# Lafayette Public Library Facility Condition Assessment

Lafayette Public Library

Enter Report Date



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# **EXECUTIVE SUMMARY**

#### Introduction

Lafayette Public Library entered into a contract with Dude Solutions whom is partnered with ALPHA Facilities Solutions, LLC (ALPHA) to provide facility condition assessment and implementation services for Capital Forecast (CF), SchoolDude's Cloud-based capital planning solution used to forecast facility needs and justify funding requirements. The project was completed by a team consisting of engineers, architects, and construction professionals. Data collected during the Facility Condition Assessment phase of the project was input into CF in order to estimate current and future funding requirements for facility sustainment. This predictive approach to asset management is known as Capital Planning and is used to anticipate funding and maintenance needs many years into the future.

The scope of work included the following:

- 1. Identify and document current and forecasted conditions of approximately 143,313 square feet of facilities.
- 2. Identify and document current site infrastructure needs.
- Identify and document remaining service life of major building systems to include envelope; architectural finishes; roofs; electrical; plumbing; and heating, ventilation, and air conditioning (HVAC).
- 4. Provide Rough Order of Magnitude (ROM) cost estimates for building system renewal and site infrastructure repairs.
- 5. Forecast facility renewal requirements based on lifecycle analysis of existing systems over the span of the next 20 years for each facility.
- 6. Provide a Facility Condition Index (FCI) measurement to illustrate the relative condition of all facilities.
- 7. Input the facility condition information and current site infrastructure needs information into the CF software.

#### Acknowledgement

Finally, the ALPHA Team would like to take this opportunity to thank Lafayette Public Library for allowing ALPHA to help the Town achieve its goals. We would also like to thank Dan Crowley, and his staff for investing a substantial amount of their valuable time to work with us on this project; their knowledge of the facilities was superb and their contributions were invaluable.

#### **Facility Condition Assessment Approach**

Capital Forecast (CF) was used to document facility conditions, to determine current requirements, and to forecast future requirements for facilities within the Lafayette Public Library. Parametric cost models contained within CF were assigned to most buildings while new cost models were developed in instances where an appropriate cost model did not exist. New cost models developed by the ALPHA Team are also contained within CF. System and component life cycles used within the cost models are based on average service life as shown in the Preventive Maintenance Guidebook: Best Practices to Maintain Efficient and Sustainable Buildings published by Building Owners and Managers Association (BOMA) International. When life cycle information is not provided by BOMA, we used our experience and professional judgment to suggest appropriate average service life for those components and systems. Unit costs, which are used to calculate renewal requirements, are also built into the cost models. Life cycles and unit costs have been adjusted on a location-specific basis as appropriate or as requested by Town personnel.

Although there are many factors that are important to obtain a successful outcome for a facility condition assessment, three provide the foundation for establishing a reliable cost model for each building. Those three factors are related to the following basic building information:

- Gross area
- Date built
- Building/location name

The gross area of a building, also known as gross square footage (GSF), is one of the basic building blocks for determining current replacement value (CRV) and generating system renewal costs, which are major components of a parametric-based effort. The date built for each facility provides the basis for establishing life cycles for many, and in some cases, all major building systems. Finally, although not critical to the outcome of the project, agreeing upon a building/location naming convention that is meaningful to all stakeholders enhances the usefulness and readability of the facility condition assessment report. Please note that GSF for each building was provided by the Town and generally was not validated as part of this project. It should be noted that some building names may have changed at the direction of the Town from what was indicated in documentation initially provided. Locations, names, dates built, and GSF data contained in this report are as shown in your Capital Forecast account.

In order to determine basic building information, the ALPHA Team met with designated Town personnel to discuss Town-specific information such as building construction/renovation programs and building naming conventions. Scaled floor and site plans were generally not available, so square footages associated with additions and site features were obtained from a combination of sources to include Town records, satellite imagery, and professional judgment.

It is worth noting that, although most concealed systems may appear to be functional, the risk of failure increases with time when they have exceeded the average service life as predicted by BOMA. Consequently, this effort assumes that replacement of concealed systems that have exceeded the average service life as predicted by BOMA is appropriate. Based on the availability of resources and the tolerance for risk or potential out-of-service conditions, the Town may elect to defer immediate replacement of concealed systems that have exceeded average service life as appropriate.

Building condition requirements and site infrastructure requirements are documented within Capital Forecast and based on estimated quantities, RS Means, and client supplied data when available.

#### **Prioritization of Needs**

Finally, all needs contained within CF have been assigned a default priority based on importance to mission performance. Therefore, systems whose failure might render a building not suitable for occupancy have been ranked with a higher priority than those systems that have minimal or no impact on a facility's suitability for occupancy. For example, replacement of an HVAC system might take priority over replacement of flooring. The priority for a specific need can be changed if required and priorities can be further refined if desired by assignment of scores of one through 99. Although additional priorities are available within CF, priorities used for this project are:

- High
- Medium
- Low

Needs contained within CF have been ranked in terms of urgency in order to aid in the prioritization for allocation of funds. The priorities of applicable systems for this project are as follows:

#### High

- Electrical Branch Wiring
- Electrical Other Electrical Services
- Electrical Service & Distribution

#### Medium

- Electrical Lighting
- Exterior Enclosure Exterior Doors
- Exterior Enclosure Exterior Windows
- HVAC Cooling Generating Systems
- HVAC Distribution System
- HVAC Heat Generating Systems

#### Low

- Exterior Enclosure Exterior Walls (Finishes)
- Interior Construction Specialties
- Interior Finishes Ceiling Finishes
- Interior Finishes Floor Finishes

- Fire Protection Fire Alarm & Detection
- Fire Protection Sprinklers & Standpipe
- Roofing
- HVAC Terminal & Package Units
- Interior Construction Interior Doors
- Plumbing Domestic Water Distribution
- Plumbing Plumbing Fixtures
- Plumbing Sanitary Waste

- Interior Finishes Wall Finishes
- Pedestrian Pavements
- Vehicular Pavements

#### **Building Performance Metrics**

As part of the FCA process, a facility condition index (FCI) was calculated for each facility. The FCI is used to quantify a facility's physical condition at a specific point in time and is calculated using the expired system replacement costs (costs associated with systems that are beyond average service life) and the current replacement value (CRV) of the building. Expired system replacement costs of work that is necessary to restore the facility to a condition equivalent to its original (like new) state.

The FCI can be helpful in several ways to include:

- Comparing the condition of one facility to a group of facilities
- Tracking trends (the extent of improvement or deterioration over time)
- Prioritizing capital improvement projects
- Making renovation versus replacement decisions

The FCI is calculated as shown in the example below.

Example 1: Total expired system replacement costs (Requirements) = \$3,000,000

Current Replacement Value (CRV) = \$10,000,000

$$FCI = \frac{\$3,000,000}{\$10,000,000} = .30$$

It is important to note there is no recognized standard for what constitutes an acceptable or unacceptable FCI. For example, the International Facility Management Association (IFMA) indicates that building condition is often defined in terms of the FCI as follows:

- 1. Good 0% to 5%,
- 2. Fair 5% to 10%,
- 3. Poor 10% to 30%, and
- 4. Critical greater than 30%

![](_page_8_Figure_0.jpeg)

Figure 1. FCI Standards

#### The Renovate Versus Replacement Question

A question that often arises is at what point does it make sense to replace a facility rather than to renovate it? Again, there is no industry standard, but conventional thinking is that replacement of a facility should be seriously considered when the FCI rises above 50%. However, the FCI is not the only consideration when making renovation versus replacement decisions. One consideration that should be taken into account is whether a facility is functionally adequate for the intended use. Another consideration revolves around the magnitude of needed renovations. For example, when cost of renovation reaches or exceeds 50% of the replacement cost of the facility, requirements to meet Americans with

Disabilities Act (ADA), Life Safety and possibly other codes may be triggered. When the requirement to meet current building codes or civil rights statutes, such as those mentioned above are triggered, additional costs will be incurred. Although it is not possible to predict what the additional costs will be until project requirements are identified and cost estimates are prepared, it has been our experience that additional cost can be expected to range from 5% to 20% depending upon the age of the facility.

#### **Categorization of Costs**

At this point, it is appropriate to review the different types of costs associated with facility renovation and construction and how they apply to this project. According to the American Institute of Architects (AIA), facility capital costs are normally subdivided into three major categories - site costs, hard costs, and soft costs. Site costs are normally associated with the owner's initial land acquisition and development costs for a project and are not a consideration in the context of this project. Hard costs are associated with direct construction costs while soft costs can be defined as any indirect costs incurred in addition to the direct construction costs. Soft costs include a variety of costs such as design fees, legal fees, taxes, insurance, owner's administration costs, and financing costs. Cost data produced by the parametric cost models within CFD includes hard costs including consideration of renewal costs, which accounts for the additional cost associated with replacing an existing building system versus constructing the system in a new facility. Cost information within this report does not include soft costs.

