

HARRIS ELEMENTARY SCHOOL

POUDRE SCHOOL DISTRICT HARRIS BILINGUAL ES

FACILITY CONDITION ASSESSMENT

FORT COLLINS, CO

MARCH 2023



Together, Building a Thriving Planet



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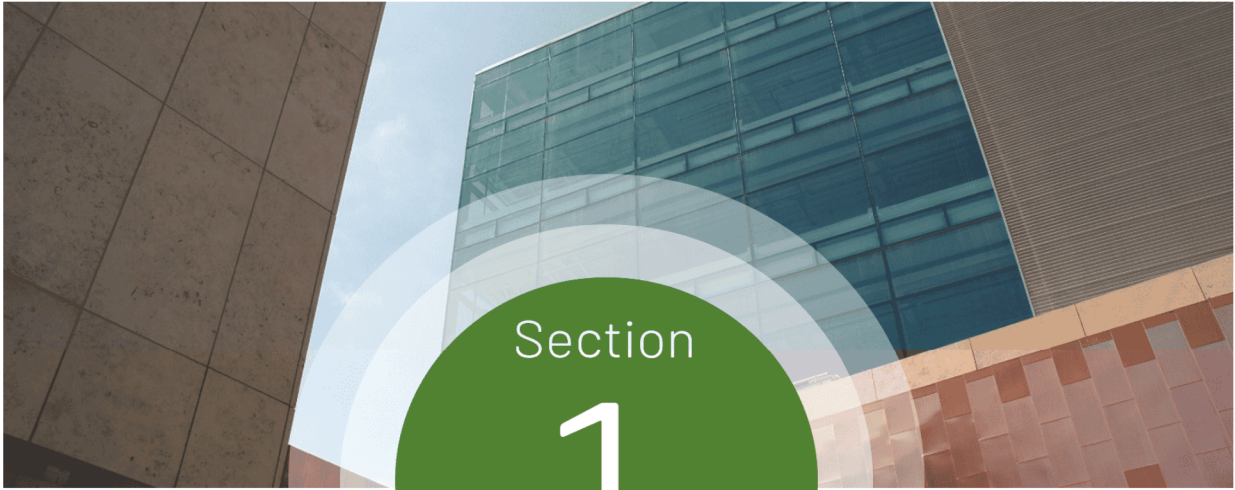
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Section

1

Executive Summary

Executive Summary

Project Goals

The contents of this report present the results of the Facility Condition Assessment (FCA) performed at Harris Bilingual ES within the Poudre School District (PSD) on July 5, 2023. PSD intends to utilize the findings of this report to inform both capital and operating budgets, prioritize maintenance efforts, and optimize planning processes as replacements and upgrades of assets and facility systems become necessary in the future.

Facility List

The scope of the FCA project included the assessment of the following campus.

FACILITY NAME	AREA (SF)	YEAR(S) BUILT
HARRIS BILINGUAL ES	38,599	1919
TOTAL	38,599	

Facility Summary

Harris Bilingual ES

Harris Bilingual ES is located at 501 E. Elizabeth St., Fort Collins, CO 80524. This 38,599 SF facility consists of two levels and was initially constructed in 1919. The equity index for this school is 2.32.



Figure 1-1: Harris Bilingual ES

Executive Summary

Assessment Summary

This section summarizes the building systems at the facility and describes the general condition observed based on the assessment performed on July 5, 2023. Additional details, findings and recommendations are presented in Section 3 of this report.

Capital Plan Summary

The estimated replacement costs for equipment expected to fail within the next ten years are shown below, divided into three separate plans. These plans are the 3-Year Plan, 5-Year Plan, and the 10-Year Plan. Each plan includes the cost for replacement of equipment expected to fail during these periods, based on the observed condition of the equipment at the time of the assessment.

Replacement costs include 3% inflation year over year.

