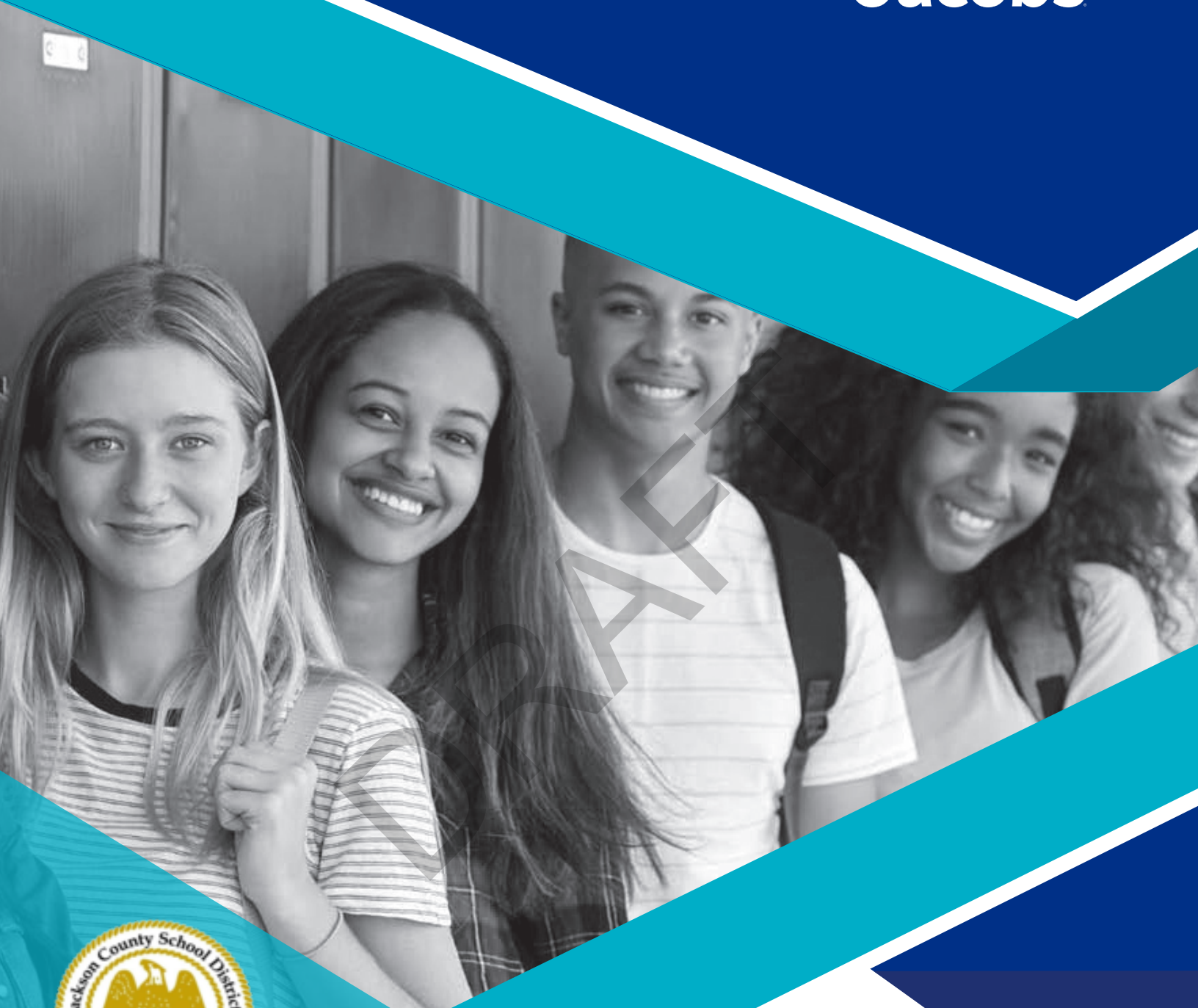


Jacobs



STATE OF SCHOOLS
FACILITY REPORT

JACKSON COUNTY SCHOOL DISTRICT | NOVEMBER 2020



STATE OF SCHOOLS FACILITY REPORT

Executive Summary | November 2020

The Jackson County School District (JCSD or the District) recently completed a comprehensive facilities condition assessment of 19 school and administrative facilities within its jurisdiction. This assessment was completed to direct long-range capital planning efforts and investments across the District.

ASSESSMENT FINDINGS

Several data gathering components culminate to provide options for future investment: an assessment of the entire JCSD facility portfolio, a facility condition assessment, and a five-year and ten-year life cycle forecast. Results from the assessment are summarized in this document, giving an overall picture of the District's facilities. With this information JCSD can develop a capital plan and forecast future funding requirements.

The facility condition assessment identified \$44.6 million in current need. The projected five-year life cycle renewal needs for JCSD's facilities are estimated to be \$59.0 million and the total ten-year life cycle forecast is \$112.0 million. Combining current needs with the next ten years of anticipated life cycle renewal forecast, the District can anticipate \$156.6 million in facility-related needs. These figures exclude any classroom additions or new construction for additional enrollment growth or program expansion.

FIVE-YEAR FACILITY CONDITION INDEX (FCI)

For long-range planning purposes, the facility deficiency costs and the first five years of projected life cycle renewal forecast were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A five-year FCI was calculated by dividing the combined five-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation.

The majority of the campus FCIs are between 21 and 50 percent, indicating that they are in below average to poor condition. During the field work it was noted that JCSD facilities were well-maintained. Generally, the current conditions are due to aging facilities. One school and one administrative facility in the District have FCIs between 51 and 65 percent, indicating they are in very poor condition. They are East Central Upper Elementary and Central Office.