It is important to remember that cost models are intended to produce rough order of magnitude (ROM) costs for purposes of developing a baseline from which to establish an FCI for each facility and to facilitate capital planning. It is not unusual for those new to the parametric cost estimating/life cycle analysis process to have expectations that are not completely in alignment with what the process is intended to yield. For example, the parametric cost estimating/life cycle analysis while costs that are more detailed are derived during formal preliminary design and final design cost estimating processes.

As a point of interest, *APPA: Leadership in Educational Facilities* published a paper citing research conducted by the *Building Research Board of the National Research Council* indicating, "Underfunding of maintenance and repair is a widespread and persistent problem." The council concluded, "That an appropriate total budget allocation for routine maintenance and capital renewal is in the range of two to four percent of the aggregate current replacement value (CRV) of those facilities (excluding major infrastructure). When a backlog of deferred maintenance has been allowed to accumulate, spending must exceed this minimum level until the backlog has been eliminated.

#### **Facility Condition Assessment**

Facility-related data contained in this report was developed at the building level, which in turn, was rolled up at the campus level. Likewise, site infrastructure requirements were rolled up at the campus level. All data was then rolled up to provide an aggregate view of District facilities. Data within this report has been grouped as follows:

• Library

This report includes the following content, which is found at campus and/or Executive Summary levels:

- Facility Description: Summary of Findings
- Current Needs (2018)
- Forecasted Needs (2023)
- Current and Forecasted Needs: Summarized by Reporting Period
- Current and Forecasted Needs: Summarized by System
- Need Priorities (High Medium Low)

Appendix B - Supplemental Information provides additional information the reader may find useful.

#### Site and Infrastructure Condition Assessment

A site infrastructure assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- In need of repair
- In need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth Aerial photographs were used in lieu of site plans.

The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present.

We determined unit pricing for the various deficiency requirements by referencing 2018 RSMeans Building Construction Cost Data and Assembly Cost Data when available; industry sources were used as a supplemental source for unit pricing when needed.

#### **Overview of Findings**

The Facility Condition Assessment and Town implementation project included 5 permanent facilities, 0 portables, totaling143,313 square feet. The average FCI for the facilities assessed is 2 while the average FCI in five years is estimated to be 6 assuming current facility sustainment funding levels. The assessment team made the following general observations:

- 1. The Main Library was recently remodeled. This renovation replaced a large majority of the building systems. A small portion of the Sanitary Sewer system was not remodeled and is still original to the building. No issues were observed, however additional inspection is recommended to extend useful life.
- 2. In the Main Library, it was reported to the on-site team that although renewed, the elevators have consistent maintenance issues. Additional testing is recommended for further inspection.
- 3. The Chenier Library is only partially controlled by the Lafayette Public Library faculty. It was reported to the on-site team that their portion was recently remodeled. This recently renewed portion is in good condition.
- 4. At the South Branch Library, a small portion of the domestic water distribution was leaking and has been repaired. The system is now in good condition with no reported issues.
- It was observed that Addison Energy Recovery Ventilation (ERV) units at the South Branch Library are in poor condition. These units are planned to be replaced with Variable Refrigerant Flow (VRF) units.
- Too often, exhaust fans are ignored until malfunction occurs. Residues can build up and cause the system to slow down. Slowdown may be a gradual process, not noticeable at first. This can be serious and result in illness and even liability issues.
- 7. Some of the HVAC systems in service use R-22 refrigerant. In 2020 R-22 refrigerant will no longer be produced and servicing existing equipment will be limited to recycled refrigerant. Since supply is limited, costs to charge existing units leaking R-22 refrigerant have gone up and are expected to rise.
- 8. Asphalt pavements were generally in fair condition except for a few locations. A more extensive seal coating program will extend useful life of pavements and reduce the necessity of reconstruction.
- 9. Trip hazards were observed at a few locations where sidewalks are separating and heaving at the expansion joints.
- 10. When tested, several emergency lights were proven to be out of batteries. Battery backup has a limited life cycle and should be checked on a regular basis.

### Facility Condition Assessment Findings

Name	Year Built	Area (SF)	Total Needs 2018	Current Replacement Value	2018 FCI %	Total Needs 2023	Forecast Replacement Value	2023 FCI %
Chenier Branch Library	2000	12,700	\$259,630	\$2,676,779	10	\$591,259	\$2,676,779	22
East Regional Library	2015	15,000	\$0	\$3,161,550	0	\$88,449	\$3,161,550	3
Main Library	1973	65,449	\$216,974	\$13,794,686	2	\$650,788	\$13,794,686	5
North Regional Library	2007	12,564	\$74,505	\$2,648,114	3	\$225,060	\$2,648,114	8
South Regional Library	2009	37,600	\$74,737	\$7,924,952	1	\$297,705	\$7,924,952	4
SUBTOTAL	-	143,313	\$625,845	\$30,206,081	2	\$1,853,260	\$30,206,081	6
Site and Infrastructure (excluded from FCI calculations)			\$373,958			\$373,958		
TOTALS		143,313	\$999,803	\$30,206,081		\$2,227,218	\$30,206,081	

 Table 1. Facility Description: Summary of Findings: Lafayette Public Library

Note: The cumulative FCI for the Lafayette Public Library facilities assessed is 2 while the cumulative FCI in 5 years is estimated to be 6 assuming current sustainment levels.

![](_page_13_Figure_0.jpeg)

Figure 2. Comparison of 2018 Current Needs vs. 2023 Forecasted Needs by System Group: Lafayette Public Library

Note: Forecasted Needs (2023) include Current Needs (2018)

![](_page_14_Figure_0.jpeg)

![](_page_14_Figure_1.jpeg)

#### **Renewal Forecast**

The renewal forecast below shows the current maintenance and repair backlog and projected facility sustainment requirements over the next 20 years. Please note the renewal forecast does not include potential costs associated with seismic evaluation; seismic retrofitting; hazardous material inspection, evaluation, and mitigation, including asbestos abatement; and NFPA 101 and ADA upgrades. The renewal forecast is shown below:

![](_page_15_Figure_2.jpeg)

Figure 4. Current and Forecasted Needs: Summarized by Reporting Period (Current +10 Years): Lafayette Public Library

Figure 5. Current and Forecasted Needs: Summarized by Reporting Period (Years 11-20): Lafayette Public Library

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System	2018	2019	2020	2021	2022	2023
Cumulative Needs by Year	\$999.803	\$999,803	\$1,188,856	\$1,440.622	\$1,703,288	\$2,227,218
Needs by Year	\$999,803	\$0	\$189,053	\$251,767	\$262,666	\$523,930
Exterior Enclosure	\$69,850	\$0	\$0	\$0	\$163,623	\$0
Exterior Walls (Finishes)	\$69,850	\$0	\$0	\$0	\$163,623	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$161,671	\$0	\$85,199	\$0	\$0	\$0
Roof Coverings	\$161,671	\$0	\$85,199	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$20,102	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$20,102	\$0
Interiors	\$175,089	\$0	\$0	\$222,968	\$0	\$437,837
Ceiling Finishes	\$61,532	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$74,505	\$0	\$0	\$222,968	\$0	\$56,483
Wall Finishes	\$39,053	\$0	\$0	\$0	\$0	\$381,353
Plumbing	\$55,304	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$55,304	\$0	\$0	\$0	\$0	\$0
HVAC	\$126,087	\$0	\$0	\$28,799	\$41,500	\$86,093
Cooling Generation	\$51,350	\$0	\$0	\$0	\$41,500	\$0
Distribution System	\$0	\$0	\$0	\$28,799	\$0	\$86,093
Terminal & Package Units	\$74,737	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$37,846	\$0	\$0	\$0	\$37,441	\$0
Fire Alarms	\$37,846	\$0	\$0	\$0	\$37,441	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$103,854	\$0	\$0	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$98,393	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$5,461	\$0	\$0	\$0
Site Infrastructure	\$373,958	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$17,833	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$356,125	\$0	\$0	\$0	\$0	\$0

Table 3. Current and Forecasted Needs Summarized by System (Years 6 - 10): Lafayette Public Library