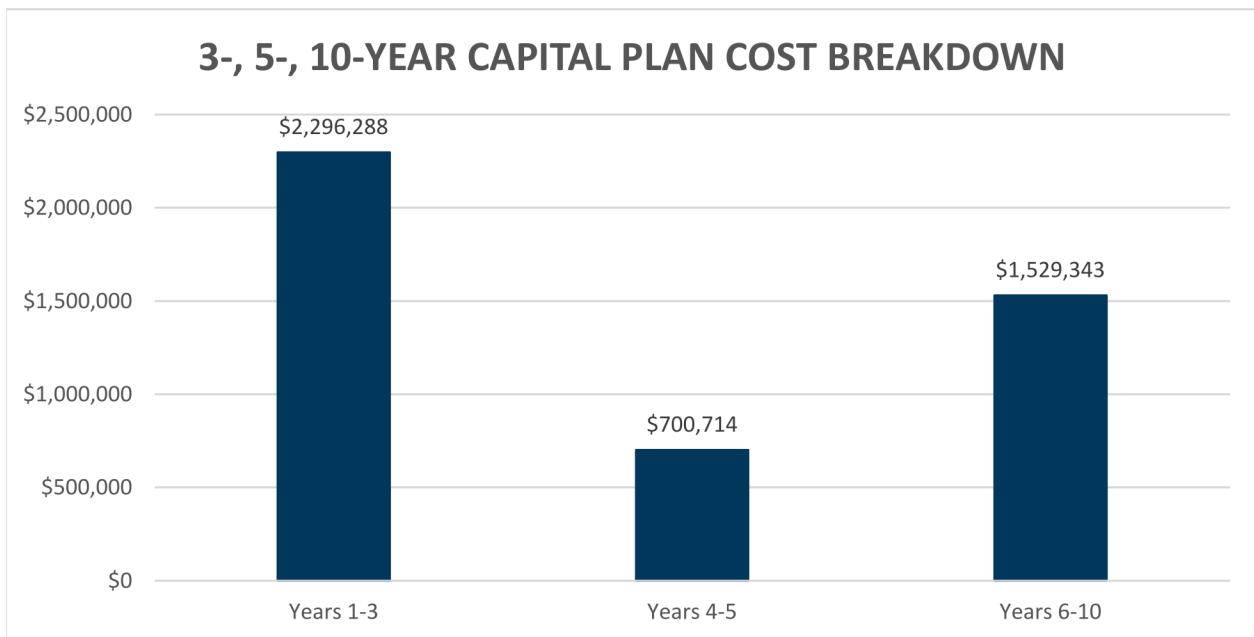


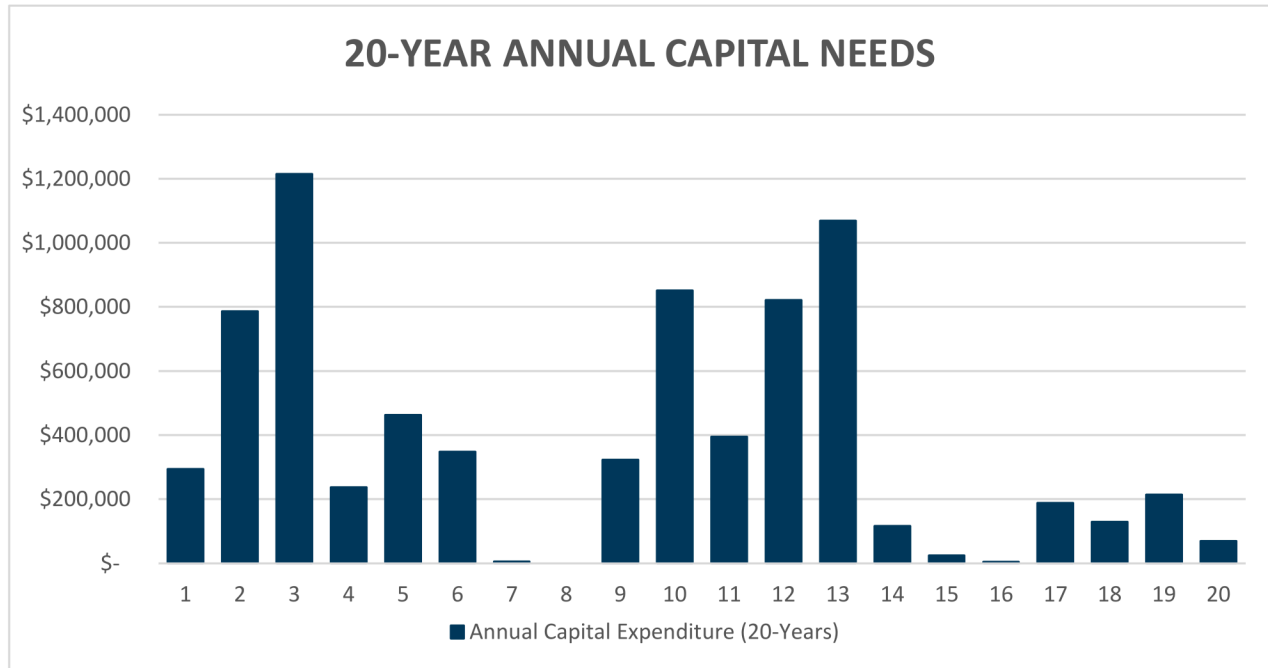
Figure 1-2: 3-, 5-, 10-Year Capital Plan Cost Breakdown

Executive Summary

Annual Capital Expenditure (20 Years)

20-Year Annual Capital Needs and 20-Year Annual Capital Expenditure by Subsystem below indicate the estimated replacement costs for equipment expected to fail within the next twenty years, and are displayed both by year and by subsystem.

Replacement costs include 3% inflation year over year.



Annual Capital Expenditure by Year

Replacement costs associated with the Annual Capital Expenditure graph and table include values that are adjusted for inflation.

20-Year Annual Capital Expenditure by Subsystem

Subsystem	Years 1-5	Years 6-10	Years 11-15	Years 15-20
B20 - Enclosure	\$0	\$520,116	\$12,218	\$0
B30 - Roofing	\$172,105	\$0	\$0	\$0
C10 - Int. Construction	\$0	\$365,545	\$0	\$0
C20 - Stairs	\$0	\$174,905	\$0	\$0
C30 - Interior Finishes	\$1,055,798	\$114,404	\$806,565	\$103,204
D10 - Conveying	\$0	\$0	\$114,674	\$0
D20 - Plumbing	\$29,864	\$0	\$30,735	\$0
D30 - HVAC	\$725,810	\$0	\$112,380	\$242,688
D40 - Fire Suppression	\$0	\$0	\$954,276	\$0
D50 - Electrical	\$974,517	\$354,373	\$395,273	\$261,388
E10 - Equipment	\$37,286	\$0	\$0	\$0
Total:	\$1,767,477	\$354,373	\$1,607,338	\$504,076

Section

2

Approach and Methodology

Scope and Approach

Scope and Approach

SCOPE OF WORK

The scope of this facility condition assessment includes all major mechanical, electrical, and plumbing equipment, and commercial refrigeration equipment. In addition, the building enclosure, roofing, interior construction and finishes, and fire suppression systems are included within the assessment.

The following table lists the general asset types included within the scope of this assessment. Also shown is the corresponding Unifomat code, which has been used to catalog equipment based on type and intended use.

UniFormat Classification of Building Systems

UNIFORMAT CODE	CATEGORY DESCRIPTION
B20	Exterior Enclosure (i.e. windows, walls, doors)
B30	Roofing (i.e. roofing covering, skylights, etc.)
C10	Interior Construction (i.e. doors, walls)
C20	Interior Stairs (i.e. stair construction)
C30	Interior Finishes (i.e. flooring, ceiling finishes, etc.)
D10	Conveying (i.e., elevators)
D20	Plumbing (i.e., water heating, pumps, compressors)
D30	Heating, Ventilation, and Air Conditioning
D40	Fire Suppression Systems
D50	Electrical (panelboards, transformers, switchgear)
E10	Equipment, Kitchen Hoods, Walk-in Units, etc.

Scope and Approach

RATINGS, METHODS AND SCORING

To allow Poudre School District more flexibility in prioritizing capital planning efforts, McKinstry has developed the following metrics which assign various scores to each asset.

Asset Condition

Condition ratings are presented for each asset as a score of 1 – 5. Scores are based upon a visual inspection during the building evaluation period. A score of 1 signifies that the asset is in great, “like new” condition. A score of 2 indicates that the asset is in good condition. A score of 3 signifies that the asset is in expected “average” condition based on function and the age of the asset. A score of 4 signifies that the asset is in poor condition, in need of repair, and will require replacement in the near future. A score of 5 signifies that the asset is in very poor or failed condition and in need of imminent replacement.

SCORE	CONDITION ASSESSMENT
1	Asset is in great condition, no action required.
2	Asset is in good condition, regular maintenance expected.
3	Asset is in expected condition, regular replacement/maintenance expected.
4	Asset is in poor condition, maintenance/replacement recommended soon.
5	Asset is in very poor condition, urgent replacement needed.

Student/Teacher Impact

Student/Teacher Impact scores are presented for each asset on a scale of 1 – 5 (low to high impact). This metric considers educational (student and/or teacher) impact caused if the equipment were to fail. Assets serving classrooms and other educational spaces are assigned scores of 2-5 depending on the impact the failure of an asset would have and if backups are available. A student/teacher impact score of 1 indicates that there is little to no impact to educational activities.

SCORE	STUDENT/TEACHER IMPACT
1	Failure poses no significant educational impact.
2	Failure poses low educational impact.
3	Failure poses moderate impact. Asset serves teaching area, but has backup.
4	Failure poses high educational impact.
5	Failure poses severe impact. Asset serves teaching area and has no backup.

