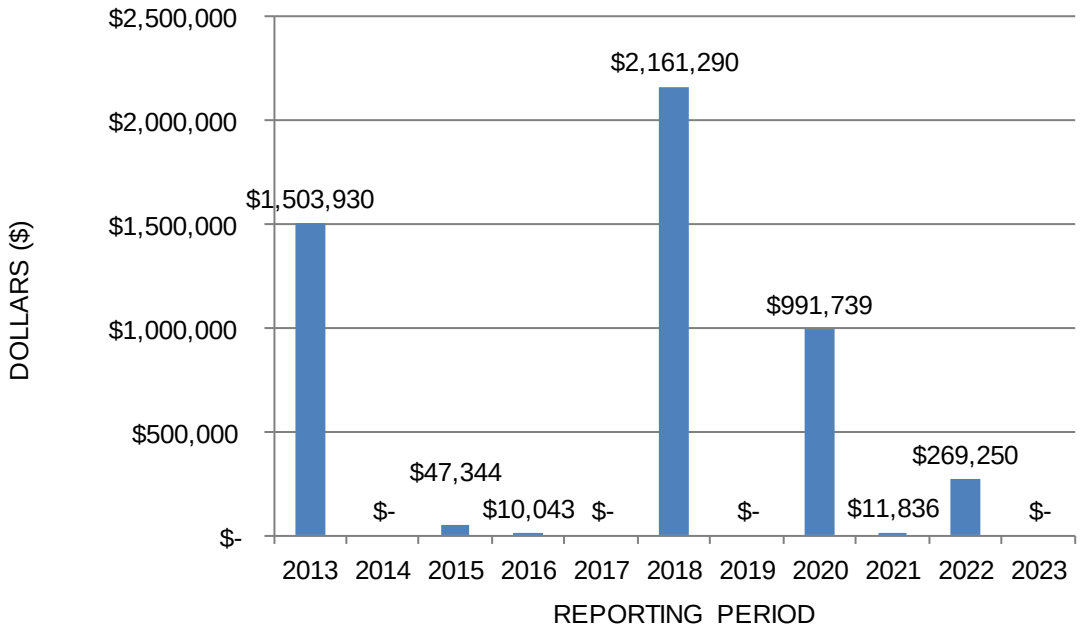

Figure 30. Renewal Forecast – Cedar Creek Elementary School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 14. Forecasted Needs Table Cedar Creek Elementary School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$1,494,930**	**$2,218,677**	**$1,272,825**
B20	**Building Exterior**	**$29,045**	**$248,552**	**$82,476**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$238,509	$82,476
B2030	Exterior Doors	$29,045	$10,043	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$176,901**	**$556,553**
C1020	Interior Doors	$-	$37,242	$117,169
C1030	Fittings	$-	$139,659	$439,384
C30	**Interior Finishes**	**$357,153**	**$277,503**	**$58,389**
C3010	Wall Finishes	$357,153	$-	$-
C3020	Floor Finishes	$-	$277,503	$-
C3030	Ceiling Finishes	$-	$-	$58,389
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$580,901**	**$200,874**	**$-**
D2010	Plumbing Fixtures	$-	$-	$-
D2020	Plumbing Rough-in	$580,901	$200,874	$-
D30	**HVAC**	**$-**	**$23,672**	**$306,157**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$36,907
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$23,672	$269,250
D40	**Fire Protection**	**$164,768**	**$52,372**	**$-**
D4010	Fire Alarm & Detection	$164,768	$52,372	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$363,063**	**$1,238,803**	**$269,250**
D5010	Electrical Equipment	$-	$996,479	$-
D5020(01)	Wiring	$363,063	$125,546	$-
D5090(02)	Lighting	$-	$116,778	$269,250
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$9,000**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 15. Cedar Creek Elementary School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$4,995,432
B2030	Building Exteriors	Cedar Creek Elementary-Gymnasium	(B2030) Exterior Doors: Refurbish/ replacement	30	2016	$10,043
C3030	Interior Finishes	Cedar Creek Elementary-Gymnasium	(C3030) Ceiling Finishes: Recommend extending renewal of system year to 2020 due to condition with the exception of the ceiling tiles in gymnasium restroom. Replaced due to stains caused by leaks.	10	2020	$46,553
C1030	Built-in Equipment/Specialties	Cedar Creek Elementary-Gymnasium	(C1030) In good condition, recommend extending renewal year to 2018.	15	2018	$139,659
D2020	Plumbing Rough-in	Cedar Creek Elementary-Gymnasium	(D2020) No leaks reported	30	2018	$200,874
D4010	Fire Detection	Cedar Creek Elementary-Gymnasium	(D4010) in working condition.	10	2018	$52,372
D5010	Electrical Equipment	Cedar Creek Elementary-Gymnasium	(D5010) Panels have been added due to greater demand.	30	2018	$256,042

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5020	Wiring	Cedar Creek Elementary-Gymnasium	(D5020) No GFCI's or not properly labeled.	30	2018	$125,546
D5090	Lighting	Cedar Creek Elementary-Gymnasium	(D5090) Appears to be original; potential for energy savings	20	2018	$93,106
B2020	Building Exteriors	Cedar Creek Elementary-Gymnasium	(B2020) Exterior Windows: Original, double paned. Good condition. Recommend extending renewal year to 2020	30	2020	$82,476
C1020	Interior Finishes	Cedar Creek Elementary-Gymnasium	(C1020) Interior Doors: In need of refurbishment	20	2018	$37,242
C3010	Interior Finishes	Cedar Creek Elementary-Gymnasium	(C3010) Interior Wall Finishes: Substantial cracks in corridors, boys restroom, and in the gym.	5	1991	$86,142
C3020	Interior Finishes	Cedar Creek Elementary-Gymnasium	(C3020) Floor Finishes: Annex VCT tile is expired (9,184sf)	15	2018	$43,165
S1000	Special Needs	Cedar Creek Elementary-Gymnasium	(S1000) Engineering study	0	2013	$7,000

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Cedar Creek Elementary-Gymnasium	(S1000) Building Code and Safety study recommended for walkway deficiency located between library and Gym Annex.	0	2013	$1,000
C3030	Interior Finishes	Cedar Creek Elementary-Library	(C3030) Ceiling Finishes: All new ceiling tiles. Tiles at leaks need to be replaced.	10	2021	$11,836
C1030	Built-in Equipment/Specialties	Cedar Creek Elementary-Library	(C1030) In good condition, next renewal recommended to be extended to 2020	15	2020	$35,509
D3060	HVAC Controls	Cedar Creek Elementary-Library	(D3060) OK	20	2015	$23,672
D3030	HVAC Equipment	Cedar Creek Elementary-Library	(D3030) New RTU's	25	2020	$36,907
D4010	Fire Detection	Cedar Creek Elementary-Library	(D4010) OK	10	2005	$13,315
D5090	Lighting	Cedar Creek Elementary-Library	(D5090) OK	20	2015	$23,672
C1020	Interior Finishes	Cedar Creek Elementary-Library	(C1020) Interior Doors: In good condition. Extended replacement year to 2020.	20	2020	$9,469

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Cedar Creek Elementary-Library	(C3010) Interior Wall Finishes: Cracks visible near exterior door frames	5	2012	$21,902
C3020	Interior Finishes	Cedar Creek Elementary-Library	(C3020) Floor Finishes: Good condition, holes in carpet at doorways into computer lab from door stops being removed	15	2018	$18,938
B2030	Building Exteriors	Cedar Creek Elementary-Main Building	(B2030) Exterior Doors: Good condition, need refurbishment. Gaskets and painting.	30	2003	$29,045
C1030	Built-in Equipment/Specialties	Cedar Creek Elementary-Main Building	(C1030) In fair condition, next renewal recommended to be extended to 2020	15	2020	$403,875
D2020	Plumbing Rough-in	Cedar Creek Elementary-Main Building	(D2020)	30	2008	$580,901
D3060	HVAC Controls	Cedar Creek Elementary-Main Building	(D3060) OK	20	2022	$269,250
D4010	Fire Detection	Cedar Creek Elementary-Main Building	(D4010) OK	10	2007	$151,453

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5010	Electrical Equipment	Cedar Creek Elementary-Main Building	(D5010) Panels have been added due to greater demand.	30	2018	$740,437
D5020	Wiring	Cedar Creek Elementary-Main Building	(D5020) GFCI's were present and properly labeled.	30	2008	$363,063
D5090	Lighting	Cedar Creek Elementary-Main Building	(D5090) Appears to be original, potential for energy savings	20	2020	$269,250
B2020	Building Exteriors	Cedar Creek Elementary-Main Building	(B2020) Exterior Windows: Original, single paned. Fair condition. Caulking and sealants are desiccated.	30	2018	$238,509
C1020	Interior Finishes	Cedar Creek Elementary-Main Building	(C1020) Interior Doors: In fair condition. Extended replacement year to 2020. Minor refurbishing needed.	20	2020	$107,700
C3010	Interior Finishes	Cedar Creek Elementary-Main Building	(C3010) Interior Wall Finishes: Cracks visible near exterior door frames and midway lines in classrooms. Over 50% of wall finishes expired	5	2012	$249,109

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3020	Interior Finishes	Cedar Creek Elementary-Main Building	(C3020) Floor Finishes: Poor condition, carpet stained, VCT tile expired, needs replacement.	15	2018	$215,400
S1000	Special Needs	Cedar Creek Elementary-Main Building	(S1000) Removal of abandoned netting structure over the butterfly atrium. Rotting and has allowed water intrusion points in exterior wall.	0	2013	$1,000

EANES ELEMENTARY SCHOOL

Assessment Findings		
Size (SF)	73,875	
Date of construction	1937	
Type of Construction	Masonry	
Roof	Standing seam metal, except Building L, which is corrugated metal panels	
Ceilings	Lay-in acoustic tile	
Lighting	Fluorescent	
Additions/ Renovations	1960, 1964, 1985, 1993 Buildings	
HVAC	Combination of residential split unit/heat pumps and larger direct expansion units with gas heat	

Condition Summary

Eanes Elementary School is generally in good condition, considering the age of the facilities. Only building L had systems appearing original, as it is the History Center. Major building systems have been renewed and are preforming as designed. Minor building systems have been renovated with minor deficiencies found with systems having a 10-year life cycle.

Buildings A, B, C, I, F, G, H: 1960-1964 Building K 1985

EXTERIORS

The metal roof covering is a Standing Seam replaced in 2012. Flashings and gutters were also replaced in 2012. A leaf guard system over the gutters is recommended due to the amount of trees in the area. A PM schedule is recommended for cleaning. The soffit is recommended for renewal, but due to the attached electrical components, minor repairs to wood in rotted areas, and reapplication of protective coatings will extend the useful life of the system out to 2025.

The windows are original and in fair condition, but are expired and should be scheduled for replacement with a more energy efficient system. Window operation is generally smooth. Exterior doors are original and in fair condition. Refurbishment is recommended for gaskets and painting. Exterior walls are brick veneer, which are original and in good condition. Caulking and general maintenance is recommended on all exterior components to assure useful life.

INTERIORS

Overall interior finishes are in good condition and well maintained.

Floor finishes are a combination of carpet and tiles in fair-good condition, with the newest flooring in the library remodel. The VCT flooring in the shared bathroom areas is in need of replacement due to condition and age.

The wall and ceiling finishes are in fair to good condition, with wall finishes requiring renewal. The acoustic ceiling tiles in the bathroom areas are expired and should be replaced due to condition and age.

MECHANICAL

Majority of the mechanical components have been renewed in 2012 and are in excellent condition. Staff personnel assigned to classrooms report that the placement of the air handling unit returns are noisy during classroom instruction and the temperature will not regulate during after hour meetings.

ELECTRICAL

Majority of the exterior wall packs and classrooms overhead lighting have been renewed recently and are in good condition. Electrical panels and wiring are within their useful life and preforming as designed.

PLUMBING

Plumbing fixtures are expiring and replacement is recommended at the time the classroom cabinetry is replaced. No leaks have been reported or observed.

Building M 1993

Building M comprises the cafeteria and the gymnasium facilities for the school. It's the newest building on campus and some systems have been recently renewed. The painting, VCT, and ceiling systems throughout the building are in need of renewal.

Building L and J

These are two historic buildings, which are being used for classroom instruction. With a section assigned to a history center for the district. Windows and doors are expired and have been identified for historical restoration. Other minor building systems have expired and should be replaced.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 16. Eanes Elementary School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Eanes Elementary	1937	76	67,350	94	Q1	78	Q3	70	Q3	$10,776,000

A summary of the physical condition assessment findings at Eanes Elementary School is shown below. The figures depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

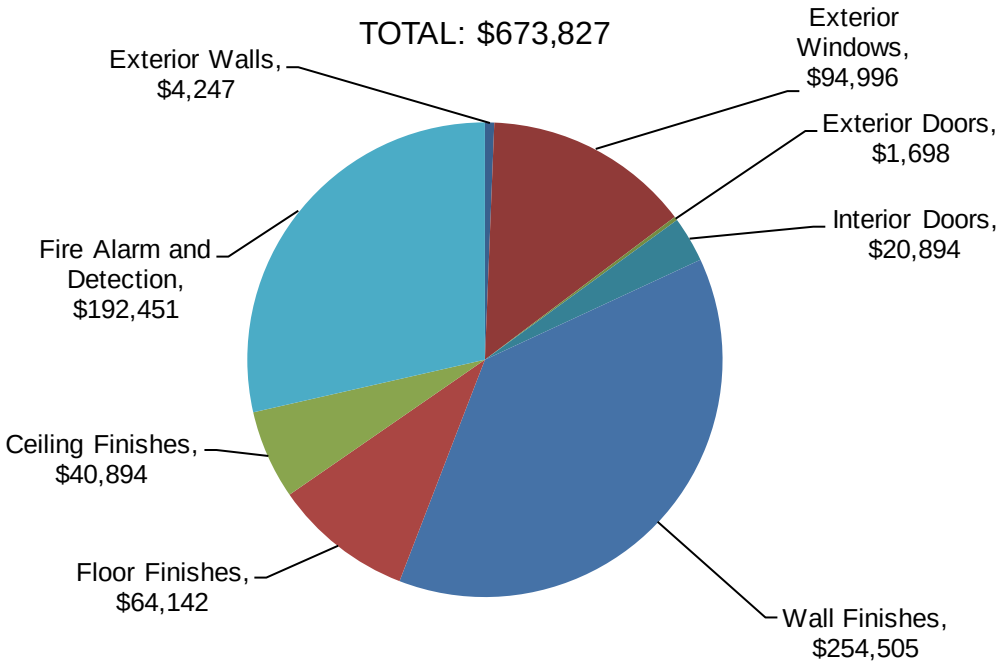

Figure 31. Current Needs (2013) – Eanes Elementary School

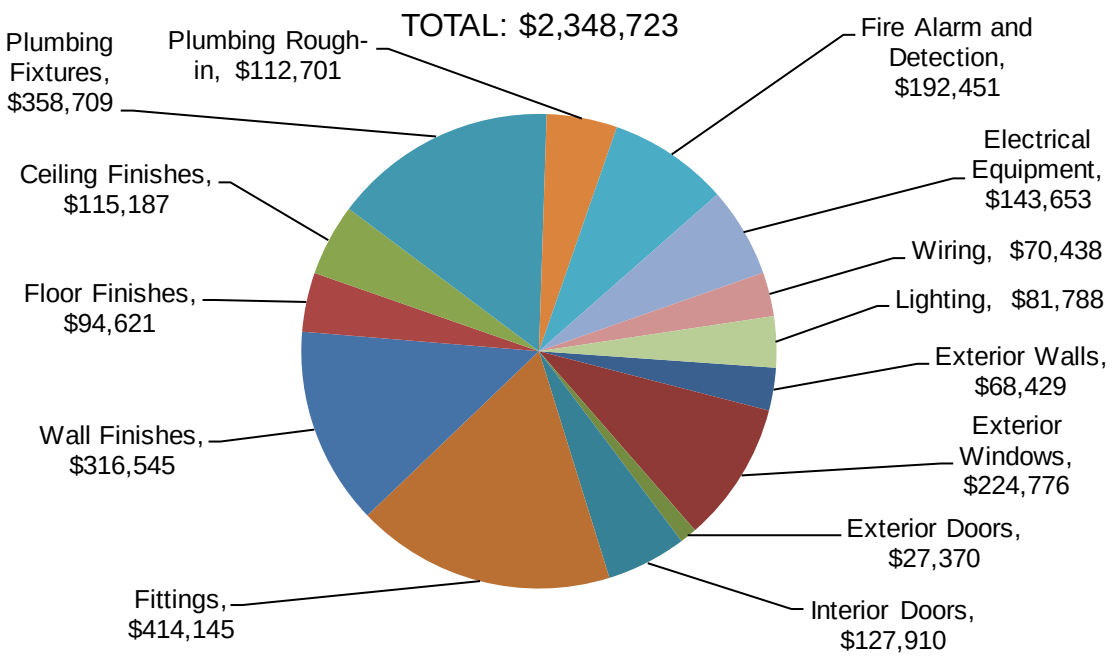

Figure 32. Cumulative projected Cost of Expired Systems (2018) – Eanes Elementary School

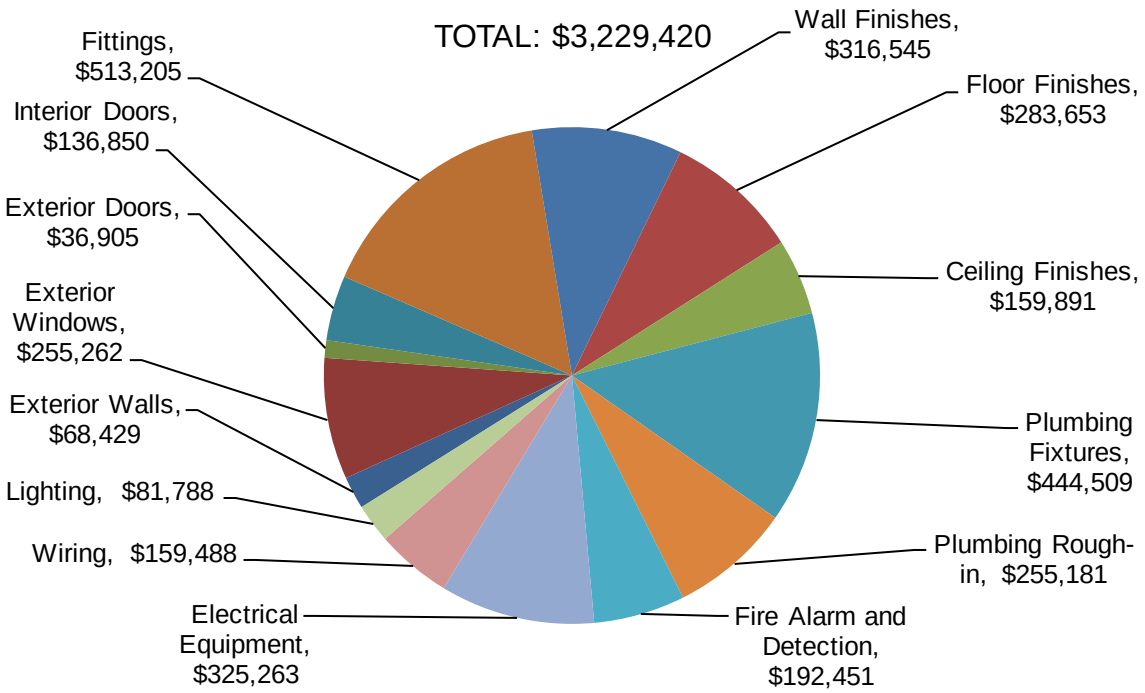

Figure 33. Cumulative projected Cost of Expired Systems (2023) – Eanes Elementary School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figures below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

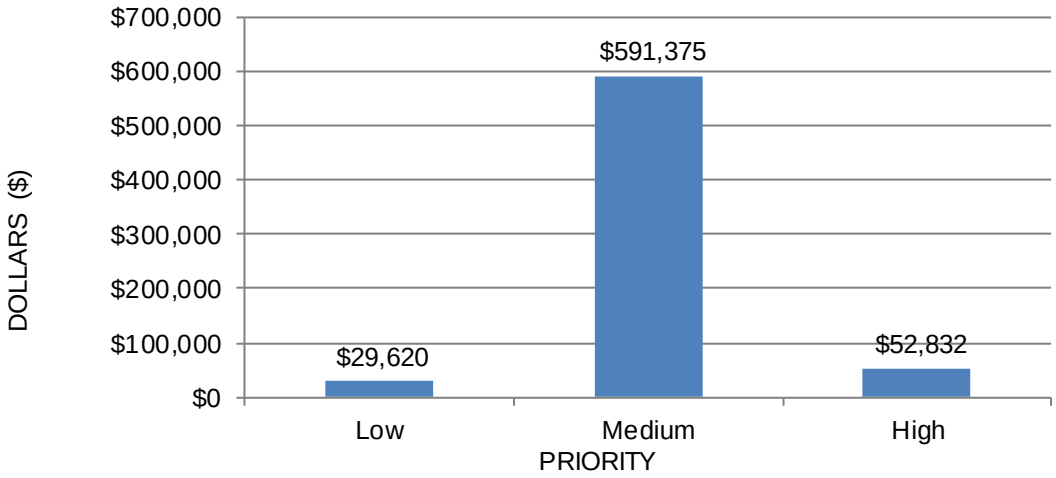

Figure 34. Current (2013) Needs By Priority – Eanes Elementary School

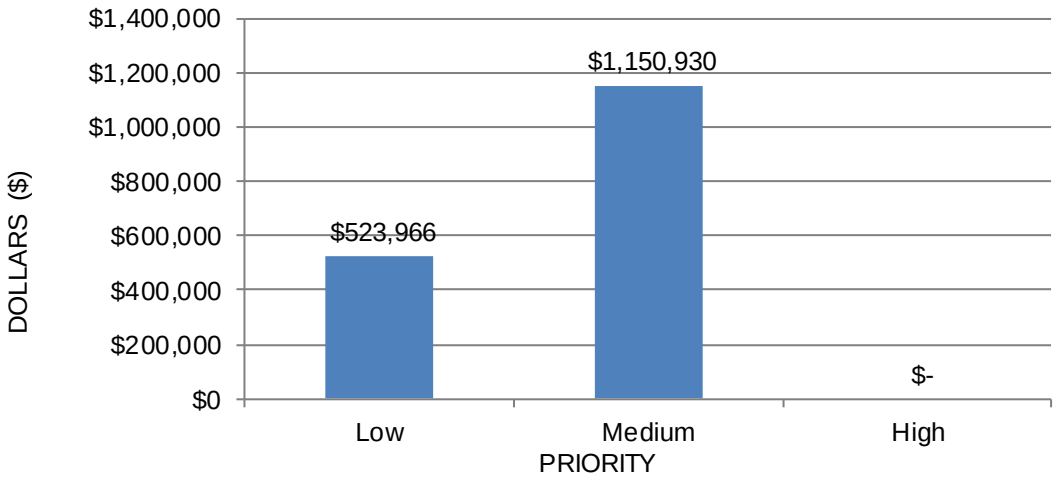

Figure 35. Extended (2018) Needs By Priority – Eanes Elementary School

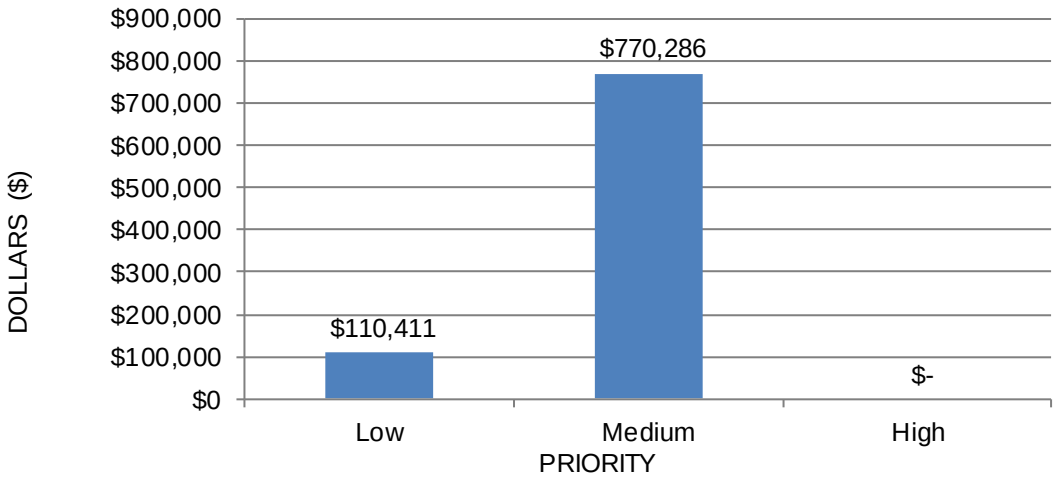

Figure 36. Extended (2023) Needs By Priority – Eanes Elementary School

Renewal Forecast

The renewal forecast for Eanes Elementary School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

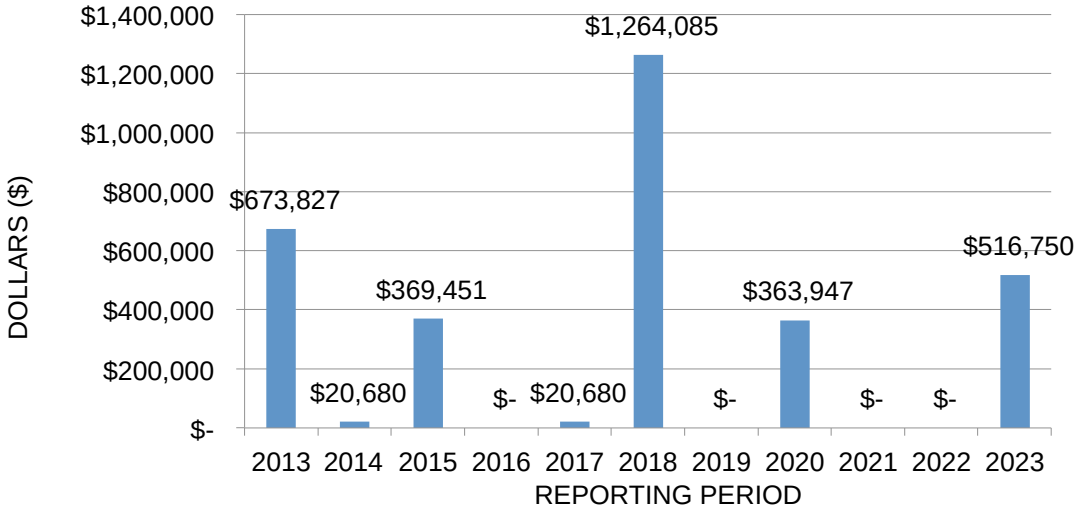

Figure 37. Renewal Forecast – Eanes Elementary School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 17. Forecasted Needs Table Eanes Elementary School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$673,827**	**$1,674,896**	**$880,697**
B20	**Building Exterior**	**$100,941**	**$219,634**	**$40,021**
B2010	Exterior Walls	$4,247	$64,182	$-
B2020	Exterior Windows	$94,996	$129,780	$30,486
B2030	Exterior Doors	$1,698	$25,672	$9,535
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$20,894**	**$521,161**	**$108,000**
C1020	Interior Doors	$20,894	$107,016	$8,940
C1030	Fittings	$-	$414,145	$99,060
C30	**Interior Finishes**	**$359,541**	**$166,812**	**$233,736**
C3010	Wall Finishes	$254,505	$62,040	$-
C3020	Floor Finishes	$64,142	$30,479	$189,032
C3030	Ceiling Finishes	$40,894	$74,293	$44,704
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$-**	**$471,410**	**$228,280**
D2010	Plumbing Fixtures	$-	$358,709	$85,800
D2020	Plumbing Rough-in	$-	$112,701	$142,480
D30	**HVAC**	**$-**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$192,451**	**$-**	**$-**
D4010	Fire Alarm & Detection	$192,451	$-	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$295,879**	**$270,660**
D5010	Electrical Equipment	$-	$143,653	$181,610
D5020(01)	Wiring	$-	$70,438	$89,050
D5090(02)	Lighting	$-	$81,788	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$-**	**$-**	**$-**