System	2024	2025	2026	2027	2028
Cumulative Needs by Year	\$2,500,926	\$2,855,378	\$2,868,396	\$3,763,352	\$3,958,390
Needs by Year	\$273,708	\$354,453	\$13,018	\$894,956	\$195,038
Exterior Enclosure	\$0	\$167,336	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$82,500	\$0	\$0	\$0
Exterior Windows	\$0	\$61,087	\$0	\$0	\$0
Exterior Doors	\$0	\$23,749	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$90,581	\$0
Roof Coverings	\$0	\$0	\$0	\$90,581	\$0
Interior Construction	\$60,160	\$32,957	\$0	\$0	\$0
Interior Doors	\$0	\$32,957	\$0	\$0	\$0
Specialties	\$60,160	\$0	\$0	\$0	\$0
Interiors	\$0	\$154,160	\$13,018	\$558,226	\$0
Ceiling Finishes	\$0	\$0	\$0	\$81,163	\$0
Floor Finishes	\$0	\$0	\$0	\$477,063	\$0
Wall Finishes	\$0	\$154,160	\$13,018	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$101,500	\$0	\$0	\$110,960	\$0
Cooling Generation	\$101,500	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$110,960	\$0
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$112,048	\$0	\$0	\$0	\$195,038
Fire Alarms	\$112,048	\$0	\$0	\$0	\$195,038
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$135,189	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$129,786	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$5,403	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

System	2029	2030	2031	2032	2033
Cumulative Needs by Year	\$5,075,448	\$6,246,484	\$6,246,484	\$6,458,689	\$7,489,571
Needs by Year	\$1,117,058	\$1,171,035	\$0	\$212,206	\$1,030,882
Exterior Enclosure	\$0	\$0	\$0	\$83,928	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$60,433	\$0
Exterior Doors	\$0	\$0	\$0	\$23,495	\$0
Roofing	\$245,213	\$0	\$0	\$0	\$0
Roof Coverings	\$245,213	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$128,718	\$0	\$43,471	\$20,320
Interior Doors	\$0	\$0	\$0	\$43,471	\$0
Specialties	\$0	\$128,718	\$0	\$0	\$20,320
Interiors	\$242,896	\$18,828	\$0	\$0	\$0
Ceiling Finishes	\$242,896	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$18,828	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$113,411	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$27,559	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$42,926	\$0	\$0	\$0
Sanitary Waste	\$0	\$42,926	\$0	\$0	\$0
HVAC	\$224,373	\$746,379	\$0	\$0	\$982,419
Cooling Generation	\$4,055	\$0	\$0	\$0	\$541,027
Distribution System	\$216,068	\$746,379	\$0	\$0	\$415,892
Terminal & Package Units	\$4,250	\$0	\$0	\$0	\$25,500
Fire Protection	\$0	\$44,700	\$0	\$84,807	\$0
Fire Alarms	\$0	\$44,700	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$84,807	\$0
Electrical	\$404,576	\$118,999	\$0	\$0	\$28,143
Branch Wiring	\$0	\$118,999	\$0	\$0	\$0
Lighting	\$388,408	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$16,168	\$0	\$0	\$0	\$28,143
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 5. Current and Forecasted Needs Summarized by System (Years 16-20): Lafayette Public Library

System	2034	2035	2036	2037	2038
Cumulative Needs by Year	\$8,124,635	\$10,229,011	\$10,229,011	\$10.518.092	\$11.013.181
Needs by Year	\$635,064	\$2,104,376	\$0	\$289,081	\$495,089
Exterior Enclosure	\$251,168	\$0	\$0	\$31,410	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$31,410	\$0
Exterior Windows	\$180,856	\$0	\$0	\$0	\$0
Exterior Doors	\$70,312	\$0	\$0	\$0	\$0
Roofing	\$0	\$109,481	\$0	\$0	\$0
Roof Coverings	\$0	\$109,481	\$0	\$0	\$0
Interior Construction	\$130,096	\$0	\$0	\$0	\$0
Interior Doors	\$130,096	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$519,701	\$0	\$0	\$20,511
Ceiling Finishes	\$0	\$519,701	\$0	\$0	\$20,511
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$112,197	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$27,264	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$42,466	\$0
Sanitary Waste	\$0	\$0	\$0	\$42,466	\$0
HVAC	\$0	\$609,563	\$0	\$27,750	\$0
Cooling Generation	\$0	\$304,646	\$0	\$0	\$0
Distribution System	\$0	\$304,916	\$0	\$27,750	\$0
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$253,800	\$0	\$0	\$0	\$441,781
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$253,800	\$0	\$0	\$0	\$441,781
Electrical	\$0	\$865,631	\$0	\$117,725	\$32,798
Branch Wiring	\$0	\$0	\$0	\$117,725	\$0
Lighting	\$0	\$831,038	\$0	\$0	\$32,798
Exit Signs and Emergency Lighting	\$0	\$34,593	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

# **CHENIER BRANCH LIBRARY**

Summary of Findings									
Construction Type	Structure One-Story Structure								
Roof Type	Mod and Sea	lified Bit Standin m Metal	umen g				<u>}</u>		
Ceiling Type	Acoustical Tile and Painted Surfaces				c		UBRALY		
Lighting	LED				and the second		iline Corner		
HVAC	Split-DX			-	-		-		
Elevator	No					-	- ATA		
Fire Sprinkler	No			and the		to a	F.F.F.F		
Fire Alarm	Yes								
Name		Year Built	Area (SF)	Total Needs 2018	Current Replacement Value	2018 FCI %	Total Needs 2023	Forecast Replacement Value	2023 FCI %
Chenier Branch Library		2000	12,700	\$259,630	\$2,676,779	10	\$591,259	\$2,676,779	22
Site Information				\$27,070			\$27,070		
TOTAL				\$286,700			\$618,329		

Table 6: Facility Description: Lafayette Public Library - Chenier Branch Library

#### **CONDITION SUMMARY**

The facility is generally in good condition. The majority of the building systems are within their expected service life. No life safety issues were observed during the assessment. Routine maintenance activities appear to be conducted in an effective manner. Regular maintenance is recommended to assure the useful life of major and minor building systems.

![](_page_21_Picture_0.jpeg)

### **Exterior Enclosure**

Exterior finishes were comprised of painted stucco which was observed to be in poor condition. Finishes were faded, stained, and the stucco contained spider web cracks throughout. The system is expired. The exterior doors were metal framed with glass panels. The doors were original and in fair condition. Rust was observed on some external door hinges, frames, and metal door finishes. Exterior windows were comprised of double-paned, insulated glass which were original to the building. Windows were in good condition with no issues observed or reported.

# HVAC

The Heating, Ventilation, and Cooling (HVAC) units are predominately split DX units, which are original and are in good condition. The cooling generating for the facility was observed to be in poor condition. Rusted fan motors and dented coils were observed. These units use R-22 refrigerant. In 2020 R-22 refrigerant will no longer be produced and servicing existing equipment will be limited to recycled refrigerant. The distribution system consists of ductwork and is in good condition.

![](_page_21_Picture_5.jpeg)

# Interiors

The ceiling finishes were comprised of a combination of painted hard surfaces, exposed structure and acoustical tiles. A small portion of this system was recently renewed. However, the majority of the system is in poor condition. Water stains and peeling paint were observed, expiring the system as a whole. Resilient flooring and carpet tiles were installed in 2018 and in good condition; however, the resilient flooring and ceramic tile that were original to the building were in fair condition with signs of age and deterioration present. The painted hard surfaces and wall paper coverings that were original to the building were in poor condition with multiple areas stained, damaged, and deteriorated. The painted hard surfaces renewed in the 2018 renovation were in good condition.

![](_page_21_Picture_8.jpeg)

### Plumbing

Plumbing fixtures are original and are in good condition. Domestic water distribution is provided by an unknown pipe type due to system being concealed with hot water provided by a local water heater and is within its expected useful life. Sewer piping is comprised of an unknown pipe type due to system being concealed and is within its expected useful life.