Energy Cost Impact

The Energy Impact score is presented for each asset on a scale of 1-5 (low to high impact). Each of the asset types within the scope of this assessment were evaluated based on their impact to energy cost and consumption (including electrical, natural gas, and liquid fuels). Assets with a higher Energy Cost Impact score indicate that the asset has a large contribution to the overall energy costs of the facility. A sample of Energy impact scores is shown below:

Scope and Approach

ASSET TYPE	ASSET SIZE	ENERGY COST IMPACT (1-5)
Air Handling Unit	less than 10,000 CFM	3
	between 10,000 CFM – 50,000 CFM	4
	greater than 50,000 CFM	5
Chiller	less than 200 tons	3
	between 200 – 500 tons	4
	greater than 500 tons	5
Computer Room AC Condensing Unit Heat Pump	less than 10 tons	2
	greater than 10 tons	3
Cooling Tower	less than 200 tons of rejection	2
	greater than 200 tons of rejection	3
Dust Collector	less than 5 HP	2
	between 5 HP and 25 HP	3
	greater than 25 HP	4
Exhaust Fan	less than 5000 CFM	2
	greater than 5000 CFM	3
Fan Coil Unit	greater than 3000 CFM	2
Fuel Fired Boiler	less than 200 MBH	2
	between 200 – 1000 MBH	3
	between 1000 – 2000 MBH	4
	greater than 2000 MBH	5
Furnace	less than 100 MBH	2
	between 100 and 500 MBH	3
	greater than 500 MBH	4
Generator	less than 500 KW	2
	greater than 500 KW	3
Lighting, Exterior	LED	2
	Fluorescent	3
	HID/Incandescent	4
Lighting, Interior	LED	2
	Fluorescent	4
	HID/Incandescent	5
Make-Up Air Unit	less than 5,000 CFM	3
	between 5,000 and 25,000 CFM	4
	greater than 25,000 CFM	5
Pumps	less than 25 HP	2
	between 25 -150 HP*	3
	greater than 150 HP*	4
Return Fan Supply Fan	less than 20 HP	2
	greater than 20 HP*	3

Scope and Approach

ASSET TYPE	ASSET SIZE	ENERGY COST IMPACT (1-5)		
Rooftop Unit	less than 5 ton	2		
	between 5 and 20 tons	3		
	between 20 and 50 tons	4		
	greater than 50 tons	5		
Transformer	greater than 200 kVA	2		
VFD	greater than 50 HP	2		
Air Compressor	All sizes	2		
Air Curtain				
Air Dryer				
Cabinet Unit Heater				
Dehumidifier				
Electric Duct Heater				
Humidifier				
Unit Heater				
Unit Ventilator				
Walk-In Condenser				
Walk-In Unit				
All Other			All sizes	1

*Add 1 for direct drive motors

Operational Impact

Operational Impact scores are presented for each asset on a scale of 1 – 5 (low to high impact). This metric considers the operational impact caused if the equipment were to fail. Assets serving critical administrative and district operational spaces are assigned scores of 2-5 depending on the impact the failure of an asset would have and if backups are available. An operational impact score of 1 indicates that there is little to no impact to administrative or operational activities.

SCORE	OPERATIONAL COST IMPACT SCORE
1	Asset has little to no operational impact.
2	Asset has a low level of operational impact.
3	Asset has a moderate operational impact.
4	Asset has a high level of operational impact.
5	Asset has severe operational impact.

Industry Life Expectancy

The designed life expectancy for a given asset is determined using a combination of widely accepted industry standards including ASHRAE and BOMA, as well as a manufacturers' database of equipment life expectancies. This value is expressed in number of years.

Scope and Approach

Observed Remaining Life

The Observed Remaining Life is also expressed in number of years and takes into consideration the function and operating environment of the asset, as well as a determination based upon a visual inspection of the asset. The Observed Remaining Life value may vary from the Design Life value. For example, a secondary heat exchanger that has been well maintained may have an Observed Remaining Life that is greater than the expected Design Life. Likewise, a primary chilled water pump that has not been well maintained, and shows visual signs of premature wear and tear, may have an Observed Remaining Life that is less than the expected Design Life.

COST ESTIMATING

Each asset receives an Estimated Replacement Cost, presented in dollars. The Estimated Replacement Cost includes both the material cost of the asset and the installation of that asset. This information is intended to assist in the prioritization and resource allocation associated with maintenance and capital replacement projects. Cost estimates are determined using specific characteristics of each asset (tonnage, motor size, capacity, etc.) along with one of several cost information data sets. These data sets include industry standards, RSMMeans, and data sourced through McKinstry's construction division. Additionally, site specific construction and equipment invoices have been utilized as available. All estimated costs are in 2023 dollars.

Data-Driven Maintenance Approach

Included with the submission of this report is the FCA Data Collection Workbook, which includes all data collected for each asset. The Workbook can be used to quickly sort through equipment and prioritize maintenance and replacement efforts. Additional observations and equipment details are provided within the workbook for each asset. Each asset is classified according to building system, size, capacity, and other standards, as well as ratings of current condition and impact of failure. Such organization and classification facilitate searching and sorting the data for maintenance and replacement priorities.

As mentioned above, the impact ratings help to compare one asset to another. Based on observed condition and impact scores, the future maintenance priorities for each building are described further in later sections.

As each of the components identified in the workbook is repaired or replaced, the information can be revised to reflect the new conditions. Remaining useful life values can also be manually iterated one year from the assessment date to reflect fewer remaining years of life. Assets no longer in service can be removed from the list. Similarly, assets that have been newly installed can be added to the list. Following the impact guidelines, relative priority can be calculated for these assets.

Scope and Approach

Equity Index

As an additional metric to the six existing areas of the Facilities Condition Assessment, Poudre School District has created an Equity Index to assist in prioritizing facilities improvement projects. This number takes into account student poverty, students qualifying for ELA services, students qualifying for Special Education services, and students who are homeless. The calculated score for each school is based on these factors and where it falls in relation to the district average. The formula would be:

$$\frac{\text{School Percentage in these areas added together as decimals}}{\text{District Percentages in these areas added together as decimals}}$$

In this formula, a school with student needs equal to the district average would have an equity index of 1.0. Schools with student needs higher than the district average would have an Equity Index greater than 1.0. Schools with student needs less than the district average would have an Equity Index less than 1.0.

Category	Equity Index
Low	0.29
High	3.20
Average	1.11
Median	0.95

The equity index for Harris Bilingual ES is 2.32.