CURRENT NEED

\$44.6

million



LIFE CYCLE YEARS 1-5

\$59.0

million



LIFE CYCLE YEARS 6-10

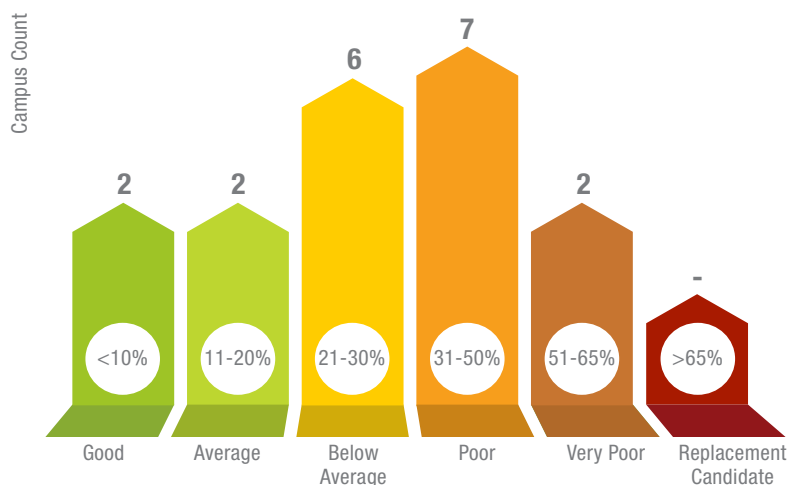
\$53.0

million

TOTAL 10-YEAR NEED

\$156.6

million





WINDSWEPT
LOWER ELEMENTARY

DRAFT

Acknowledgments

The team would like to extend our appreciation to Jackson County School District for choosing our team to conduct this comprehensive assessment.

SDMC SUPERINTENDENT

Dr. John Strycker

SCHOOL BOARD OF JACKSON COUNTY

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PROJECT TEAM

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DRAFT



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SUMMARY



Introduction and Methodology

In order to support the Jackson County School District’s (JCSD) mission, each campus facility must be well-equipped with appropriate learning spaces for students and faculty alike. The District has embarked on a comprehensive assessment of 19 educational and administrative facilities within its jurisdiction.

This document summarizes the results of the 2020 JCSD comprehensive assessment, highlighting the need for future investment dollars. These components include a review of the entire facility portfolio, a facility condition assessment, and a ten-year life cycle forecast. Data are combined to formulate total district-wide investment needs for the next five and ten years, which can be used to develop a facility long-range plan and forecast future funding requirements.

The facility condition assessment contains detailed information associated with each building system, including the overall condition of school facilities, as well as life cycle forecasting information that attempts to identify future building and system needs. All collected data is housed in the MAPPS™ assessment database for future access and analysis by the District.

THE JCSD COMPREHENSIVE ASSESSMENT PROCESS

This report summarizes findings and results for each component of the comprehensive assessment. As shown in Figure 1 below, each individual assessment or data gathering exercise leads to the production of a list of needs over the next ten years. This is used to inform a future facility long-range plan.



Figure 1: JCSD Comprehensive Assessment Process

DISTRICT CONDITION SUMMARY

926
DEFICIENCIES
3,135
TOTAL LIFE CYCLE ITEMS
19
CAMPUSES
79
BUILDINGS

COMPONENTS OF THE JCSD COMPREHENSIVE ASSESSMENT

Each comprehensive assessment component is described in further detail below.



Facility Condition Assessment

The facility condition assessment evaluates each building's overall condition, including its site, roof, structural integrity, the exterior building envelope, the interior, and the mechanical, electrical, and plumbing systems.

Architectural, mechanical and electrical building professionals observed conditions at the facilities in the District. Conditions were evaluated from a visual observation that did not include intrusive measures, destructive investigations, or testing. Additionally, input provided by District staff was incorporated where applicable. Facility deficiency cost and life cycle forecast are combined to total the cost for facility need.



Facility Deficiency Cost

Facility deficiency costs are associated with bringing current systems and components back to a functional state as installed, but do not account for additional funds required to adapt facilities to new construction standards or address capacity.



Ten-Year Life Cycle Forecast

Life cycle data predicts future facility costs based on the expected remaining life of individual building systems (e.g., roofing, exterior, interior, and more). While a particular building component may not require immediate replacement, it is quite possible for it to reach its end of useful life before or during the commencement of a planned capital construction project. This results in additional costs, which must be accounted for in the planning process. For example, if a chiller is currently functioning but will require replacement in the next few years, JCSD will need to plan for its replacement.



Combined Ten-Year Need

Combining the current repair costs with the ten-year life cycle renewal forecast indicates total District need. These figures exclude any expansion for classroom additions or new construction for additional enrollment growth. Also, not included are costs for programmatic changes, school consolidations, and replacements. These items should be determined as part of different scenarios developed during planning.



Facility Long-Range Plan

Based on information collected during the assessment, the District can begin a long-range facilities plan to address deteriorating buildings. Many different scenarios are possible that consider facility condition, capacity, attendance zone utilization, and other factors. Each scenario would have a different impact on the actual cost related to facility condition improvements, five-year and ten-year life cycle costs, and costs of replacing some facilities in poor condition with new buildings. It is important to note that developing actual potential scenarios would involve reviewing these factors, as well as additional planning involving key stakeholders.

ASSESSMENT METHODOLOGY

The JCSD comprehensive assessment utilized a four-step methodology summarized below.

1. **Project Kickoff:** In September 2020, the comprehensive assessment began with a kickoff meeting to establish goals and objectives. Project and assessment schedules were confirmed, and logistical concerns identified.
2. **Data Gathering:** On-site assessments were conducted by two teams of specialists, representing architectural, mechanical, electrical and plumbing disciplines. Each facility was visited, and pertinent data collected using standardized processes and procedures.
3. **Data Analysis and Cost Estimating:** Following the assessments, collected data were reviewed and entered into the MAPPS™ assessment and capital planning database. Cost estimates were derived from 2020 RSMeans and enhanced with local cost estimating expertise and relevance to the Jackson County region. All costs were based on a replace-in-kind approach.

For planning and budgeting purposes, facility assessments customarily add a soft cost multiplier onto deficiency repair cost estimates. This soft cost multiplier accounts for costs that are typically incurred when contracting for renovation and construction services. Soft costs typically include construction cost factors, such as labor and material inflation, professional fees, and administrative costs. All stated costs in the assessment report will include soft costs for planning and budgeting purposes. These are not exhaustive estimates and costs will vary at the time of construction.

Replacement cost models for each facility type were developed based on RSMeans square foot cost and adjusted to better represent current costs within Jackson, Mississippi. These values are applied to the actual square footage of the facility to estimate a theoretical replacement cost.

4. **Next Steps:** Data compiled in this assessment will be utilized in facility long-range planning by the District. By developing decisions based on the prioritization and categorization of needs identified during the assessment, the district can begin planning with an objective, data-driven foundation for long-term decision making.