Table 7. Current and Forecasted Needs Summarized by System (Current + 5 years): Chenier Branch Library

System	2018	2019	2020	2021	2022	2023
Cumulative Needs by Year	\$286,700	\$286,700	\$475,753	\$475,753	\$475,753	\$618,329
Needs by Year	\$286,700	\$0	\$189,053	\$0	\$0	\$142,576
Exterior Enclosure	\$69,850	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$69,850	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$85,199	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$85,199	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Interiors	\$100,584	\$0	\$0	\$0	\$0	\$56,483
Ceiling Finishes	\$61,532	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$56,483
Wall Finishes	\$39,053	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0	\$0
HVAC	\$51,350	\$0	\$0	\$0	\$0	\$86,093
Cooling Generation	\$51,350	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0	\$86,093
Fire Protection	\$37,846	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$37,846	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$103,854	\$0	\$0	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$98,393	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$5,461	\$0	\$0	\$0
Site Infrastructure	\$27,070	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$15,070	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$12,000	\$0	\$0	\$0	\$0	\$0

Table 8. Current and Forecasted Needs Summarized	by System (Years 6 - 10): Chenier Branch Library
--	--

System	2024	2025	2026	2027	2028
	¢040.000	A700 400	A740.400	A740.400	A740.400
Cumulative Needs by Year	\$018,329	\$730,122	\$749,139	\$749,139	\$749,139
Needs by Year	\$0	\$117,793	\$13,018	\$0	\$0
Exterior Enclosure	\$0	\$84,836	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$61,087	\$0	\$0	\$0
Exterior Doors	\$0	\$23,749	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$32,957	\$0	\$0	\$0
Interior Doors	\$0	\$32,957	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$13,018	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$13,018	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 9. Current and Forecasted Needs Summarized by System (Years 11 - 15): Chenier Branch Libra	ary
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Sustan	2020	2020	2024	2022	2022
System	2029	2030	2031	2032	2033
Cumulative Needs by Year	\$749,139	\$1,746,756	\$1,746,756	\$1,746,756	\$1,767,076
Needs by Year	\$0	\$997,617	\$0	\$0	\$20,320
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$20,320
Interior Doors	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$20,320
Interiors	\$0	\$18,828	\$0	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$18,828	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$113,411	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$27,559	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$42,926	\$0	\$0	\$0
Sanitary Waste	\$0	\$42,926	\$0	\$0	\$0
HVAC	\$0	\$746,379	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$746,379	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$118,999	\$0	\$0	\$0
Branch Wiring	\$0	\$118,999	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 10. Current and Forecasted Needs Summarized by System (Years 16-20): Chenier Branch Library

System	2034	2035	2036	2037	2038
-,					
Cumulative Needs by Year	\$1,767,076	\$1,767,076	\$1,767,076	\$1,767,076	\$1,820,384
Needs by Year	\$0	\$0	\$0	\$0	\$53,308
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$20,511
Ceiling Finishes	\$0	\$0	\$0	\$0	\$20,511
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$32,798
Branch Wiring	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$32,798
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 11. Expired Systems 2018: Lafayette Public Library – Chenier Branch Library

Building	System Category	System	Priority	2018 Needs
Chenier Branch Library	Exterior Enclosure	Exterior Walls (Finishes)	Low	\$69,850
Chenier Branch Library	Fire Protection	Fire Alarms	High	\$37,846
Chenier Branch Library	HVAC	Cooling Generation	Medium	\$7,850
Chenier Branch Library	HVAC	Cooling Generation	Medium	\$14,500
Chenier Branch Library	HVAC	Cooling Generation	Medium	\$14,500
Chenier Branch Library	HVAC	Cooling Generation	Medium	\$14,500
Chenier Branch Library	Interiors	Ceiling Finishes	Low	\$61,532
Chenier Branch Library	Interiors	Wall Finishes	Low	\$39,053
			TOTAL	\$259,630

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# Site and Infrastructure Assessment Findings

#### **Site General Condition**

The brick areas need to be removed and replaced with asphalt pavement.

The concrete sidewalks were in poor condition. Isolated areas of broken, damaged, and/or heaving pavement which need to be repaired or replaced.

#### Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- · Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2018 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

#### Site Utilities

A site utilities assessment was not performed.

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Pedestrian Pavements	Replace Concrete Pavements; 4" Thick	1,370 SF @ \$11 per SF	Low	\$15,070	2018
Vehicular Pavements	Replace Brick Parking Lot with Asphalt Pavement	800 SF @ \$15 per SF	Low	\$12,000	2018
			Total 2018 Needs	\$27,070	

Table 12 Summa	arv of 2018 Site and	Infrastructure Deficiencies:	Chenier Branch Library
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![](_page_29_Picture_1.jpeg)

![](_page_30_Picture_0.jpeg)

# Site Infrastructure

The concrete sidewalks were in poor condition. Isolated areas of broken, damaged, and/or heaving pavement which need to be repaired or replaced.

![](_page_30_Picture_3.jpeg)

# Site Infrastructure

The brick parking area needs to be removed and replaced with asphalt pavement.

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# EAST REGIONAL LIBRARY

Summary of Findings									
Construction Type	One Stru	-Story cture					for the		
Roof Type	Mod	lified Bit	umen	1	1 - B		Sec.		
Ceiling Type	Aco Pair	ustical T nted Sur	ile and faces						
Lighting	LED	)							
HVAC	Air H with Chill Cen	Handling Hot and led Wate tral Plar	y Units d er from nt						
Elevator	No								
Fire Sprinkler	No			and the second					
Fire Alarm	Yes								
Name		Year Built	Area (SF)	Total Needs 2018	Current Replacement Value	2018 FCI %	Total Needs 2023	Forecast Replacement Value	2023 FCI %
East Regional Lib	rary	2015	15,000	\$0	\$3,161,550	0	\$88,449	\$3,161,550	3
Site Information				\$37,775			\$37,775		
TOTAL				\$37,775			\$126,224		

Table 13: Facility Description: Lafayette Public Library - East Regional Library

#### **CONDITION SUMMARY**

The facility is generally in good condition. The majority of the building systems are within their expected service life. No life safety issues were observed during the assessment. Routine maintenance activities appear to be conducted in an effective manner. Regular maintenance is recommended to assure the useful life of major and minor building systems.

![](_page_33_Picture_0.jpeg)

### **Exterior Enclosure**

Exterior wall finishes were a combination of brick and stained wood. The brick was in good condition; however, the stained wood showed signs of age and deterioration. The original exterior doors were comprised of metal frames with glass panels and in good condition. Exterior windows were double-paned, insulated glass, original, and in good condition. No issues were observed or reported.

![](_page_33_Picture_3.jpeg)

# **Fire Protection**

Exit lights and emergency lighting were present and observed to be in good condition. Battery backup has a limited life cycle and should be checked on a regular basis. Fire protection specialties were present. System components include wet sprinklers, pull stations, and hard-wired smoke detectors. These systems are provided throughout the building and appear to be in good condition.

![](_page_33_Picture_6.jpeg)

# HVAC

The Heating, Ventilation, and Cooling (HVAC) units are predominately a centralized cooling/heating system, which are original and are in good condition. The distribution system consists of ductwork and piping in good condition.

![](_page_33_Picture_9.jpeg)

#### Interiors

The floor finishes were a combination of carpet tiles, ceramic tile, and resilient flooring. These were original to the facility and in good condition. Ceiling finishes were comprised of the original acoustical tile and painted hard surfaces in good condition. Interior wall finishes were a combination of painted hard surfaces, ceramic tile, and wallpaper. Finishes were original and in good condition. The interior finishes had no issues observed or reported.

				-			
Table 11	Current and	Earoaatad Naad	Summarized k	NY Swatam	$(Current \perp E$	vooro). Eoot	Dogional Library
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Svstem	2018	2019	2020	2021	2022	2023
Cumulative Needs by Year	\$37,775	\$37,775	\$37,775	\$64,724	\$64,724	\$126,224
Needs by Year	\$37,775	\$0	\$0	\$26,949	\$0	\$61,500
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0	\$61,500
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0	\$61,500
HVAC	\$0	\$0	\$0	\$26,949	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$26,949	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$37,775	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$37,775	\$0	\$0	\$0	\$0	\$0

Table 15. Current and Forecasted Needs Summarized by System (Years 6 - 10): East Regional Librar	I Forecasted Needs Summarized by System (Years 6 - 10): East	Regional Library
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System	2024	2025	2026	2027	2028		
Cumulative Needs by Year	\$126,224	\$208,724	\$208,724	\$297,674	\$297,674		
Needs by Year	\$0	\$82,500	\$0	\$88,950	\$0		
Exterior Enclosure	\$0	\$82,500	\$0	\$0	\$0		
Exterior Walls (Finishes)	\$0	\$82,500	\$0	\$0	\$0		
Roofing	\$0	\$0	\$0	\$0	\$0		
Roof Coverings	\$0	\$0	\$0	\$0	\$0		
Interior Construction	\$0	\$0	\$0	\$0	\$0		
Specialties	\$0	\$0	\$0	\$0	\$0		
Interiors	\$0	\$0	\$0	\$88,950	\$0		
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0		
Floor Finishes	\$0	\$0	\$0	\$88,950	\$0		
Wall Finishes	\$0	\$0	\$0	\$0	\$0		
HVAC	\$0	\$0	\$0	\$0	\$0		
Cooling Generation	\$0	\$0	\$0	\$0	\$0		
Distribution System	\$0	\$0	\$0	\$0	\$0		
Fire Protection	\$0	\$0	\$0	\$0	\$0		
Fire Alarms	\$0	\$0	\$0	\$0	\$0		
Electrical	\$0	\$0	\$0	\$0	\$0		
Lighting	\$0	\$0	\$0	\$0	\$0		
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0		
Site Infrastructure	\$0	\$0	\$0	\$0	\$0		
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0		
Table 16.	Current and F	orecasted Needs	Summarized	bv Svstem	(Years 11 -	15): East R	egional Librarv
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Svstem	2029	2030	2031	2032	2033
Cumulative Needs by Year	\$297,674	\$366,374	\$366,374	\$366,374	\$366,374
Needs by Year	\$0	\$68,700	\$0	\$0	\$0
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$24,000	\$0	\$0	\$0
Specialties	\$0	\$24,000	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$44,700	\$0	\$0	\$0
Fire Alarms	\$0	\$44,700	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