Table 18. Eanes Elementary School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$3,229,420
B2030	Building Exteriors	Eanes Elementary-Bldg A&B	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$8,570
C3030	Interior Finishes	Eanes Elementary-Bldg A&B	(C3030) Ceiling Finishes: Fair condition	10	2018	$39,725
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg A&B	(C1030) Cabinets are in need of replacement.	15	2018	$119,176
D2010	Plumbing Fixtures	Eanes Elementary-Bldg A&B	(D2010) Replace with cabinets	30	2018	$103,224
D4010	Fire Detection	Eanes Elementary-Bldg A&B	(D4010) System appears to be in serviceable condition	10	2012	$44,691

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2010	Building Exteriors	Eanes Elementary-Bldg A&B	(B2010) Exterior Walls: Brick veneer. Good condition. Freshly cleaned. Well maintained. Soffit is in need of refurbishment. Minor repairs needed near the roofing edge for rotting wood. All exposed surfaces need to be repainted	50	2018	$21,426
B2020	Building Exteriors	Eanes Elementary-Bldg A&B	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed.	30	2018	$70,380
C1020	Interior Finishes	Eanes Elementary-Bldg A&B	(C1020) Interior Doors: Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2018	$31,780

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Eanes Elementary-Bldg A&B	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed. The school administration offices were recently painted and are not expired. They use 30% of the space.	5	2010	$73,508
C3020	Interior Finishes	Eanes Elementary-Bldg A&B	(C3020) Floor Finishes: VT tile is expired and should be replaced. Carpet is reported as 2005 and comprises more than 70% of space.	15	2020	$73,508
B2030	Building Exteriors	Eanes Elementary-Bldg C	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$5,933
C3030	Interior Finishes	Eanes Elementary-Bldg C	(C3030) Ceiling Finishes: Fair condition	10	2018	$27,500

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg C	(C1030) Cabinets are in need of replacement.	15	2018	$82,501
D2010	Plumbing Fixtures	Eanes Elementary-Bldg C	(D2010) Replace with cabinets	30	2018	$71,458
D4010	Fire Detection	Eanes Elementary-Bldg C	(D4010) System appears to be in serviceable condition	10	2012	$30,938
B2010	Building Exteriors	Eanes Elementary-Bldg C	(B2010) Exterior Walls: Brick veneer. Good condition. Freshly cleaned. Well maintained. Extended NR to 2025. Sofit is in need of refurbishment. Minor repairs needed near the roofing edge. All exposed surfaces need to be repainted. Need individual needs…	50	2018	$14,832

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Eanes Elementary-Bldg C	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed.	30	1994	$48,722
C1020	Interior Finishes	Eanes Elementary-Bldg C	(C1020) Interior Doors: Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2018	$22,000
C3010	Interior Finishes	Eanes Elementary-Bldg C	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed. The Library room/offices were recently painted and are not expired. They use 50% of the space.	5	2012	$50,887

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3020	Interior Finishes	Eanes Elementary-Bldg C	(C3020) Floor Finishes: VT tile is expired and should be replaced. Carpet is new and comprises more than 70% of space. Individual needs.	15	2020	$44,000
B2030	Building Exteriors	Eanes Elementary-Bldg F	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting.	30	2020	$2,411
C3030	Interior Finishes	Eanes Elementary-Bldg F	(C3030) Ceiling Finishes: Fair condition	10	2020	$11,176
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg F	(C1030) Cabinets are in need of replacement.	15	2018	$33,528
D2010	Plumbing Fixtures	Eanes Elementary-Bldg F	(D2010) Replace with cabinets	30	2015	$29,040
D4010	Fire Detection	Eanes Elementary-Bldg F	(D4010) System appears to be in serviceable condition	10	2012	$12,573

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Eanes Elementary-Bldg F	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed.	30	2020	$19,800
C1020	Interior Finishes	Eanes Elementary-Bldg F	(C1020) Interior Doors: Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2020	$8,940
C3010	Interior Finishes	Eanes Elementary-Bldg F	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed.	5	2015	$20,680
C3020	Interior Finishes	Eanes Elementary-Bldg F	(C3020) Floor Finishes: VT tile is expired and should be replaced. Carpet is new and comprises more than 70% of space.	15	2020	$17,881

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2030	Building Exteriors	Eanes Elementary-Bldg G	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$2,411
C3030	Interior Finishes	Eanes Elementary-Bldg G	(C3030) Ceiling Finishes: Fair condition	10	2020	$11,176
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg G	(C1030) Cabinets are in need of replacement.	15	2018	$33,528
D2010	Plumbing Fixtures	Eanes Elementary-Bldg G	(D2010) Replace with cabinets	30	2018	$29,040
D4010	Fire Detection	Eanes Elementary-Bldg G	(D4010) System appears to be in serviceable condition	10	2012	$12,573

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2010	Building Exteriors	Eanes Elementary-Bldg G	(B2010) Exterior Walls: Brick veneer. Good condition. Freshly cleaned. Well maintained. Extended NR to 2025. Sofit is in need of refurbishment. Minor repairs needed near the roofing edge. All exposed surfaces need to be repainted.	50	2018	$6,028
B2020	Building Exteriors	Eanes Elementary-Bldg G	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed.	30	2018	$19,800
C1020	Interior Finishes	Eanes Elementary-Bldg G	(C1020) Interior Doors: Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2005	$8,940

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Eanes Elementary-Bldg G	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed.	5	2017	$20,680
C3020	Interior Finishes	Eanes Elementary-Bldg G	(C3020) Floor Finishes: VT tile is expired and should be replaced. Carpet is new and comprises more than 70% of space.	15	2020	$17,881
B2030	Building Exteriors	Eanes Elementary-Bldg H	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$2,411
C3030	Interior Finishes	Eanes Elementary-Bldg H	(C3030) Ceiling Finishes: Fair condition	10	2020	$11,176
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg H	(C1030) Cabinets are in need of replacement.	15	2018	$33,528
D2010	Plumbing Fixtures	Eanes Elementary-Bldg H	(D2010) Replace with cabinets	30	2018	$29,040

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D4010	Fire Detection	Eanes Elementary-Bldg H	(D4010) System appears to be in serviceable condition	10	2012	$12,573
B2010	Building Exteriors	Eanes Elementary-Bldg H	(B2010) Exterior Walls: Brick veneer. Good condition. Freshly cleaned. Well maintained. Extended NR to 2025. Sofit is in need of refurbishment. Minor repairs needed near the roofing edge. All exposed surfaces need to be repainted.	50	2018	$6,028
B2020	Building Exteriors	Eanes Elementary-Bldg H	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed.	30	2015	$19,800
C1020	Interior Finishes	Eanes Elementary-Bldg H	(C1020) Interior Doors: Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2018	$8,940

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Eanes Elementary-Bldg H	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed.	5	2010	$20,680
C3020	Interior Finishes	Eanes Elementary-Bldg H	(C3020) Floor Finishes: VT tile is expired and should be replaced (individual need). Carpet is new and comprises more than 70% of space.	15	2015	$17,881
B2030	Building Exteriors	Eanes Elementary-Bldg I	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$2,411
C3030	Interior Finishes	Eanes Elementary-Bldg I	(C3030) Ceiling Finishes: Fair condition	10	2020	$11,176
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg I	(C1030) Cabinets are in need of replacement.	15	2018	$33,528
D2010	Plumbing Fixtures	Eanes Elementary-Bldg I	(D2010) Replace with cabinets	30	2018	$29,040

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D4010	Fire Detection	Eanes Elementary-Bldg I	(D4010) System appears to be in serviceable condition	10	2012	$12,573
B2010	Building Exteriors	Eanes Elementary-Bldg I	(B2010) Exterior Walls: Brick veneer. Good condition. Freshly cleaned. Well maintained. Extended NR to 2025. Sofit is in need of refurbishment. Minor repairs needed near the roofing edge. All exposed sufaces need to be repainted.	50	2018	$6,028
B2020	Building Exteriors	Eanes Elementary-Bldg I	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed.	30	1990	$19,800
C1020	Interior Finishes	Eanes Elementary-Bldg I	(C1020) Interior Doors: Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2018	$8,940

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Eanes Elementary-Bldg I	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed.	5	2014	$20,680
C3020	Interior Finishes	Eanes Elementary-Bldg I	(C3020) Floor Finishes: VT tile is expired and should be replaced. Carpet is newer and comprises more than 70% of space.	15	2020	$17,881
B2030	Building Exteriors	Eanes Elementary-Bldg J	(B2030) Exterior Doors; Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$1,525
C3030	Interior Finishes	Eanes Elementary-Bldg J	(C3030) Ceiling Finishes; Fair condition	10	2018	$7,068
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg J	(C1030) Cabinets are in need of replacement.	15	2018	$21,206
D2020	Plumbing Rough-in	Eanes Elementary-Bldg J	(D2020) No leaks reported	30	2015	$30,501
D2010	Plumbing Fixtures	Eanes Elementary-Bldg J	(D2010) Fixtures are worn, replace with cabinets	30	2018	$18,367

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D4010	Fire Detection	Eanes Elementary-Bldg J	(D4010) System appears to be in serviceable condition	10	2012	$7,952
D5010	Electrical Equipment	Eanes Elementary-Bldg J	(D5010) Estimated	30	2015	$38,878
D5020	Wiring	Eanes Elementary-Bldg J	(D5020) Estimated	30	2015	$19,063
B2010	Building Exteriors	Eanes Elementary-Bldg J	(B2010) Exterior Wall Finishes; Building is historic status and stone exterior wall is original. Small addition for bathrooms and storage 1985.	50	2018	$3,812
B2020	Building Exteriors	Eanes Elementary-Bldg J	(B2020) Exterior Windows; System is expired and a more energy efficient system is needed.	30	1967	$12,524
C1020	Interior Finishes	Eanes Elementary-Bldg J	(C1020) Interior Doors; Poor condition. Delamination showing.	20	2012	$5,655

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Eanes Elementary-Bldg J	(C3010) Interior Wall Finishes; System is expired. A fresh coat of paint is needed.	5	2010	$13,080
C3020	Interior Finishes	Eanes Elementary-Bldg J	(C3020) Floor Finishes; VCT tile is expired and should be replaced.	15	2000	$11,310
B2030	Building Exteriors	Eanes Elementary-Bldg K	(B2030) Exterior Doors; Fair condition, minor refurbishment needed; gaskets and painting.	30	2018	$2,411
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg K	(C1030) Cabinets are in need of replacement.	15	2018	$33,528
D2020	Plumbing Rough-in	Eanes Elementary-Bldg K	(D2020) Original	30	2015	$48,224
D2010	Plumbing Fixtures	Eanes Elementary-Bldg K	(D2010) Replace with cabinets	30	2018	$29,040
D4010	Fire Detection	Eanes Elementary-Bldg K	(D4010) System appears to be in serviceable condition.	10	2012	$12,573

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5010	Electrical Equipment	Eanes Elementary-Bldg K	(D5010) Motion sensors in restrooms and custodial rooms	30	2015	$61,468
D5020	Wiring	Eanes Elementary-Bldg K	(D5020) Original	30	2015	$30,140
B2010	Building Exteriors	Eanes Elementary-Bldg K	(B2010) Exterior Wall Finishes; Brick veneer. Good condition. Freshly cleaned. Well maintained. Extended NR to 2025. Sofit is in need of refurbishment. Minor repairs needed near the roofing edge. All exposed surfaces need to be repainted.	50	2018	$6,028
B2020	Building Exteriors	Eanes Elementary-Bldg K	(B2020) Exterior Windows; System is expired and a more energy efficient system is needed.	30	2015	$19,800

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C1020	Interior Finishes	Eanes Elementary-Bldg K	(C1020) Interior Doors; Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2018	$8,940
C3010	Interior Finishes	Eanes Elementary-Bldg K	(C3010) Interior Wall Finishes; System is expired. A fresh coat of paint is needed.	5	2010	$20,680
C3020	Interior Finishes	Eanes Elementary-Bldg K	(C3020) Floor Finishes; VT tile is expired and should be replaced. Carpet is new and comprises more then 70% of space.	15	2020	$17,881
B2030	Building Exteriors	Eanes Elementary-Bldg L	(B2030) Exterior Doors: Expired. Historical restoration required.	30	1967	$1,698
C3030	Interior Finishes	Eanes Elementary-Bldg L	(C3030) Ceiling Finishes: Fair condition	10	1995	$7,874
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg L	(C1030) Cabinets are in need of replacement.	15	2018	$23,622

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D2020	Plumbing Rough-in	Eanes Elementary-Bldg L	(D2020) Estimated not original; one sink in music classroom, trap is leaking.	30	2015	$33,976
D2010	Plumbing Fixtures	Eanes Elementary-Bldg L	(D2010) Replace with cabinet	30	2018	$20,460
D4010	Fire Detection	Eanes Elementary-Bldg L	(D4010) System appears to be in serviceable condition	10	2012	$8,858
D5010	Electrical Equipment	Eanes Elementary-Bldg L	(D5010) Unknown, historic building with modifications to support HVAC systems. Extended due to condition.	30	2018	$43,307
D5020	Wiring	Eanes Elementary-Bldg L	(D5020) Unknown, historic building, assume wiring was updated to support HVAC. Extended due to condition.	30	2018	$21,235

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5090	Lighting	Eanes Elementary-Bldg L	(D5090) Unknown, historic building with period specific lighting that may be new. Extended due to condition.	20	2018	$15,748
B2010	Building Exteriors	Eanes Elementary-Bldg L	(B2010) Exterior Walls: Building is historic status and stone exterior wall is original. Historical restoration required.	50	1987	$4,247
B2020	Building Exteriors	Eanes Elementary-Bldg L	(B2020) Exterior Windows: System is expired and a more energy efficient system is needed. Historical restoration required.	30	1967	$13,950
C1020	Interior Finishes	Eanes Elementary-Bldg L	(C1020) Interior Doors: Poor condition. De-lamination showing. Historical restoration required.	20	2005	$6,299

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	Eanes Elementary-Bldg L	(C3010) Interior Walls: System is expired. A fresh coat of paint is needed.	5	2010	$14,570
C3020	Interior Finishes	Eanes Elementary-Bldg L	(C3020) Floor Finishes: Carpet in music room is expired and should be replaced. VCT tile in history center is expired.	15	2018	$12,598
B2030	Building Exteriors	Eanes Elementary-Bldg M	(B2030) Exterior Doors; Fair condition, minor refurbishment needed; gaskets and painting.	30	2023	$7,124
C3030	Interior Finishes	Eanes Elementary-Bldg M	(C3030) Ceiling Finishes; Fair-poor condition. system is expired and replacement needed.	10	2012	$33,020
C1030	Built-in Equipment/Specialties	Eanes Elementary-Bldg M	(C1030) Cabinets are in fair condition. Extend NR to 2020	15	2020	$99,060

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D2020	Plumbing Rough-in	Eanes Elementary-Bldg M	(D2020) Good condition	30	2023	$142,480
D2010	Plumbing Fixtures	Eanes Elementary-Bldg M	(D2010) Good condition	30	2023	$85,800
D4010	Fire Detection	Eanes Elementary-Bldg M	(D4010) System appears to be in serviceable condition	10	2012	$37,147
D5010	Electrical Equipment	Eanes Elementary-Bldg M	(D5010) Good condition	30	2023	$181,610
D5020	Wiring	Eanes Elementary-Bldg M	(D5020) Good condition	30	2023	$89,050
D5090	Lighting	Eanes Elementary-Bldg M	(D5090) Good condition, extended to 2018	20	2018	$66,040
B2020	Building Exteriors	Eanes Elementary-Bldg M	(B2020) Exterior Windows; System is in good Condition	30	2023	$10,686
C1020	Interior Finishes	Eanes Elementary-Bldg M	(C1020) Interior Doors; Fair condition, minor refurbishment needed; Cleaning and refinishing.	20	2018	$26,416
C3010	Interior Finishes	Eanes Elementary-Bldg M	(C3010) System is expired. A fresh coat of paint is needed.	5	2012	$61,100

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3020	Interior Finishes	Eanes Elementary-Bldg M	(C3020) Floor Finishes; VCT tile is expired and should be replaced. Gymnasium floor was reported as replaced in 2002 is expired replacement should be in 2018.	15	2012	$52,832

FOREST TRAIL ELEMENTARY SCHOOL

Assessment Findings		
Size (SF)	79,431	
Date of construction	1985	
Type of Construction	One-Story Masonry Structure	
Roof	Standing Seam Metal	
Ceilings	Acoustical Tile	
Lighting	Surface-Mounted and Lay-In Fluorescent Fixtures	
Additions/ Renovations		
HVAC	Four-pipe Chiller system	

Condition Summary

Forest Trail Elementary School campus is overall in fair condition. Multiple major building systems are nearing the end of their life cycle or have reached the end and are still performing as designed; however, replacement is recommended and should be scheduled.

Minor building systems have expired and are in need of replacement.

Site has 2 portable classrooms.

EXTERIORS

The windows are original and in poor condition. Window operation is rough due to counterweight springs and slide failure. Replacement should be scheduled with a more energy efficient system. Exterior doors are original and in fair condition. Refurbishment is recommended for gaskets and painting. Exterior walls are brick veneer, which are original and in good condition. Caulking and general maintenance is recommended on all exterior components to assure useful life.

INTERIORS

Over all interior finishes are in good condition and well maintained.

Floor finishes are a combination of carpet and VCT tiles. Carpet is in fair-good condition with renewal reported in 2004. The VCT flooring is in need of replacement due to age and condition.

The wall and ceiling finishes are in fair-good condition, with wall finishes requiring renewal. The acoustic ceiling tiles, as well as the grid should be scheduled for replacement due to condition and age.

MECHANICAL

The mechanical systems in general are original; except for the two chillers, cooling tower, and the controls have been updated in a recent renewal project. The campus has one elevator and appears to be in serviceable condition.

ELECTRICAL

The majority of the electrical systems, including the lights, are original. There have been some minor upgrades in the mechanical/elevator equipment room on the lower level. It appeared to be accomplished in 1997 for added computer loads. The Fire Detection System main panel was installed in 2002 based upon documentation observed and appears to be in serviceable condition.

PLUMBING

Plumbing fixtures and piping are original. Recommend replacement of lavatories/sinks and faucets at the time the classroom cabinetry is replaced. No leaks observed.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 19. Forest Trail Elementary School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Forest Trail Elementary	1985	28	79,431	95	Q1	52	Q4	43	Q4	$12,708,960

A summary of the physical condition assessment findings at Forest Trail Elementary School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

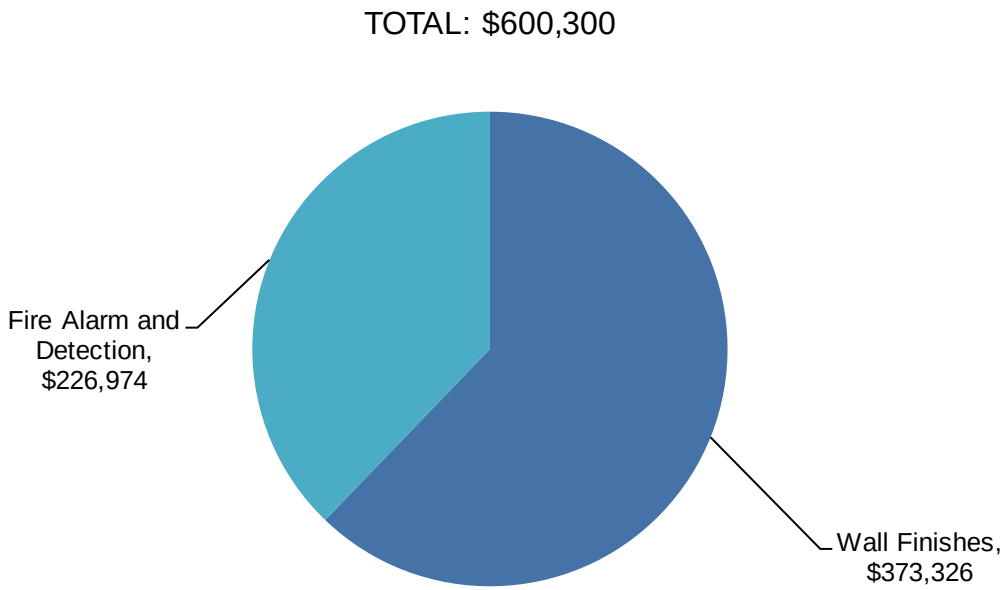

Figure 38. Current Needs (2013) – Forest Trail Elementary School

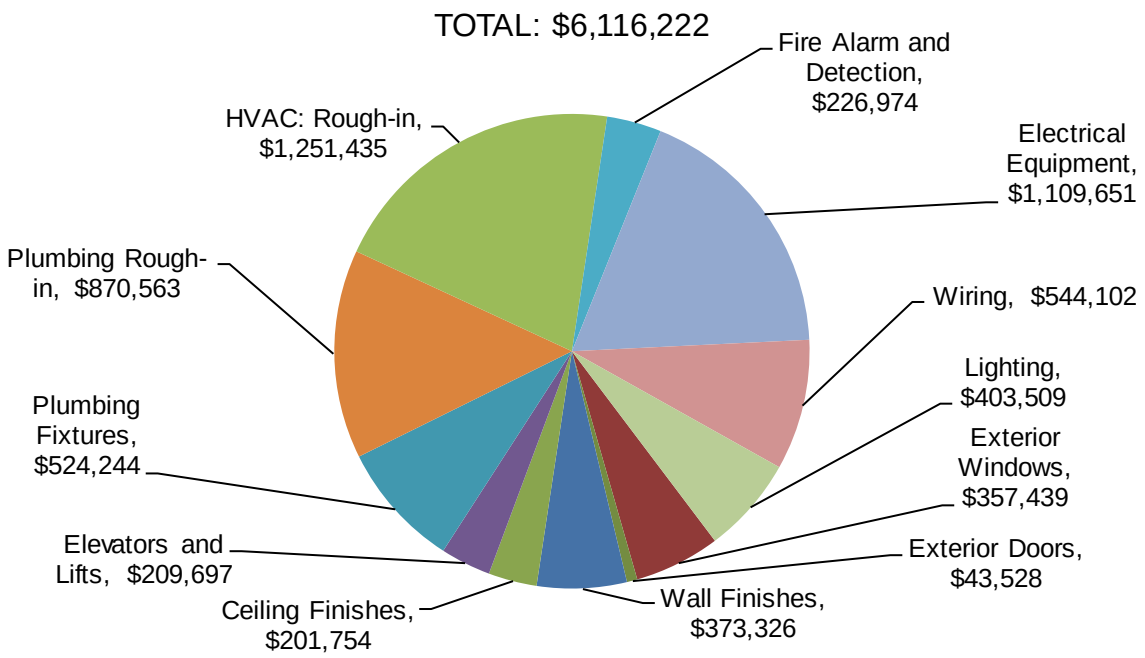

Figure 39. Cumulative projected Cost of Expired Systems (2018) – Forest Trail Elementary School

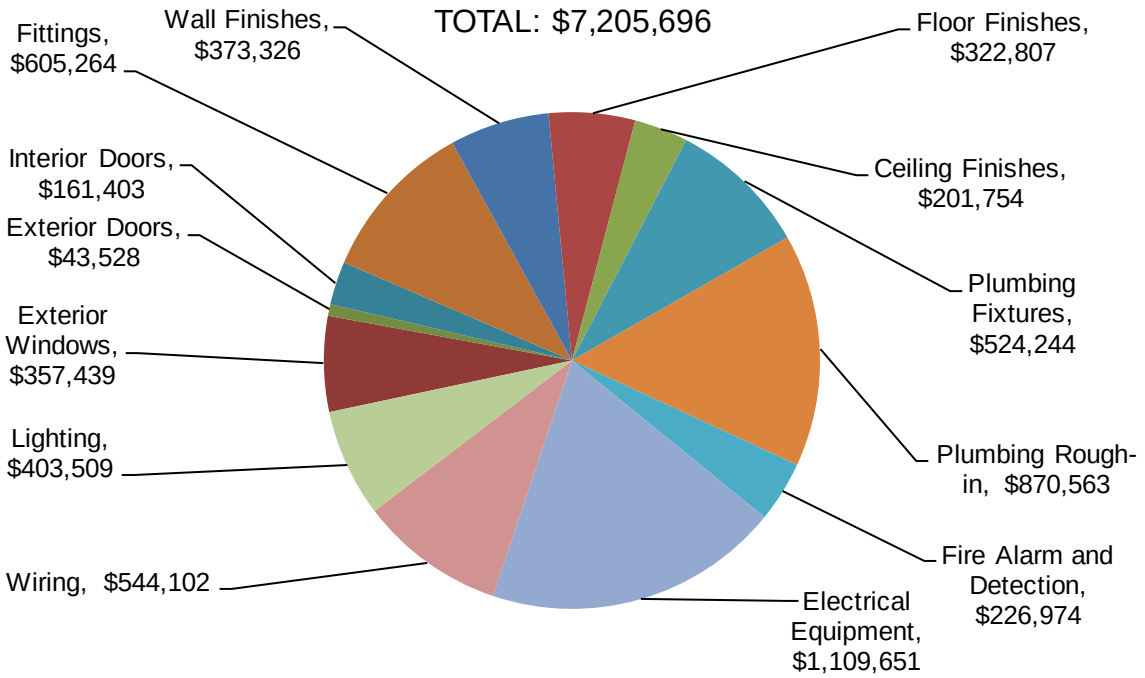

Figure 40. Cumulative projected Cost of Expired Systems (2023) – Forest Trail Elementary School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

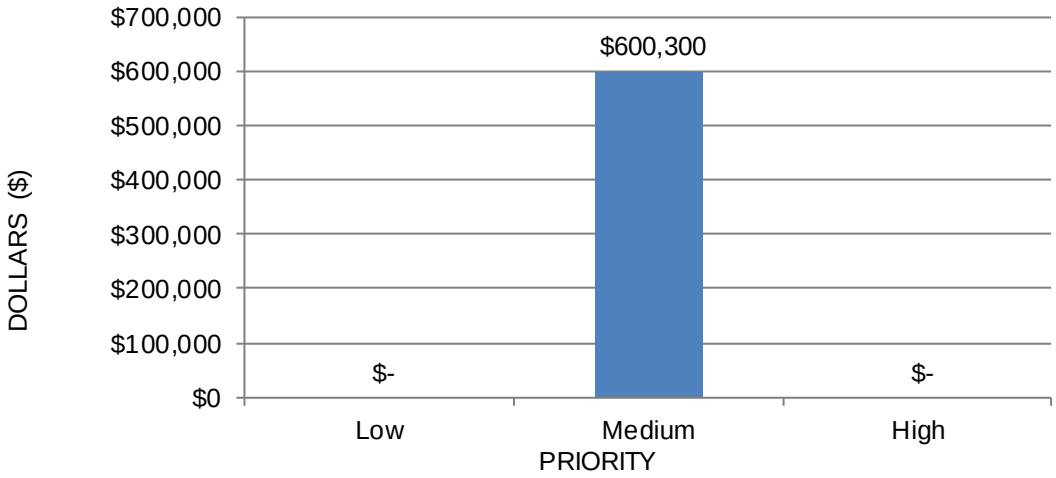

Figure 41. Current (2013) Needs By Priority – Forest Trail Elementary School

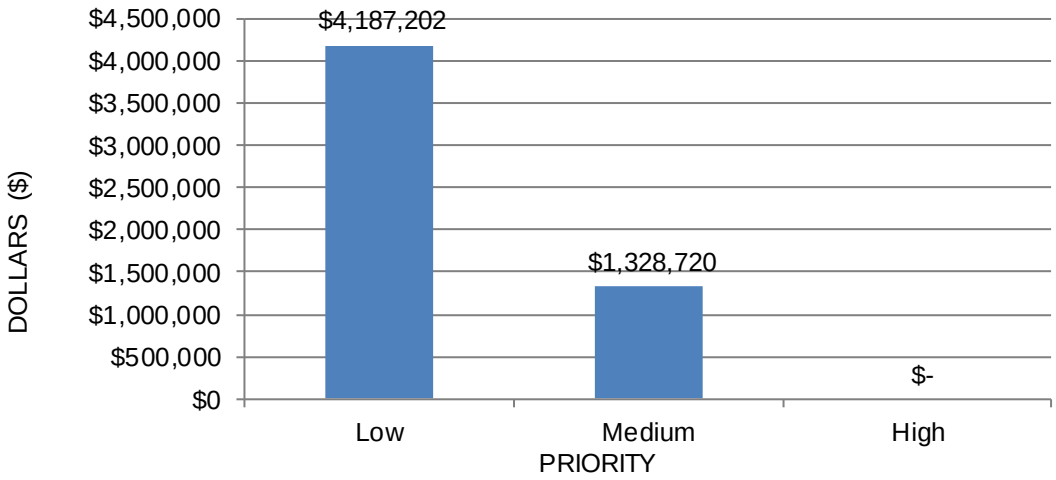

Figure 42. Extended (2018) Needs By Priority – Forest Trail Elementary School

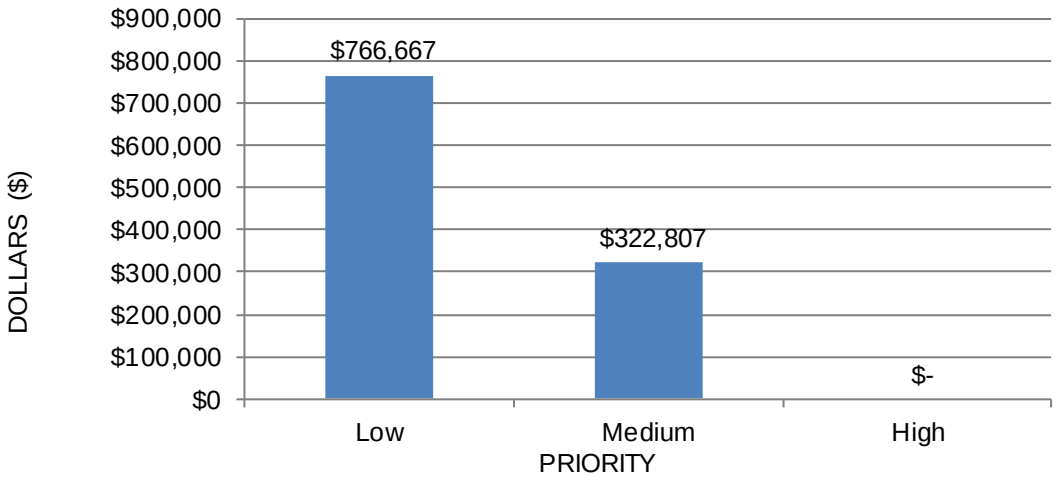

Figure 43. Extended (2023) Needs By Priority – Forest Trail Elementary School

Renewal Forecast

The renewal forecast for Forest Trail Elementary School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