FACILITY CONDITION ASSESSMENT METHODOLOGY





Facility Portfolio

JCSD currently manages more than 1.3 million square feet of educational facilities across 19 educational and administrative campuses. The District properties include seven elementary school campuses, three middle school campuses, three high school campuses, and six administration facilities. Table 1 summarizes the portfolio of permanent buildings for the District. JCSD's permanent educational space is comprised of 37.9 percent elementary school, 24.9 percent middle school, and 33.0 percent high school square footage.

Table 1: JCSD Facility Portfolio

Facility Type	Campuses	Permanent Buildings	
		Count	Sq Ft
Elementary Schools	7	32	510,716
Middle Schools	3	20	335,344
High Schools	3	21	444,972
Admin Buildings	6	6	57,000
Total	19	79	1,348,032

CAMPUS AGE

Early research indicated a correlation between school age and student achievement; newer buildings have better lighting, better comfort control, and air quality. However, with school districts across the country having aging portfolios, a more important correlation to be made is between the condition of a facility and student performance. Studies indicate that student's performance is increased in upgraded facilities. Upgraded facilities generally have all the key components of a newer facility; i.e. improved indoor air quality, upgraded lighting, and the appropriate learning spaces.

In 2014, the National Center for Education Statistics (NCES) reported that the average public school main instructional building in the United States was 44 years old. Major building replacements and additions have occurred, on average, approximately 16 years ago. By the time a school facility reaches 30 years of age, many of its building systems are beyond their useful life and furthermore, the learning technologies have changed vastly over time, making major renovations necessary to accommodate new learning technologies and space standards.

Seventy percent of the District's portfolio was constructed prior to 1995, indicating that the majority of the facility population is at or nearing the midpoint of its average design life. Figure 2 illustrates campus age breakdown. Campus age data presented here was either provided by the District or was approximated in the field where data was not available.

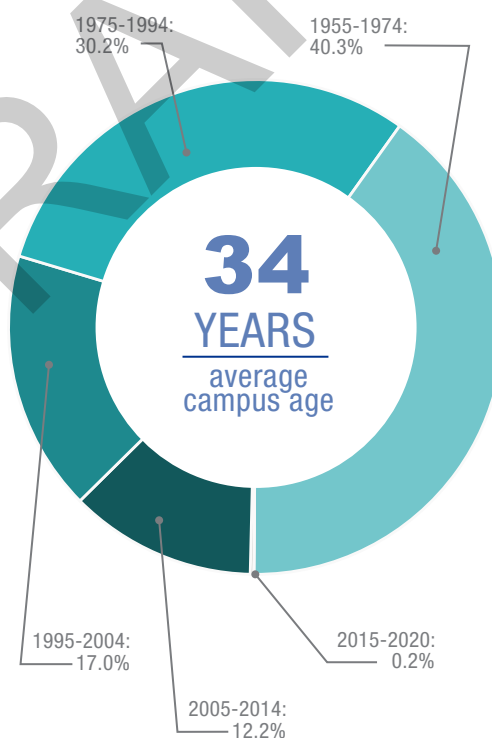


Figure 2: Average Age of JCSD Facilities





Facility Condition Assessment & Life Cycle Renewal

FACILITY CONDITION ASSESSMENT SUMMARY

A facility condition assessment evaluates the general health of physical facilities by identifying and prioritizing deficiencies that require correction for long-term use of the campus. The facility condition assessment at JCSD included a comprehensive evaluation that assessed both current deficiencies and building system life cycles. Data collected is organized by building system as well as, prioritized to support long-range planning. At the conclusion of the building assessment, deficiency and life cycle renewal costs were compiled to develop district-wide current need, ten-year life cycle forecast, and a total ten-year need.

All members of the survey team recorded existing conditions, identified problems and deficiencies, documented corrective action and quantities, and identified priorities for repair. Published checklists and definitions were used for consistency and completeness of data among the different survey teams. An example of a current deficiency might include rusted exterior metal doors. Digital photos were taken at each school to better identify significant deficiencies.

The assessment team also estimated the remaining useful life on all major building systems. Life cycle analysis typically looks at the ages of systems in a building to forecast system replacement as it reaches the end of its serviceable life. An example of a life cycle system replacement might be a roof with a 20-year life that has been in place for 15 years, requiring replacement in five years.

Following the assessment, a separate data entry team entered the identified deficiencies and life cycle data, using a specific code structure to ensure accuracy, into the MAPPS™ assessment and capital planning database. Quality control experts and cost estimators reviewed the data for consistency and accuracy.





FACILITY DEFICIENCY PRIORITY LEVELS

- 1 Mission Critical Concerns
- 2 Indirect Impact to Educational Mission
- 3 Short-Term Conditions
- 4 Long-Term Requirements
- 5 Enhancements

FACILITY DEFICIENCY PRIORITY LEVELS

Facility deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

- **Priority 1 – Mission Critical Concerns:** Deficiencies or conditions that may directly affect the school's ability to remain open or deliver the educational curriculum. These deficiencies typically include items related to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency may be a fire alarm system replacement.
- **Priority 2 – Indirect Impact to Educational Mission:** Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing and building envelope issues that could lead to further deterioration of integral buildings systems if not addressed early.
- **Priority 3 – Short-Term Conditions:** Deficiencies that are necessary to the mission of the school but may not require immediate attention. These items should be considered necessary improvements requiring incorporation into initial construction projects and plans to maximize efficiency and usefulness of the facility. Examples of Priority 3 items include site improvements and plumbing deficiencies.
- **Priority 4 – Long-Term Requirements:** Items or systems which are likely to require attention within the next five years or would be considered an improvement to the instructional environment. The improvements may be aesthetic or may provide greater functionality. Examples include cabinets, interior finishes, paving, or removal of abandoned equipment.
- **Priority 5 – Enhancements:** These items are deficiencies that are aesthetic in nature or are considered enhancements. Typical deficiencies in this priority may include repainting, recarpeting, improved signage, or other items that provide for an improved facility environment. These items may be optional to the district, but are generally included under a comprehensive renovation project plan.

Figure 3 represents the current need, by priority. Priority 2 deficiencies make up 56 percent of the current need at \$25.0 million. Over 66 percent of the Priority 2 deficiencies are related to roofing. It is important to note that these deficiencies may progress to Priority 1 if not addressed in the near term.