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System	2034	2035	2036	2037	2038
Cumulative Needs by Year	\$366,374	\$1,173,994	\$1,173,994	\$1,173,994	\$1,173,994
Needs by Year	\$0	\$807,621	\$0	\$0	\$0
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$109,481	\$0	\$0	\$0
Roof Coverings	\$0	\$109,481	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$96,900	\$0	\$0	\$0
Ceiling Finishes	\$0	\$96,900	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$439,840	\$0	\$0	\$0
Cooling Generation	\$0	\$304,646	\$0	\$0	\$0
Distribution System	\$0	\$135,193	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$161,400	\$0	\$0	\$0
Lighting	\$0	\$154,950	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$6,450	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

#### Table 18. Expired Systems 2018: Lafayette Public Library – East Regional Library

Building	System Category	System	Priority	2018 Needs
None				\$0
			TOTAL	\$0

# Site and Infrastructure Assessment Findings

#### **Site General Condition**

The concrete pavements were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.

The asphalt pavements were generally in good condition except for a few isolated areas. Crack filling, seal coating, and re-striping would extend the overall life of the pavement.

#### **Site Improvements**

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- · Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2018 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

#### Site Utilities

A site utilities assessment was not performed.

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Cost, and Re-stripe Asphalt Pavements	9,000 SF @ \$1.20 per SF	Low	\$10,800	2018
Vehicular Pavements	Replace Caulking in Concrete Pavements	41,500 SF @ \$0.65 per SF	Low	\$26,975	2018
			Total 2018 Needs	\$37,775	

Table 19. Summary of 2018	Site and Infrastructure	Deficiencies: Eas	t Regional Library
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## Site Infrastructure

The concrete pavements were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.



## Site Infrastructure

The asphalt pavements were generally in good condition except for a few isolated areas. Crack filling, seal coating, and re-striping would extend the overall life of the pavement.

# **MAIN LIBRARY**

Summary of I	Findir	ngs								
Construction Type	Mult Stru	i-Story cture		N. S.						
Roof Type	Mod	lified Bit	umen		A C					
Ceiling Type	Aco Pair	ustical T nted Sur	ile and faces	2.3		4				
Lighting	LED	)								
HVAC	Air H with Chill Cen	Handling Hot and led Wate tral Plar	ן Units ป er from nt							
Elevator	Yes									
Fire Sprinkler	Yes									
Fire Alarm	Yes									
Name		Year Built	Area (SF)	Total Needs 2018	Current Replacement Value	2018 FCI %	Total Needs 2023	Forecast Replacement Value	2023 FCI %	
Main Library		1973	65,449	\$216,974	\$13,794,686	2	\$650,788	\$13,794,686	5	
Site Information				\$33,150			\$33,150			
TOTAL				\$250,124			\$683,938			

Table 20: Facility Description: Lafayette Public Library - Main Library

#### CONDITION SUMMARY

The facility is generally in good condition. The majority of the building systems are within their expected service life. No life safety issues were observed during the assessment. Routine maintenance activities appear to be conducted in an effective manner. Regular maintenance is recommended to assure the useful life of major and minor building systems.



## **Exterior Enclosure**

The exterior wall finishes were a combination of brick and painted stucco. The brick finishes were original to the building and have surpassed their useful life according to BOMA. Some minor patchwork was observed; however, the system was still in good condition. Exterior windows were updated in the 2015 renovation and comprised of double-paned, insulated glass windows in good condition with no issues observed or reported.



## **Fire Protection**

Exit lights and emergency lighting were present and observed to be in good condition. Battery backup has a limited life cycle and should be checked on a regular basis. Fire protection specialties were present. System components include pull stations, wet sprinklers and hard-wired smoke detectors. These systems are provided throughout the building and appear to be in good condition.



## HVAC

The Heating, Ventilation, and Cooling (HVAC) units are predominately a centralized cooling/heating system, which are replacements and are in good condition. The distribution system consists of ductwork and piping in good condition.



### Roofing

The modified bitumen roof covering was original. It was patched between the 2012-2013 time-frame; however, multiple roof blisters were observed at the time of the assessment. The roof was in poor condition and should be considered for replacement soon.

Table 21. Current and Forecasted Needs Summarized by System (Current + 5 years): Main Library

System	2018	2019	2020	2021	2022	2023
Cumulative Needs by Year	\$250,124	\$250,124	\$250,124	\$251,974	\$415,597	\$683,938
Needs by Year	\$250,124	\$0	\$0	\$1,850	\$163,623	\$268,341
Exterior Enclosure	\$0	\$0	\$0	\$0	\$163,623	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$163,623	\$0
Roofing	\$161,671	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$161,671	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0	\$268,341
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0	\$268,341
Plumbing	\$55,304	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$55,304	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$1,850	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$1,850	\$0	\$0
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$33,150	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$33,150	\$0	\$0	\$0	\$0	\$0

System	2024	2025	2026	2027	2028
Cumulative Needs by Year	\$683,938	\$683,938	\$683,938	\$1,072,050	\$1,267,088
Needs by Year	\$0	\$0	\$0	\$388,113	\$195,038
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$388,113	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$388,113	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$195,038
Fire Alarms	\$0	\$0	\$0	\$0	\$195,038
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 23. C	Current and	Forecasted	Needs	Summarized	by System	(Years 1	11 - 1	15): Main	Library
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Sustan	2020	2020	2024	2022	2022
System	2029	2030	2031	2032	2033
Cumulative Needs by Year	\$1,271,144	\$1,375,862	\$1,375,862	\$1,375,862	\$2,386,424
Needs by Year	\$4,055	\$104,718	\$0	\$0	\$1,010,562
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$104,718	\$0	\$0	\$0
Specialties	\$0	\$104,718	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$4,055	\$0	\$0	\$0	\$982,419
Cooling Generation	\$4,055	\$0	\$0	\$0	\$541,027
Distribution System	\$0	\$0	\$0	\$0	\$415,892
Terminal & Package Units	\$0	\$0	\$0	\$0	\$25,500
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$28,143
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$28,143
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 24. Current and Forecasted Needs Summarized by System (Ye	ears 16-20): Main Library
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System	2034	2035	2036	2037	2038
Cumulative Needs by Year	\$2,386,424	\$3,683,179	\$3,683,179	\$3,683,179	\$4,124,960
Needs by Year	\$0	\$1,296,755	\$0	\$0	\$441,781
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$422,801	\$0	\$0	\$0
Ceiling Finishes	\$0	\$422,801	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$169,723	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$169,723	\$0	\$0	\$0
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$441,781
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$441,781
Electrical	\$0	\$704,231	\$0	\$0	\$0
Lighting	\$0	\$676,088	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$28,143	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 25. Expired Systems 2018: Lafayette Public Library – Main Library

Building	System Category	System	Priority	2018 Needs
Main Library	Plumbing	Sanitary Waste	Medium	\$55,304
Main Library	Roofing	Roof Coverings	High	\$161,671
			TOTAL	\$216,974

# **Site and Infrastructure Assessment Findings**

#### **Site General Condition**

The concrete pavements were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.

#### **Site Improvements**

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- · Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2018 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

#### **Site Utilities**

A site utilities assessment was not performed.

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Replace Caulking in Concrete Pavements	51,000 SF @ \$0.65 per SF	Low	\$33,150	2018
			Total 2018 Needs	\$33,150	

Table 26. Summary of 2018 Site and Infrastructure Deficiencies: Main Library



# Site Infrastructure



The concrete pavements were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.