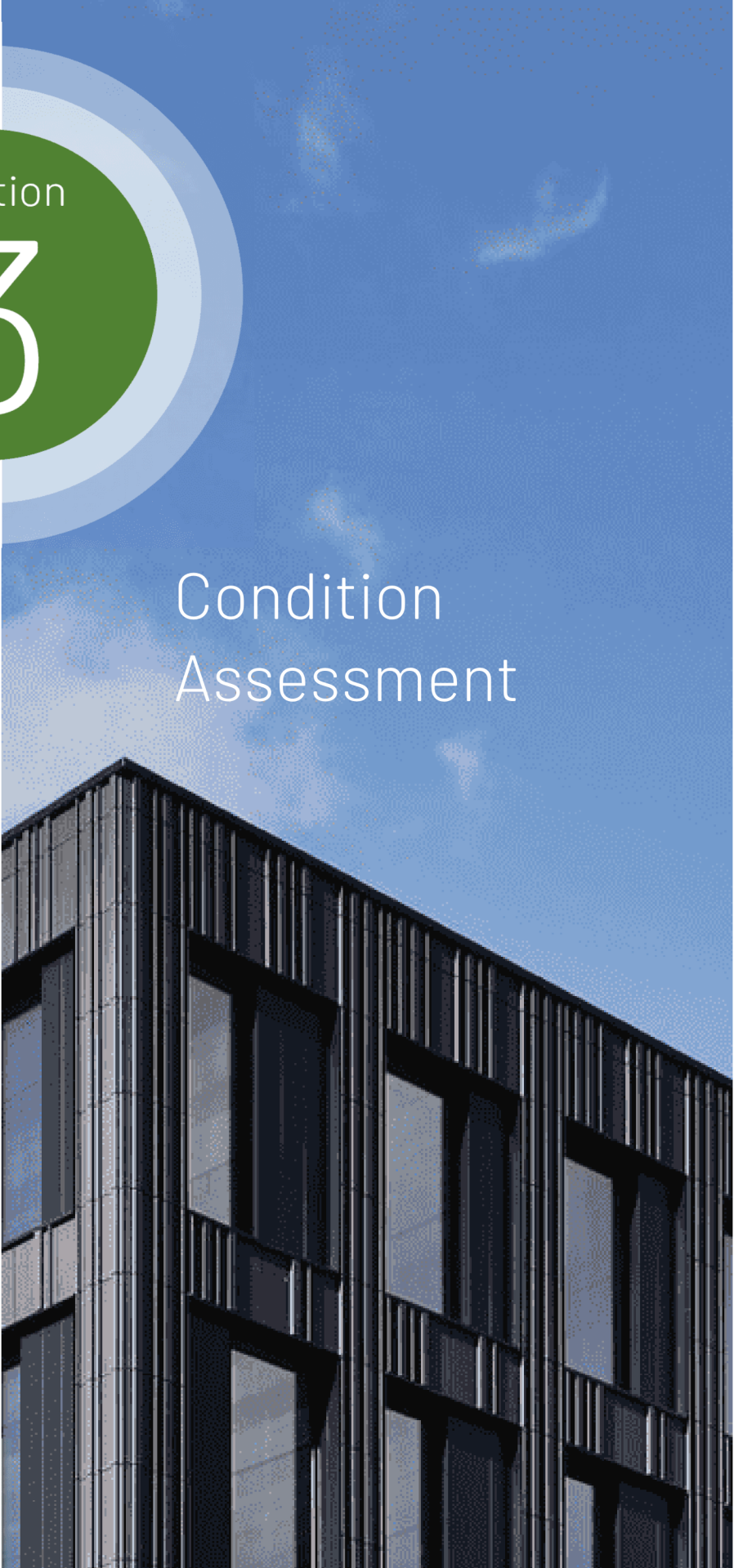
Sample Calculation:

School Name	School Population K-12 Total	F/R	ELL	SPED	McKinney-Vento (homeless)	Total of Previous Columns	Equity Index Number = school average / district average
Sample	381	15.20%	0.00%	8.40%	0.00%	0.24	0.24/0.48 = 0.49
Grand PSD Total - Oct 2022 Count	26,163	29.5%	5.8%	9.5%	3.4%	0.48	

F/R - Free or Reduced-Price Lunch
 ELL - English Language Learners
 SPED - Special Education
 McKinney-Vento - Homeless Assistance

Section
3

Condition
Assessment



Condition Assessment

SYSTEMS DESCRIPTION

This section summarizes the building systems at Harris Bilingual ES and describes the general condition observed based on the assessment. Specific findings and recommendations are detailed later in this report.

Exterior Enclosure

The Exterior of the building comprised two (2) construction periods. The original construction (est. 1919) exterior is a light colored brick with plaster interior finish. It is presumed that this is a multi-wythe wall due to the age of the building. The original building's masonry is in good condition. Windows in the original facade have been updated and match the new construction's metal clad wood windows. The new construction facade (2002) is a light colored masonry and is in good condition.

Roofing

The building has three (3) different roofing systems. Red Clay Tiles, Rolled Asphalt, and Built-Up ballasted roofing. All of these systems appear to have been installed with the 2002 addition and are in good condition. Drainage from the Red Clay Tile is adequately sloped to a gutter and downspout system. The other systems are on low-pitch roofs with interior roof drains. There was no evidence of leaks or standing water.

Interior Construction and Finishes

The original building's plaster and masonry are intact and in good condition, limited areas of original hardwood are visible as and in fair condition. CMU walls (2002) are in good condition. Corridor and classroom flooring is carpet in fair condition as is the ACT ceilings throughout corridors and classrooms. A few drywall ceilings and older (original?) ceiling tiles throughout the building. Wet areas of the building have tile or Vinyl flooring and are in good condition. Original wood stairs are utilized and in good condition. In new and older portions of the building wood framed windows are in good condition.

Conveyance

The school has one elevator serving two floors in average condition.

Electrical and Lighting

The building's electrical distribution equipment consists of 120/208 panels, transformers, and switchgear. Generally, these assets are in good condition and have about half of their life expectancy remaining. [REDACTED] The fire alarm system dates to 2014. Interior lighting consists of fluorescent fixtures. Exterior lighting is made up of a mixture of fluorescent, incandescent, and LED lights [REDACTED]. Consider upgrading the interior and exterior lighting to light emitting diode (LED) fixtures to reduce energy costs and maintenance needs.

HVAC Systems

The building's heating, ventilation, and air conditioning (HVAC) system consists of a hot water system, two air handling units, and two rooftop units. The hot water system is currently being upgraded over the summer of 2023. The building automation system is made up of Honeywell controls. Additional HVAC equipment includes a makeup air unit, fan coil units, exhaust fans, unit heaters, and cabinet unit heaters. The air handling units, rooftop units, condensing unit, and UH-1 [REDACTED] have either surpassed their life expectancies or are nearing them. They should all be replaced within the next 2-3 years. In addition, several exhaust fans have also surpassed their life expectancies and should be replaced within the next 3-5 years.

Plumbing

Domestic hot water is provided by two (2) natural gas fired water heater installed in 2001 and 2018 and an electric water heater installed in 2016. The water heater installed in 2001, along with the circulation pump, [REDACTED] has surpassed its life expectancy, and is anticipated to need replacement within the next two years. Additional plumbing equipment includes a backflow preventer. [REDACTED]

Fire Suppression

The school has a wet sprinkler system which was updated in 2001, based on industry life expectancy it is anticipated to need replacement in approximately 13 years.