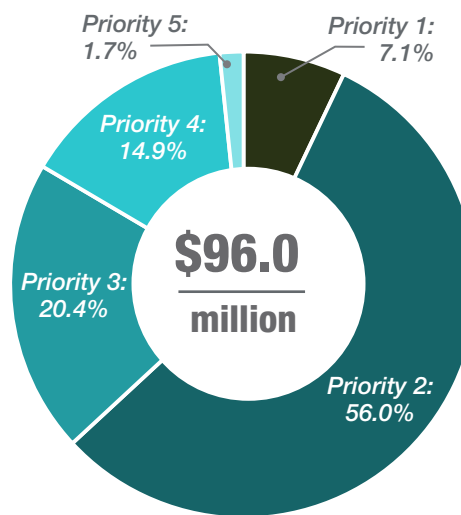


Figure 3: Deficiency Priorities

FACILITY DEFICIENCY BY FACILITY TYPE

Table 2 and Figure 4 depict school or facility types and their associations, in dollars, by priority level. The table indicates that the majority of total deficiencies are at the high schools and are Priority 2. It should be noted that high schools make up 33% of the District's portfolio by area. Middle schools have the highest deficiency cost per square foot at \$36.62.

Table 2: Building Type Deficiencies by Priority Level

Type	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Total
Elementary Schools	\$ 1,183,594	\$ 6,624,050	\$ 4,419,949	\$ 1,985,869	\$ 227,356	\$ 14,440,819
Middle Schools	\$ 719,891	\$ 7,613,346	\$ 1,965,188	\$ 1,801,743	\$ 179,726	\$ 12,279,894
High Schools	\$ 1,233,482	\$ 9,713,623	\$ 2,213,109	\$ 2,514,704	\$ 316,869	\$ 15,991,786
Admin Buildings	\$ 14,452	\$ 1,017,631	\$ 473,264	\$ 323,932	\$ 12,370	\$ 1,841,648
Total	\$ 3,151,419	\$ 24,968,649	\$ 9,071,510	\$ 6,626,248	\$ 736,322	\$ 44,554,147

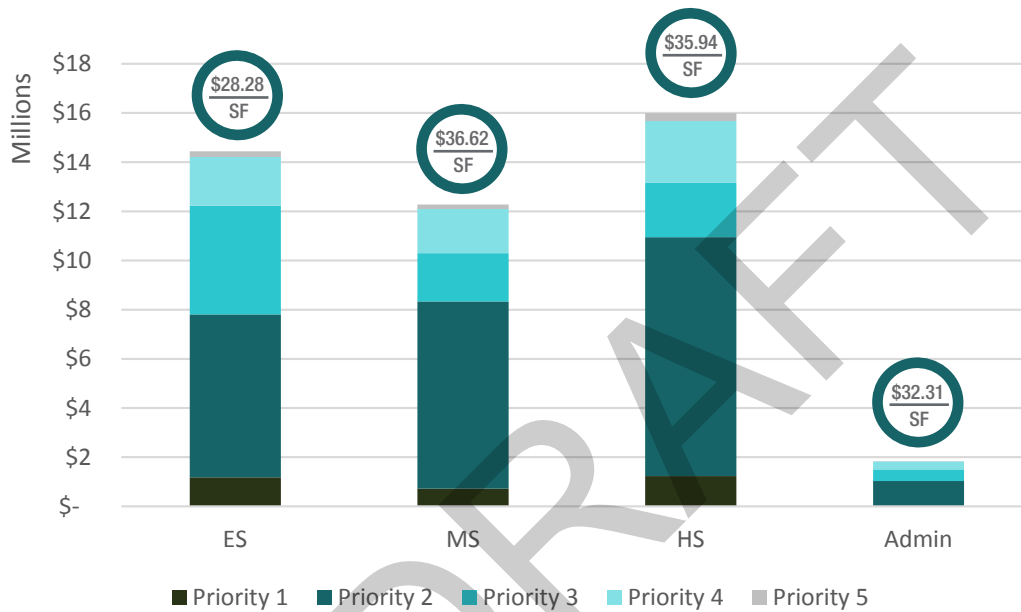


Figure 4: Building Type Deficiencies

FACILITY DEFICIENCY BY BUILDING SYSTEM

Facility deficiencies are divided into industry-standard building systems with multiple subsystems and subsystem types. The systems include:

- Site
- Roofing
- Structural
- Exterior
- Interior
- Mechanical
- Electrical
- Plumbing
- Fire and Life Safety
- Conveyances
- Specialties





Table 3 and Figure 5 show building system type and their associations, in dollars, by priority. The table indicates that approximately 38 percent of the deficiencies are related to roofing and nearly 15 percent are associated with the site.

Table 3: Building System Deficiencies by Priority Level

Building System	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Total
Site	\$ -	\$ 3,965	\$ 4,577,451	\$ 1,811,441	\$ 119,931	\$ 6,512,788
Roofing	\$ -	\$ 16,528,125	\$ 554,353	\$ 617	\$ 1,320	\$ 17,084,415
Structural	\$ 23,039	\$ -	\$ -	\$ -	\$ -	\$ 23,039
Exterior	\$ -	\$ 2,285,273	\$ 119,776	\$ 694,141	\$ 206,561	\$ 3,305,750
Interior	\$ -	\$ -	\$ 891,709	\$ 2,362,911	\$ 287,997	\$ 3,542,617
Mechanical	\$ -	\$ 5,604,759	\$ 529,373	\$ 79,977	\$ 103,400	\$ 6,317,508
Electrical	\$ 1,848	\$ 510,104	\$ 2,164,541	\$ 49,146	\$ 14,451	\$ 2,740,090
Plumbing	\$ -	\$ 311	\$ 206,490	\$ 100,095	\$ -	\$ 306,896
Fire & Life Safety	\$ 3,126,532	\$ 36,113	\$ -	\$ -	\$ -	\$ 3,162,645
Conveyances	\$ -	\$ -	\$ 25,227	\$ -	\$ -	\$ 25,227
Specialties	\$ -	\$ -	\$ 2,589	\$ 1,527,921	\$ 2,661	\$ 1,533,171
Total	\$ 3,151,419	\$ 24,968,649	\$ 9,071,510	\$ 6,626,248	\$ 736,322	\$ 44,554,147