# NORTH REGIONAL LIBRARY

Summary of I	Findir	ngs							
Construction Type	One Stru	-Story cture					-	and the	
Roof Type	Asp Con Shir	halt npositior ngle	1			LERARY		Sec. 1	
Ceiling Type	Aco Pair	ustical T nted Surf	ile and faces						
Lighting	LED	)					and the second		
HVAC	Split	t-DX							
Elevator	No								
Fire Sprinkler	Yes			T.					
Fire Alarm	Yes								
Name		Year Built	Area (SF)	Total Needs 2018	Current Replacement Value	2018 FCI %	Total Needs 2023	Forecast Replacement Value	2023 FCI %
North Regional Lil	orary	2007	12,564	\$74,505	\$2,648,114	3	\$225,060	\$2,648,114	8
Site Information				\$205,763			\$205,763		
TOTAL				\$280,267			\$430,823		

Table 27: Facility Description: Lafayette Public Library - North Regional Library

#### **CONDITION SUMMARY**

The facility is generally in good condition. The majority of the building systems are within their expected service life. No life safety issues were observed during the assessment. Routine maintenance activities appear to be conducted in an effective manner. Regular maintenance is recommended to assure the useful life of major and minor building systems.



## **Exterior Enclosure**

The exterior wall finishes were a combination of brick and painted stucco. The finishes were original to the building and in good condition. Exterior windows were comprised of double-paned, insulated glass which were original to the building. Windows were in good condition with no issues observed or reported.



## **Fire Protection**

Exit lights and emergency lighting were present and observed to be in good condition. Battery backup has a limited life cycle and should be checked on a regular basis. Fire protection specialties were present. System components include pull stations, wet sprinklers and hard-wired smoke detectors. These systems are provided throughout the building and appear to be in good condition.



### Interiors

Floor finishes were a combination of carpet tiles, ceramic tile, and resilient flooring. The carpet tiles in the children's area have been replaced; however, the remainder of the floor coverings were original to the facility and in poor condition. The resilient flooring was soiled and deteriorated, and carpet tile seams were separating. System needs replacement soon. Ceiling finishes were comprised of acoustical tile and painted hard surfaces which were observed to be in good condition. Interior wall finishes were a combination of painted hard surfaces, ceramic tile, and wallpaper that were original to the building and in good condition.



### Plumbing

Plumbing fixtures are original and are in good condition. Domestic water distribution is provided by an unknown pipe type due to system being concealed with hot water provided by a central water heater and is within its expected useful life. Sewer piping is comprised of an unknown pipe type due to system being concealed and is within its expected useful life.

Table 28. Current and Forecasted Needs Summarized by System (Current + 5 years): North Regional Library

System	2018	2019	2020	2021	2022	2023
, i						
Cumulative Needs by Year	\$280,267	\$280,267	\$280,267	\$280,267	\$379,310	\$430,823
Needs by Year	\$280,267	\$0	\$0	\$0	\$99,043	\$51,512
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$20,102	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$20,102	\$0
Interiors	\$74,505	\$0	\$0	\$0	\$0	\$51,512
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$74,505	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0	\$51,512
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$41,500	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$41,500	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$37,441	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$37,441	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$205,763	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$2,763	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$203,000	\$0	\$0	\$0	\$0	\$0

Table 29. Current and Forecasted Needs Summarized	by System (Years 6 -	10): North Regional Library
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System	2024	2025	2026	2027	2028
Cumulative Needs by Year	\$430,823	\$430,823	\$430,823	\$848,716	\$848,716
Needs by Year	\$0	\$0	\$0	\$417,894	\$0
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$90,581	\$0
Roof Coverings	\$0	\$0	\$0	\$90,581	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$81,163	\$0
Ceiling Finishes	\$0	\$0	\$0	\$81,163	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$110,960	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$110,960	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$135,189	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$129,786	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$5,403	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 30. Current and Forecasted Needs Summarized	by System (Years 11	- 15): North Regional Library
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System	2029	2030	2031	2032	2033
Cumulative Needs by Year	\$848,716	\$848,716	\$848,716	\$1,060,922	\$1,060,922
Needs by Year	\$0	\$0	\$0	\$212,206	\$0
Exterior Enclosure	\$0	\$0	\$0	\$83,928	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$60,433	\$0
Exterior Doors	\$0	\$0	\$0	\$23,495	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$43,471	\$0
Interior Doors	\$0	\$0	\$0	\$43,471	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$0	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$0	\$0
Sanitary Waste	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$84,807	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$84,807	\$0
Electrical	\$0	\$0	\$0	\$0	\$0
Branch Wiring	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 31. Current and Forecasted Needs Summarized by System (Years 16-20): North Regional Library

System	2034	2035	2036	2037	2038
Cumulative Needs by Year	\$1,060,922	\$1,060,922	\$1,060,922	\$1,350,003	\$1,350,003
Needs by Year	\$0	\$0	\$0	\$289,081	\$0
Exterior Enclosure	\$0	\$0	\$0	\$31,410	\$0
Exterior Walls (Finishes)	\$0	\$0	\$0	\$31,410	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$112,197	\$0
Domestic Water Distribution	\$0	\$0	\$0	\$27,264	\$0
Plumbing Fixtures	\$0	\$0	\$0	\$42,466	\$0
Sanitary Waste	\$0	\$0	\$0	\$42,466	\$0
HVAC	\$0	\$0	\$0	\$27,750	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$27,750	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$117,725	\$0
Branch Wiring	\$0	\$0	\$0	\$117,725	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Pedestrian Pavements	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

### Table 32. Expired Systems 2018: Lafayette Public Library – North Regional Library

Building	System Category	System	Priority	2018 Needs
North Regional Library	Interiors	Floor Finishes	Low	\$74,505
			TOTAL	\$74,505

# **Site and Infrastructure Assessment Findings**

#### **Site General Condition**

The asphalt pavements were in poor condition and need to be resurfaced.

The concrete sidewalks were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.

#### Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- · Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2018 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

#### Site Utilities

A site utilities assessment was not performed.

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Pedestrian Pavements	Replace Caulking in Concrete Pavements	4,250 SF @ \$0.65 per SF	Low	\$2,763	2018
Vehicular Pavements	Resurface Asphalt Pavement	58,000 SF @ \$3.50 per SF	Low	\$203,000	2018
			Total 2018 Needs	\$205,763	

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Table 33. Sumn	nary of 2018 Site a	na intrastructure	Deficiencies:	North Reg	gionai Libra	ary





## Site Infrastructure

The concrete sidewalks were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.



## Site Infrastructure

The asphalt pavements were in poor condition and need to be resurfaced.

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# SOUTH REGIONAL LIBRARY

Summary of Findings													
Construction Type	One Stru	-Story cture											
Roof Type	Mod and Sea	lified Bit Standin m Metal	umen g										
Ceiling Type	Aco Pair Surf	ustical T nted Har aces	ile and d	SOUTH REGIONAL LIBRARY									
Lighting	Fluc	rescent											
HVAC	Split	t-DX											
Elevator	No												
Fire Sprinkler	Yes				L.								
Fire Alarm	Yes												
Name		Year Built	Area (SF)	Total Needs 2018	Current Replacement Value	2018 FCI %	Total Needs 2023	Forecast Replacement Value	2023 FCI %				
South Regional Li	brary	2009	37,600	\$74,737	\$7,924,952	1	\$297,705	\$7,924,952	4				
Site Information				\$70,200			\$70,200						
TOTAL				\$144,937			\$367,905						

Table 34: Facility Description: Lafayette Public Library - South Regional Library

#### CONDITION SUMMARY

The facility is generally in good condition. The majority of the building systems are within their expected service life. No life safety issues were observed during the assessment. Routine maintenance activities appear to be conducted in an effective manner. Regular maintenance is recommended to assure the useful life of major and minor building systems.



## **Exterior Enclosure**

The exterior wall system is a combination of brick veneer and painted stucco in good condition. The window system is comprised of double pane, insulated windows in metal frames observed to be in good condition.



## **Fire Protection**

Exit lights and emergency lighting were present and observed to be in good condition. Battery backup has a limited life cycle and should be checked on a regular basis. Fire protection specialties were present. System components include pull stations, wet sprinklers and hard-wired smoke detectors. These systems are provided throughout the building and appear to be in good condition.



## **HVAC**

The Heating, Ventilation, and Cooling (HVAC) units are predominately split DX units, which are original and are in varying conditions. The Addison rooftop units were reported to have been in poor condition and not functioning correctly. The distribution system consists of ductwork and piping in good condition.



### Interiors

The interior wall finishes are a combination of painted surfaces, ceramic tile and wallpaper. The floor finishes are a combination of carpet tiles, resilient flooring and ceramic tile. Ceiling finishes are a combination of acoustical tiles and painted surfaces. All systems were original and in fair to good condition with a few deficiencies observed.