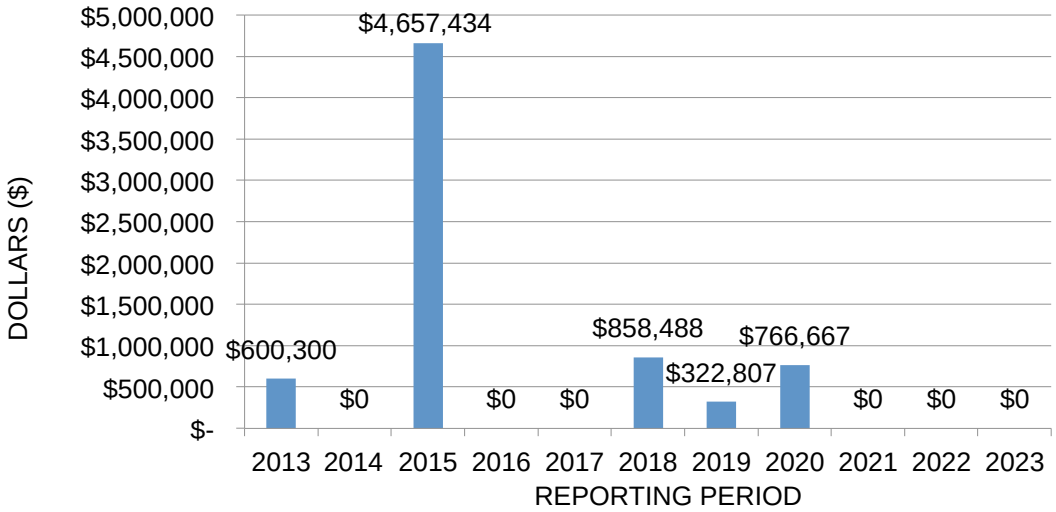

Figure 44. Renewal Forecast – Forest Trail Elementary School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 20. Forecasted Needs Table Forest Trail Elementary School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$600,300**	**$5,515,922**	**$1,089,474**
B20	**Building Exterior**	**$-**	**$400,967**	**$-**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$357,439	$-
B2030	Exterior Doors	$-	$43,528	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$-**	**$766,667**
C1020	Interior Doors	$-	$-	$161,403
C1030	Fittings	$-	$-	$605,264
C30	**Interior Finishes**	**$373,326**	**$201,754**	**$322,807**
C3010	Wall Finishes	$373,326	$-	$-
C3020	Floor Finishes	$-	$-	$322,807
C3030	Ceiling Finishes	$-	$201,754	$-
D10	**Conveying Systems**	**$-**	**$209,697**	**$-**
D1010	Elevators & Lifts	$-	$209,697	$-
D20	**Plumbing**	**$-**	**$1,394,807**	**$-**
D2010	Plumbing Fixtures	$-	$524,244	$-
D2020	Plumbing Rough-in	$-	$870,563	$-
D30	**HVAC**	**$-**	**$1,251,435**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$1,251,435	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$226,974**	**$-**	**$-**
D4010	Fire Alarm & Detection	$226,974	$-	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$2,057,262**	**$-**
D5010	Electrical Equipment	$-	$1,109,651	$-
D5020(01)	Wiring	$-	$544,102	$-
D5090(02)	Lighting	$-	$403,509	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$-**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 21. Forest Trail Elementary School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$7,205,696
B2030	Building Exteriors	Forest Trail Elementary-Main Building	(B2030) Exterior Doors: Fair condition, minor refurbishment needed; gaskets and painting. Extended life cycle to 2018.	30	2018	$43,528
C3030	Interior Finishes	Forest Trail Elementary-Main Building	(C3030) Ceiling Finishes: System is original and in need of replacement.	15	2018	$201,754
C1030	Built-in Equipment/Specialties	Forest Trail Elementary-Main Building	(C1030) Original and in good condition. Useful lives extend to 2020.	15	2020	$605,264
D1010	Elevators	Forest Trail Elementary-Main Building	(D1010) extended due to condition	20	2018	$209,697
D2020	Plumbing Rough-in	Forest Trail Elementary-Main Building	(D2020) Original, allow system to expire based upon life cycle	30	2015	$870,563
D2010	Plumbing Fixtures	Forest Trail Elementary-Main Building	(D2010) Original, allow system to expire based upon life cycle	30	2015	$524,244

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D3040	HVAC Rough-in	Forest Trail Elementary-Main Building	(D3040) Original, allow system to expire based upon life cycle	30	2015	$1,251,435
D4010	Fire Detection	Forest Trail Elementary-Main Building	(D4010) System main panel was installed in 2002 based upon documentation observed and appears to be in serviceable condition.	10	2012	$226,974
D5010	Electrical Equipment	Forest Trail Elementary-Main Building	(D5010) Original, allow system to expire based upon life cycle	30	2015	$1,109,651
D5020	Wiring	Forest Trail Elementary-Main Building	(D5020) Original, allow system to expire based upon life cycle	30	2015	$544,102
D5090	Lighting	Forest Trail Elementary-Main Building	(D5090) Original, schedule for replacement.	20	2018	$403,509

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Forest Trail Elementary-Main Building	(B2020) Exterior Windows: Original, single paned. Poor condition. Caulking and sealants are desiccated. Window operation is rough and springs and glides are damaged. Replacement recommended.	30	2015	$357,439
C1020	Interior Finishes	Forest Trail Elementary-Main Building	(C1020) Interior Doors: System is original and in fair condition. Isolated replacement is needed. Extend useful life to 2020.	20	2020	$161,403
C3010	Interior Finishes	Forest Trail Elementary-Main Building	(C3010) Interior Walls: Wall finishes are expired and in disrepair.	5	2012	$373,326

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3020	Interior Finishes	Forest Trail Elementary-Main Building	(C3020) Carpet 50% of space was reported to have been replaced in 2004. VCT is expired and in need of replacement. Complete flooring system should be scheduled for replacement in 2019.	15	2019	$322,807

VALLEY VIEW ELEMENTARY SCHOOL

Assessment Findings		
Size (SF)	94,230	
Date of construction	1982	
Type of Construction	Two Story Masonry Structure; One Story Detached Gymnasium of Similar Type	
Roof	Standing Seam Metal	
Ceilings	Acoustical Tile	
Lighting	Surface-Mounted and Lay-In Fluorescent Fixtures	
Additions/ Renovations	Cooling Tower 2011	
HVAC	Evaporation Transfer with Gas Fired Boilers	

Condition Summary

Valley View Elementary campus is in good overall condition. Campus consists of a main building constructed in 1982, a gymnasium constructed in 1997, and three portable buildings. Many systems appear to be original and are nearing the end of their useful life. The only significant upgrade appeared to be a new cooling tower, installed in 2011.

EXTERIORS

Exterior doors show signs of corrosion. They also appear to not be airtight. Recommend scheduling replacement of exterior doors in the next 5 years. Exterior wall finish is brick veneer. Brick is in good condition. The windows appear to be original with failing seals. Occupants report water intrusion it is recommended to replace the window system.

The roofing system was not assessed under this contract, nevertheless it was noted that the flashings and gutters are in fair condition. The main building and gymnasium had a standing seam metal roof. A leaf guard system over the gutters is recommended, due to the amount of trees in the area. The Main building common area consists of an architectural skylight opening that spans the center of the roof. This skylight is manufactured with non-insulated materials. And the seals are noticeably failing. A considerable amount of solar heating was present even during the winter season of the assessment. It is recommended that this area be reviewed for replacement for building integrity and energy saving opportunities

INTERIORS

Overall, the interior finishes are in good condition. Floor finishes are a combination of brick, VCT tiles and carpet. Brick and VCT tiles are in good condition. Carpets in classrooms and gymnasium were stained and worn. Recommend scheduling to replace carpets in the next 5 years. Ceiling finishes are in good condition.

Interior wall finishes are in fair condition. There is minor scuffing in corridors. There are also minor cracks and chipping sheetrock on some corners. Recommend scheduling renewing wall finishes in the next 5 years. Interior doors are in good condition. Recommend extending useful life to 2018.

MECHANICAL

The cooling tower appears to be new, installed in 2011, and in good condition. Gas-fired boilers appear to be installed in 2002, also in good condition. Air handlers and ductwork appear to be original. Due to renovations over the years, the distribution system has become inefficient and has become difficult to maintain adequate balance between classrooms. It is recommended that air handlers, ductworks, and controls be replaced. Properly sealing and insulating the skylight may also help regulate the second floors temperature.

The gym's condensers have excessive hail damage. Recommend scheduling renewal in the next 5 years.

ELECTRICAL

Light fixtures appear to be in good condition. Light fixtures utilize florescent bulbs. The lighting installed comes in either a three or four bulb light fixture. There is an elevator on site.

PLUMBING

Plumbing fixtures appear to be in good condition. Most plumbing fixtures are stainless steel. No leaks were reported or observed.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 22. Valley View Elementary School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Valley View Elementary	1982	31	72,916	97	Q1	58	Q4	51	Q4	$11,666,560

A summary of the physical condition assessment findings at Valley View Elementary School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

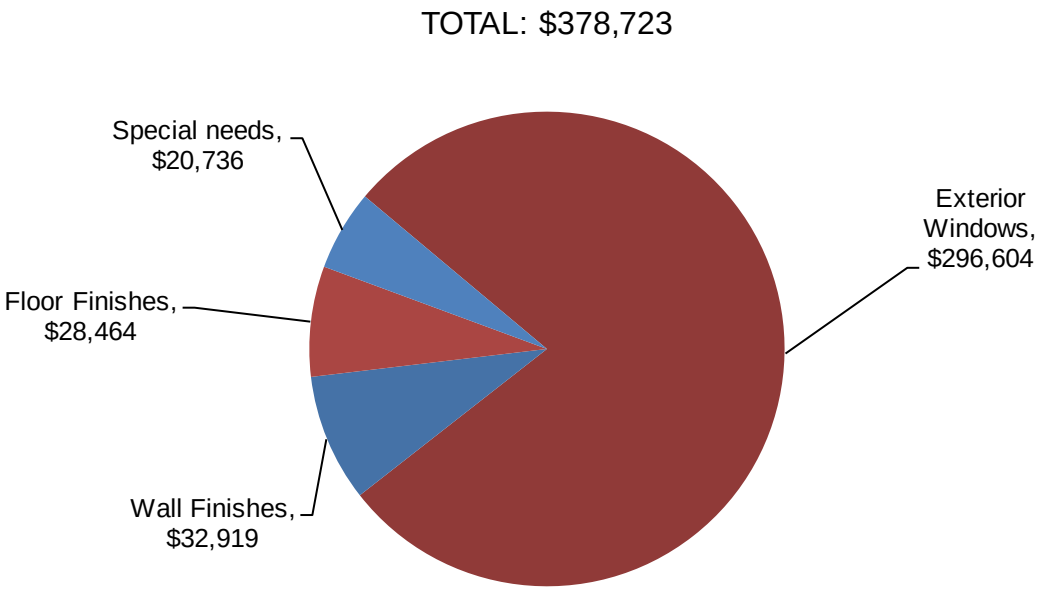

Figure 45. Current Needs (2013) – Valley View Elementary School

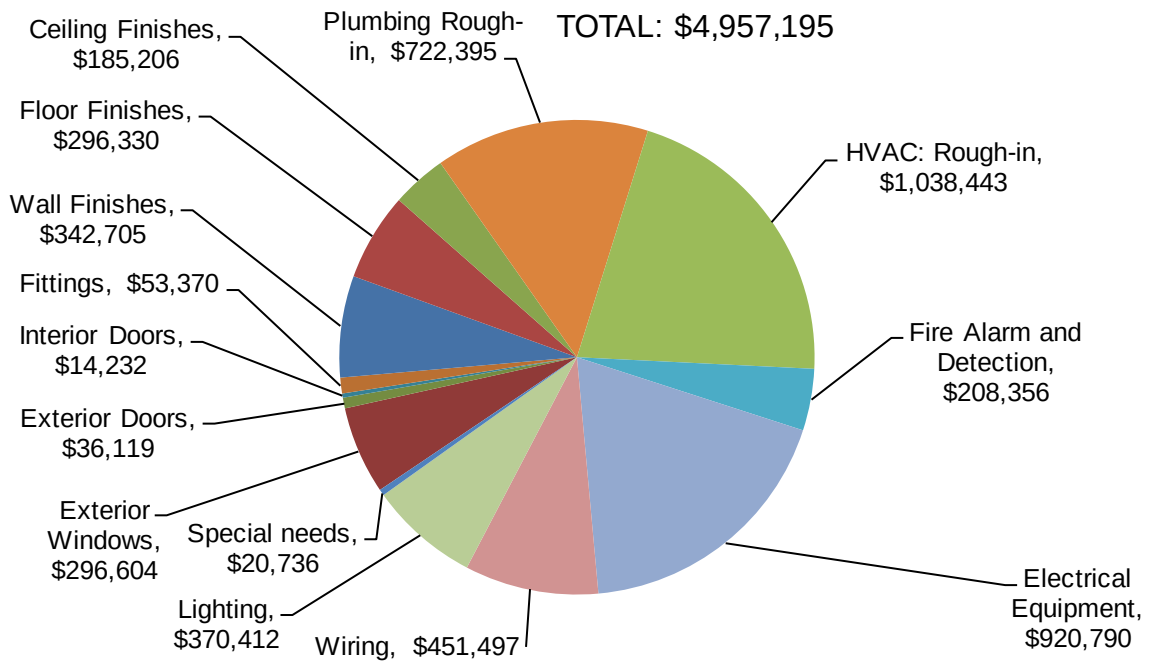

Figure 46. Cumulative projected Cost of Expired Systems (2018) – Valley View Elementary School

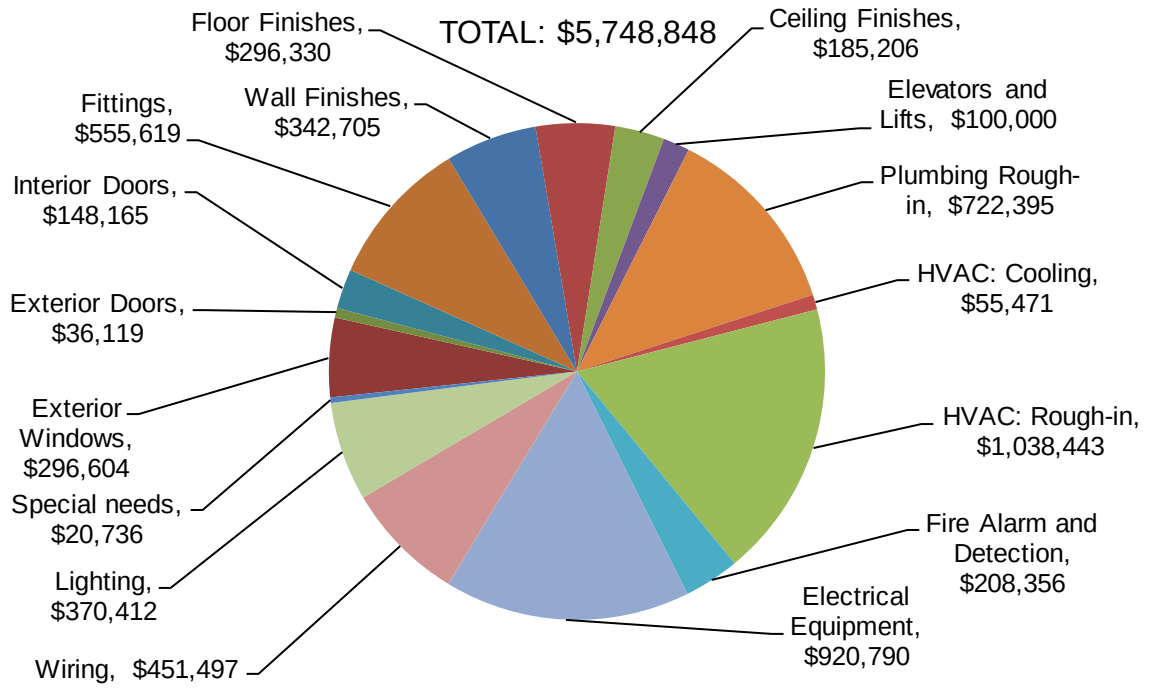

Figure 47. Cumulative projected Cost of Expired Systems (2023) – Valley View Elementary School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

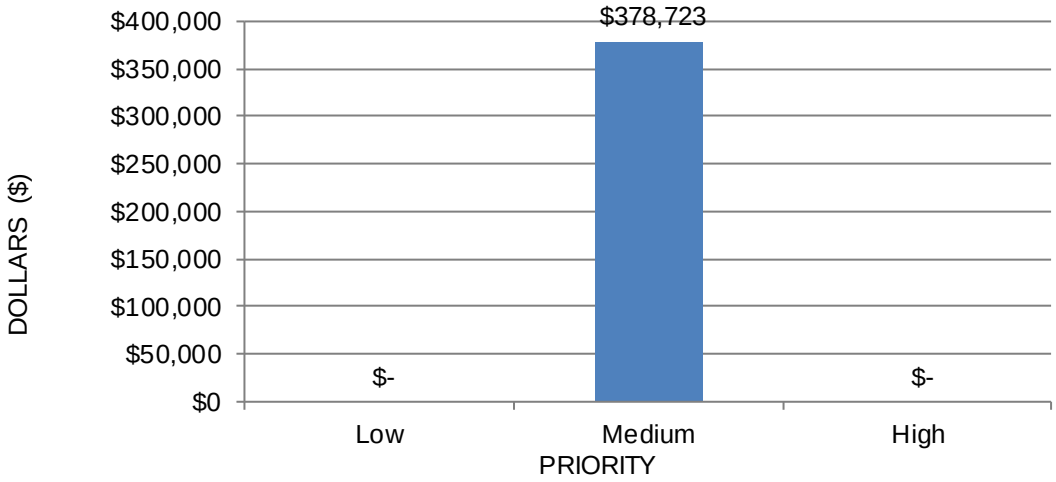

Figure 48. Current (2013) Needs By Priority – Valley View Elementary School

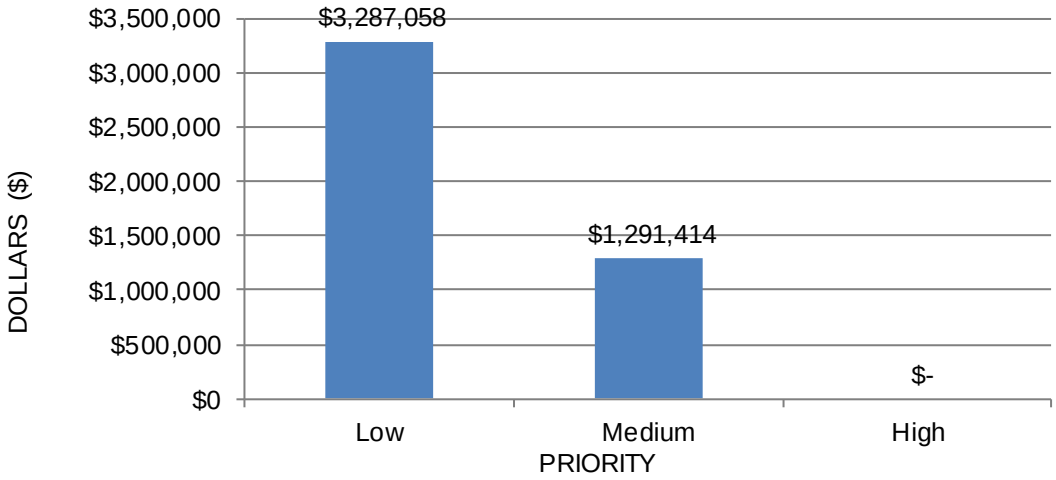

Figure 49. Extended (2018) Needs By Priority – Valley View Elementary School

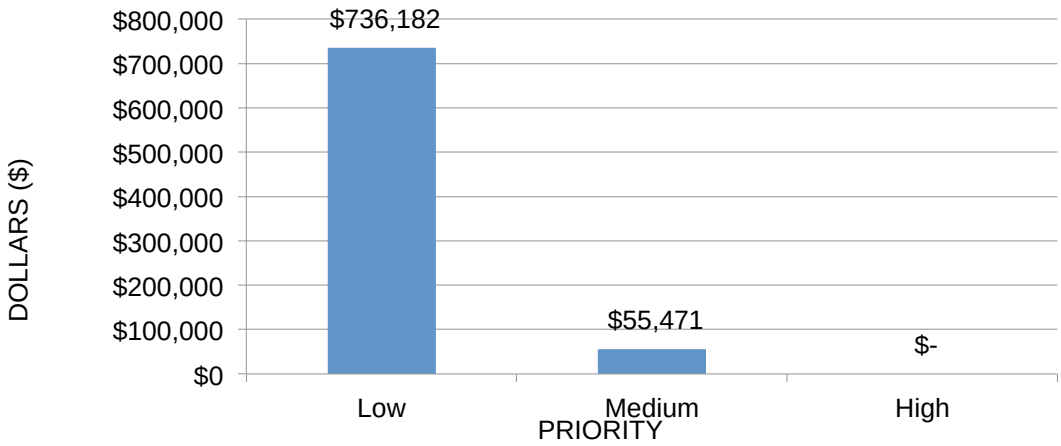

Figure 50. Extended (2023) Needs By Priority – Valley View Elementary School

Renewal Forecast

The renewal forecast for Valley View Elementary School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

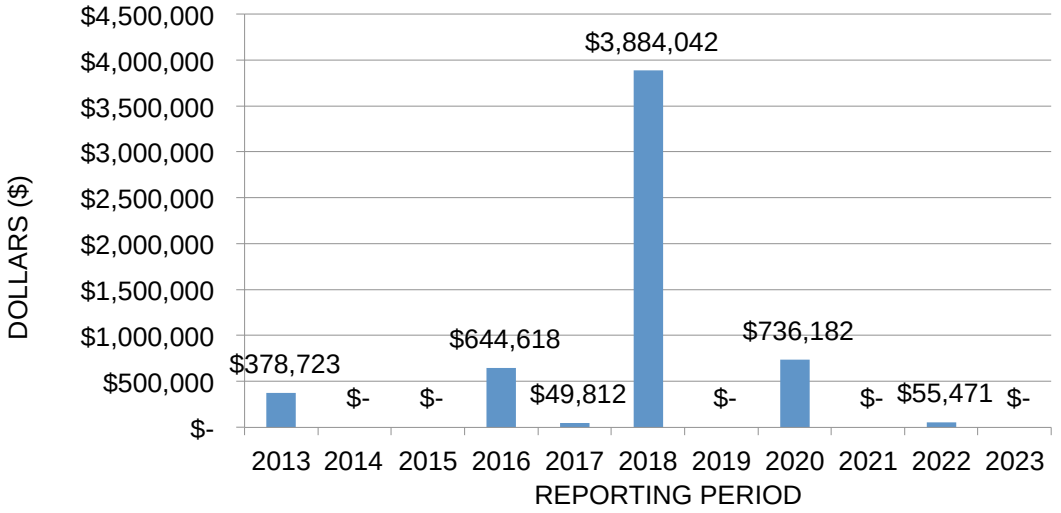

Figure 51. Renewal Forecast – Valley View Elementary School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 23. Forecasted Needs Table Valley View Elementary School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$357,987**	**$4,578,472**	**$791,653**
B20	**Building Exterior**	**$296,604**	**$36,119**	**$-**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$296,604	$-	$-
B2030	Exterior Doors	$-	$36,119	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$67,602**	**$636,182**
C1020	Interior Doors	$-	$14,232	$133,933
C1030	Fittings	$-	$53,370	$502,249
C30	**Interior Finishes**	**$61,383**	**$762,858**	**$-**
C3010	Wall Finishes	$32,919	$309,786	$-
C3020	Floor Finishes	$28,464	$267,866	$-
C3030	Ceiling Finishes	$-	$185,206	$-
D10	**Conveying Systems**	**$-**	**$-**	**$100,000**
D1010	Elevators & Lifts	$-	$-	$100,000
D20	**Plumbing**	**$-**	**$722,395**	**$-**
D2010	Plumbing Fixtures	$-	$-	$-
D2020	Plumbing Rough-in	$-	$722,395	$-
D30	**HVAC**	**$-**	**$1,038,443**	**$55,471**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$55,471
D3040	Distribution System	$-	$1,038,443	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$-**	**$208,356**	**$-**
D4010	Fire Alarm & Detection	$-	$208,356	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$1,742,699**	**$-**
D5010	Electrical Equipment	$-	$920,790	$-
D5020(01)	Wiring	$-	$451,497	$-
D5090(02)	Lighting	$-	$370,412	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$20,736**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 24. Valley View Elementary School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$5,748,848
C3030	Interior Finishes	Valley View Elementary-Gymnasium	(C3030) Ceiling Finishes: OK, extend due to condition	10	2018	$17,790
C1030	Built-in Equipment/Specialties	Valley View Elementary-Gymnasium	(C1030) OK, extend due to condition	15	2018	$53,370
D3030	HVAC Equipment	Valley View Elementary-Gymnasium	(D3030) Excessive hail damage on condensers	25	2022	$55,471
D4010	Fire Detection	Valley View Elementary-Gymnasium	(D4010) OK, extend due to condition	10	2018	$20,013
D5090	Lighting	Valley View Elementary-Gymnasium	(D5090) OK	20	2017	$35,580
C1020	Interior Finishes	Valley View Elementary-Gymnasium	(C1020) Exterior Doors: OK	20	2017	$14,232
C3010	Interior Finishes	Valley View Elementary-Gymnasium	(C3010) Exterior Walls: Clean walls, adhesive residue	5	2002	$32,919

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3020	Interior Finishes	Valley View Elementary-Gymnasium	(C3020) Floor Finishes: stained worn carpets, RT stained in rest rooms	15	2012	$28,464
B2030	Building Exteriors	Valley View Elementary-Main Building	(B2030) Exterior Doors: Signs of corrosion and not air tight	30	2018	$36,119
C3030	Interior Finishes	Valley View Elementary-Main Building	(C3030) Ceiling Finishes: OK, extend due to condition	10	2018	$167,416
C1030	Built-in Equipment/Specialties	Valley View Elementary-Main Building	(C1030) OK, extend due to condition	15	2020	$502,249
D1010	Elevators	Valley View Elementary-Main Building	(D1010) OK, extend due to condition	20	2020	$100,000
D2020	Plumbing Rough-in	Valley View Elementary-Main Building	(D2020) OK, extend due to condition	40	2018	$722,395

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D3040	HVAC Rough-in	Valley View Elementary-Main Building	(D3040) Appears to be original-Due to renovations over the years, the distribution system has become inefficient and has become difficult to maintain adequate balance between classrooms.	30	2018	$1,038,443
D4010	Fire Detection	Valley View Elementary-Main Building	(D4010) OK, extend due to condition	10	2018	$188,343
D5010	Electrical Equipment	Valley View Elementary-Main Building	(D5010) OK, extend due to condition	40	2018	$920,790
D5020	Wiring	Valley View Elementary-Main Building	(D5020) Appears to have insufficient convenience outlets	40	2018	$451,497
D5090	Lighting	Valley View Elementary-Main Building	(D5090) 3 or 4-light bulb system. Majority original. Program for replacement.	20	2016	$334,832

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Valley View Elementary-Main Building	(B2020) Exterior Windows: Original windows, gaskets failing, water intrusion reported	30	2012	$296,604
C1020	Interior Finishes	Valley View Elementary-Main Building	(C1020) Interior Doors: OK, extend due to condition	20	2020	$133,933
C3010	Interior Finishes	Valley View Elementary-Main Building	(C3010) Interior Walls: Minor scuffing and stains	5	2016	$309,786
C3020	Interior Finishes	Valley View Elementary-Main Building	(C3020) Floor Finishes: stained carpets, peeling vinyl base board	15	2018	$267,866
S1000	Special Needs	Valley View Elementary-Main Building	(S1000) Replace skylight due to falling seals and low energy efficiency.	0	2013	$20,736

HILL COUNTRY MIDDLE SCHOOL

Assessment Findings		
Size (SF)	146,276	
Date of construction	1975	
Type of Construction	Brick	
Roof	Rolled and Built Up	
Ceilings	Acoustical Tile	
Lighting	Three Bulb System	
Additions/ Renovations	Gymnasium- 1979, New Wing- 2004	
HVAC	Lenox and Trane Roof Top Units	

Condition Summary

Hill Country Middle School consists of three buildings, the Main Building was built in 1975 with an addition in 2004, and a gymnasium built in 1979. Most major systems were replaced or upgraded during the construction of the addition in 2004.