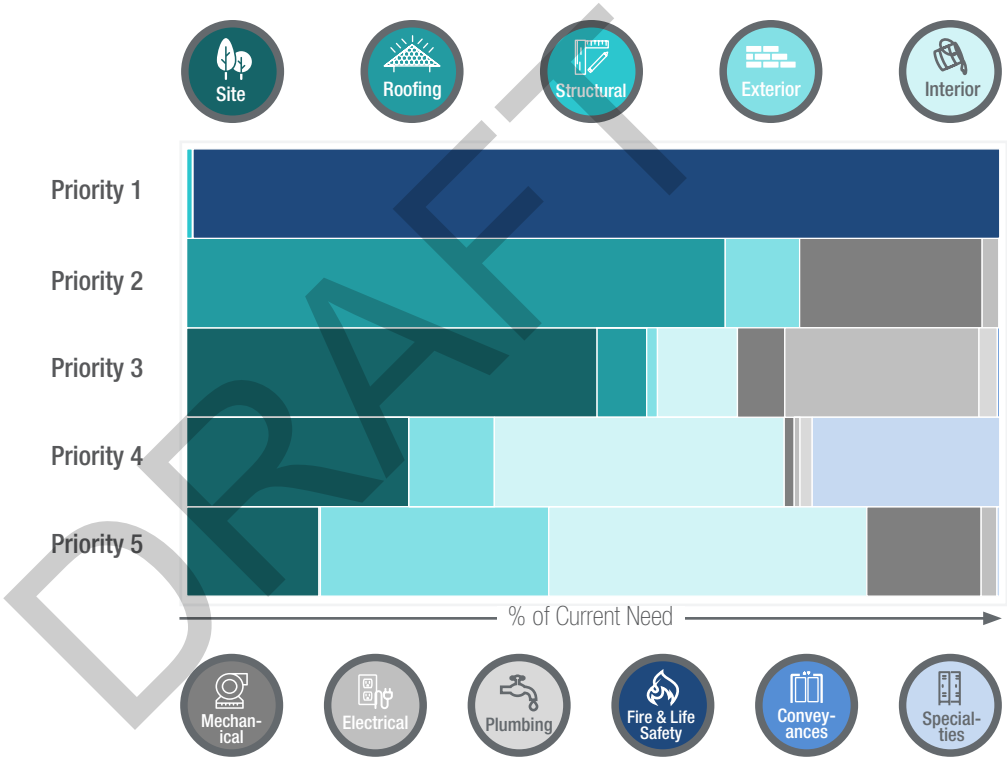


Figure 5: Building System Deficiencies

LIFE CYCLE RENEWAL

The life cycle of building systems and components plays a major role in properly developing a long-range facilities plan. Capital planning scenarios account for needs over a number of years. Hence, it is necessary to forecast any future costs associated with a facility beyond the current year needs.

Life cycle renewal may be defined as the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, and reach the end of their useful life, at which point they may require replacement. While an item may be in good condition now, it is possible for it to reach its end of life before the date of a planned construction project. Similar to deficiency data, life cycle renewal information is prioritized and organized by industry standard building systems.

Life cycle data for JCSD was obtained during the facility condition assessment and is shown in Figure 6 below. The District can anticipate estimated life cycle renewal costs to reach approximately \$59.0 million in years 1-5 and \$53.0 million in years 6-10, for a total ten-year forecast of \$112.0 million. It is anticipated that most life cycle renewal costs will occur in four years.

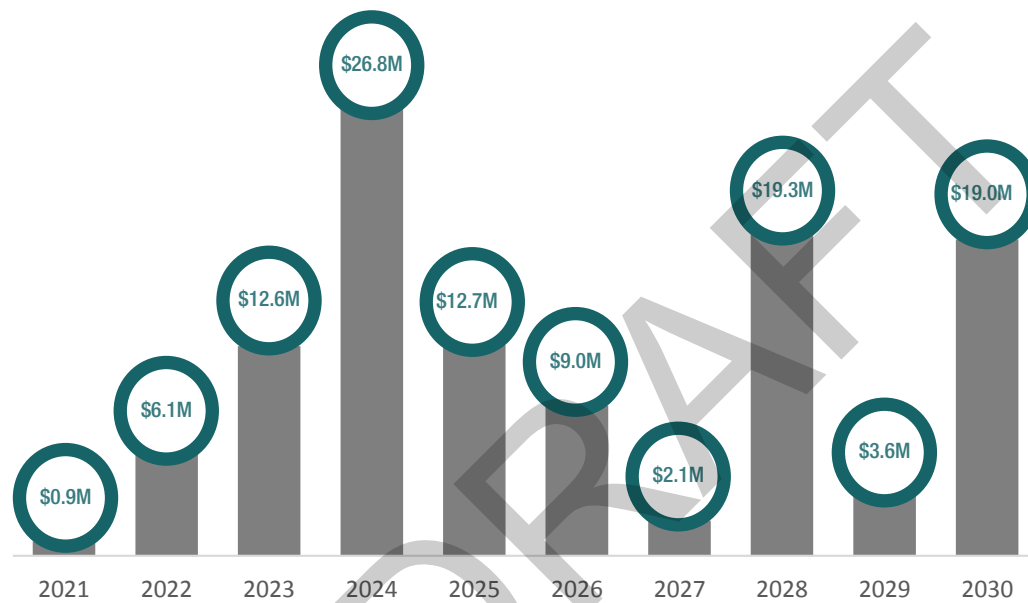


Figure 6: Life Cycle Renewal Totals by Year

For planning purposes, life cycle records are assigned a Priority 1-5 that aligns with the deficiency priorities previously outlined. Figure 7 represents the 10-year life cycle forecast, by priority. Priority 3 has the greatest 10-year life cycle renewal at \$49.7 million, with more than 39 percent being interior light fixtures.