Table 35	Current and	Forecasted Nee	ds Summa	rized by S	vstem	(Current + 5	vears)	· South Re	aional	l ihran	/
	Current anu	i orecasteu nee	us Summa	nzeu by o	ysienn	Current ' 5	ycais)	. 3000111116	yiunan	பமாவர	/

Sustan	204.0	2010	2020	2024	2022	2022
System	2010	2019	2020	2021	2022	2023
Cumulative Needs by Year	\$144,937	\$144,937	\$144,937	\$367,905	\$367,905	\$367,905
Needs by Year	\$144,937	\$0	\$0	\$222,968	\$0	\$0
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$222,968	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$222,968	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0	\$0
HVAC	\$74,737	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0	\$0
Terminal & Package Units	\$74,737	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$70,200	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$70,200	\$0	\$0	\$0	\$0	\$0

Table 36.	Current and	Forecasted Need	ls Summarize	d bv Svstem	(Years 6 -	10): South	Regional Library
					1		

System	2024	2025	2026	2027	2028		
	2021	2020	2020	2021	2020		
Cumulative Needs by Year	\$641,613	\$795,773	\$795,773	\$795,773	\$795,773		
Needs by Year	\$273,708	\$154,160	\$0	\$0	\$0		
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0		
Exterior Windows	\$0	\$0	\$0	\$0	\$0		
Exterior Doors	\$0	\$0	\$0	\$0	\$0		
Roofing	\$0	\$0	\$0	\$0	\$0		
Roof Coverings	\$0	\$0	\$0	\$0	\$0		
Interior Construction	\$60,160	\$0	\$0	\$0	\$0		
Interior Doors	\$0	\$0	\$0	\$0	\$0		
Specialties	\$60,160	\$0	\$0	\$0	\$0		
Interiors	\$0	\$154,160	\$0	\$0	\$0		
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0		
Floor Finishes	\$0	\$0	\$0	\$0	\$0		
Wall Finishes	\$0	\$154,160	\$0	\$0	\$0		
HVAC	\$101,500	\$0	\$0	\$0	\$0		
Cooling Generation	\$101,500	\$0	\$0	\$0	\$0		
Distribution System	\$0	\$0	\$0	\$0	\$0		
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0		
Fire Protection	\$112,048	\$0	\$0	\$0	\$0		
Fire Alarms	\$112,048	\$0	\$0	\$0	\$0		
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0		
Electrical	\$0	\$0	\$0	\$0	\$0		
Lighting	\$0	\$0	\$0	\$0	\$0		
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0		
Site Infrastructure	\$0	\$0	\$0	\$0	\$0		
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0		
Table 37. C	urrent and Fored	asted Needs S	Summarized by	System (	Years 11 -	15): South	Regional Library
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System	2029	2030	2031	2032	2033
Cumulative Needs by Year	\$1,908,776	\$1,908,776	\$1,908,776	\$1,908,776	\$1,908,776
Needs by Year	\$1,113,003	\$0	\$0	\$0	\$0
Exterior Enclosure	\$0	\$0	\$0	\$0	\$0
Exterior Windows	\$0	\$0	\$0	\$0	\$0
Exterior Doors	\$0	\$0	\$0	\$0	\$0
Roofing	\$245,213	\$0	\$0	\$0	\$0
Roof Coverings	\$245,213	\$0	\$0	\$0	\$0
Interior Construction	\$0	\$0	\$0	\$0	\$0
Interior Doors	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$242,896	\$0	\$0	\$0	\$0
Ceiling Finishes	\$242,896	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
HVAC	\$220,318	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$216,068	\$0	\$0	\$0	\$0
Terminal & Package Units	\$4,250	\$0	\$0	\$0	\$0
Fire Protection	\$0	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$0	\$0	\$0	\$0	\$0
Electrical	\$404,576	\$0	\$0	\$0	\$0
Lighting	\$388,408	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$16,168	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

Table 38. Current and Forecasted Needs Summarized by System (Years 16-20): South Regional Library

System	2034	2035	2036	2037	2038
	2001	2000	2000	2001	2000
Cumulative Needs by Year	\$2,543,840	\$2,543,840	\$2,543,840	\$2,543,840	\$2,543,840
Needs by Year	\$635,064	\$0	\$0	\$0	\$0
Exterior Enclosure	\$251,168	\$0	\$0	\$0	\$0
Exterior Windows	\$180,856	\$0	\$0	\$0	\$0
Exterior Doors	\$70,312	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0
Roof Coverings	\$0	\$0	\$0	\$0	\$0
Interior Construction	\$130,096	\$0	\$0	\$0	\$0
Interior Doors	\$130,096	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0
Interiors	\$0	\$0	\$0	\$0	\$0
Ceiling Finishes	\$0	\$0	\$0	\$0	\$0
Floor Finishes	\$0	\$0	\$0	\$0	\$0
Wall Finishes	\$0	\$0	\$0	\$0	\$0
HVAC	\$0	\$0	\$0	\$0	\$0
Cooling Generation	\$0	\$0	\$0	\$0	\$0
Distribution System	\$0	\$0	\$0	\$0	\$0
Terminal & Package Units	\$0	\$0	\$0	\$0	\$0
Fire Protection	\$253,800	\$0	\$0	\$0	\$0
Fire Alarms	\$0	\$0	\$0	\$0	\$0
Sprinklers & Standpipe	\$253,800	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0
Lighting	\$0	\$0	\$0	\$0	\$0
Exit Signs and Emergency Lighting	\$0	\$0	\$0	\$0	\$0
Site Infrastructure	\$0	\$0	\$0	\$0	\$0
Vehicular Pavements	\$0	\$0	\$0	\$0	\$0

# Table 39. Expired Systems 2018: Lafayette Public Library – South Regional Library

Building	System Category	System	Priority	2018 Needs
South Regional Library	HVAC	Terminal & Package Units	Medium	\$23,166
South Regional Library	HVAC	Terminal & Package Units	Medium	\$23,166
South Regional Library	HVAC	Terminal & Package Units	Medium	\$28,405
			TOTAL	\$74,737

# **Site and Infrastructure Assessment Findings**

# **Site General Condition**

The concrete pavements were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.

# Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- · Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2018 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

#### **Site Utilities**

A site utilities assessment was not performed.

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Replace Caulking in Concrete Pavements	108,000 SF @ \$0.65 per SF	Low	\$70,200	2018
			Total 2018 Needs	\$70,200	

Table 40. Summary of 2018 Site and Infrastructure Deficiencies: South Regional Library





# Site Infrastructure

The concrete pavements were in overall good condition; however, replacement of the sealant in the expansion joints as part of routine maintenance would extend their overall life.

# Table 41. Equipment Inventory: Lafayette Public Library

Building	Area Name	Equipment Type	Item Number
Chenier Branch Library	F: 1, S: 102	Panel, Fire	CBL_FALMP_1
Chenier Branch Library	F: 1, S: 105 Auditorium Electrical Closet	Panel	CBL_MCBE_2
Chenier Branch Library	F: 1, S: 105 Auditorium Electrical Closet	Switchgear	CBL_SWTCHGR_1
Chenier Branch Library	F: 1, S: 105 Auditorium Electrical Closet	Panel	CBL_MCBE_1
Chenier Branch Library	F: 1, S: Janitor	Air Handling Unit	CBL_AHU_3
Chenier Branch Library	F: 1, S: Janitor	Air Handling Unit	CBL_AHU_4
Chenier Branch Library	F: 1, S: Mechanical Electrical 1	Air Handling Unit	CBL_AHU_1
Chenier Branch Library	F: 1, S: Mechanical Electrical 2	Air Handling Unit	CBL_AHU_2
Chenier Branch Library	F: 1, S: Outside	Condensing Unit	CBL_CUR_4
Chenier Branch Library	F: 1, S: Outside	Condensing Unit	CBL_CUR_1
Chenier Branch Library	F: 1, S: Outside	Condensing Unit	CBL_CUR_2
Chenier Branch Library	F: 1, S: Outside	Condensing Unit	CBL_CUR_3
East Regional Library	F: 1, S: Electrical	Panel	ERL_MCBE_9
East Regional Library	F: 1, S: Electrical	Panel	ERL_MCBE_8
East Regional Library	F: 1, S: Electrical	Panel	ERL_MCBE_7
East Regional Library	F: 1, S: Facility Wide	VAV Box	ERL_VAVT_1
East Regional Library	F: 1, S: Hallway	Panel, Fire	ERL_FALMP_1
East Regional Library	F: 1, S: Mechanical	Air Handling Unit	ERL_AHU_3
East Regional Library	F: 1, S: Mechanical	Variable Frequency Drive	ERL_VFD_5
East Regional Library	F: 1, S: Mechanical	Variable Frequency Drive	ERL_VFD_6
East Regional Library	F: 1, S: Outside	Pump	ERL_CPCW_2
East Regional Library	F: 1, S: Outside	Chiller, Air Cooled	ERL_CHLR_1
East Regional Library	F: 1, S: Outside	Switchgear	ERL_ESEE_1
East Regional Library	F: 1, S: Outside	Transformer	ERL_TRANS_1
East Regional Library	F: 1, S: Outside	Pump	ERL_CPCW_1
East Regional Library	F: 1, S: Outside	Tank, Expansion	ERL_ETH_1
East Regional Library	F: 1, S: Outside	Panel	ERL_MCBE_10
East Regional Library	F: 1, S: Outside	Switchgear	ERL_ESEE_2
East Regional Library	F: 1, S: Outside	Panel	ERL_MCBE_11
East Regional Library	F: 1, S: Outside	Chiller, Air Cooled	ERL_CHLR_2
East Regional Library	F: 1, S: Outside	Backflow Preventer	ERL_BP_1
East Regional Library	F: 1, S: Outside	Transformer	ERL_TRANS_2
East Regional Library	F: 1, S: Riser Room	Panel	ERL_MCBE_4
East Regional Library	F: 1, S: Riser Room	Panel	ERL_MCBE_1
East Regional Library	F: 1, S: Riser Room	Variable Frequency Drive	ERL_VFD_4
East Regional Library	F: 1, S: Riser Room	Sprinkler System	ERL_FR_1
East Regional Library	F: 1, S: Riser Room	Panel	ERL_MCBE_5
East Regional Library	F: 1, S: Riser Room	Variable Frequency Drive	ERL_VFD_3
East Regional Library	F: 1, S: Riser Room	Panel	ERL_MCBE_3
East Regional Library	F: 1, S: Riser Room	Panel	ERL_MCBE_2
East Regional Library	F: 1, S: Riser Room	Air Handling Unit	ERL_AHU_1
East Regional Library	F: 1, S: Riser Room	Air Handling Unit	ERL_AHU_2