Equipment

There is one (1) walk-in cooler and one (1) walk-in freezer in the school's kitchen. These units generally appear to be in expected condition.

Condition Assessment

PRIORITIES

SPECIFIC PRIORITIES

The top capital measures (up to five max) have been detailed in the following tables. Each measure receives a priority level of 1, 2, or 3. A priority level of 1 indicates that the measure is considered an immediate concern or a potential hazard and should be addressed as soon as possible. A priority level of 2 indicates that the measure is considered urgent, but not a potential hazard or there is a less severe impact to occupants. A priority level of 3 indicates that the assets associated with the measure are nearing end of life, but have not yet failed or have a mild to moderate impact on occupant safety and comfort.

Harris Bilingual ES

Red Clay Tile Roofing

3,500 SF of red clay tile roofing was replaced in 2002. This type of roofing has a 50 year expected useful life per BOMA. This roof has approximately 29 years of remaining life at present. No deficiencies or repairs were noted during the FCA inspection. This is not a "Top Deficiency Issue", it is listed at #1 due to PSD's request to determine whether additional assessment is required. In McKinstry's opinion an additional assessment of this roof is not required at present.



The following assets are included within this measure:

FCAID-230010

Priority Level:	3
Estimated Cost:	\$62,900
Remaining Life:	29

Condition Assessment

Replace RTU-1 and RTU-2

RTUs 1 (served Administration Area) & 2 (serves Admin & Classrooms) are seven years and ten years past expected useful life respectively. They are both expected to require replacement within the next two years. No access to this section of roof due to red clay tile roof safety issues.

The following assets are included within this measure:

FCAID-230091, FCAID-230091.



Priority Level: 2
Estimated Cost: \$63,900
Remaining Life: 2

Replace WH-1

WH-1 (75 Gal, 75MBH) was installed in 2001, and is therefore 12 years past expected useful life. Anticipate replacement within the next two years.

The following assets are included within this measure:

FCAID-230047



Priority Level: 2
Estimated Cost: \$10,610
Remaining Life: 2

Condition Assessment

Replace CU-1 and CU-Walk-in Cooler/Freezer

CU-1 (serving F-1), and CU-Walk-in Cooler/Freezer (serving the kitchen walk-in cooler and freezer) were installed 2001-2002. Therefore, they are 7 and 6 years past expected useful life at present. Expect to replace these condensing units within two years.

The following assets are included within this measure:

FCAID-230061, FCAID-230063



CU-1



CU-Walk-Ins

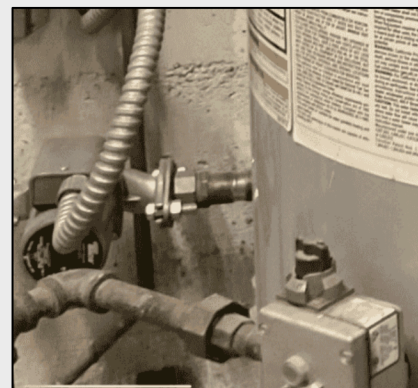
Priority Level:	2
Estimated Cost:	\$45,240
Remaining Life:	2

Replace CP-1

CP-1 (1/25 Hp) serves WH-1 and is two years past expected useful life. Recommend replacing this pump at the same time that WH-1 is replaced in two years.

The following assets are included within this measure:

FCAID-230046



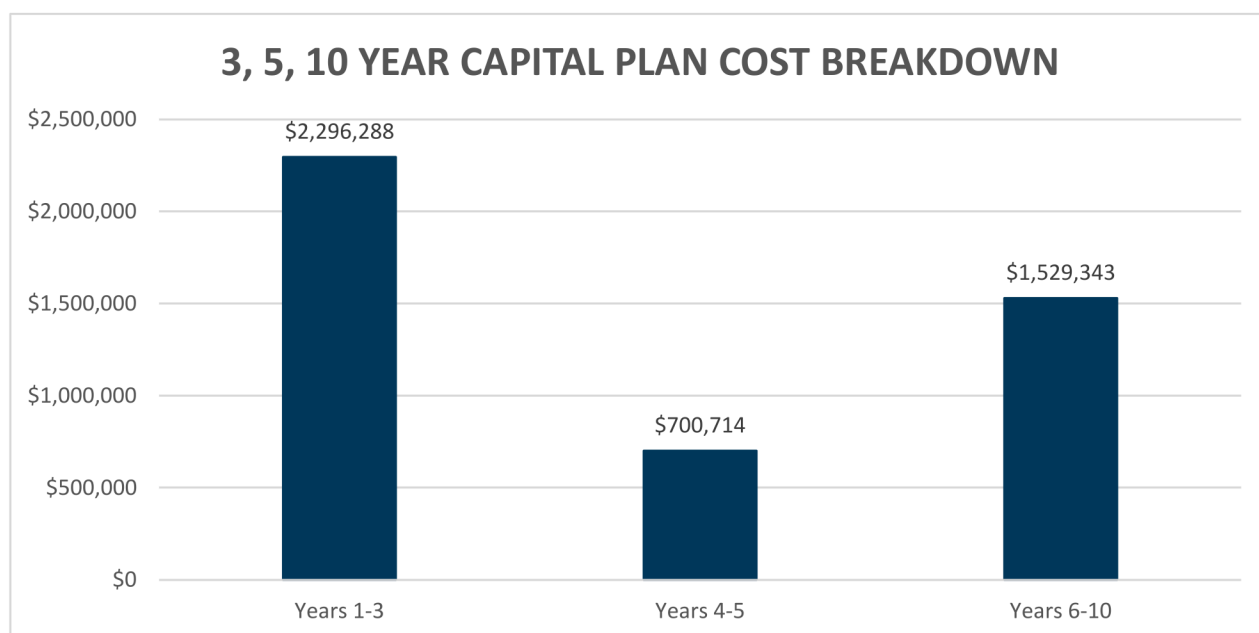
Priority Level:	2
Estimated Cost:	\$4,631
Remaining Life:	2

Condition Assessment

3-, 5-, 10-YEAR PLANS

The following sections present the expected equipment replacement costs over the next ten years, broken into three separate plans. These plans are the 3-Year Plan, 5-Year Plan, and the 10-Year Plan. Each plan includes the equipment expected to fail during these periods, based on the observed condition of the equipment at the time of the assessment. Note, the 3-Year Plan includes assets failing within the next three years, the 5-Year Plan includes assets failing between four and five years, and the 10-Year Plan includes assets failing between in the next six to ten years from the assessment date.

The chart below presents the total expected replacement costs for each plan. Note that these figures include 3% inflation YOY.



Future Capital Plan

The table below displays replacement costs for the campus, and the number of associated assets expected to fail within the next ten years. Assets requiring replacement or extensive maintenance in this plan are presented in Appendices A, B, and C.