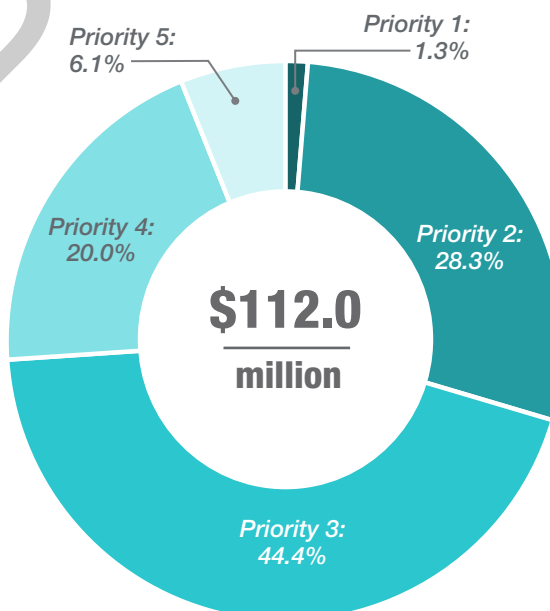


Figure 7: Life Cycle Priorities

Tables 4 and 5 and Figure 8 show 10-year life cycle renewal data categorized by system type. Electrical systems have the largest need, with 22.0 percent of the life cycle renewal costs over 10 years, with the largest estimated cost occurring in year four. More than 36 percent of these year four costs are associated with interior light fixtures. Interior building systems make up 18.3 percent of the 10-year life cycle renewal cost, nearly a quarter of these costs are associated with vinyl composition tile flooring.

Table 4: Life Cycle Forecast by Building System (Years 1-5)

Building System	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	5 Year Sub Total
Site	\$ -	\$ 128,429	\$ 114,759	\$ 2,410,233	\$ 1,026,955	\$ 3,680,376
Roofing	\$ -	\$ -	\$ 137,028	\$ 1,000,969	\$ 4,190,457	\$ 5,328,454
Exterior	\$ 29,845	\$ 1,034,657	\$ 319,052	\$ 301,269	\$ 1,225,326	\$ 2,910,149
Interior	\$ 368,785	\$ 1,612,957	\$ 2,159,879	\$ 2,967,519	\$ 1,790,254	\$ 8,899,394
Mechanical	\$ -	\$ 72,015	\$ 3,850,917	\$ 4,967,236	\$ 1,739,614	\$ 10,629,782
Electrical	\$ 274,172	\$ 1,986,839	\$ 4,525,856	\$ 10,451,057	\$ 836,507	\$ 18,074,431
Plumbing	\$ 170,031	\$ 681,088	\$ 764,562	\$ 2,949,779	\$ 1,686,169	\$ 6,251,629
Fire & Life Safety	\$ 20,949	\$ 19,191	\$ 580,620	\$ 133,705	\$ 169,576	\$ 924,041
Conveyances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Specialties	\$ -	\$ 522,263	\$ 133,518	\$ 1,657,194	\$ -	\$ 2,312,975
Total	\$ 863,782	\$ 6,057,439	\$ 12,586,191	\$ 26,838,961	\$ 12,664,858	\$ 59,011,231

Table 5: Life Cycle Forecast by Building System (Years 6-10)

Building System	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030	6-10 Year Sub Total	Total
Site	\$ 713,648	\$ 306,997	\$ 4,000,234	\$ 515,301	\$ 707,330	\$ 6,243,510	\$ 9,923,886
Roofing	\$ 2,112,380	\$ 53,713	\$ 4,982,274	\$ 862,727	\$ 1,037,200	\$ 9,048,294	\$ 14,376,748
Exterior	\$ 115,623	\$ 668,644	\$ 170,730	\$ 190,162	\$ 1,027,622	\$ 2,172,781	\$ 5,082,930
Interior	\$ 2,210,258	\$ 855,383	\$ 3,918,145	\$ 1,762,704	\$ 2,846,379	\$ 11,592,869	\$ 20,492,263
Mechanical	\$ 3,220,591	\$ 116,380	\$ 1,820,957	\$ 157,892	\$ 1,471,866	\$ 6,787,686	\$ 17,417,468
Electrical	\$ 448,607	\$ -	\$ 2,308,961	\$ 27,231	\$ 3,813,892	\$ 6,598,691	\$ 24,673,122
Plumbing	\$ 17,809	\$ 72,792	\$ 680,582	\$ 1,905	\$ 7,889,182	\$ 8,662,270	\$ 14,913,899
Fire & Life Safety	\$ 139,840	\$ -	\$ 277,269	\$ 77,802	\$ 34,807	\$ 529,718	\$ 1,453,759
Conveyances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Specialties	\$ 39,270	\$ 31,416	\$ 1,137,457	\$ -	\$ 176,125	\$ 1,384,268	\$ 3,697,243
Total	\$ 9,018,026	\$ 2,105,325	\$ 19,296,609	\$ 3,595,724	\$ 19,004,403	\$ 53,020,087	\$ 112,031,318

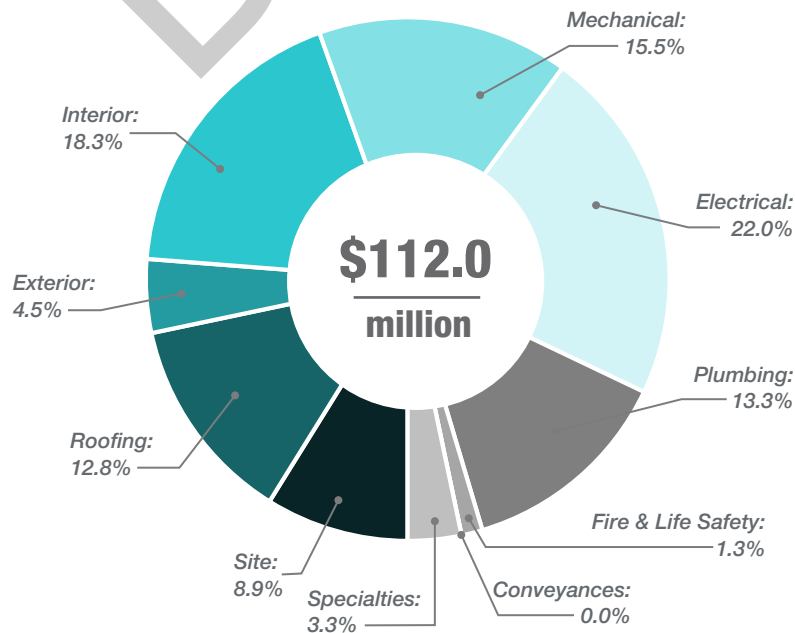


Figure 8: Life Cycle by System

Tables 6 and 7 and Figure 9 show 10-year life cycle renewal data categorized by facility type. Elementary schools have the largest 10-year life cycle renewal cost at \$41.8 million. Based on square footage, the high schools have the highest life cycle renewal cost at \$89.82 per foot, while life cycle renewal costs for elementary schools are \$81.82 per foot.