The roofing system was not assessed under this contract. The roofs were a mixture of rolled and built up.

EXTERIORS

Exterior wall finish is mostly brick veneer. Brick is in good condition, it is recommended to repaint the remaining exterior stucco and cinder block finishes. Doors are in fair condition with protective coatings in poor condition. Recommend scheduling repainting of the doors. Windows are single paned and not airtight. Several windows have visible gaps in the frames. It is recommended that the window system be replaced. The 2004 addition exterior wall finish, windows, and doors are in good condition.

INTERIORS

Ceilings appear to have been replaced during the 2004 addition and are in good condition. Most interior doors appear to be in good condition, with the exception of heavy use doors: cafeteria, band, orchestra, choir, gymnasium and library need to be refinished or replaced. The glass panes in some classroom doors are loose and rattle, presenting a potential safety hazard. Wall finishes are expired and in poor condition. Corridor and classroom walls are scuffed and worn, it is recommended for refinishing. Majority of the VCT tile is in good condition. Some classrooms show signs of blistering, potentially caused from water intrusion. Room 112 has a severe floor cracks the length of the room, an engineering study is recommend.

MECHANICAL

Newer Lenox and Trane roof top units. Most roof top unit and HVAC controls appear to be no older than 2002 and in good condition. Buildings have Automated Logic controls throughout. Recommend an energy audit for the building.

ELECTRICAL

Electrical equipment, wiring, and lighting are in good condition. There is limited use of automatic light switches throughout. GFCI's appear to be in proper location and correctly identified. Room 309, Drama, has exposed electrical wires near the door.

PLUMBING

Piping and fixtures appear to be in good condition. Fire suppression sprinklers throughout the new addition. Sprinklers in the original building are only in the cafeteria and appear to be in good condition.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 25. Hill Country Middle School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Hill Country Middle School	1975	38	142,458	98	Q1	78	Q3	67	Q3	$27,264,182

A summary of the physical condition assessment findings at Hill Country Middle School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

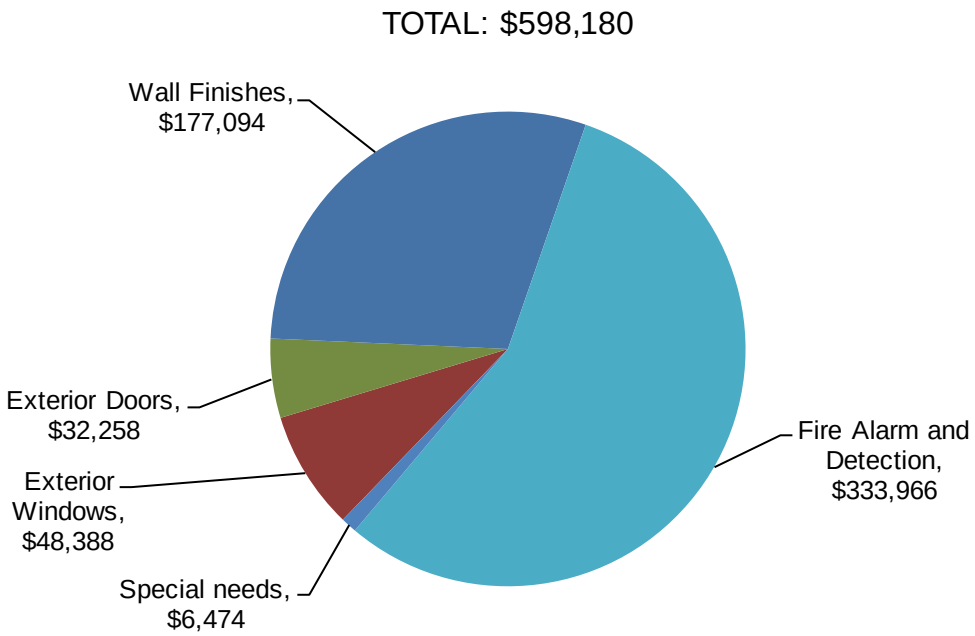

Figure 52. Current Needs (2013) – Hill Country Middle School

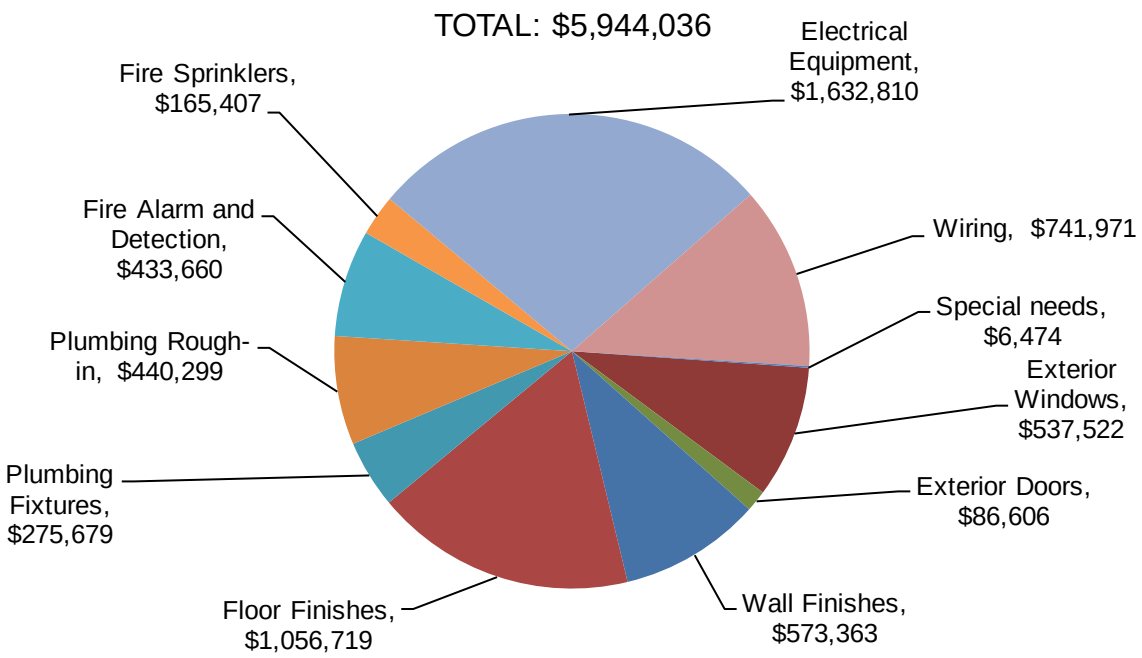

Figure 53. Cumulative projected Cost of Expired Systems (2018) – Hill Country Middle School

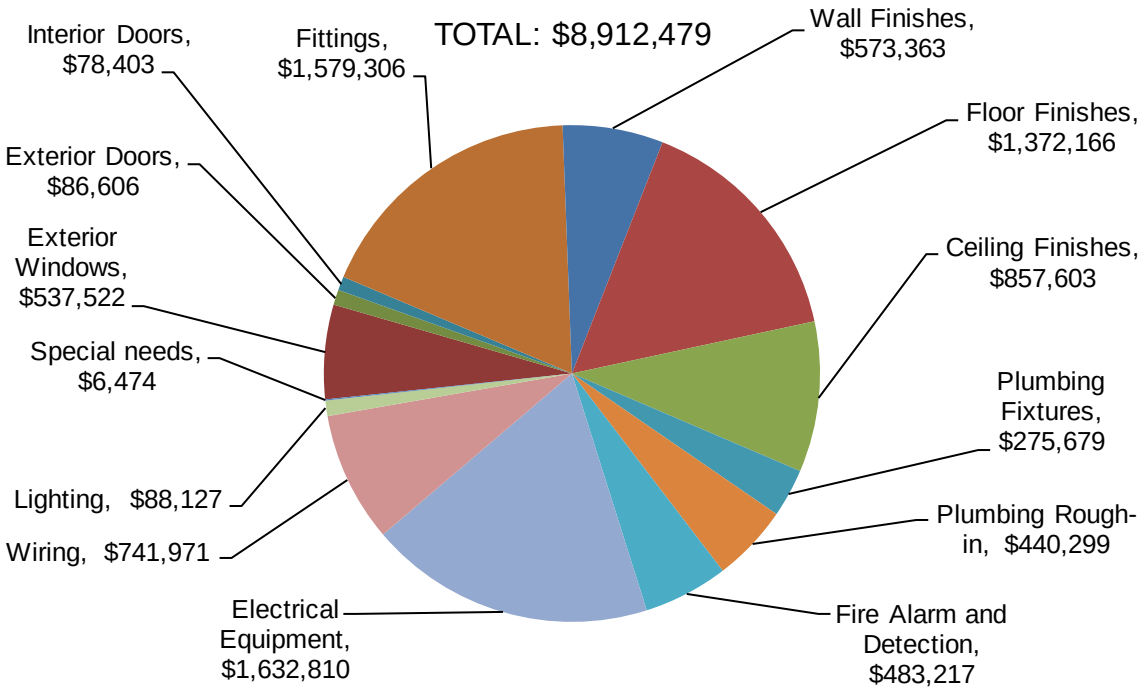

Figure 54. Cumulative projected Cost of Expired Systems (2023) – Hill Country Middle School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

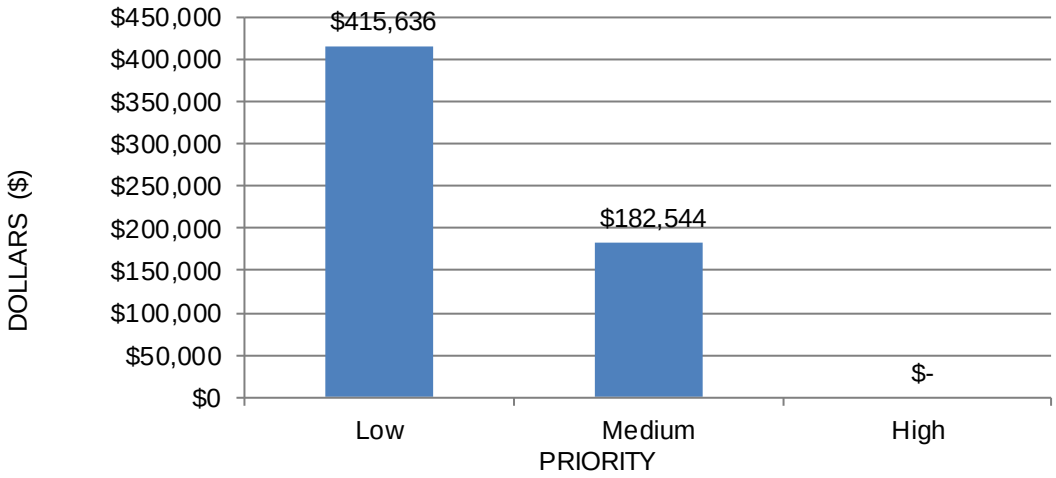

Figure 55. Current (2013) Needs By Priority – Hill Country Middle School

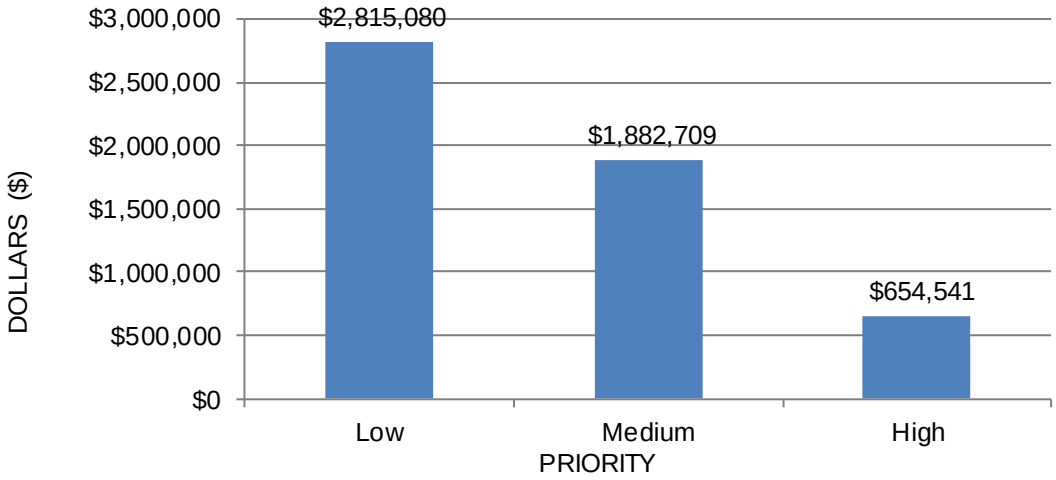

Figure 56. Extended (2018) Needs By Priority – Hill Country Middle School

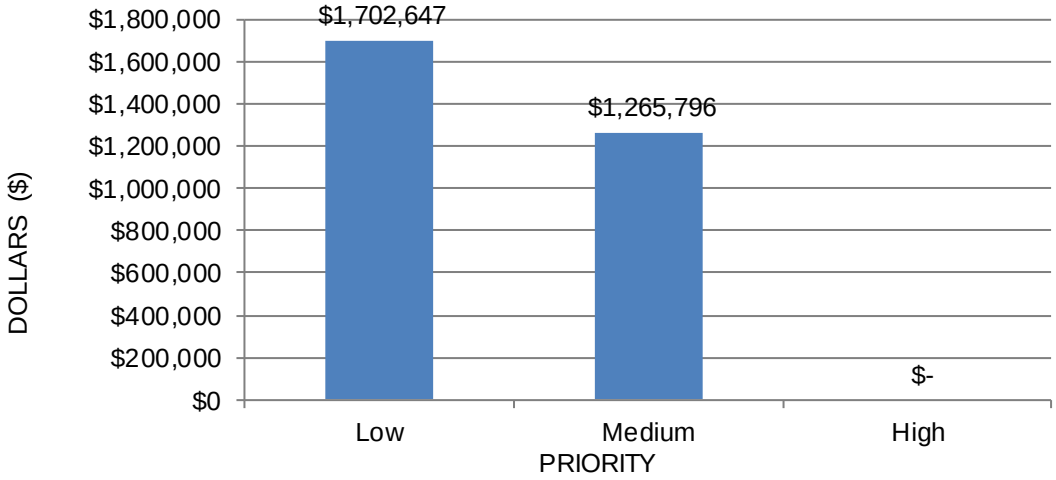

Figure 57. Extended (2023) Needs By Priority – Hill Country Middle School

Renewal Forecast

The renewal forecast for Hill Country Middle School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

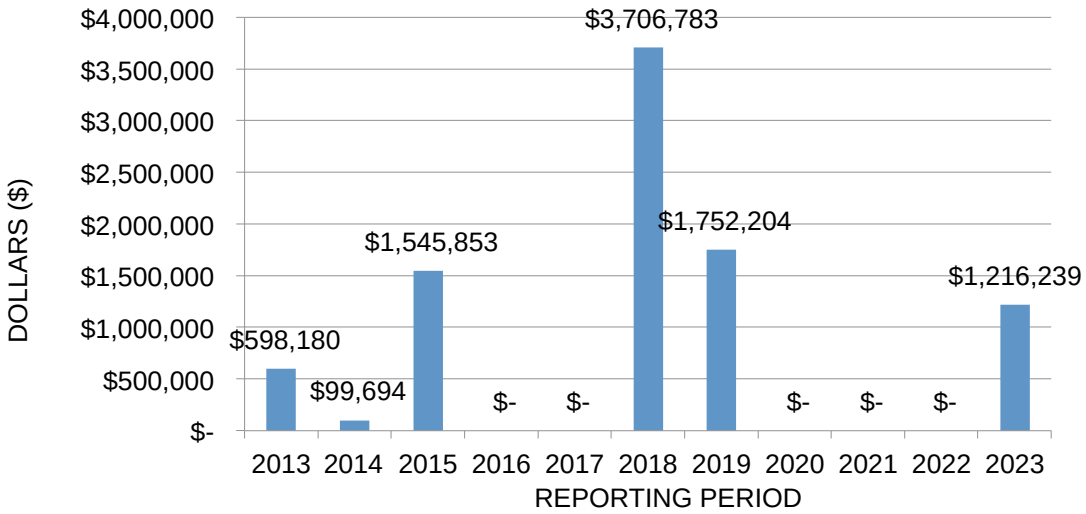

Figure 58. Renewal Forecast – Hill Country Middle School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 26. Forecasted Needs Table Hill Country Middle School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$591,706**	**$5,352,330**	**$2,968,443**
B20	**Building Exterior**	**$80,646**	**$543,482**	**$-**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$48,388	$489,134	$-
B2030	Exterior Doors	$32,258	$54,348	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$-**	**$1,657,709**
C1020	Interior Doors	$-	$-	$78,403
C1030	Fittings	$-	$-	$1,579,306
C30	**Interior Finishes**	**$177,094**	**$1,452,988**	**$1,173,050**
C3010	Wall Finishes	$177,094	$396,269	$-
C3020	Floor Finishes	$-	$1,056,719	$315,447
C3030	Ceiling Finishes	$-	$-	$857,603
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$-**	**$715,978**	**$-**
D2010	Plumbing Fixtures	$-	$275,679	$-
D2020	Plumbing Rough-in	$-	$440,299	$-
D30	**HVAC**	**$-**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$333,966**	**$265,101**	**$49,557**
D4010	Fire Alarm & Detection	$333,966	$99,694	$49,557
D4040	Fire Sprinklers	$-	$165,407	$-
D50	**Electrical**	**$-**	**$2,374,781**	**$88,127**
D5010	Electrical Equipment	$-	$1,632,810	$-
D5020(01)	Wiring	$-	$741,971	$-
D5090(02)	Lighting	$-	$-	$88,127
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$6,474**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 27. Hill Country Middle School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$8,918,953
B2030	Building Exteriors	Hill Country Middle-1979 Gymnasium	(B2030) Exterior Doors: In good condition	30	2009	$32,258
D4010	Fire Detection	Hill Country Middle-1979 Gymnasium	(D4010) In good condition	10	2019	$49,557
D5090	Lighting	Hill Country Middle-1979 Gymnasium	(D5090) In good condition	20	2019	$88,127
B2020	Building Exteriors	Hill Country Middle-1979 Gymnasium	(B2020) Exterior Windows: In good condition	30	2009	$48,388
C1020	Interior Finishes	Hill Country Middle-1979 Gymnasium	(C1020) Interior Doors: In good condition	20	2019	$78,403
C3010	Interior Finishes	Hill Country Middle-1979 Gymnasium	(C3010) Interior Wall Finishes: Refinish interior walls	5	2012	$58,802
C3030	Interior Finishes	Hill Country Middle-2004 Addition	(C3030) Ceiling Finishes: OK	15	2019	$197,154

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C1030	Built-in Equipment/Specialties	Hill Country Middle-2004 Addition	(C1030) OK	15	2019	$363,067
D4010	Fire Detection	Hill Country Middle-2004 Addition	(D4010) OK	10	2014	$99,694
C3010	Interior Finishes	Hill Country Middle-2004 Addition	(C3010) Interior Walls: Walls and corridors have stains	5	2009	$118,292
C3020	Interior Finishes	Hill Country Middle-2004 Addition	(C3020) Floor Finishes: OK	15	2019	$315,447
B2030	Building Exteriors	Hill Country Middle-Original Building	(B2030) Exterior Doors: In fair condition	30	2018	$54,348
C3030	Interior Finishes	Hill Country Middle-Original Building	(C3030) Ceiling Finishes: In good condition	15	2019	$660,449
C1030	Built-in Equipment/Specialties	Hill Country Middle-Original Building	(C1030) In good condition	15	2023	$1,216,239
D2020	Plumbing Rough-in	Hill Country Middle-Original Building	(D2020) In good condition	30	2018	$440,299
D2010	Plumbing Fixtures	Hill Country Middle-Original Building	(D2010) In good condition	30	2018	$275,679

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D4040	Plumbing Sprinklers	Hill Country Middle-Original Building	(D4040) Only in the cafeteria	25	2018	$165,407
D4010	Fire Detection	Hill Country Middle-Original Building	(D4010) In good condition	10	2013	$333,966
D5010	Electrical Equipment	Hill Country Middle-Original Building	(D5010) In good condition	30	2018	$1,632,810
D5020	Wiring	Hill Country Middle-Original Building	(D5020) In good condition	30	2018	$741,971
B2020	Building Exteriors	Hill Country Middle-Original Building	(B2020) Exterior Windows: Most windows are not air-tight	30	2015	$489,134
C3010	Interior Finishes	Hill Country Middle-Original Building	(C3010) Interior Walls: Corridors and classrooms have scuff marks and stains	5	2018	$396,269
C3020	Interior Finishes	Hill Country Middle-Original Building	(C3020) Floor Finishes: In good condition. Not to be completed until engineering study	15	2015	$1,056,719

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Hill Country Middle-Original Building	(S1000) Electrical equipment	0	2013	$450
S1000	Special Needs	Hill Country Middle-Original Building	(S1000) Safety glass	0	2013	$88
S1000	Special Needs	Hill Country Middle-Original Building	(S1000) Engineering study	0	2013	$5,000
S1000	Special Needs	Hill Country Middle-Original Building	(S1000) De-laminating Built-in	0	2013	$936

WEST RIDGE MIDDLE SCHOOL

Assessment Findings		
Size (SF)	**177,520**	
Date of construction	1986	
Type of Construction	One-story masonry building	
Roof	Standing Seam Metal	
Ceilings	Acoustical Tile	
Lighting	Lay in 4 Bulb Fluorescent Fixtures	
Additions/ Renovations	The “300” wing was added in 2003 and the HVAC building was constructed in 2012.	
HVAC	Chilled Water and Boiler System	

Condition Summary

The campus consists of three buildings. The Main Building has one addition. The 300 Wing (2003 addition) and the HVAC building are located at the rear of the campus. The campus has one elevator. Most major systems are in good condition. Most interior finishes need to be renewed. The roofing system was not assessed under this contract. The main building and HVAC building both had standing seam metal roofs.

EXTERIORS

Exterior doors show signs of excessive wear. Paint is chipped, pealing, and worn. Hardware is broken and not matching. Recommend renewing exterior doors. Exterior wall finishes for both buildings are brick veneer and are in good condition. Windows in the original portion of the main building are single paned and in good condition; potential energy savings present by upgrading to double paned at time of renewal. Windows in the 300 wing addition are double paned and in good condition.

INTERIORS

Ceiling finishes in the original building are expired and need to be replaced. Interior doors appear to be original. Doors are scuffed, chipped, and missing hardware parts. Doors need to be replaced. Interior finishes in classrooms and cafeteria need repainting. Corridors are tiled and in good condition. Floor finishes are VCT tiles. Tile is in good condition.

Ceilings, doors, and wall finishes in the 300 wing are in good condition. Flooring appears to have water intrusion form poor drainage adjacent to the 300 wing. Floors need to be replaced and drainage needs to be addressed.

MECHANICAL

The HVAC system underwent an extensive renovation in 2012. The system has new controls, air handlers, ducts, and thermostats. The system also has two boilers that were installed in 2012.

ELECTRICAL

Electrical equipment, wiring, and lighting are in good condition. Lighting is a four bulb fixtures and are in good condition. There is potential for energy savings.