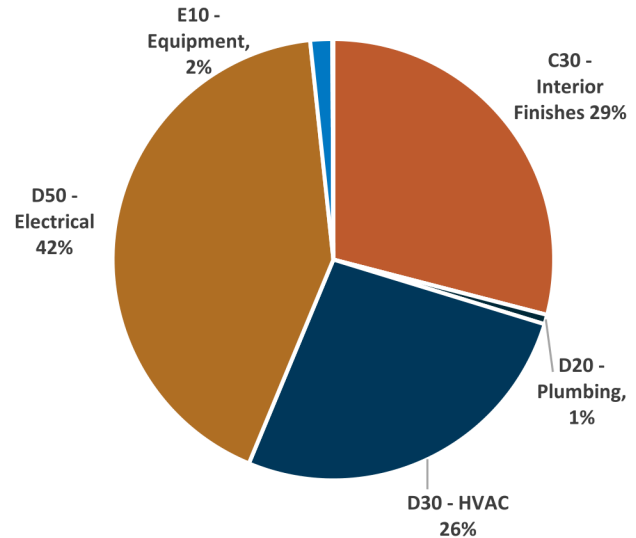
REPLACEMENT PERIOD	ASSET QUANTITY	CUMULATIVE REPLACEMENT COST
3-Year Plan	46	\$2,296,288
5-Year Plan	24	\$700,714
10-Year Plan	18	\$1,529,343
Total	88	\$4,526,346

Condition Assessment

3-YEAR PLAN BREAKDOWN

The three-year plan includes the estimated capital expenditure needed to replace assets reaching end of life in years 1-3, or between 2024 and 2026. The sum of the anticipated capital needs is \$2,296,288. The specific assets that will reach end of life in this period are listed in Appendix A.

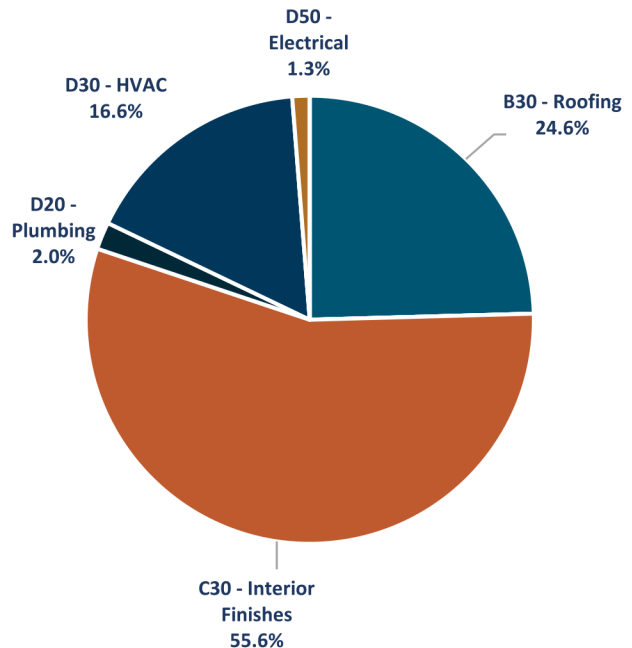
SUBSYSTEM	Years 1-3	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$0	0%
B30 - Roofing	\$0	0%
C10 - Int. Construction	\$0	0%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$666,403	29%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$16,122	1%
D30 - HVAC	\$609,184	27%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$965,670	42%
E10 - Equipment	\$37,286	2%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$1,623	<1%



5-YEAR PLAN BREAKDOWN

The five-year plan includes the estimated capital expenditure needed to replace assets reaching end of life in years 4-5, or between 2027 and 2028. The sum of the anticipated capital needs is \$700,714. The specific assets that will reach end of life in this period are listed in Appendix A.

SUBSYSTEM	Years 4-5	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$0	0%
B30 - Roofing	\$172,105	25%
C10 - Int. Construction	\$0	0%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$389,395	56%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$13,742	2%
D30 - HVAC	\$116,625	17%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$8,847	1%
E10 - Equipment	\$0	0%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$0	0%

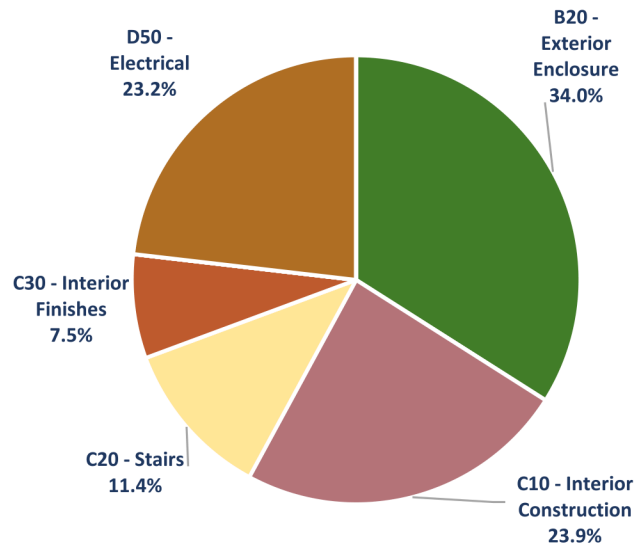


Condition Assessment

10-YEAR PLAN BREAKDOWN

The ten-year plan includes the estimated capital expenditure needed to replace assets reaching end of life in years 6-10, or between 2029 and 2033. The sum of the anticipated capital needs is \$1,529,343. The specific assets that will reach end of life in this period are listed in Appendix A.

SUBSYSTEM	Years 6-10	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$520,116	34%
B30 - Roofing	\$0	0%
C10 - Int. Construction	\$365,545	24%
C20 - Stairs	\$174,905	11%
C30 - Interior Finishes	\$114,404	7%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$0	0%
D30 - HVAC	\$0	0%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$354,373	23%
E10 - Equipment	\$0	0%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$0	0%



Condition Assessment

PRIORITY SUMMARY

The summary below assigns a composite Overall Priority Score to the campus as of the assessment date. Priority Scores range from 6 (low priority) to 30 (high priority), and are based on asset condition, operating impact, student impact, energy impact, estimated replacement cost, and observed remaining life.

In addition to the Overall Priority Score, each Subsystem category within the site is assigned a Priority Score. This score can differentiate systems that may need more attention than others, due to condition or impact on occupants or operations. Each Subsystem category includes a general narrative section under the Description column.