Table 6: Life Cycle Forecast by Building Type (Years 1-5)

Facility Type	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	5 Year Sub Total
Elementary Schools	\$ 169,579	\$ 3,986,428	\$ 5,013,628	\$ 11,643,081	\$ 5,087,950	\$ 25,900,666
Middle Schools	\$ 53,094	\$ 600,324	\$ 2,558,308	\$ 8,320,376	\$ 2,306,441	\$ 13,838,543
High Schools	\$ 431,072	\$ 1,005,249	\$ 3,987,454	\$ 6,152,557	\$ 4,482,507	\$ 16,058,839
Admin Buildings	\$ 210,037	\$ 465,438	\$ 1,026,801	\$ 722,947	\$ 787,960	\$ 3,213,183
Total Schools	\$ 863,782	\$ 6,057,439	\$ 12,586,191	\$ 26,838,961	\$ 12,664,858	\$ 59,011,231

Table 7: Life Cycle Forecast by Building Type (Years 6-10)

Facility Type	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030	6-10 Year Sub Total	Total
Elementary Schools	\$ 1,990,605	\$ 753,878	\$ 6,705,750	\$ 1,563,447	\$ 4,874,854	\$ 15,888,534	\$ 41,789,200
Middle Schools	\$ 1,329,655	\$ 492,126	\$ 5,110,696	\$ 761,818	\$ 3,758,964	\$ 11,453,259	\$ 25,291,802
High Schools	\$ 5,232,017	\$ 781,080	\$ 6,554,234	\$ 1,269,875	\$ 10,072,742	\$ 23,909,948	\$ 39,968,787
Admin Buildings	\$ 465,749	\$ 78,241	\$ 925,929	\$ 584	\$ 297,843	\$ 1,768,346	\$ 4,981,529
Total Schools	\$ 9,018,026	\$ 2,105,325	\$ 19,296,609	\$ 3,595,724	\$ 19,004,403	\$ 53,020,087	\$ 112,031,318



Figure 9: 10-Year Life Cycle Forecast by Building Type (Cost per SF)



Facility Condition Index (FCI)

The FCI is used throughout the facility condition assessment industry as a general indicator of a building’s health. Different organizations and industries utilize varying scales to link FCI to condition, depending on the level to which they maintain their facilities. Jacobs has used the FCI ranges illustrated in Figure 10. FCIs less 10 percent are good, 11 to 20 percent are average, 21 to 30 percent are below average, 31 to 50 percent are poor, 51 to 65 are very poor, and greater than 65 percent are replacement candidates. Financial modeling has shown that over a 30-year period, schools that fall in the 65 percent or greater range are more cost-effective to replace than to repair. This is due to efficiency gains with more modern facilities and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on the property owners’/facility managers’ approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making school facility decisions.

For long-range planning purposes, the facility deficiency costs and the first five years of projected life cycle renewal forecast were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A five-year FCI was calculated by dividing the combined five-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation.

FIVE-YEAR FCI BY CAMPUS

Table 8 and Figure 10 show the range of FCIs at the campus level within JCSD. More than 78 percent of the campus FCIs are considered below average, poor, or very poor; this is often indicative of an aging facility portfolio. A campus condition summary is found in Appendix A.

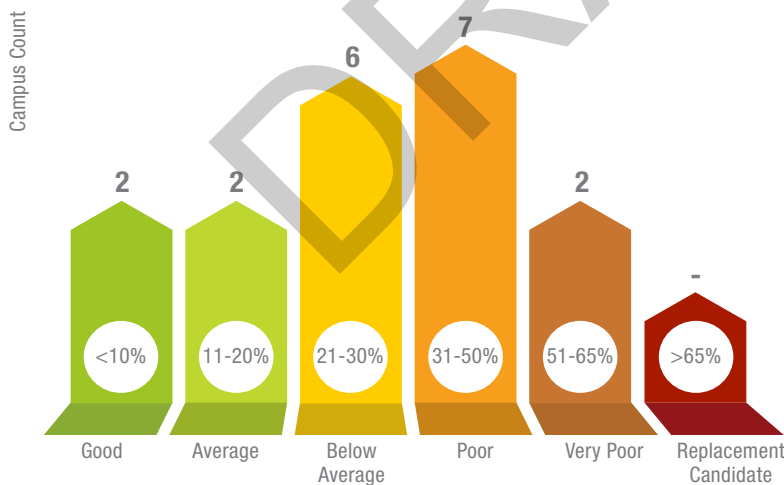


Figure 10: Campus FCI Range

FIVE-YEAR FACILITY CONDITION INDEX

Combined Five-Year Need



Total Replacement Cost



Five-Year Facility Condition Index (FCI)

Table 8: FCI by Campus

FCI	Campuses	Area
<10%	2	167,904
11-20%	2	150,700
21-30%	6	548,912
31-50%	7	418,716
51-65%	2	61,800
>65%	-	-
Total	19	1,348,032



POOR CONDITION FACILITIES

Nine sites in the District have FCIs 31 percent or greater, indicating they are in poor or very poor condition. They range in age from 25 to 61 years and the majority of deficiencies at these sites are associated with roofing and site building systems. Figure 11 illustrates the poor condition facilities. They are Vancleave Upper Elementary, East Central High School, St. Martin East Elementary, St. Martin North Elementary, Business Office, JCTC, GED Building, East Central Upper Elementary, and Central Office.