PLUMBING

Restroom fixtures appear to be in good condition. Sinks in 300 wing science rooms have leaking faucets.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 28. West Ridge Middle School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Westridge Middle School	1986	27	178,570	90	Q1	62	Q3	55	Q4	$34,100,488

A summary of the physical condition assessment findings at West Ridge Middle School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

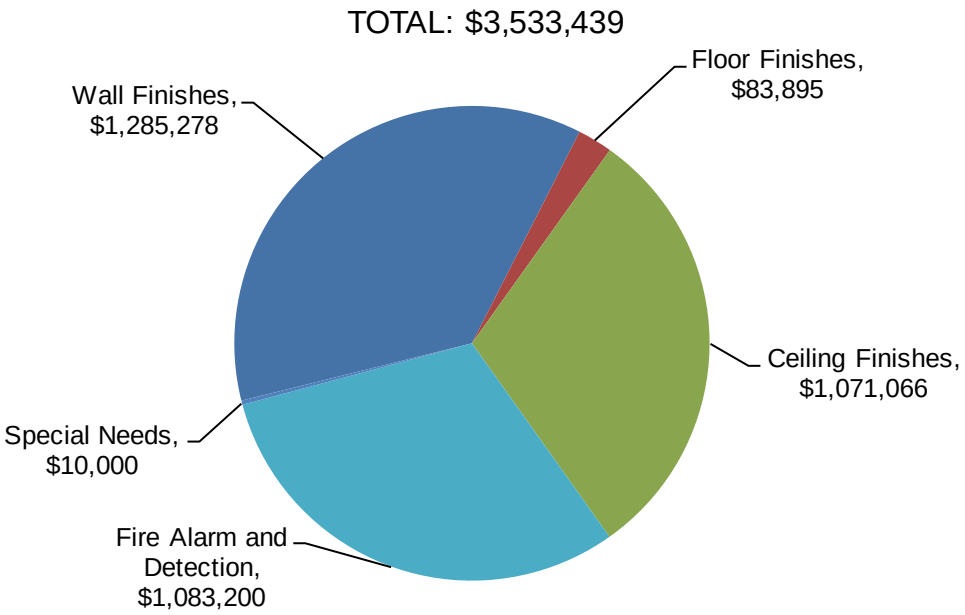

Figure 59. Current Needs (2013) – West Ridge Middle School

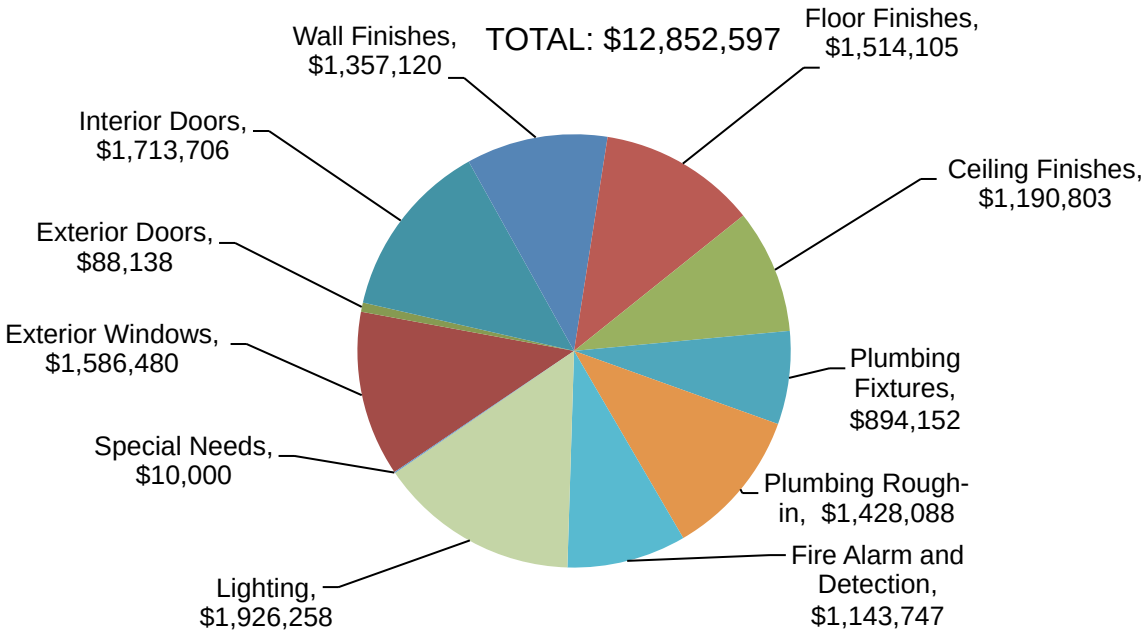

Figure 60. Cumulative projected Cost of Expired Systems (2018) – West Ridge Middle School

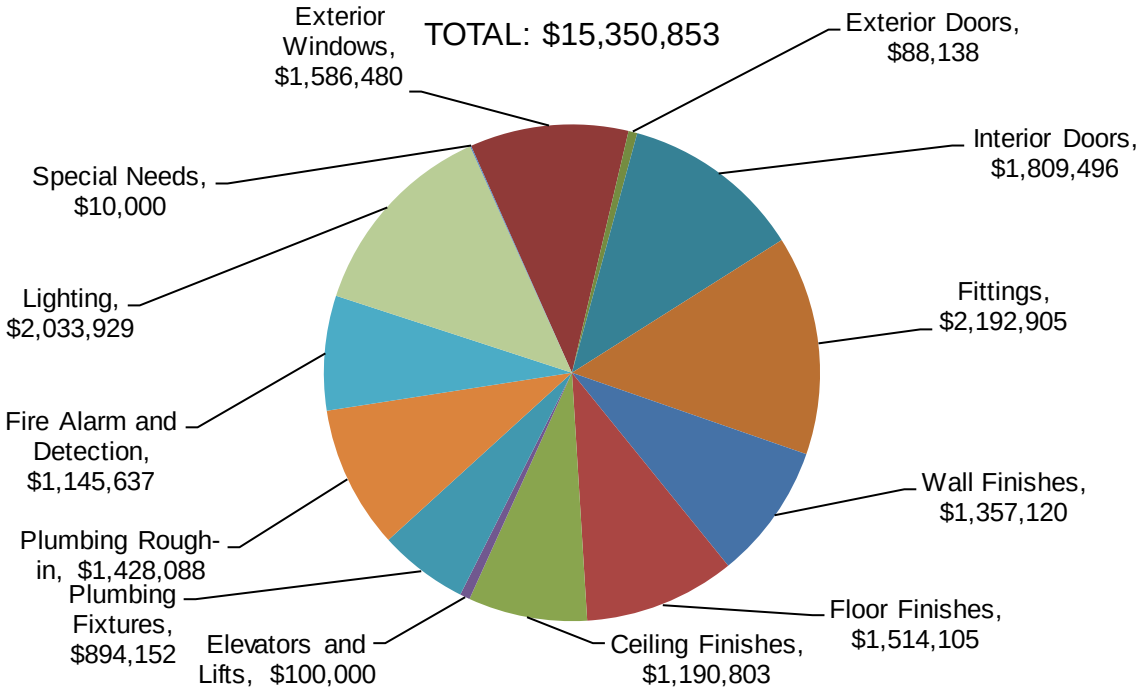

Figure 61. Cumulative projected Cost of Expired Systems (2023) – West Ridge Middle School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

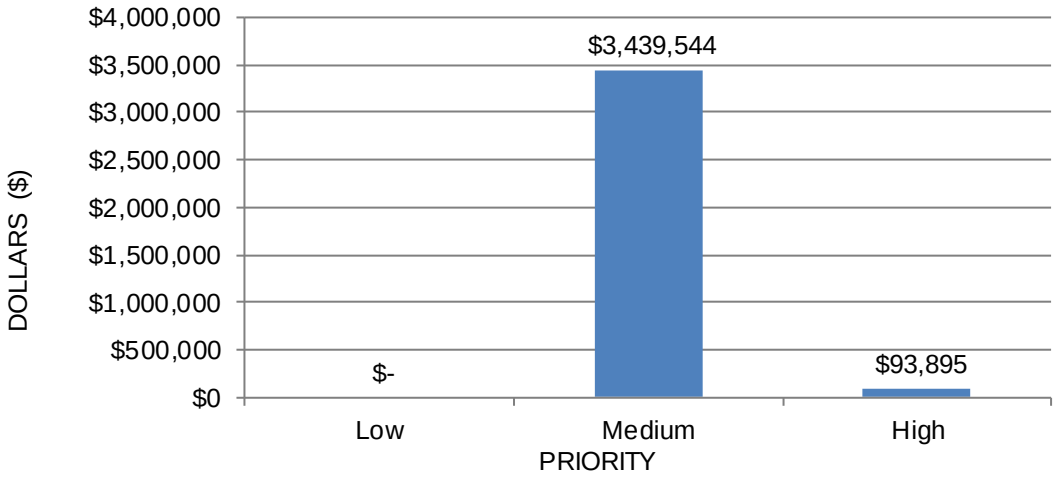

Figure 62. Current (2013) Needs By Priority – West Ridge Middle School

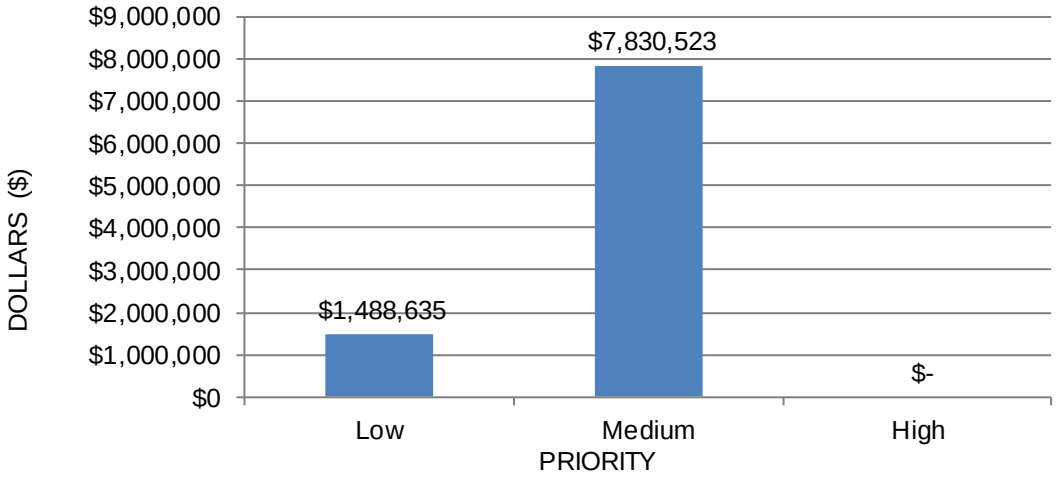

Figure 63. Extended (2018) Needs By Priority – West Ridge Middle School

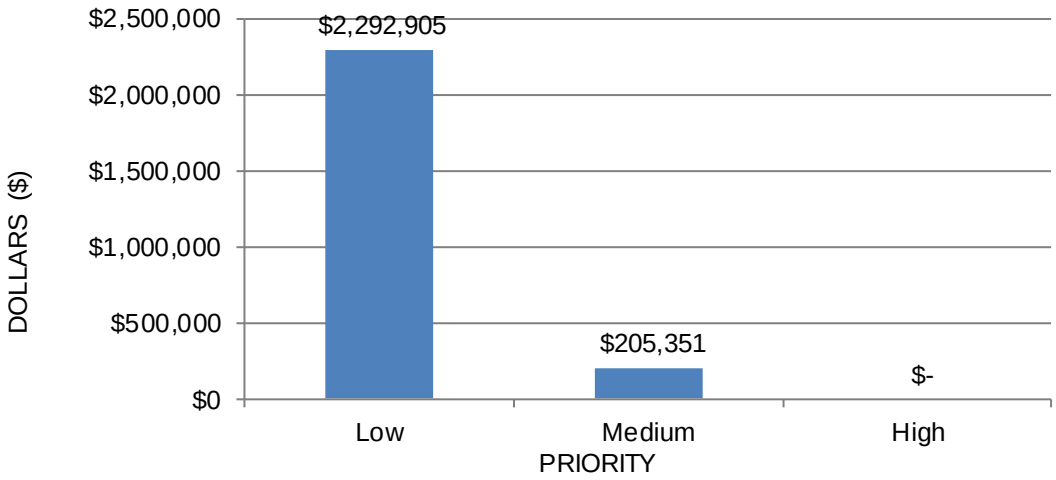

Figure 64. Extended (2023) Needs By Priority – West Ridge Middle School

Renewal Forecast

The renewal forecast for West Ridge Middle School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

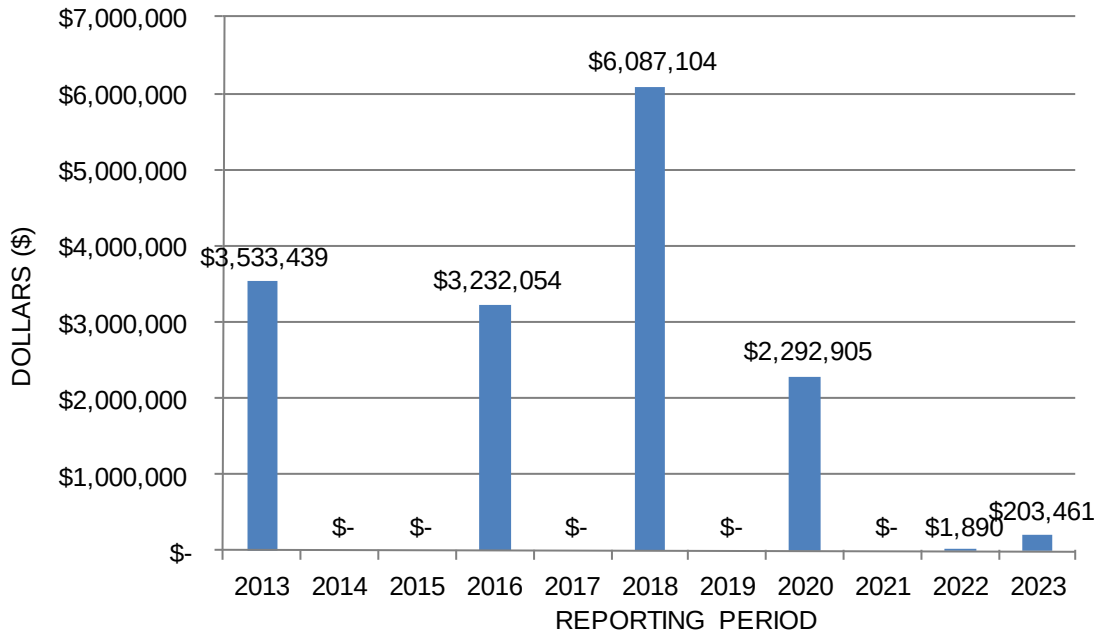

Figure 65. Renewal Forecast – West Ridge Middle School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 29. Forecasted Needs Table West Ridge Middle School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$3,523,439**	**$9,319,158**	**$2,498,256**
B20	**Building Exterior**	**$-**	**$1,674,618**	**$-**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$1,586,480	$-
B2030	Exterior Doors	$-	$88,138	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$1,713,706**	**$2,288,695**
C1020	Interior Doors	$-	$1,713,706	$95,790
C1030	Fittings	$-	$-	$2,192,905
C30	**Interior Finishes**	**$2,440,239**	**$1,621,789**	**$-**
C3010	Wall Finishes	$1,285,278	$71,842	$-
C3020	Floor Finishes	$83,895	$1,430,210	$-
C3030	Ceiling Finishes	$1,071,066	$119,737	$-
D10	**Conveying Systems**	**$-**	**$-**	**$100,000**
D1010	Elevators & Lifts	$-	$-	$100,000
D20	**Plumbing**	**$-**	**$2,322,240**	**$-**
D2010	Plumbing Fixtures	$-	$894,152	$-
D2020	Plumbing Rough-in	$-	$1,428,088	$-
D30	**HVAC**	**$-**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$1,083,200**	**$60,547**	**$1,890**
D4010	Fire Alarm & Detection	$1,083,200	$60,547	$1,890
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$1,926,258**	**$107,671**
D5010	Electrical Equipment	$-	$-	$-
D5020(01)	Wiring	$-	$-	$-
D5090(02)	Lighting	$-	$1,926,258	$107,671
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$10,000**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 30. West Ridge Middle School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$15,350,853
D4010	Fire Detection	West Ridge HVAC Building	(D4010) New, good condition	10	2022	$1,890
C3030	Interior Finishes	West Ridge Middle-2003 Addition	(C3030) Ceiling Finishes: In good condition. Program for replacement at a later date due to age.	15	2018	$119,737
C1030	Built-in Equipment/Specialties	West Ridge Middle-2003 Addition	(C1030) In good condition. Extend due to condition.	15	2020	$220,501
D4010	Fire Detection	West Ridge Middle-2003 Addition	(D4010) In good condition. Program for upgrades for code compliance.	10	2018	$60,547
D5090	Lighting	West Ridge Middle-2003 Addition	(D5090) 3-bulb fixtures in good condition.	20	2023	$107,671
C1020	Interior Finishes	West Ridge Middle-2003 Addition	(C1020) Interior Doors: In good condition	20	2023	$95,790

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	West Ridge Middle-2003 Addition	(C3010) Interior walls: In good condition. Program for replacement due to expected use.	5	2018	$71,842
C3020	Interior Finishes	West Ridge Middle-2003 Addition	(C3020) Floor Finishes: Organic matter buildup at along resilient tile seams; appears to be originating underneath tile. Recommend replace all flooring in 300 wing.	15	2012	$83,895
S1000	Special Needs	West Ridge Middle-2003 Addition	(S1000) Structural and Drainage Study	0	2013	$10,000
B2030	Building Exteriors	West Ridge Middle-Original building	(B2030) Exterior Doors: Hardware in bad condition and doors require refinishing.	30	2016	$88,138

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3030	Interior Finishes	West Ridge Middle-Original building	(C3030) Ceiling Finishes: Ceiling tiles sagging. Replace due to condition.	15	2001	$1,071,066
C1030	Built-in Equipment/Specialties	West Ridge Middle-Original building	(C1030) In good condition. Extend due to condition.	15	2020	$1,972,404
D1010	Elevators	West Ridge Middle-Original building	(D1010) In good condition. Extend due to condition.	20	2020	$100,000
D2020	Plumbing Rough-in	West Ridge Middle-Original building	(D2020) In good condition. System should be programed for replacement for PM reasons.	30	2018	$714,044
D2010	Plumbing Fixtures	West Ridge Middle-Original building	(D2010) In good condition. System should be programed for replacement for PM reasons.	30	2018	$447,076
D4010	Fire Detection	West Ridge Middle-Original building	(D4010) In good condition. System is dated and in need of code related upgrades.	10	1996	$541,600

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5090	Lighting	West Ridge Middle-Original building	(D5090) 4-bulb fixtures in good condition and are a potential for energy saving	20	2018	$963,129
B2020	Building Exteriors	West Ridge Middle-Original building	(B2020) Exterior Windows: Some single pane windows show sign of water intrusion. Program for replacement due to age and condition. Energy saving possibility.	30	2018	$793,240
C1020	Interior Finishes	West Ridge Middle-Original building	(C1020) Interior Doors: Door hardware in missing parts, scuffed, bad finishes, chipped doors	20	2016	$856,853

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	West Ridge Middle-Original building	(C3010) Interior Walls: Paint all interior walls in classrooms and cafeteria due to condition. Tiled corridors walls are in good condition.	5	2012	$642,639
C3020	Interior Finishes	West Ridge Middle-Original building	(C3020) Floor Finishes: Most floors appear to be in good condition. Program for replacement due to expected use.	15	2016	$715,105
D2020	Plumbing Rough-in	West Ridge Middle-Original building	(D2020) In good condition. System should be programed for replacement for PM reasons.	30	2018	$714,044
D2010	Plumbing Fixtures	West Ridge Middle-Original building	(D2010) In good condition. System should be programed for replacement for PM reasons.	30	2018	$447,076

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D4010	Fire Detection	West Ridge Middle-Original building	(D4010) In good condition. System is dated and in need of code related upgrades.	10	1996	$541,600
D5090	Lighting	West Ridge Middle-Original building	(D5090) 4-bulb fixtures in good condition and are a potential for energy saving	20	2018	$963,129
B2020	Building Exteriors	West Ridge Middle-Original building	(B2020) Exterior Windows: Some single pane windows show sign of water intrusion. Program for replacement due to age and condition. Energy saving possibility.	30	2018	$793,240
C1020	Interior Finishes	West Ridge Middle-Original building	(C1020) Interior Doors: Door hardware in missing parts, scuffed, bad finishes, chipped doors	20	2016	$856,853

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3010	Interior Finishes	West Ridge Middle-Original building	(C3010) Interior Walls: Paint all interior walls in classrooms and cafeteria due to condition. Tiled corridors walls are in good condition.	5	2012	$642,639
C3020	Interior Finishes	West Ridge Middle-Original building	(C3020) Floor Finishes: Most floors appear to be in good condition. Program for replacement due to expected use.	15	2016	$715,105

WESTLAKE HIGH SCHOOL

Assessment Findings		
Size (SF)	573,776	
Date of construction	1960*	
Type of Construction	Concrete frame work with Masonry walls	
Roof	Metal Standing Seam and Built up with ballast.	
Ceilings	Acoustical lay in tiles.	
Lighting	Predominately lay in florescent fixtures.	
Additions/ Renovations	1978 additional Classrooms and Gymnasium 1984 Additional Classrooms, Performing Arts and Gymnasium 2001 9th Grade Center. 2004 Administration offices, Field House, Band Hall and courtyard. 2008 Renovation of the PAC	
HVAC	The HVAC system is a combination of rooftop units and chilled water systems for cooling and a combination of gas heat section of rooftop units and gas-fire boilers.	

Condition Summary

Areas of concern campus wide are:

1. Foundation movement in and around the girl's locker room #414B. Wall cracks on the interior and exterior including sidewalk area.

2. Emergency exit and lighting fixtures. Although not all exit signs and emergency lighting fixtures were tested approximately 50% of the samples had some kind of deficiency. Improper egress direction, no sign installed, battery fault indicator, or non-operational.

3. Seals and gaskets on exterior doors are in need of refurbishment or installation.

2001 Addition Ninth Grade Center

Westlake High School NGC addition is in fair condition overall. Major building systems are within their life cycle and are still performing as designed.

Minor building systems have expired or will be expiring in the next 5 years and should be scheduled for replacement.

EXTERIORS

The windows are original and in good condition. Signs of caulking repairs were observed and are in good condition. Exterior doors are original and in fair condition. Refurbishment is recommended for gaskets and seals and should be schedule soon as energy efficiency is compromised. Exterior walls are brick veneer, which are original and in good condition. Pressure-wash all exterior building masonry surfaces to include courtyards. Caulking and general maintenance is recommended on all exterior components to assure useful life.

INTERIORS

Overall interior finishes are in fair condition.

Floor finishes are a combination of carpet tiles with rolled carpet in the NGC research center. Replacement of the carpeted area should be scheduled soon. The VCT flooring is performing well and useful life can be extended to 2018. Areas of immediate concern with flooring and built-in specialties have been listed as deficiencies in Planning Direct and prioritized.

The ceiling finishes consist of acoustical tiles and are in poor-fair condition. Approximately 20% of tiles have been replaced and remaining system will need to be scheduled for replacement in the near future. Wall and handrail finishes are recommended for immediate replacement at the next scheduling opportunity.

MECHANICAL

The mechanical systems in general are original; except for the three water heaters, and the HVAC controls have been updated. The addition has two elevators and an equipment lift in the Black Box Theater.

ELECTRICAL

The electrical system, including the lights, is original.

PLUMBING

Plumbing fixtures and piping are original. No leaks observed.

Original Building

Westlake High School main academic buildings are in good condition overall. Major building systems appear to have been renewed in 2004 and are performing as designed. Minor building systems were also renewed in the 2004-2010 remodeling projects. A majority of wall and floor finishes will be expiring in the next 5 years and should be scheduled for replacement, with the exception being the research center.

EXTERIORS

The windows and exterior doors were partially renewed, with a small majority being original and in good condition. Signs of caulking repairs were observed and are in good condition. Refurbishment is recommended for gaskets and seals for the original doors and they should be schedule for replacement.

Exterior walls are brick veneer, which are original and in good condition. Pressure-wash all exterior building masonry surfaces to include courtyards. Caulking and general maintenance is recommended on all exterior components to extend useful life.

INTERIORS

Overall interior finishes are in good condition.

Floor finishes are a combination of carpet tiles and VCT tiles. Carpeting was installed in the 2008 remodel and the VCT flooring part of the 2004 upgrade. VCT is preforming well and useful life can be extended to 2020. Isolated areas of repairs are needed; recommended 5% of the renewal cost for repairs. Classroom and frequently used interior doors have been renewed in 2004. Maintenance and utility storage doors are expired and should be scheduled for renewal. The ceiling finishes renewed in 2010 consist of acoustical tiles and are in good condition. Wall and handrail finishes are recommended for immediate replacement at the next scheduling opportunity.

MECHANICAL

The mechanical systems in general were renewed in the 2004 renovation and the HVAC controls were updated 2011. The addition has three elevators.

ELECTRICAL

The majority of the electrical system appeared to be renewed in 2004, including the lights.

PLUMBING

Plumbing fixtures were replaced in 2004: piping is original and is reportedly repaired or replaced when necessary. No leaks were observed.

2004 Additions

Westlake High school 2004 addition is in good condition overall. Major building systems are within their life cycle and are still performing as designed.

Minor building systems have expired or will be expiring in the next 5 years and should be scheduled for replacement.

EXTERIORS

The windows are original and in good condition. Exterior doors are original and in good condition. Refurbishment is recommended for gaskets and seals and should be schedule soon as energy efficiency is compromised. Exterior walls are Split-face brick, which is original and in good condition. Caulking and general maintenance is recommended on all exterior components to assure useful life. Areas of immediate concern with exterior doors and wall areas have been listed as deficiencies in Planning Direct and prioritized.

INTERIORS

Overall interior finishes are in fair condition.

Floor finishes are a combination of carpet tiles and rolled carpet. Replacement of the carpeted areas should be scheduled soon. The VCT flooring is preforming well and useful life can be extended to 2020. Areas of immediate concern with flooring and built-in specialties have been listed as deficiencies in Planning Direct and prioritized.

The ceiling finishes consist of acoustical tiles and are in good condition. Ceilings were reported to have been replaced in 2010; minor replacement is needed in areas of water damage from roof leaks and HVAC condensation. Recommend a budget of 10% of the renewal cost for replacement. Wall and handrail finishes are recommended for immediate replacement at the next scheduling opportunity.

MECHANICAL

The mechanical systems in general are original and the HVAC controls were updated in 2011. The addition has one elevator.

ELECTRICAL

The electrical system, including the lights, is original.

PLUMBING

Plumbing fixtures and piping are original. No leaks were observed.

Performing Arts Center and Field House

Westlake High School Performing Arts and Athletic addition (1984) main academic buildings are in good condition overall. Major building systems appear to have been renewed in 2004 - 2008 and are performing as designed. Minor building systems were also renewed in the 2004 - 2010 remodeling projects, with the exception of the exterior windows and doors. A majority of wall and floor finishes will be expiring in the next 8 years and should be scheduled for replacement.

EXTERIORS

The windows and exterior doors are original and in fair condition. Signs of caulking repairs were observed and are in good condition. Refurbishment is recommended for gaskets, seals and painting. Windows and exterior doors are at the end of their useful life cycle. Replacement should be scheduled. Exterior walls are brick veneer, which are original and in good condition. Pressure-wash all exterior building masonry surfaces to include courtyards. Caulking and general maintenance is recommended on all exterior components to assure useful life.

INTERIORS

Overall interior finishes are in fair condition.

Floor finishes are a combination of carpet tiles and VCT tiles. Carpeting was in need of replacement in the performing art classroom areas and should be scheduled soon. Carpeting in the theaters are in good condition. VCT is preforming well and useful life can be extended to 2020. Isolated areas of repairs are needed; recommend 5% of renewal cost for repairs.

Classroom and frequent use interior doors have been renewed in 2004. Maintenance and utility storage doors are expired and should be scheduled for renewal. Interior finishes in the band practice areas are in poor condition and should be replaced soon. The ceiling finishes consist of acoustical tiles and are in fair condition. Wall and handrail finishes are recommended for immediate replacement at the next scheduling opportunity.

MECHANICAL

The mechanical systems in general were replaced in 2008 and the HVAC controls were updated in 2011. The addition has one elevator.

ELECTRICAL

The electrical system, including the lights, was updated starting in 2004 through 2008. It is recommended that motion light switches be installed in the practice rooms and weight rooms.

PLUMBING

Plumbing fixtures were replaced 2008 and piping is original. No leaks were observed.