Future Capital Plan

The Subsystem scores are color coded to reflect the level of priority: ≤ 12 = Green, 12.1-23.9 = Yellow, ≥ 24 = Red. Higher priority scores indicate that a system should be considered for maintenance or capital improvements before other systems with lower scores. The rating scale for Priority Score is visualized below.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

Condition Assessment

PRIORITY SCORE SUMMARY - HARRIS BILINGUAL ES

	HARRIS BILINGUAL ES	
	BUILDING TYPE:	Elementary School
	YEAR BUILT:	1919
	GROSS AREA (SF):	38,599
	DATE ASSESSED:	5-Jul-23
PRIORITY SCORE:	16.3	

SUBSYSTEM:	DESCRIPTION	PRIORITY SCORE
B20 - Ext. Enclosure	The Exterior of the building comprised two (2) construction periods. The original construction (est. 1919) exterior is a light colored brick with plaster interior finish. It is presumed that this is a multi-wythe wall due to the age of the building. The original building's masonry is in good condition. Windows in the original facade have been updated and match the new construction's metal clad wood windows. The new construction facade (2002) is a light colored masonry and is in good condition.	11.6
B30 - Roofing	The building has three (3) different roofing systems. Red Clay Tiles, Rolled Asphalt, and Built-Up ballasted roofing. All of these systems appear to have been installed with the 2002 addition and are in good condition. Drainage from the Red Clay Tile is adequately sloped to a gutter and downspout system. The other systems are on low-pitch roofs with interior roof drains. There was no evidence of leaks or standing water.	13.1
C10 - Int. Construction	The original building's plaster and masonry are intact and in good condition, limited areas of original hardwood are visible [REDACTED] CMU walls (2002) are in good condition. Corridor and classroom flooring is carpet in fair condition as is the ACT ceilings throughout corridors and classrooms. A few drywall ceilings and older (original?) ceiling tiles throughout the building. Wet areas of the building have tile or Vinyl flooring and are in good condition. Original	12.2
C30 - Interior Finishes		15.5
D20 - Plumbing	Domestic hot water is provided by two (2) natural gas fired water heater installed in 2001 and 2018 and an electric water heater installed in 2016. The water heater installed in 2001, along with the circulation pump, [REDACTED] has surpassed its life expectancy, and is anticipated to need replacement within the next two years. Additional plumbing equipment includes a backflow preventer. [REDACTED]	14.6
D30 - HVAC	The building's heating, ventilation, and air conditioning (HVAC) system consists of a hot water system, two air handling units, and two rooftop units. The hot water system is currently being upgraded over the summer of 2023. The building automation system is made up of Honeywell controls. Additional HVAC equipment includes a makeup air unit, fan coil units, exhaust fans, unit heaters, and cabinet unit heaters. The air handling units, rooftop units, condensing unit, and UH-1 [REDACTED] have either surpassed their life expectancies or are nearing them. They should all be replaced within the next 2-3 years. In addition, several exhaust fans have also surpassed their life expectancies and should be replaced within the next 3-5 years.	16.2
D40 - Fire Suppression	The school has a wet sprinkler system which was updated in 2001, based on industry life expectancy it is anticipated to need replacement in approximately 13 years.	20.0
D50 - Electrical	The building's electrical distribution equipment consists of 120/208 panels, transformers, and switchgear. Generally, these assets are in good condition and have about half of their life expectancy remaining. [REDACTED] [REDACTED] The fire alarm system dates to 2014. Interior lighting consists of fluorescent fixtures. Exterior lighting is made up of a mixture of fluorescent, incandescent, and LED lights [REDACTED]. [REDACTED] Consider upgrading the interior and exterior lighting to light emitting diode (LED) fixtures to reduce energy costs and maintenance needs.	22.0
E10 - Equipment	There is one (1) walk-in cooler and one (1) walk-in freezer in the school's kitchen. These units generally appear to be in expected condition.	18.0

System priority scored from 6 (lowest priority) to 30 (highest priority) based on condition, operating impact, student/teacher impact, energy impact, estimated replacement cost, and observed remaining life. [≤12 = green, 12-24 = yellow, ≥24 = red]

Appendices

- A. 3-YEAR PLAN ASSETS LIST
- B. 5-YEAR PLAN ASSETS LIST
- C.10-YEAR PLAN ASSETS LIST

Appendix A

APPENDIX A: 3-YEAR PLAN ASSETS LIST

The individual assets associated with the 3-Year Plan are shown below, sorted from highest to lowest priority score. The priority score key is shown below for convenience.

Note that these values represent current replacement costs expressed in 2023 dollar amounts and are not adjusted for Net Present Value (NPV) Inflation Rate of 0%.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

The asset ID listed for each entry has been assigned during this assessment and reflects the corresponding asset in the FCA workbook.

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ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING	REPLACEMENT COST	PRIORITY SCORE
FCAID-230032	Interior Floor Finishes: Carpet	C30 - Interior Finishes	2	\$582,680	18
FCAID-230039	Interior Floor Finishes: Sheet Vinyl	C30 - Interior Finishes	3	\$1,520	11
FCAID-230040	Interior Floor Finishes: VCT	C30 - Interior Finishes	3	\$54,300	12
FCAID-230041	Interior Floor Finishes: Engineered Wood	C30 - Interior Finishes	3	\$6,620	12
FCAID-230044	BFP-1	D20 - Plumbing	3	\$400	13
FCAID-230046	CP-1	D20 - Plumbing	2	\$4,630	16
FCAID-230047	WH-1	D20 - Plumbing	2	\$10,610	16
FCAID-230049	AHU-1	D30 - HVAC	3	\$67,590	21
FCAID-230050	AHU-2	D30 - HVAC	3	\$28,100	21
FCAID-230061	CU-1	D30 - HVAC	2	\$20,110	19
FCAID-230063	CU-Walk-in Cooler/Freezer	D30 - HVAC	2	\$25,130	19
FCAID-230064	HC-1	D30 - HVAC	3	\$23,240	17
FCAID-230065	HC-2	D30 - HVAC	3	\$10,780	16
FCAID-230066	HC-3	D30 - HVAC	3	\$16,560	16
FCAID-230067	HC-4	D30 - HVAC	3	\$5,640	16
FCAID-230068	HC-5	D30 - HVAC	3	\$3,300	16
FCAID-230069	EF-1	D30 - HVAC	3	\$35,460	17
FCAID-230070	EF-1	D30 - HVAC	3	\$39,340	17
FCAID-230071	EF-2	D30 - HVAC	3	\$7,120	15
FCAID-230072	EF-2	D30 - HVAC	3	\$6,710	15
FCAID-230073	EF-3	D30 - HVAC	3	\$6,210	15
FCAID-230074	EF-3	D30 - HVAC	3	\$6,710	15
FCAID-230075	EF-4	D30 - HVAC	3	\$23,950	17
FCAID-230076	EF-5	D30 - HVAC	3	\$5,550	15
FCAID-230077	EF-6	D30 - HVAC	3	\$5,550	15
FCAID-230078	EF-7	D30 - HVAC	3	\$6,210	15