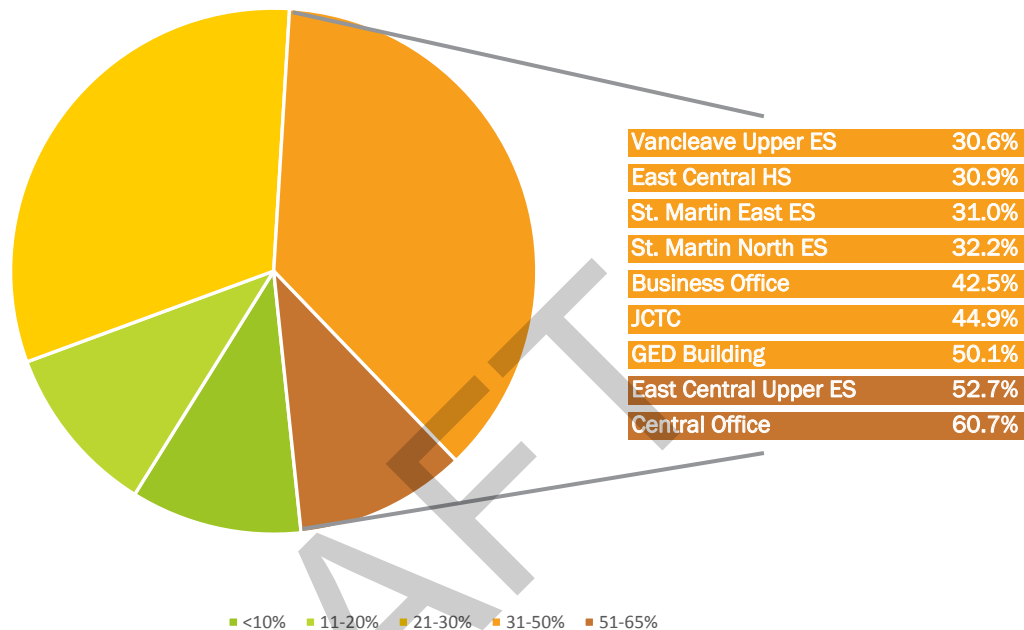


Figure 11: Poor Condition Facilities

Summary of Findings

Findings of the JCSD comprehensive assessment have been summarized to give a clear picture of the state of facilities over the next ten years. The data collected during the facility condition assessment can be used to inform facility long-range planning efforts.

DEFICIENCIES - \$44.6 MILLION

- \$36.62 / SF at MS campuses
- 56.0% Priority 2
- 38.3% associated with roofing systems
- 35.9% associated with HS

10-YEAR LIFE CYCLE - \$112.0 MILLION

- \$59.0 million - Years 1-5
- \$53.0 million - Years 6-10
- 22.0% associated with electrical systems
- \$26.8 million in Year 4

5-YEAR FCI - 25.4% DISTRICT-WIDE

- 4 campuses good or average
- 6 campuses below average
- 47.4% of portfolio in poor or very poor condition



TOTAL 10-YEAR NEED

\$156.6
million



Appendix A Campus Condition Summary

The following tables provide a summary for each campus showing the current need, five and ten-year life cycle totals, combined five-year need, replacement cost, and five-year FCI.

Campus Name	Current Need	5-Year Life Cycle	6-10 Year Life Cycle	Combined 5-Year Need	Total Replacement Cost	5-Year FCI
Elementary Schools						
East Central Lower Elementary	\$ 1,208,938	\$ 3,510,251	\$ 3,067,366	\$ 4,719,189	\$ 20,114,536	23.5%
East Central Upper Elementary	\$ 3,651,384	\$ 3,803,945	\$ 1,780,082	\$ 7,455,329	\$ 14,140,464	52.7%
St. Martin East Elementary	\$ 2,222,757	\$ 3,340,659	\$ 1,474,447	\$ 5,563,416	\$ 17,922,216	31.0%
St. Martin North Elementary	\$ 328,745	\$ 4,988,076	\$ 1,329,595	\$ 5,316,821	\$ 16,497,208	32.2%
St. Martin Upper Elementary	\$ 531,085	\$ 3,487,197	\$ 2,451,073	\$ 4,018,282	\$ 20,772,232	19.3%
Vancleave Lower Elementary	\$ 1,741,575	\$ 2,341,629	\$ 3,789,787	\$ 4,083,204	\$ 20,525,596	19.9%
Vancleave Upper Elementary	\$ 4,756,334	\$ 4,428,909	\$ 1,996,184	\$ 9,185,243	\$ 29,984,362	30.6%
Subtotals:	\$ 14,440,819	\$ 25,900,666	\$ 15,888,534	\$ 40,341,485	\$ 139,956,614	28.8%
Middle Schools						
East Central Middle School	\$ 4,606,802	\$ 4,345,497	\$ 4,770,038	\$ 8,952,299	\$ 34,612,634	25.9%
St. Martin Middle School	\$ 6,164,904	\$ 6,155,957	\$ 3,406,496	\$ 12,320,861	\$ 45,781,944	26.9%
Vancleave Middle School	\$ 1,508,188	\$ 3,337,089	\$ 3,276,725	\$ 4,845,277	\$ 23,199,893	20.9%
Subtotals:	\$ 12,279,894	\$ 13,838,543	\$ 11,453,259	\$ 26,118,437	\$ 103,594,471	25.2%
High Schools						
East Central High School	\$ 9,843,065	\$ 5,480,376	\$ 8,299,838	\$ 15,323,441	\$ 49,541,580	30.9%
St. Martin High School	\$ 780,613	\$ 4,468,551	\$ 11,128,999	\$ 5,249,164	\$ 56,625,232	9.3%
Vancleave High School	\$ 5,368,108	\$ 6,109,912	\$ 4,481,111	\$ 11,478,020	\$ 46,437,855	24.7%
Subtotals:	\$ 15,991,786	\$ 16,058,839	\$ 23,909,948	\$ 32,050,625	\$ 152,604,666	21.0%
Administrative						
Business Office	\$ 27,597	\$ 107,782	\$ 32,083	\$ 135,379	\$ 318,880	42.5%
Central Office	\$ 634,912	\$ 599,309	\$ 278,131	\$ 1,234,221	\$ 2,032,860	60.7%
Child Nutrition Office	\$ 67,339	\$ 171,011	\$ 328,005	\$ 238,350	\$ 797,200	29.9%
Fab Lab	\$ 15,647	\$ 12,795	\$ 152,020	\$ 28,442	\$ 637,760	4.5%
GED Building	\$ 83,595	\$ 106,264	\$ 100,096	\$ 189,859	\$ 378,670	50.1%
JCTC	\$ 1,012,558	\$ 2,216,022	\$ 878,011	\$ 3,228,580	\$ 7,194,730	44.9%
Subtotals:	\$ 1,841,648	\$ 3,213,183	\$ 1,768,346	\$ 5,054,831	\$ 11,360,100	44.5%
Totals:	\$ 44,554,147	\$ 59,011,231	\$ 53,020,087	\$ 103,565,378	\$ 407,515,850	25.4%

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Notes

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Jacobs