The Learning Center

Westlake High School Learning Center is in good condition overall. The building is a modular building reportedly erected in 2007. From reports the building was a pre-owned purchase and remodeled in 2012. Major building systems are within their life cycle and are still performing as designed. Due to the building construction type it is recommend that a life cycle of 25 years be placed on the building.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 31. Westlake High School Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Westlake High School	1969	44	573,776	95	Q1	89	Q2	72	Q3	$109,870,811

A summary of the physical condition assessment findings at Westlake High School is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

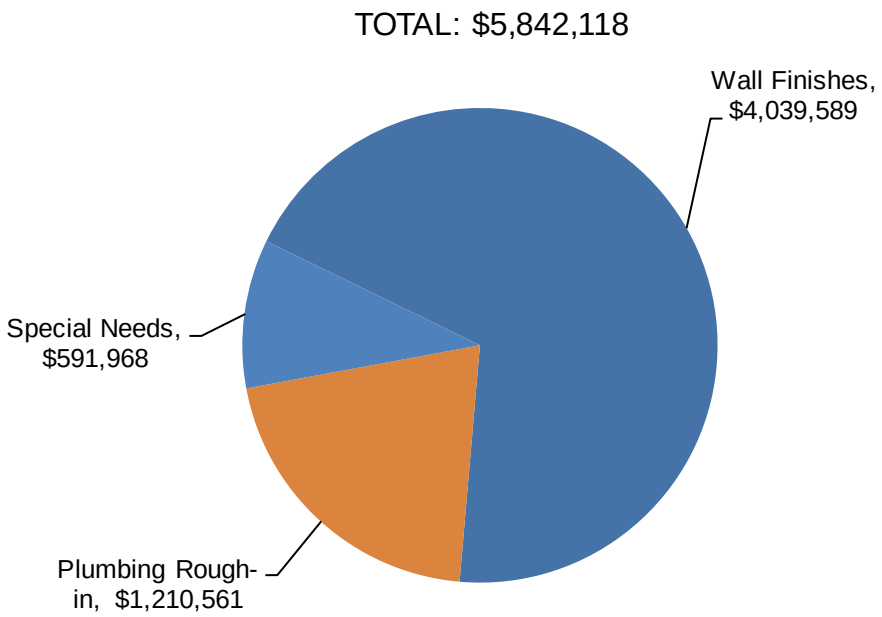

Figure 66. Current Needs (2013) – Westlake High School

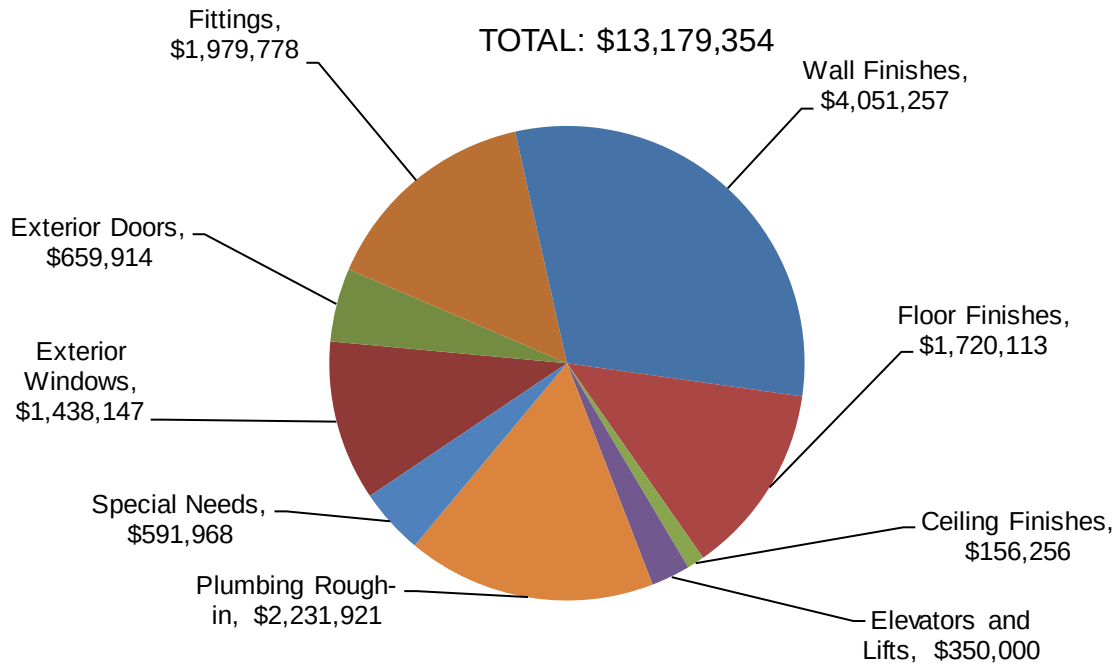

Figure 67. Cumulative projected Cost of Expired Systems (2018) – Westlake High School

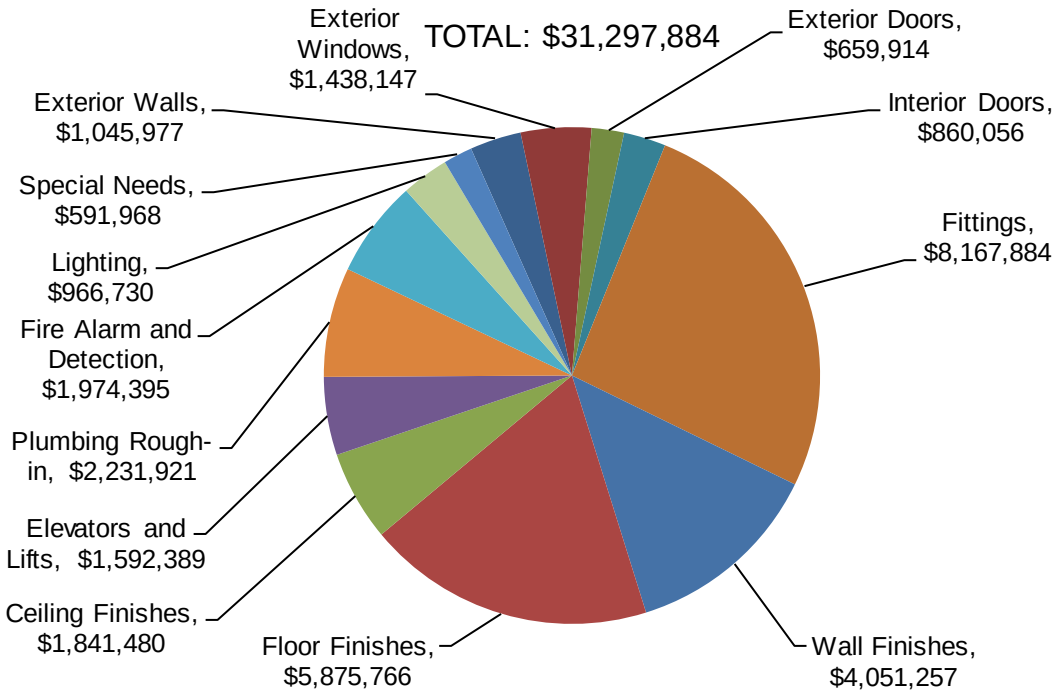

Figure 68. Cumulative projected Cost of Expired Systems (2023) – Westlake High School

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

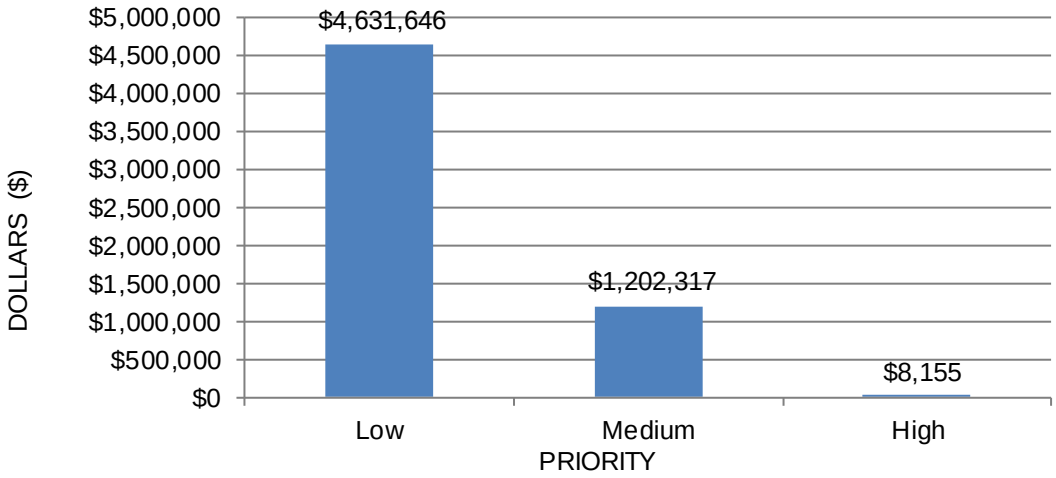

Figure 69. Current (2013) Needs By Priority – Westlake High School

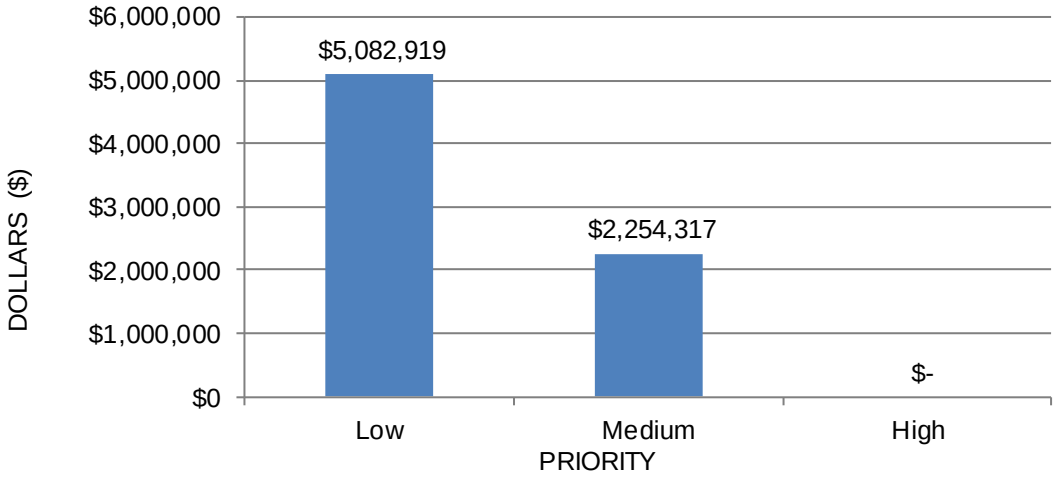

Figure 70. Extended (2018) Needs By Priority – Westlake High School

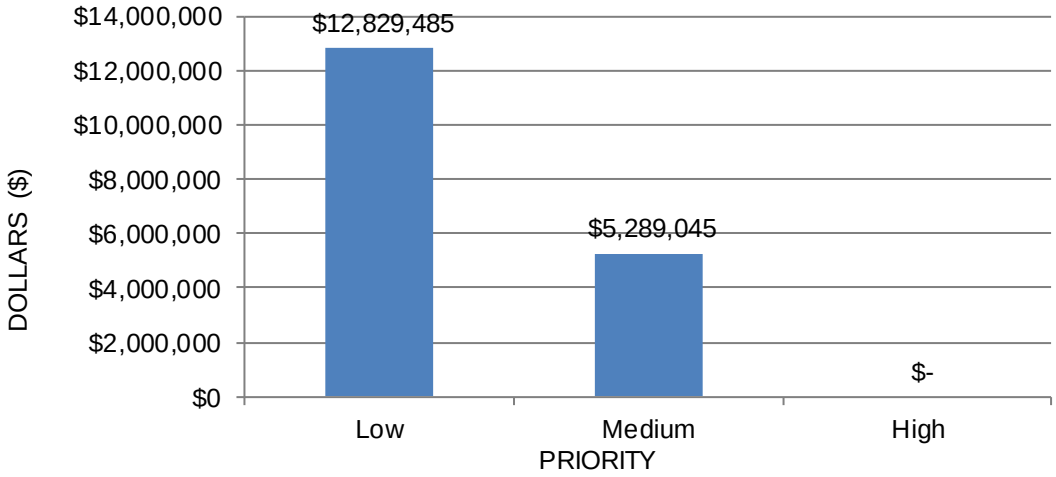

Figure 71. Extended (2023) Needs By Priority – Westlake High School

Renewal Forecast

The renewal forecast for Westlake High School shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

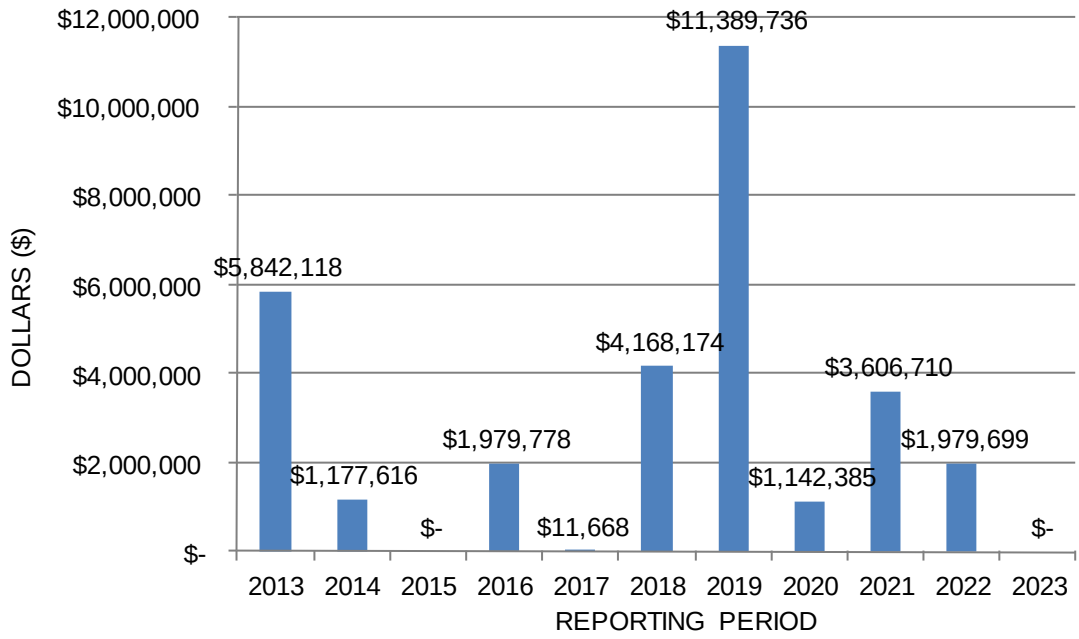

Figure 72. Renewal Forecast – Westlake High School

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 32. Forecasted Needs Table Westlake High School

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$5,250,150**	**$7,337,236**	**$18,118,530**
B20	**Building Exterior**	**$-**	**$2,098,061**	**$1,045,977**
B2010	Exterior Walls	$-	$-	$1,045,977
B2020	Exterior Windows	$-	$1,438,147	$-
B2030	Exterior Doors	$-	$659,914	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$1,979,778**	**$7,048,162**
C1020	Interior Doors	$-	$-	$860,056
C1030	Fittings	$-	$1,979,778	$6,188,106
C30	**Interior Finishes**	**$4,039,589**	**$1,888,037**	**$5,840,877**
C3010	Wall Finishes	$4,039,589	$11,668	$-
C3020	Floor Finishes	$-	$1,720,113	$4,155,653
C3030	Ceiling Finishes	$-	$156,256	$1,685,224
D10	**Conveying Systems**	**$-**	**$350,000**	**$1,242,389**
D1010	Elevators & Lifts	$-	$350,000	$1,242,389
D20	**Plumbing**	**$1,210,561**	**$1,021,360**	**$-**
D2010	Plumbing Fixtures	$-	$-	$-
D2020	Plumbing Rough-in	$1,210,561	$1,021,360	$-
D30	**HVAC**	**$-**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$-**	**$-**	**$1,974,395**
D4010	Fire Alarm & Detection	$-	$-	$1,974,395
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$-**	**$966,730**
D5010	Electrical Equipment	$-	$-	$-
D5020(01)	Wiring	$-	$-	$-
D5090(02)	Lighting	$-	$-	$966,730
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$591,968**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 33. Westlake High School Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$31,297,884
C3030	Interior Finishes	Westlake High-2004 Addition	(C3030) Ceiling Finishes: Ceiling tiles are showing signs of failing and will need to be replaced soon. Minor replacement of about 20% has been observed.	10	2014	$156,256
C1030	Built-in Equipment/Specialties	Westlake High-2004 Addition	(C1030) System is in good condition. Isolated areas are in need of repairs. L2's created.	15	2019	$575,501
D4010	Fire Detection	Westlake High-2004 Addition	(D4010) Main fire alarm panel was installed 2012, located in room PBX21	10	2022	$158,026
C3010	Interior Finishes	Westlake High-2004 Addition	(C3010) Interior Walls: Expired and in need of replacement	5	2009	$343,763
C3020	Interior Finishes	Westlake High-2004 Addition	(C3020) Floor Finishes: Carpets are in poor condition. VCT is in fair condition.	15	2019	$500,019
S1000	Special Needs	Westlake High-2004 Addition	(S1000) VCT replacement.	0	2013	$677

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Westlake High-2004 Addition	(S1000) Ceiling replacement	0	2013	$936
S1000	Special Needs	Westlake High-2004 Addition	(S1000) Engineering Study	0	2013	$5,000
S1000	Special Needs	Westlake High-2004 Addition	(S1000) Exterior Pressure Washing	0	2013	$45,737
S1000	Special Needs	Westlake High-2004 Addition	(S1000) Life Safety Study	0	2013	$406
C3030	Interior Finishes	Westlake High-9th Grade Center	(C3030) Ceiling Finishes: Ceiling tiles are showing signs of failing and will need to be replaced soon. Minor replacement of about 20% has been observed.	10	2021	$537,535
C1030	Built-in Equipment/Specialties	Westlake High-9th Grade Center	(C1030) System is in good condition. Isolated areas are in need of repairs. L2's created.	15	2016	$1,979,778
D1010	Elevators	Westlake High-9th Grade Center	(D1010) Original	20	2021	$1,242,389
D4010	Fire Detection	Westlake High-9th Grade Center	(D4010) Main fire alarm panel was installed 2012, located in room PBX 21	10	2022	$543,625

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5090	Lighting	Westlake High-9th Grade Center	(D5090) Original	20	2021	$966,730
C1020	Interior Finishes	Westlake High-9th Grade Center	(C1020) Interior Doors: Doors are in fair to good condition. Door frames should be repainted on replacement of wall finishes.	20	2021	$860,056
C3010	Interior Finishes	Westlake High-9th Grade Center	(C3010) Interior Walls: Expired and in need of replacement	5	2005	$1,182,578
C3020	Interior Finishes	Westlake High-9th Grade Center	(C3020) Floor Finishes: Carpets are in poor condition. VCT is in fair condition and can be extended to 2018.	15	2018	$1,720,113
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Repair insulation.	0	2013	$400
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Mirror replacement	0	2013	$374
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Light Fixture	0	2013	$185
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Counter top and laminate repairs.	0	2013	$1,260

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) HVAC Test and Balance study	0	2013	$1,560
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Window Repair	0	2013	$256
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Door seals and gaskets	0	2013	$1,170
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) HVAC Diffuser	0	2013	$242
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Joint sealants	0	2013	$171
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Fire Extinguishers	0	2013	$187
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Ceiling replacement	0	2013	$11,250
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Exterior Pressure Washing	0	2013	$157,341
S1000	Special Needs	Westlake High-9th Grade Center	(S1000) Life Safety Study	0	2013	$1,397

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2030	Building Exteriors	Westlake High-Original Building	(B2030) Exterior Doors: Good condition, majorities are original and should be replaced.	30	2018	$597,701
C3030	Interior Finishes	Westlake High-Original Building	(C3030) Ceiling Finishes: System recently renewed.	10	2020	$907,921
C1030	Built-in Equipment/Specialties	Westlake High-Original Building	(C1030) In good condition.	15	2019	$3,343,932
D1010	Elevators	Westlake High-Original Building	(D1010) Oldest elevator is 1978, one 1980 and one in 2004	20	2018	$350,000
D2020	Plumbing Rough-in	Westlake High-Original Building	(D2020) Original, repaired/replaced as needed.	30	1999	$1,210,561
D4010	Fire Detection	Westlake High-Original Building	(D4010) Main fire alarm panel was installed 2012, located in room PBX21	10	2022	$918,207
B2010	Building Exteriors	Westlake High-Original Building	(B2010) Exterior Wall Finishes: Good condition; needs pressure washing and recaulking around windows and doors, and expansion joints. System can be extended after pressure washing and recaulking.	50	2019	$1,045,977

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Westlake High-Original Building	(B2020) Exterior Windows: Good condition, majorities are original and should be replaced.	30	2018	$1,344,827
C3010	Interior Finishes	Westlake High-Original Building	(C3010) Interior Wall Finishes: Expired and in need of renewal, to include handrails.	5	2009	$1,997,426
C3020	Interior Finishes	Westlake High-Original Building	(C3020) Floor Finishes: Generally in good condition. Approximately 5% need repairs or replacement; need will be created.	15	2019	$2,905,347
S1000	Special Needs	Westlake High-Original Building	(S1000) Exterior Pressure Washing	0	2013	$265,756
S1000	Special Needs	Westlake High-Original Building	(S1000) Life Safety Study	0	2013	$2,359
B2030	Building Exteriors	Westlake High-PAC-Field House	(B2030) Exterior Doors: Good Condition. Seals, gaskets and painting need replacement and repairs. L2's created	30	2018	$62,213

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
C3030	Interior Finishes	Westlake High-PAC-Field House	(C3030) Ceiling Finishes: Good Condition	10	2020	$234,464
C1030	Built-in Equipment/Specialties	Westlake High-PAC-Field House	(C1030) System is in good condition. Isolated areas are in need of repairs. L2's created.	15	2019	$2,268,673
D2020	Plumbing Rough-in	Westlake High-PAC-Field House	(D2020) Original, repaired or replaced as needed.	30	2014	$1,021,360
D4010	Fire Detection	Westlake High-PAC-Field House	(D4010) Main fire alarm panel was installed 2012, located in room PBX21	10	2022	$342,603
B2020	Building Exteriors	Westlake High-PAC-Field House	(B2020) Exterior Windows: Good Condition. Seals, gaskets, painting need replacement and repairs. L2's created	30	2018	$93,320
C3010	Interior Finishes	Westlake High-PAC-Field House	(C3010) Interior Wall Finishes: Expired and in need of replacement	5	2012	$515,822
C3020	Interior Finishes	Westlake High-PAC-Field House	(C3020) Floor Finishes: Carpets are in poor condition. VCT is in fair condition.	15	2019	$750,287

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
S1000	Special Needs	Westlake High-PAC-Field House	(S1000) Exterior Pressure Washing	0	2013	$87,957
S1000	Special Needs	Westlake High-PAC-Field House	(S1000) Life Safety Study	0	2013	$781
C3030	Interior Finishes	Westlake High-TLC Building	(C3030) Ceilings: Good condition, renovated summer of 2012	10	2022	$5,304
D4010	Fire Detection	Westlake High-TLC Building	(D4010) Main fire alarm panel was installed 2012, located in room PBX 21, Original Building	10	2022	$11,934
C3010	Interior Finishes	Westlake High-TLC Building	(C3010) Interior Wall Finishes: Good condition, renovated summer of 2012	5	2017	$11,668
S1000	Special Needs	Westlake High-TLC Building	(S1000) Exterior Pressure Washing	0	2013	$6,509
S1000	Special Needs	Westlake High-TLC Building	(S1000) Life Safety Study	0	2013	$58

ADMINISTRATION BUILDING

Assessment Findings		
Size (SF)	28,690	
Date of construction	1989	
Type of Construction	Concrete	
Roof	Standing Seam Metal	
Ceilings	Acoustical Ceiling Tiles	
Lighting	Fluorescent Light Fixtures	
Additions/ Renovations	None	
HVAC	Split DX	

Condition Summary

The Central Administration Campus including the Administration Building was constructed in 1989. The Administration Building was in fair condition. Most systems appeared to be original, but in fair condition with no immediate need for renewal. Roofing was not assessed under this contract. The Administration Building had a standing seam metal roof.

EXTERIORS

The Administration Building was a concrete structure. The exterior finish is in good condition: however, there is some staining under an awning that needs to be power washed. Exterior stairwell rails and awning need to be repainted. Windows appear to be original, but in good condition. Windows are single paned, creating an energy saving opportunity when time to replace. Exterior doors appear to be original, but in good condition.

Parking is insufficient for facilities use. Facility could benefit from better signage and improved site lighting.

INTERIORS

The Administration Building had varying condition of ceiling finishes. The first floor ceiling tiles are in good condition. The second floor had sagging ceiling tiles. Recommend replacing these ceiling tiles. Interior doors throughout are in overall fair condition. Some doors were scuffed and had chipped surfaces. Recommend scheduling interior door for replacement. Interior wall

finishes throughout were in good condition. Floor finishes were a combination of VCT tile, carpet, and ceramic tile. Carpet was worn, stained, and had some tears. VCT tiles were worn and stained. Ceramic tiles in break room were in good condition. Recommend replacing VCT tile and carpet. Casework in the mailroom is in need of renewal. Shelves are separating and sagging.

MECHANICAL

Split systems provided heating and cooling with the condensers located adjacent to the building in a fenced area. Supply and return lines are directed underground to the building. Equipment make and model varies from the older original Carrier brand to replacement/addition Train and smaller Carrier systems. Five condensing units appear to be original and in need of replacement within the next year. A dedicated cooling system is recommended for LAN equipment. Heating reported as poor from building occupant interviews. Occupants use portable heaters in winter months, causing breakers to trip. Recommend replacement of HVAC equipment, controls, and distribution. The facility has one elevator dated to the original construction date.

ELECTRICAL

GFCI's missing or not labeled properly in Lounge, room 104. Lighting fixtures are in good condition but nearing the end of their expected useful life. Wiring and main feeds seem to be original and in serviceable condition.

PLUMBING

The plumbing fixtures are in good condition and it was estimated that they were replaced within the last 10 years. The water supply and sewer systems are original and there were sewer odors reported at the time of the visit. This may be due to trap primers not functioning properly.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 34. Administration Building Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Administration Building	1989	24	28,690	75	Q3	50	Q4	44	Q4	$4,590,400

A summary of the physical condition assessment findings at Administration Building is shown below. The following figures depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

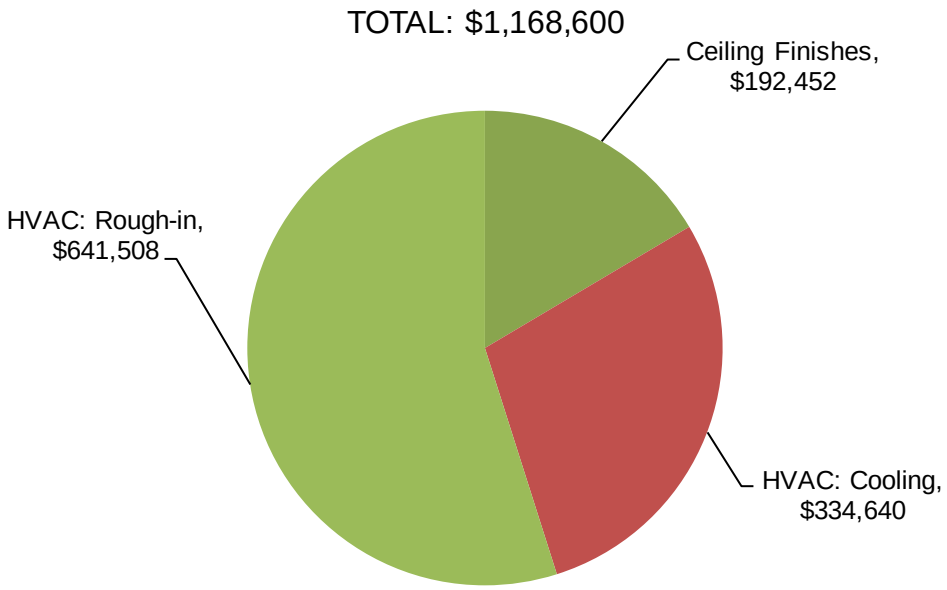

Figure 73. Current Needs (2013)

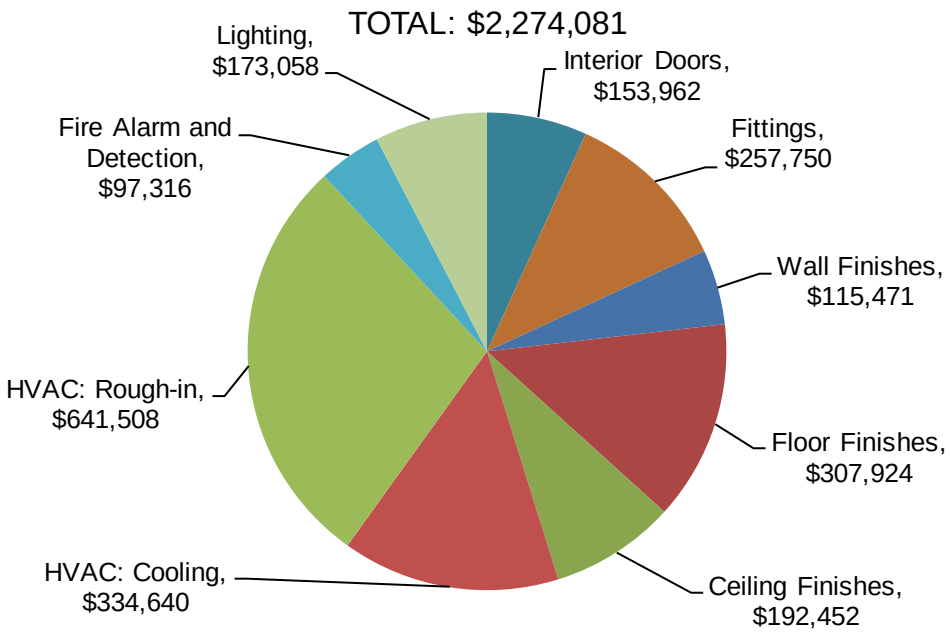

Figure 74. Cumulative Projected Cost of Expired Systems (2018)

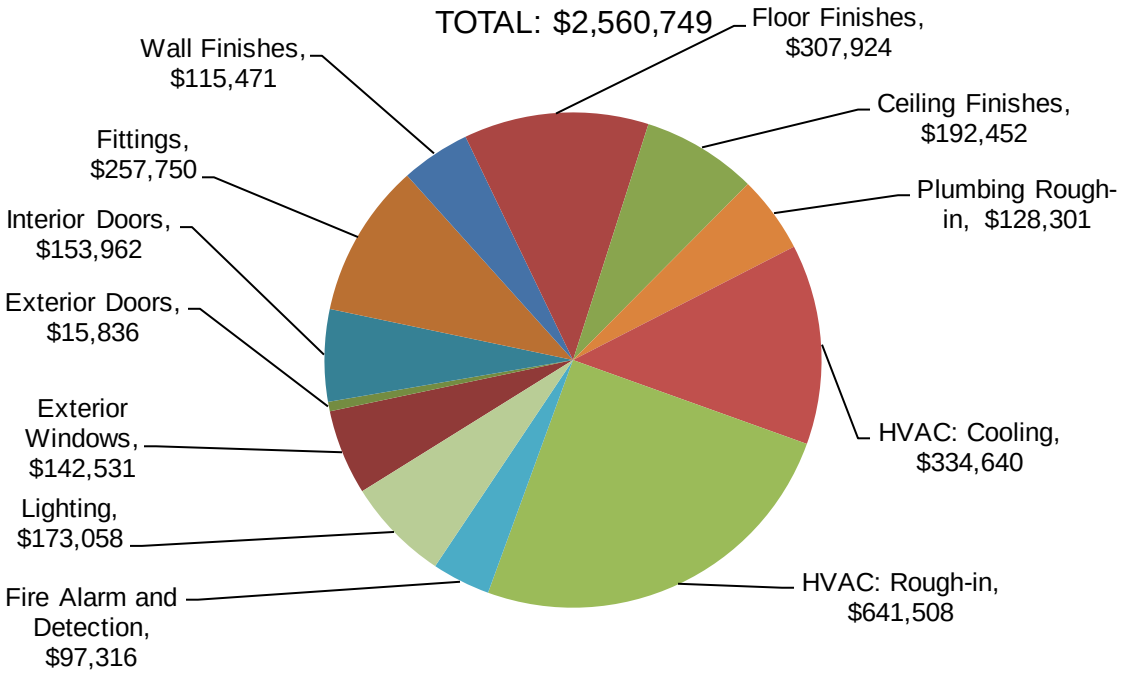

Figure 75. Cumulative Projected Cost of Expired Systems (2023)

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The following figures show the District's needs grouped by priority on a current (2013), +5 year (2018) and 10-year forecast (2023).