FCAID-230079	EF-8	D30 - HVAC	3	\$5,550	15
FCAID-230080	EF-9	D30 - HVAC	3	\$5,550	15
FCAID-230081	ET-1	D30 - HVAC	3	\$4,110	12
FCAID-230082	FC-1	D30 - HVAC	3	\$12,240	16
FCAID-230086	Gas Meter	D30 - HVAC	3	\$6,750	12
FCAID-230090	BBR	D30 - HVAC	3	\$131,150	16
FCAID-230091	RTU-1	D30 - HVAC	2	\$31,160	20
FCAID-230092	RTU-2	D30 - HVAC	2	\$32,740	20
FCAID-230093	UH-1	D30 - HVAC	2	\$5,030	15
FCAID-230095	ATS-1	D50 - Electrical	3	\$4,340	14
FCAID-230096	Emergency Generator	D50 - Electrical	3	\$22,400	18
FCAID-230097	Emergency Lighting	D50 - Electrical	1	\$147,060	18
FCAID-230099	Electrical Lighting: Incandescent Wall Pack	D50 - Electrical	2	\$4,250	16
FCAID-230102	Electrical Lighting: Recessed Can	D50 - Electrical	2	\$1,210	16
FCAID-230103	Exterior Lighting: Wall Pack, Fluorescent	D50 - Electrical	2	\$10,310	16
FCAID-230105	Interior Lighting- Fluorescent	D50 - Electrical	3	\$590,950	26
FCAID-230122	Security System	D50 - Electrical	1	\$147,060	21
FCAID-230129	Walk in Cooler	E10 - Equipment	2	\$18,100	18
FCAID-230130	Walk in Freezer	E10 - Equipment	2	\$18,100	18
FCAID-230131	Electric Meter	G40 - Site Electric	3	\$1,530	12

Appendix B

APPENDIX B: 5-YEAR PLAN ASSETS LIST

The individual assets associated with the 5-Year Plan are shown below, sorted from highest to lowest priority score. The priority score key is shown below for convenience.

Note that these values represent current replacement costs expressed in 2023 dollar amounts and are not adjusted for Net Present Value (NPV) Inflation Rate of 0%.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

The asset ID listed for each entry has been assigned during this assessment and reflects the corresponding asset in the FCA workbook.

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ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE	REPLACEMENT COST	PRIORITY SCORE
FCAID-230062	CU-2	D30 - HVAC	5	\$7,540	16
FCAID-230089	RTP-1	D30 - HVAC	5	\$19,790	15
FCAID-230058	CUH-1	D30 - HVAC	5	\$8,750	14
FCAID-230013	Roofing: Rolled Asphalt	B30 - Roofing	4	\$68,330	14
FCAID-230060	CUH-6	D30 - HVAC	5	\$9,240	14
FCAID-230031	Interior Ceiling Finishes: ACT	C30 - Interior Finishes	5	\$294,380	14
FCAID-230057	CUH-8	D30 - HVAC	5	\$6,480	14
FCAID-230053	CUH-3	D30 - HVAC	5	\$9,240	14
FCAID-230059	CUH-2	D30 - HVAC	5	\$8,750	14
FCAID-230008	Roofing: Ballast	B30 - Roofing	4	\$53,410	14
FCAID-230009	Roofing: Membrane	B30 - Roofing	4	\$27,290	14
FCAID-230083	FCU-2	D30 - HVAC	5	\$8,870	14
FCAID-230056	CUH-7	D30 - HVAC	5	\$9,240	14
FCAID-230055	CUH-5	D30 - HVAC	5	\$9,240	14
FCAID-230054	CUH-4	D30 - HVAC	5	\$6,480	14
FCAID-230126	Surge Suppressor	D50 - Electrical	4	\$3,000	13
FCAID-230125	Surge Suppressor	D50 - Electrical	4	\$3,850	13
FCAID-230048	WH-2	D20 - Plumbing	5	\$10,610	13
FCAID-230011	Roofing: Gutter and Downspouts	B30 - Roofing	4	\$7,370	13
FCAID-230012	Roofing: Metal Flashing	B30 - Roofing	4	\$1,100	13
FCAID-230037	Interior Floor Finishes: Tile	C30 - Interior Finishes	4	\$37,510	13
FCAID-230045	Fire BFP	D20 - Plumbing	5	\$1,600	12
FCAID-230038	Interior Wall Finishes: Tile	C30 - Interior Finishes	4	\$15,630	12
FCAID-230098	Electrical Lighting: Decorative Wall Pack	D50 - Electrical	5	\$1,210	11

Appendix C

APPENDIX C: 10-YEAR PLAN ASSETS LIST

The individual assets associated with the 10-Year Plan are shown below, sorted from highest to lowest priority score. The priority score key is shown below for convenience.

Note that these values represent current replacement costs expressed in 2023 dollar amounts and are not adjusted for Net Present Value (NPV) Inflation Rate of 0%.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

The asset ID listed for each entry has been assigned during this assessment and reflects the corresponding asset in the FCA workbook.

HARRIS BILINGUAL ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE	REPLACEMENT COST	PRIORITY SCORE
FCAID-230104	Fire Alarm System	D50 - Electrical	6	\$300,690	22
FCAID-230030	Stairs - 1919	C20 - Stairs	10	\$128,900	13
FCAID-230007	Exterior Windows: Metal Clad Wood Fram	B20 - Exterior Enclosu	9	\$155,320	12
FCAID-230006	Exterior Windows: Aluminum Framed	B20 - Exterior Enclosu	9	\$9,710	11
FCAID-230005	Exterior Door: Metal, Single	B20 - Exterior Enclosu	9	\$33,400	11
FCAID-230029	Stairs - 1919 Basement	C20 - Stairs	10	\$1,030	11
FCAID-230101	Electrical Lighting: LED Wall Pack	D50 - Electrical	7	\$1,210	11
FCAID-230100	Electrical Lighting: LED Egress Fixture	D50 - Electrical	7	\$3,640	11
FCAID-230004	Exterior Doors: Metal, Double	B20 - Exterior Enclosu	9	\$49,600	11
FCAID-230002	Exterior Wall Construction: Brick (1919)	B20 - Exterior Enclosu	10	\$157,820	11
FCAID-230018	Interior Wall Construction: 19 Masonry	C10 - Interior Constr	10	\$153,440	11
FCAID-230026	Ramp - 1919	C20 - Stairs	10	\$4,120	11
FCAID-230023	Interior Wall Construction: 19 Plaster	C10 - Interior Constr	10	\$120,900	10
FCAID-230033	Interior Ceiling Finishes: Tile	C30 - Interior Finishes	10	\$66,730	9
FCAID-230036	Interior Wall Finishes: Wood Wainscoting	C30 - Interior Finishes	9	\$7,180	9
FCAID-230042	Interior Floor Finishes: Org. Hardwood	C30 - Interior Finishes	10	\$7,440	9
FCAID-230034	Interior Ceiling Finishes: 19 Drywall (8)	C30 - Interior Finishes	10	\$6,540	8
FCAID-230021	Interior Window Construction: 19 Metal F	C10 - Interior Constr	10	\$5,820	8