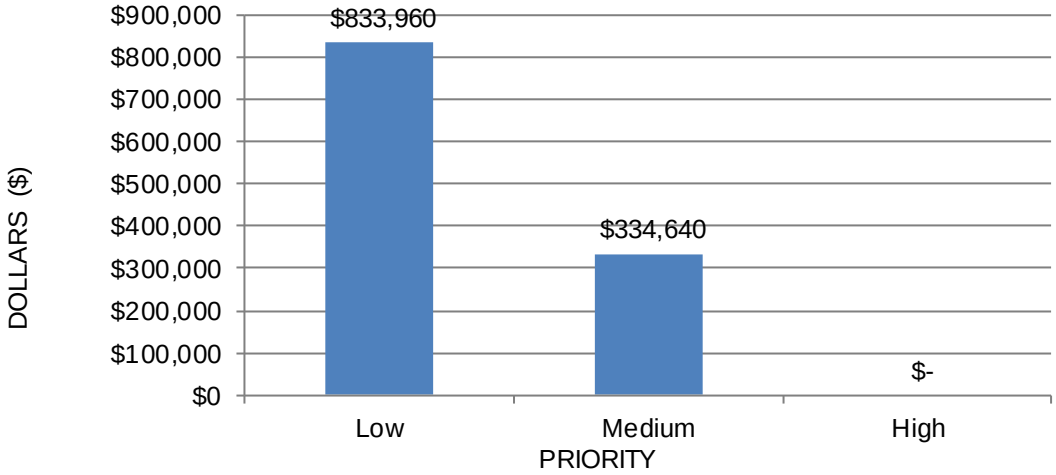

Figure 76. Current (2013) Needs By Priority

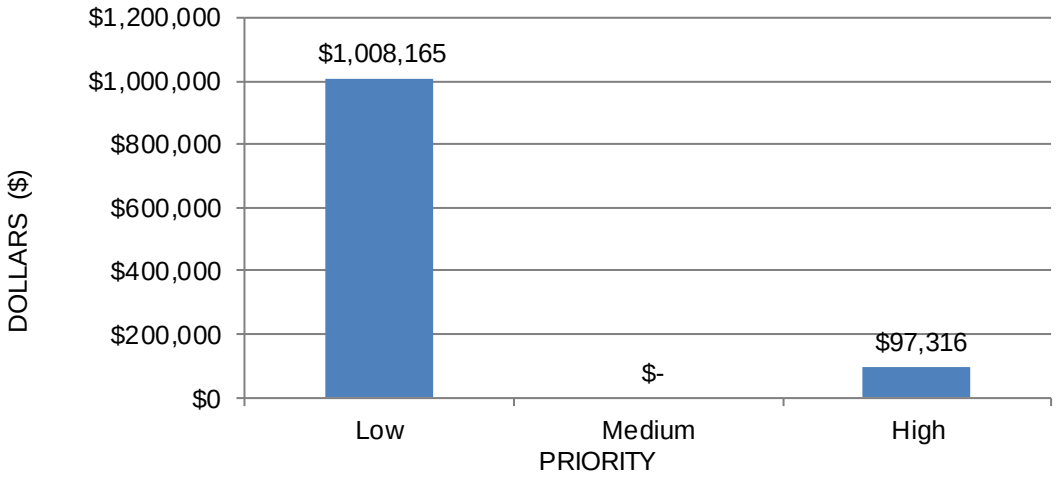

Figure 77. Extended (2018) Needs By Priority

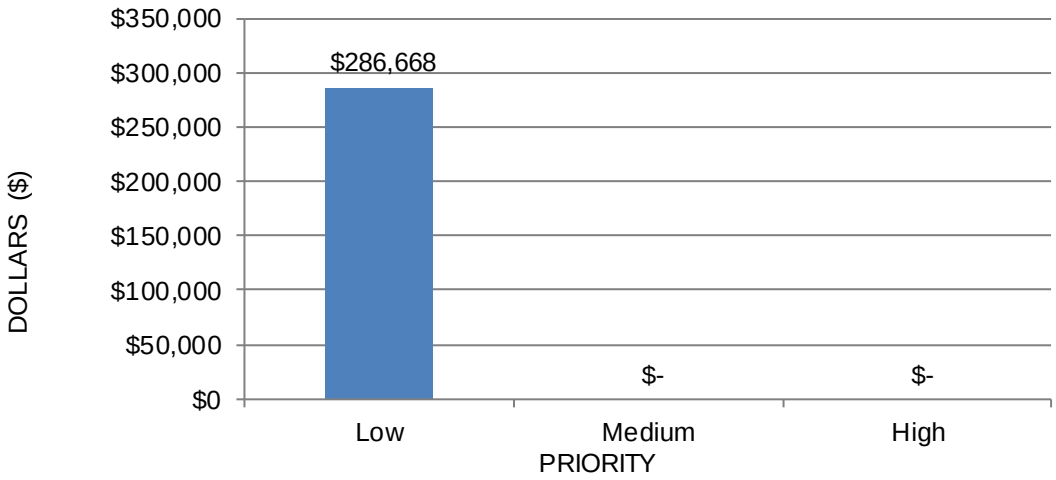

Figure 78. Extended 10-year forecast (2023) Needs By Priority

Renewal Forecast

The renewal forecast for the Administration Building shown in Figure 3, describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

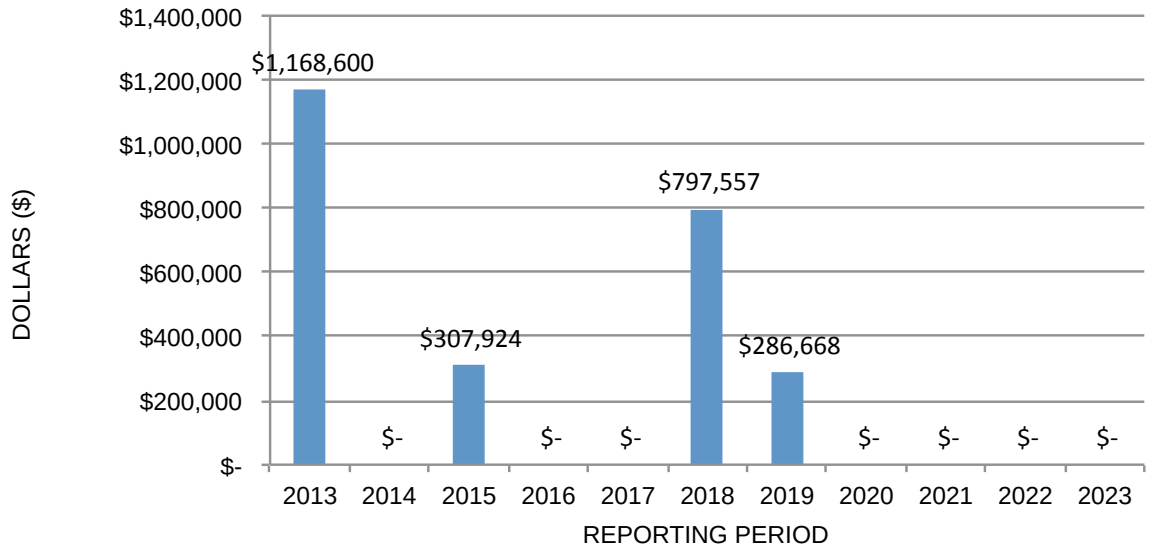

Figure 79. Renewal Forecast

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 35. Forecasted Needs Table

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$1,168,600**	**$1,105,481**	**$286,668**
B20	**Building Exterior**	**$-**	**$-**	**$158,367**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$-	$142,531
B2030	Exterior Doors	$-	$-	$15,836
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$-**	**$411,712**	**$-**
C1020	Interior Doors	$-	$153,962	$-
C1030(04)	Exit Signage	$-	$257,750	$-
C30	**Interior Finishes**	**$192,452**	**$423,395**	**$-**
C3010	Wall Finishes	$-	$115,471	$-
C3020	Floor Finishes	$-	$307,924	$-
C3030	Ceiling Finishes	$192,452	$-	$-
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$-**	**$-**	**$128,301**
D2010	Plumbing Fixtures	$-	$-	$-
D2020	Plumbing Rough-in	$-	$-	$128,301
D30	**HVAC**	**$976,148**	**$-**	**$-**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$334,640	$-	$-
D3040	Distribution System	$641,508	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$-**	**$97,316**	**$-**
D4010	Fire Alarm & Detection	$-	$97,316	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$173,058**	**$-**
D5010	Electrical Equipment	$-	$-	$-
D5020(01)	Wiring	$-	$-	$-
D5090(02)	Lighting	$-	$173,058	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$-**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 36. Administration Building Expired Systems – 10 year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$2,560,749
B2030	Building Exteriors	Administration-Main Building	(B2030) Exterior Doors: In good condition	30	2019	$15,836
C3030	Interior Finishes	Administration-Main Building	(C3030) Ceiling Finishes: 1st floor suspended ceilings in good condition. 2nd floor ceilings are sagging	15	2004	$192,452
C1030	Built-in Equipment/Specialties	Administration-Main Building	(C1030) Casework showing signs of wear and shelves sagging in mail room.	15	2018	$257,750
D2020	Plumbing Rough-in	Administration-Main Building	(D2020) In good condition. Sewer gas reported in restrooms and where floor drains are located.	30	2019	$128,301

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D3030	HVAC Equipment	Administration-Main Building	(D3030) 5 Condensing units appear to be original (CU 4, 5, 9, & 8). No dedicated cooling for LAN equipment room. Heating reported as poor. Portable heaters that are used during the winter months cause the breakers to trip.	25	2012	$334,640
D3040	HVAC Rough-in	Administration-Main Building	(D3040) Showing signs of age and wear. Heating is a problem during winter weather.	30	2012	$641,508
D4010	Fire Detection	Administration-Main Building	(D4010) In good condition	10	2018	$97,316
D5090	Lighting	Administration-Main Building	(D5090) In good condition	20	2018	$173,058

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Administration-Main Building	(B2020) Exterior Windows: Single pane windows in good condition, potential for energy savings	30	2019	$142,531
C1020	Interior Finishes	Administration-Main Building	(C1020) Interior Doors: 1st floor doors scuffed and chipped	20	2018	$153,962
C3010	Interior Finishes	Administration-Main Building	(C3010) Interior Walls: In good condition	5	2018	$115,471
C3020	Interior Finishes	Administration-Main Building	(C3020) Floor Finishes: Ist floor in good condition. 2nd floor RT is stained, carpets worn and stained.	15	2015	$307,924

ROCKHOUSE

Assessment Findings		
Size (SF)	2400	
Date of construction	1960	
Type of Construction	Residential structure with masonry exterior veneer.	
Roof	Composition Shingles	
Ceilings	Gypsum panels with textured finish	
Lighting	Florescent, 2 and 4 bulb fixtures	
Additions/ Renovations	None	
HVAC	Two Split DX Systems	

Condition Summary

The Rockhouse was constructed as a 1960 era residential home and adapted for use as administrative space. Most finishes are original and in need of renewal. Some major building systems have been renewed and are performing as designed.

EXTERIORS

The Rockhouse exterior is a combination of stone and wood siding and appears to be in good condition. Single paned windows appear to be original and in need of replacement. Exterior doors are in good condition; however, occupants expressed the need for more secure locks on doors above the current deadbolts. The sliding glass doors are in need of replacement. Parking is insufficient for facilities use; staff and visitors use the same parking lot. Facility could benefit from better signage and improved site lighting.

INTERIORS

All of the interior finishes in the Rockhouse are residential grade. The facility is not ADA compliant. The ceilings have a popcorn finish. Due to construction date and original materials, an asbestos study is recommended for the entire facility.

Casework appears to be original. The facility has a full residential grade kitchen with inoperable appliances. Interior doors are in poor condition and should be replaced. Carpets are worn throughout the facility and replacement is recommended. The Rockhouse has a poor building envelope. Occupants report a rodent problem.

A complete interior renovation is recommended. The renovation should improve functional adequacy, security issues, space utilization, and improve sanitary facilities.

MECHANICAL

The facility utilizes two heat pumps for heating and cooling. The facility has two condensers; one installed in 2007 and the other in 2000. The facility has inadequate conditioned air distribution. Above-mentioned renovations should address replacing ductwork, controls, and heating systems.

ELECTRICAL

The electrical system appears to be original but upgrades have been made. There are insufficient convenience outlets and lighting. Interior lighting fixtures have been added throughout the facility, however fixtures do not match.

PLUMBING

The Rockhouse has original residential style restroom facilities. Plumbing appears to be original while fixtures have been updated. Users report frequent plumbing problems.

A full bathroom renovation is recommended to replace fixtures, remove residential shower/tub, and improve space utilization.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 37. Rockhouse Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Rockhouse	1960	53	2,400	37	Q1	34	Q4	26	Q4	$288,000

A summary of the physical condition assessment findings at Rockhouse is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

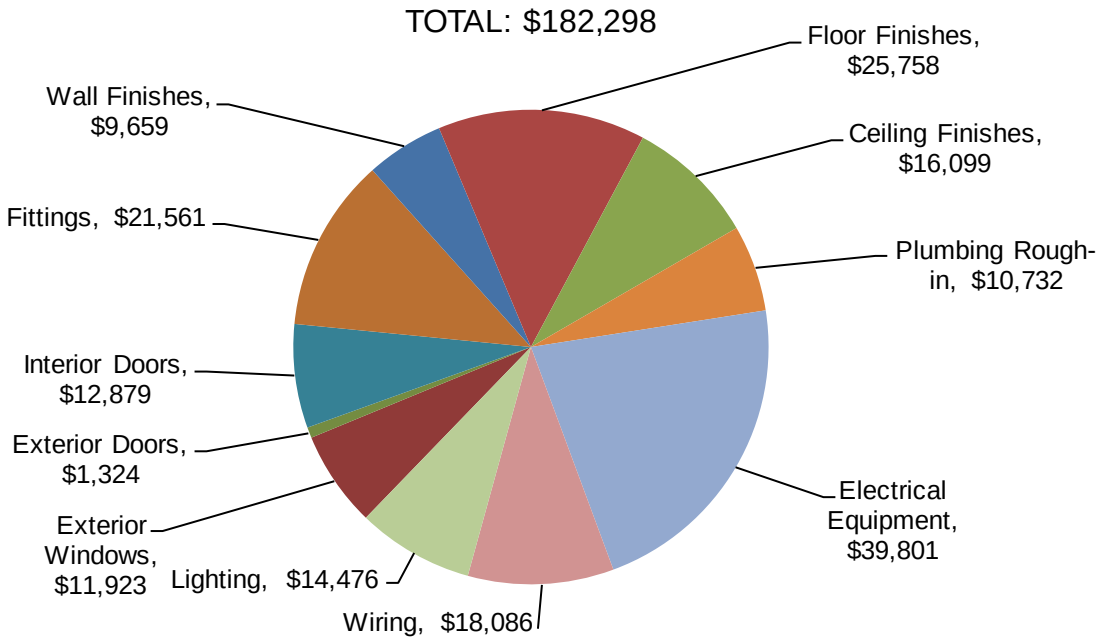

Figure 80. Current Needs (2013) – Rockhouse

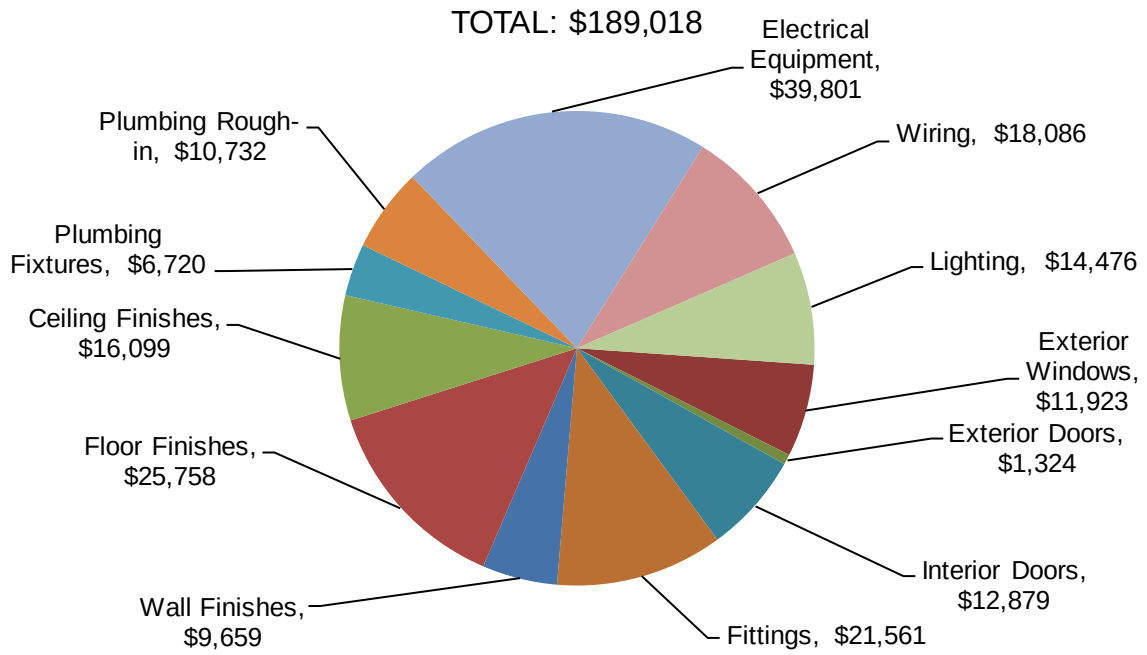

Figure 81. Cumulative projected Cost of Expired Systems (2018) – Rockhouse

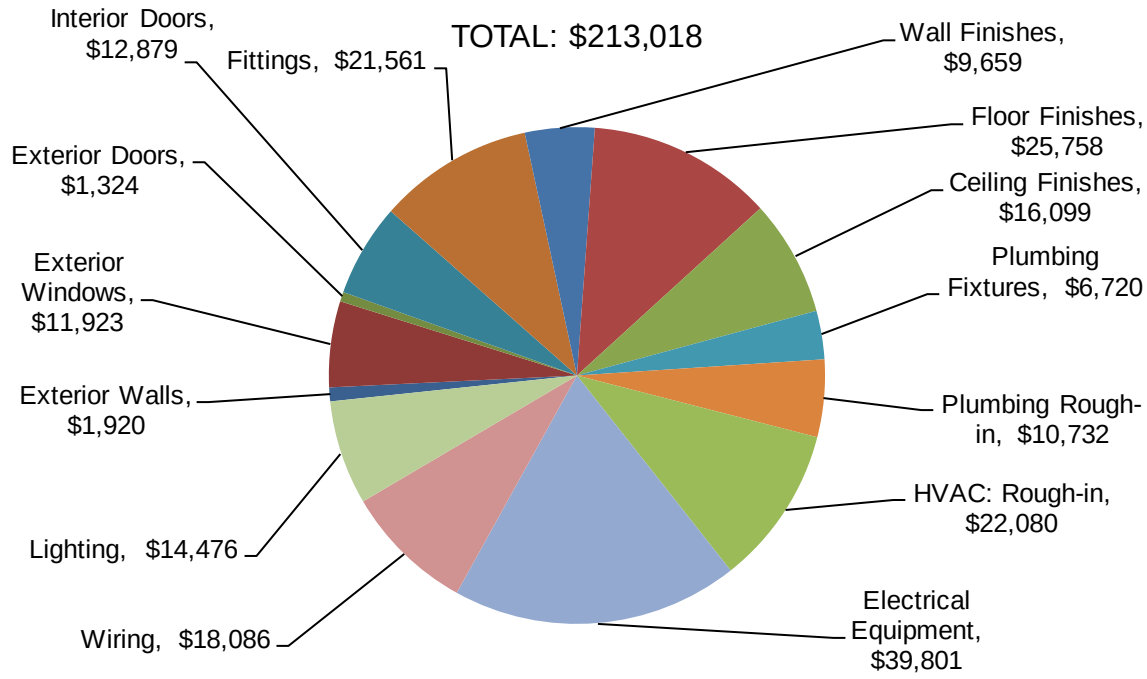

Figure 82. Cumulative projected Cost of Expired Systems (2023) – Rockhouse

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

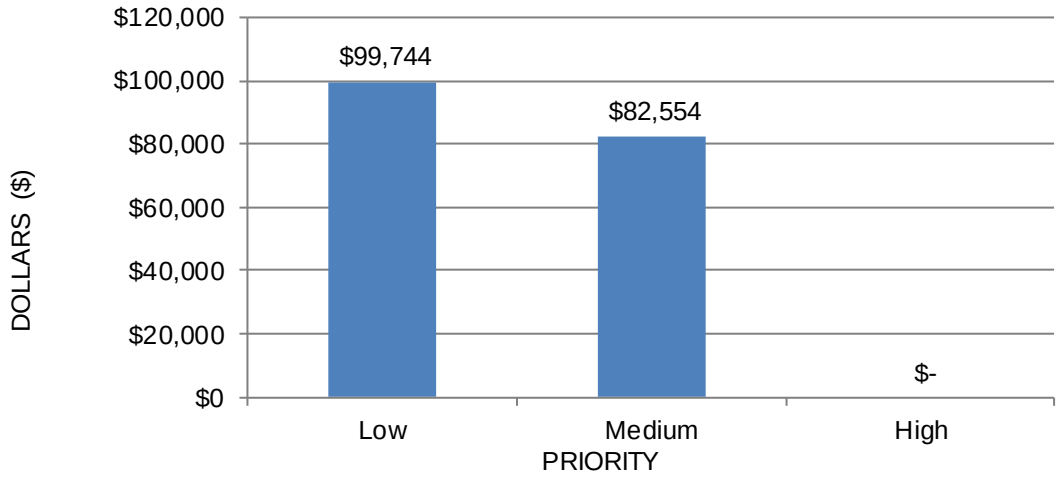

Figure 83. Current (2013) Needs By Priority – Rockhouse

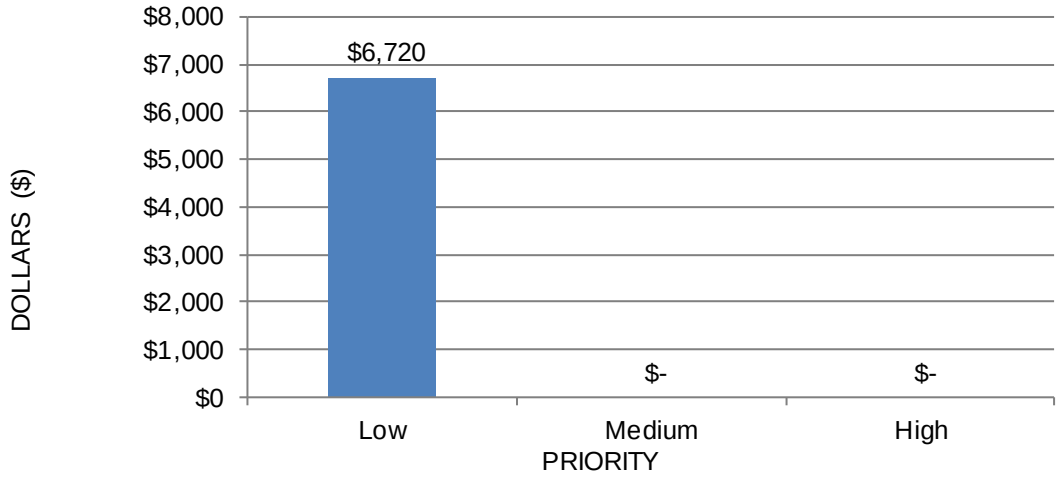

Figure 84. Extended (2018) Needs By Priority – Rockhouse

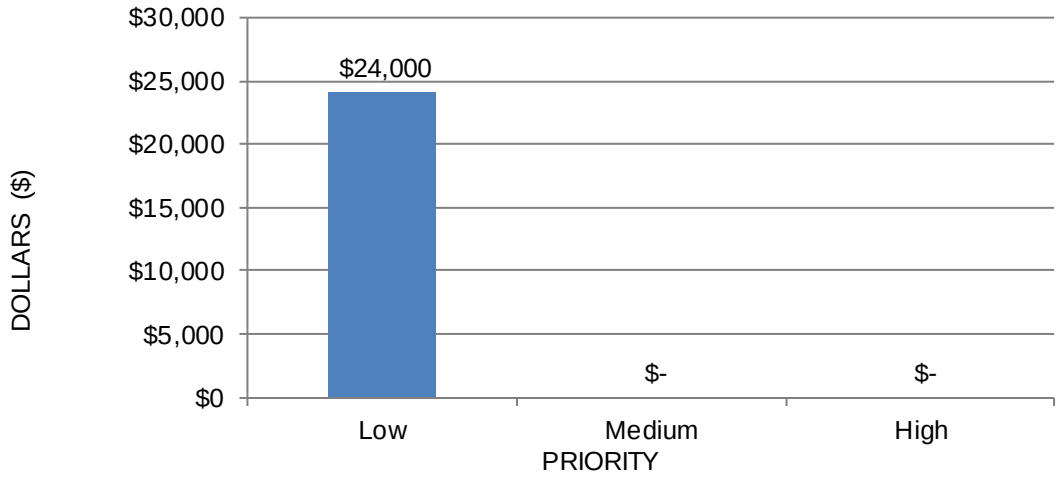

Figure 85. Extended (2023) Needs By Priority – Rockhouse

Renewal Forecast

The renewal forecast for Rockhouse shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

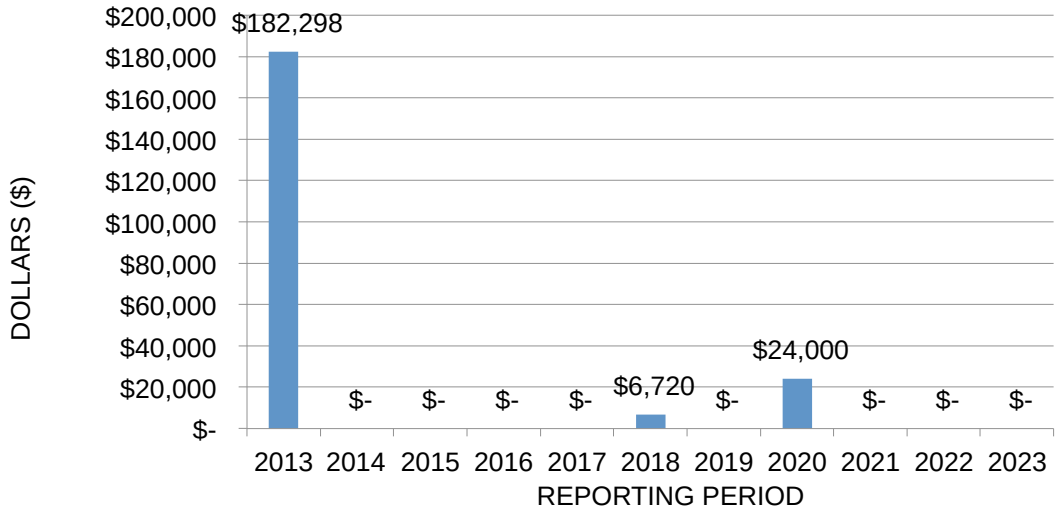

Figure 86. Renewal Forecast – Rockhouse

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 38. Forecasted Needs Table Rockhouse

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$182,298**	**$6,720**	**$24,000**
B20	**Building Exterior**	**$13,247**	**$-**	**$1,920**
B2010	Exterior Walls	$-	$-	$1,920
B2020	Exterior Windows	$11,923	$-	$-
B2030	Exterior Doors	$1,324	$-	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$34,440**	**$-**	**$-**
C1020	Interior Doors	$12,879	$-	$-
C1030	Fittings	$21,561	$-	$-
C30	**Interior Finishes**	**$51,516**	**$-**	**$-**
C3010	Wall Finishes	$9,659	$-	$-
C3020	Floor Finishes	$25,758	$-	$-
C3030	Ceiling Finishes	$16,099	$-	$-
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$10,732**	**$6,720**	**$-**
D2010	Plumbing Fixtures	$-	$6,720	$-
D2020	Plumbing Rough-in	$10,732	$-	$-
D30	**HVAC**	**$-**	**$-**	**$22,080**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$-
D3040	Distribution System	$-	$-	$22,080
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$-**	**$-**	**$-**
D4010	Fire Alarm & Detection	$-	$-	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$72,363**	**$-**	**$-**
D5010	Electrical Equipment	$39,801	$-	$-
D5020(01)	Wiring	$18,086	$-	$-
D5090(02)	Lighting	$14,476	$-	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$-**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 39. Rockhouse Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$213,018
B2030	Building Exteriors	Administration-Rockhouse	(B2030) Exterior Doors: Non-commercial grade doors. Single pane glass sliding door at rear appears not to be weather tight.	30	2012	$1,324.00
C3030	Interior Finishes	Administration-Rockhouse	(C3030) Ceiling Finishes: Popcorn ceiling; recommend asbestos study	15	1975	$16,099.00
C1030	Built-in Equipment/Specialties	Administration-Rockhouse	(C1030) Residential style casework appears to be original and not suited for office use. Insufficient storage space.	15	1975	$21,561.00

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D2020	Plumbing Rough-in	Administration-Rockhouse	(D2020) Appears to be original; user report frequent problems.	30	1990	$10,732.00
D2010	Plumbing Fixtures	Administration-Rockhouse	(D2010) Residential style fixtures	30	2018	$6,720.00
D3040	HVAC Rough-in	Administration-Rockhouse	(D3040) Inadequate distribution, users report constant heating and cooling problem	15	2020	$22,080.00
D5010	Electrical Equipment	Administration-Rockhouse	(D5010) Appears to have been upgraded	30	1990	$39,801.00
D5020	Wiring	Administration-Rockhouse	(D5020) Insufficient convenience outlets	30	1990	$18,086.00
D5090	Lighting	Administration-Rockhouse	(D5090) Appears to have inadequate lighting	20	2005	$14,476.00
B2010	Building Exteriors	Administration-Rockhouse	(B2010) Exterior Walls: Rock veneer, in good condition. Extended due to condition.	50	2020	$1,920.00

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
B2020	Building Exteriors	Administration-Rockhouse	(B2020) Exterior Windows: Single pane windows not weather tight; potential for energy savings	30	1990	$11,923.00
C1020	Interior Finishes	Administration-Rockhouse	(C1020) Interior Doors: Residential standard doors in bad condition.	20	1980	$12,879.00
C3010	Interior Finishes	Administration-Rockhouse	(C3010) Interior Walls: Residential style walls; recommend asbestos study	5	1965	$9,659.00

DISTRICT WAREHOUSE

Assessment Findings		
Size (SF)	6350	
Date of construction	1982	
Type of Construction	Prefabricated Metal Building	
Roof	R Panels	
Ceilings	Acoustical Metal Grid	
Lighting	HID fixed fixtures	
Additions/ Renovations	None	
HVAC	Pad Mounted RTU	

Condition Summary

The Eanes District Warehouse is in fair condition. The use of the building is limited to storage and surplus sales; therefore the exterior cosmetic deficiencies were not given the same weight as a public facility. The building will need renewal of building systems in order to continue its intended use.

The roofing system was not assessed under this contract, but signs of leaks were observed.

EXTERIORS

Exterior doors show signs of corrosion. They also appear not to be airtight. It is recommend to schedule replacement of exterior rollup doors in the next 5 years. Exterior wall finish's are original and will reach the end of their expected lifecycle soon.

INTERIORS

Overall, the interior finishes are in poor condition. Floor and wall finishes are limited to the office areas and are in poor condition. Replacement is recommended.

MECHANICAL

HVAC unit was replaced approximately in 1995 but the ductwork outside is rusting and needs to be replaced. There are water stains on the ceiling insulated panels around HVAC vents, is recommended to add or replace duct insulation.

ELECTRICAL

The pad-mounted transformer near the HVAC unit at the back of the building presents rusting and is in poor condition due to exposure to the elements.

PLUMBING

Plumbing fixtures appear to be in fair condition. Most are stainless steel. No leaks were reported or observed.

Cost Summary

The following table contains information regarding current and forecasted FCI and Q-ratings.

Table 40. District Warehouse Summary of Assessment Findings.

Name	Year Built	Age	Area	2013		2018		2023		CRV
				FCI %	Q-Rating	FCI %	Q-Rating	FCI %	Q-Rating	
Warehouse	1970	43	6,350	78	Q3	46	Q4	40	Q4	$762,000

A summary of the physical condition assessment findings at District Warehouse is shown below. The figures below depict the distribution of systems currently beyond useful service life and systems that are expected to be beyond useful service life by the year 2018 and 2023, respectively.

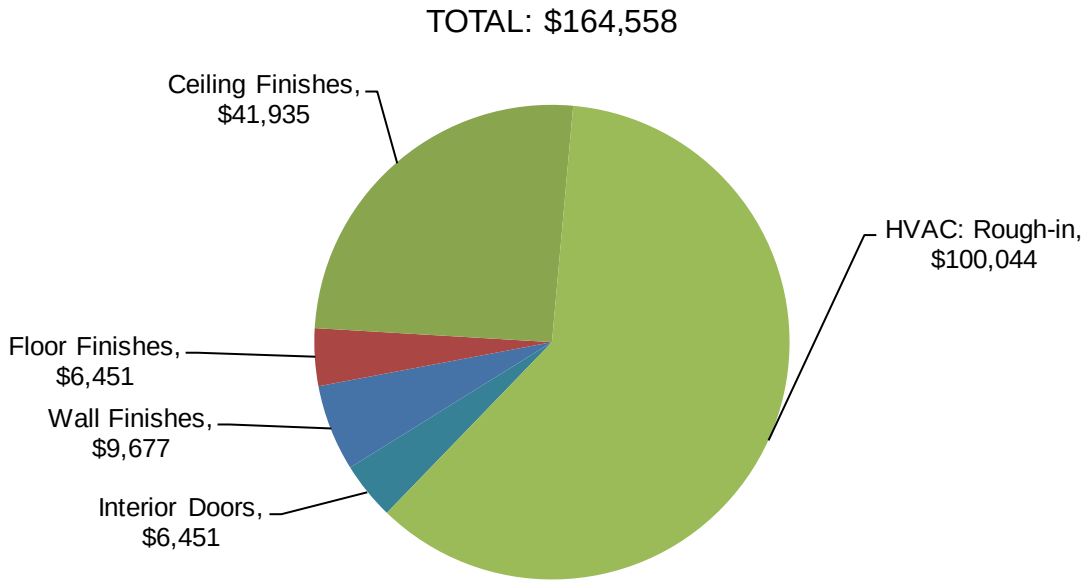

Figure 87. Current Needs (2013) – District Warehouse

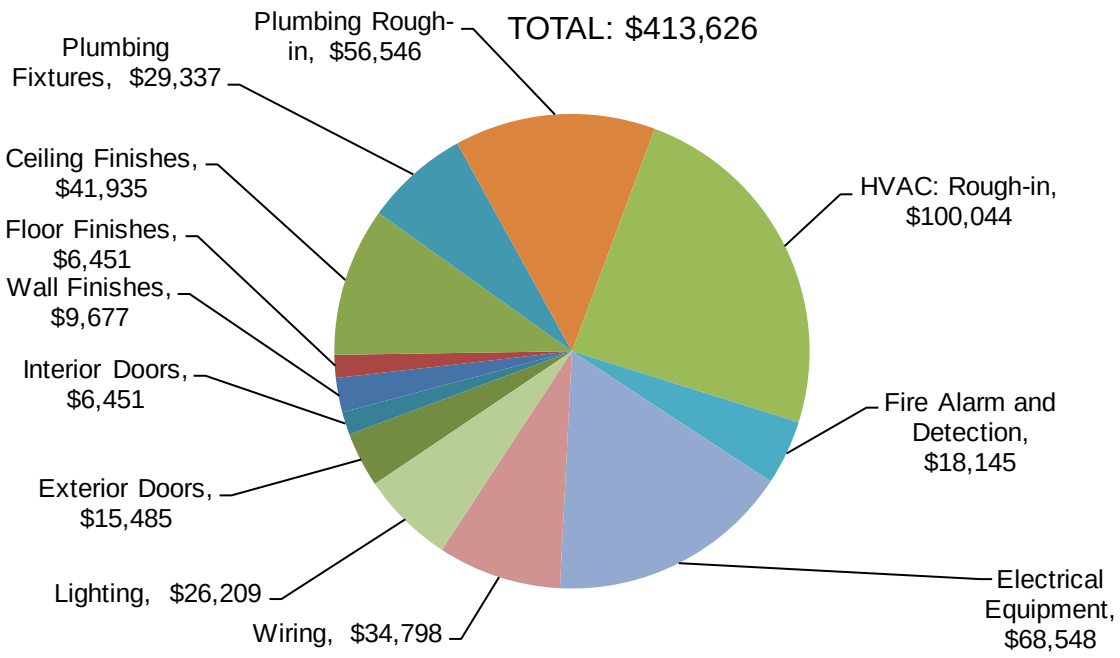

Figure 88. Cumulative projected Cost of Expired Systems (2018) – District Warehouse

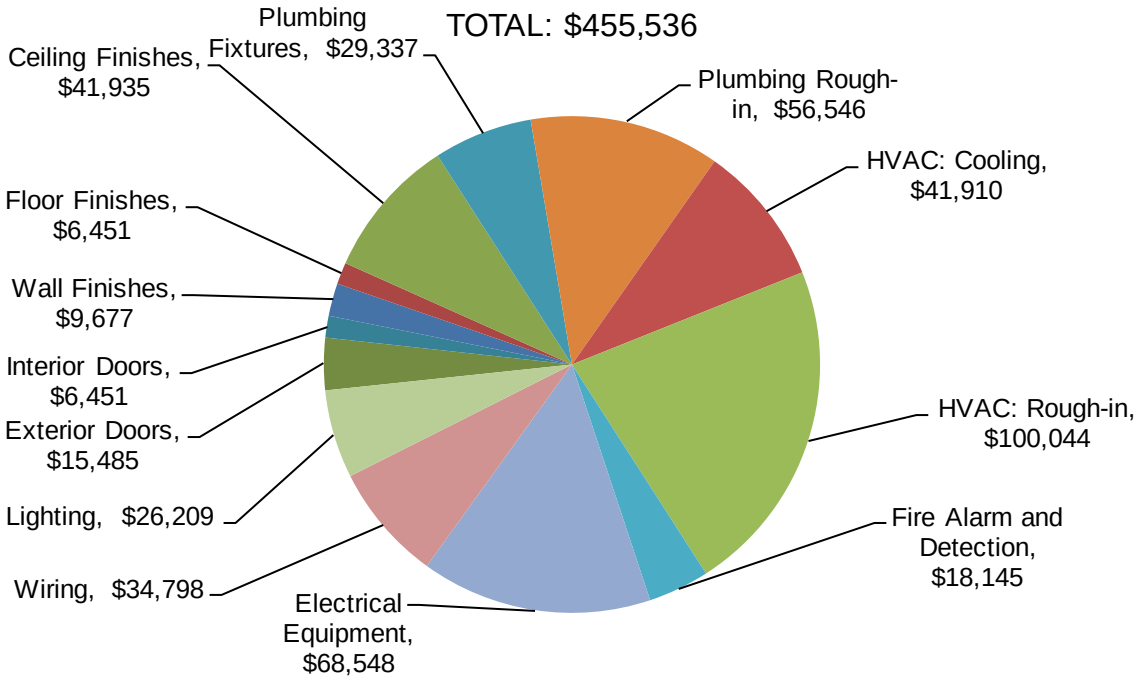

Figure 89. Cumulative projected Cost of Expired Systems (2023) – District Warehouse

PlanningDirect allows the grouping of needs by their level of urgency. In order to group needs, a priority of High, Medium or Low is assigned. The figure below show the facilities needs grouped by priority on a current (2013), 5 year (2018) and 10-year forecast (2023).

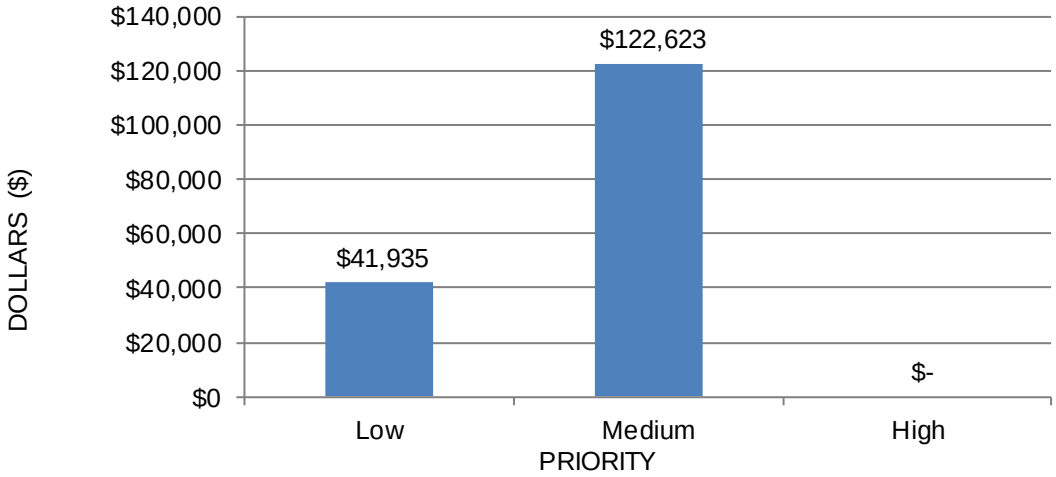

Figure 90. Current (2013) Needs By Priority – District Warehouse

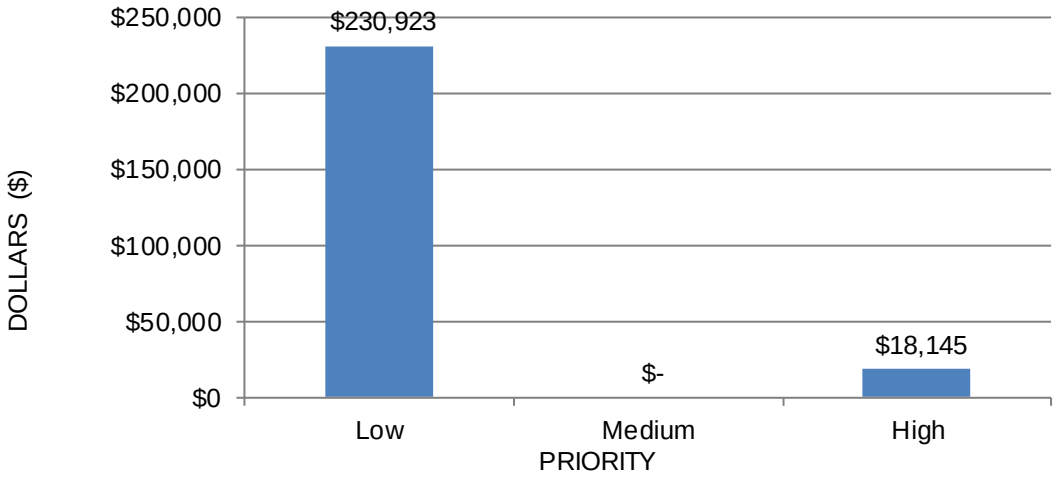

Figure 91. Extended (2018) Needs By Priority – District Warehouse

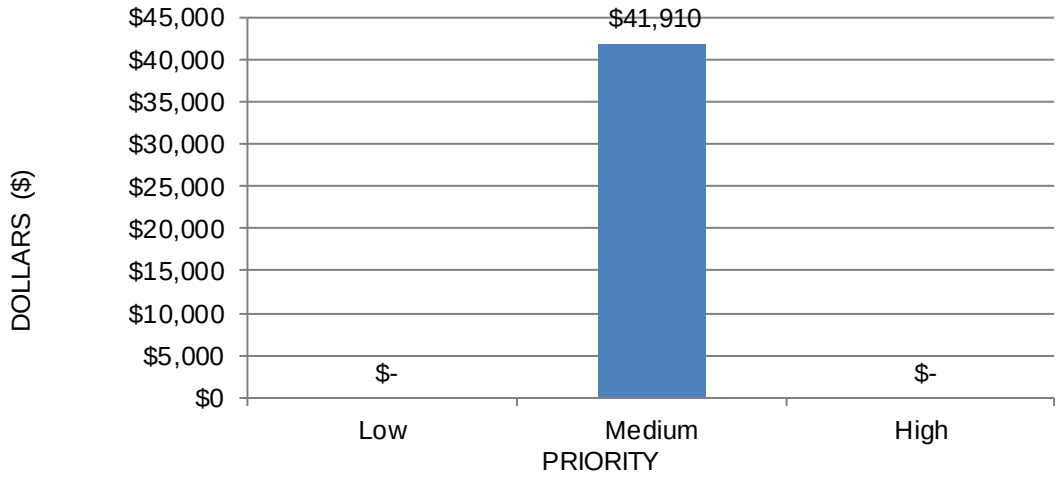

Figure 92. Extended (2023) Needs By Priority – District Warehouse

Renewal Forecast

The renewal forecast for District Warehouse shown in the following figures describes the current maintenance, repair backlog, and projected facility sustainment requirements over the next 10 years. Please note the renewal forecast does not include potential costs associated with hazardous material inspection, evaluation, and mitigation including asbestos abatement, NFPA 101, ADA upgrades, or other escalation costs like inflation or market conditions.

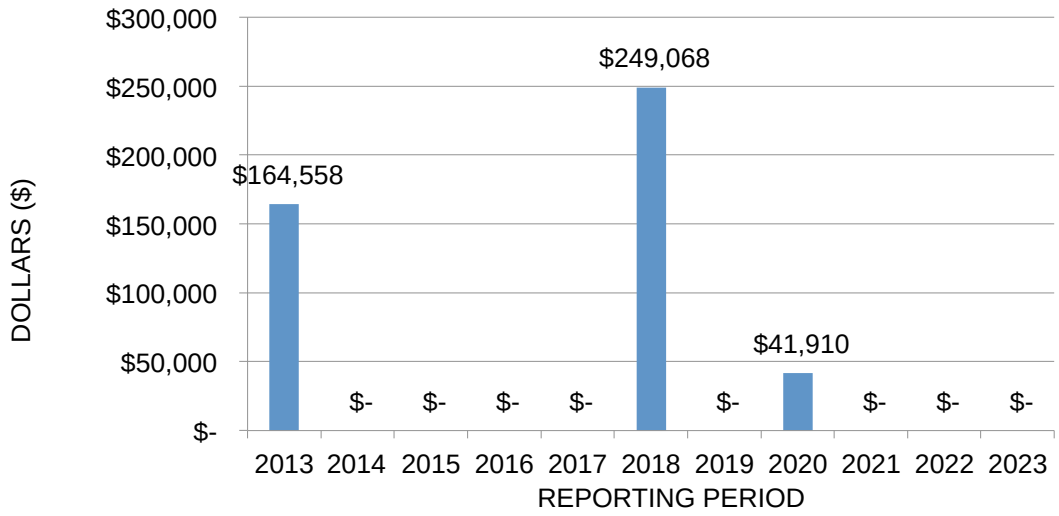

Figure 93. Renewal Forecast – District Warehouse

Forecasted Needs Table

Forecasted needs describes the expiration of an entire system based on the age and condition of that system, such as an HVAC system that may still be functioning adequately, though it is beyond its deign life. The table, “Forecasted Needs: Summarized by System”, illustrated in the figure below, provides renewal costs information for the District organized by building systems and reporting periods.

Table 41. Forecasted Needs Table District Warehouse

Uniformat	System	2013 ($)	2018 ($)	2023 ($)
	Facility Totals	**$164,558**	**$249,068**	**$41,910**
B20	**Building Exterior**	**$-**	**$15,485**	**$-**
B2010	Exterior Walls	$-	$-	$-
B2020	Exterior Windows	$-	$-	$-
B2030	Exterior Doors	$-	$15,485	$-
B30	**Roofing**	**$-**	**$-**	**$-**
B3010	Roof Coverings	$-	$-	$-
C10	**Interior Construction**	**$6,451**	**$-**	**$-**
C1020	Interior Doors	$6,451	$-	$-
C1030	Fittings	$-	$-	$-
C30	**Interior Finishes**	**$58,063**	**$-**	**$-**
C3010	Wall Finishes	$9,677	$-	$-
C3020	Floor Finishes	$6,451	$-	$-
C3030	Ceiling Finishes	$41,935	$-	$-
D10	**Conveying Systems**	**$-**	**$-**	**$-**
D1010	Elevators & Lifts	$-	$-	$-
D20	**Plumbing**	**$-**	**$85,883**	**$-**
D2010	Plumbing Fixtures	$-	$29,337	$-
D2020	Plumbing Rough-in	$-	$56,546	$-
D30	**HVAC**	**$100,044**	**$-**	**$41,910**
D3020	Heat Generating Systems	$-	$-	$-
D3030	Cooling Generating Systems	$-	$-	$41,910
D3040	Distribution System	$100,044	$-	$-
D3060	Controls & Instrumentation	$-	$-	$-
D40	**Fire Protection**	**$-**	**$18,145**	**$-**
D4010	Fire Alarm & Detection	$-	$18,145	$-
D4040	Fire Sprinklers	$-	$-	$-
D50	**Electrical**	**$-**	**$129,555**	**$-**
D5010	Electrical Equipment	$-	$68,548	$-
D5020(01)	Wiring	$-	$34,798	$-
D5090(02)	Lighting	$-	$26,209	$-
D5091	Emergency Lighting	$-	$-	$-
D5092	Exit Signage	$-	$-	$-
E10	**Built-in Equip/Specialties**	**$-**	**$-**	**$-**
E1020	Institutional Equipment	$-	$-	$-
	Special Needs	**$-**	**$-**	**$-**

The following table shows present and forecasted needs, both systems generated or individual needs.

Table 42. District Warehouse Expired Systems – 10 Year look ahead

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
Facility Totals						$455,536
B2030	Building Exteriors	District Warehouse	(B2030) Exterior Doors: Mostly roll-up doors with a single personnel door	30	2018	$15,485
C3030	Interior Finishes	District Warehouse	(C3030) Interior Ceilings: Insulated lay-in tile	15	2000	$41,935
D2020	Plumbing Rough-in	District Warehouse	(D2020) Appears to be original, extended due to condition	30	2018	$56,546
D2010	Plumbing Fixtures	District Warehouse	(D2010) Extended due to condition	30	2018	$29,337
D3030	HVAC Equipment	District Warehouse	(D3030) Systems appears to have been updated, estimate 1995	25	2020	$41,910
D3040	HVAC Rough-in	District Warehouse	(D3040) Duct work on the building exterior is rusting and needs to be replaced	30	2000	$100,044
D4010	Fire Detection	District Warehouse	(D4010) OK, extend due to condition	10	2018	$18,145
D5010	Electrical Equipment	District Warehouse	(D5010) OK, extend due to condition	30	2018	$68,548

Uniformat	System	Building	Description	Life Cycle	Next Renewal	Estimate
D5020	Wiring	District Warehouse	(D5020) OK, extend due to condition	30	2018	$34,798
D5090	Lighting	District Warehouse	(D5090) OK, extend due to condition	20	2018	$26,209
C1020	Interior Finishes	District Warehouse	(C1020) Interior Doors: Doors showing wear and tear	20	1990	$6,451
C3010	Interior Finishes	District Warehouse	(C3010) Interior Wall Finishes: Scuffed and stained	10	2010	$9,677
C3020	Interior Finishes	District Warehouse	(C3020) Interior Floor Finishes: Unfinished slab in the warehouse. CT in restroom and carpet in the office and RR is approximately 10% of the SF of the flooring.	15	1985	$6,451

APPENDIX D – TERMS AND DEFINITIONS

Backlog

Renewal needs that are past due. The backlog only includes renewal needs and directly impacts the Facility Condition Index (FCI).

Building Exteriors

Soft - any material that you can stick a pen into without breaking the pen (Stucco, vinyl, etc)

Hard - if you try to stick a pen into it, the pen breaks (Concrete, brick, etc)

Building System

Components, assemblies and systems, which are a part of the overall building and property such as roofing, exteriors, and interiors. A TARA models and generates renewal needs for 15 critical building systems (Roofing, Building Exteriors, etc.)

Building Type

Classifies a facility structure into a use category. Used to associate a TARA model for cost estimating.

- Complex - Building has one or more "wet labs" (chemistry lab with gas pipes, fume hoods, etc)
- Storage / Simple - Storage buildings/warehouse
- Basic - Standard classroom building (no wet labs)
- Residential - Contains dorms, apartments, or other living areas
- Modular - Modular/mobile classrooms

Capital Plan Length

Determines how far into the future TARA will generate renewal needs.

Considerations

Building characteristics, which can increase the cost of system renewal for a set of building systems.

- Parking - Parking Structure or Deck, not a parking lot
- Historic - a Historic building
- 5-8 levels or floors
- 9+ levels or floors
- Chillers - if the building has its own chiller that is not a part of a larger multi-building distribution system
- Commercial Kitchen - Cafeteria

- Back-up Generators - a stand-alone self-powered generator
- Boilers - if the building has its own boiler that is not part of a larger multi-building system

CRV (Current Replacement Value)

CRV is the replacement value of a particular location/building. It is based on the square footage of the facility, the model building information, and the vicinity index.

Deficiency

An observable failure in a system that needs to be addressed.

Facility Condition Index

The FCI is the ratio of deferred maintenance dollars to replacement dollars and provides a straightforward comparison of an organization's key estate assets. To calculate the FCI for a building, divide the total estimated cost to complete deferred maintenance projects for the building by its estimated replacement value. The lower the FCI, the lower the need for remedial or renewal funding relative to the facility's value. For example, an FCI of 0.1 signifies a 10 percent deficiency, which is generally considered low, and an FCI of 0.7means that a building needs extensive repairs or replacement.

Funds

Label for funding source that can be associated with needs.

Justification Type

The reason for the need. (Aesthetics, ADA compliance, Codes and Standards, etc)

Level

Categories that allow you to prioritize your needs by multiple standards. Each need may have several levels with relevant priorities for each.

Life Cycle

Amount of time that a building system is expected to last.

Need

A capital requirement or task that needs to be done to either prevent a deficiency or address an existing deficiency. PlanningDirect tracks several different types of needs.

- **Renewal Needs** - tasks that are required to update the life cycles of building systems. These needs are generated by the TARA model and cannot be created manually.
- **New Building Needs** - tasks for new construction of buildings including the construction of additions to existing buildings. These needs are created manually by the user.
- **Modernization Needs** - tasks to update building components to meet the current requirements of the institution. These needs are created manually by the user.
- **Infrastructure Needs** - tasks that improve the accessibility of the building. (Roads, sidewalks, pathways, etc.) These needs are created manually by the use
- **Gut & Replace** - tasks that pertain to the removal of all building components, leaving only the basic structure of the building intact. These needs are created manually by the user.

Opportunity Cost Factor

Inflation multiplier that adds cost of deferring maintenance.
This is applied only to deferred deficiencies, not needs.

Priority

A system defined way to prioritize needs as "High", "Medium", or "Low"

Project

A way to group related needs for reporting.

Scenarios

Needs with cost estimates that are grouped together. A scenario can become a plan, if and when it has been approved.

Score

User defined numeric value that can be used to prioritize or classify needs.

TARA

Technology Assisted Renewal Assessment Model. TARA is the default estimation model for PlanningDirect. It is comprised of building systems, system life cycles, and the cost per square foot for each of those systems.

Vicinity Index

Adjust the system renewal cost scaled by region of the facility.

Year

The year during which a Need will be completed.

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