Building	Area Name	Equipment Type	Item Number
East Regional Library	F: 1, S: Riser Room	Variable Frequency Drive	ERL_VFD_1
East Regional Library	F: 1, S: Riser Room	Panel	ERL_MCBE_6
East Regional Library	F: 1, S: Riser Room	Variable Frequency Drive	ERL_VFD_2
East Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	ERL_EF_2
East Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	ERL_EF_4
East Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	ERL_EF_5
East Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	ERL_EF_3
East Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	ERL_EF_1
Main Library	F: 1, S: Air Handler Room	Air Handling Unit	ML_AHU_11
Main Library	F: 1, S: Air Handler Room	Variable Frequency Drive	ML_VFD_7
Main Library	F: 1, S: Data	Panel, Fire	ML_FALMP_1
Main Library	F: 1, S: Electrical	Switchgear	ML_SWTCHGR_6
Main Library	F: 1, S: Electrical	Switchgear	ML_SWTCHGR_1
Main Library	F: 1, S: Electrical	Automatic Transfer Switch	ML_ATS_1
Main Library	F: 1, S: Electrical	Switchgear	ML_SWTCHGR_3
Main Library	F: 1, S: Electrical	Panel	ML_MCBE_12
Main Library	F: 1, S: Electrical	Transformer	ML_TRANS_1
Main Library	F: 1, S: Electrical	Transformer	ML_TRANS_2
Main Library	F: 1, S: Electrical	Switchgear	ML_SWTCHGR_5
Main Library	F: 1, S: Electrical	Switchgear	ML_SWTCHGR_2
Main Library	F: 1, S: Electrical	Panel	ML_MCBE_13
Main Library	F: 1, S: Electrical	Switchgear	ML_SWTCHGR_4
Main Library	F: 1, S: Facility Wide	VAV Box	ML_VAVT_1
Main Library	F: 1, S: Fire Sprinkler Room	Pump, Fire, Electric	ML_PFP_1
Main Library	F: 1, S: Fire Sprinkler Room	Sprinkler System	ML_FR_1
Main Library	F: 1, S: Janitor	Panel	ML_MCBE_10
Main Library	F: 1, S: Janitor	Panel	ML_MCBE_11
Main Library	F: 1, S: Outside	Automatic Transfer Switch	ML_ATS_2
Main Library	F: 1, S: Outside	Emergency Generator	ML_GEN_1
Main Library	F: 1, S: Sprinkler Room 115	Air Handling Unit	ML_AHU_14
Main Library	F: 2, S: Electrical	Panel	ML_MCBE_6
Main Library	F: 2, S: Electrical	Panel	ML_MCBE_5
Main Library	F: 2, S: Electrical	Panel	ML_MCBE_7
Main Library	F: 2, S: Mechanical	Variable Frequency Drive	ML_VFD_4
Main Library	F: 2, S: Mechanical	Variable Frequency Drive	ML_VFD_3
Main Library	F: 2, S: Mechanical	Panel	ML_MCBE_8
Main Library	F: 2, S: Mechanical	Air Handling Unit	ML_AHU_7
Main Library	F: 2, S: Mechanical	Air Handling Unit	ML_AHU_8
Main Library	F: 2, S: Mechanical 2	Panel	ML_MCBE_9
Main Library	F: 2, S: Mechanical 2	Variable Frequency Drive	ML_VFD_6
Main Library	F: 2, S: Mechanical 2	Air Handling Unit	ML_AHU_10
Main Library	F: 2, S: Mechanical 2	Variable Frequency Drive	ML_VFD_5
Main Library	F: 2, S: Mechanical 2	Air Handling Unit	ML_AHU_9

Building	Area Name	Equipment Type	Item Number
Main Library	F: 2, S: Stair S001	Mini Split System	ML_MINISPLT_6
Main Library	F: 2, S: Stair S001	Mini Split System	ML_MINISPLT_3
Main Library	F: 2, S: Stair S003	Mini Split System	ML_MINISPLT_5
Main Library	F: 2, S: Stair S003	Mini Split System	ML_MINISPLT_4
Main Library	F: 3, S: Electrical	Panel	ML_MCBE_4
Main Library	F: 3, S: Electrical	Panel	ML_MCBE_3
Main Library	F: 3, S: Mechanical	Air Handling Unit	ML_AHU_3
Main Library	F: 3, S: Mechanical	Tank, Expansion	ML_ETC_2
Main Library	F: 3, S: Mechanical	Panel	ML_MCBE_2
Main Library	F: 3, S: Mechanical	Tank, Expansion	ML_ETC_1
Main Library	F: 3, S: Mechanical	Variable Frequency Drive	ML_VFD_2
Main Library	F: 3, S: Mechanical (by roof access )	Variable Frequency Drive	ML_VFD_1
Main Library	F: 3, S: Mechanical (by roof access )	Panel	ML_MCBE_1
Main Library	F: 3, S: Mechanical (by roof access )	Air Handling Unit	ML_AHU_2
Main Library	F: 3, S: Mechanical -next to admin offices	Air Handling Unit	ML_AHU_4
Main Library	F: 3, S: Server Room	Air Handling Unit	ML_AHU_5
Main Library	F: Basement 1, S: Elevator Shaft	Pump, Sump	ML_SUMPM_1
Main Library	F: Roof 1, S: Elevator Room	Air Handling Unit	ML_AHU_1
Main Library	F: Roof 1, S: Elevator Room	Elevator	ML_ELEV_2
Main Library	F: Roof 1, S: Elevator Room	Elevator	ML_ELEV_3
Main Library	F: Roof 1, S: Elevator Room	Elevator	ML_ELEV_1
Main Library	F: Roof 1, S: Roof	Pump	ML_CPCW_2
Main Library	F: Roof 1, S: Roof	Pump	ML_CPCW_3
Main Library	F: Roof 1, S: Roof	Chiller, Water Cooled	ML_CHLR_2
Main Library	F: Roof 1, S: Roof	Chiller, Water Cooled	ML_CHLR_3
Main Library	F: Roof 1, S: Roof	Mini Split System	ML_MINISPLT_1
Main Library	F: Roof 1, S: Roof	Condensing Unit	ML_CUR_1
Main Library	F: Roof 1, S: Roof	Chiller, Water Cooled	ML_CHLR_1
Main Library	F: Roof 1, S: Roof	Energy Recovery Unit	ML_ERV_12
Main Library	F: Roof 1, S: Roof	Pump	ML_CPCW_1
Main Library	F: Roof 1, S: Roof	Mini Split System	ML_MINISPLT_2
Main Library	F: Roof 1, S: Roof	Energy Recovery Unit	ML_ERV_13
Main Library	F: Roof 2, S: Roof 2	Energy Recovery Unit	ML_ERV_6
North Regional Library	F: 1, S: Electrical	Switchgear	NRL_SWTCHGR_1
North Regional Library	F: 1, S: Electrical	Panel	NRL_MCBE_3
North Regional Library	F: 1, S: Electrical	Panel	NRL_MCBE_4
North Regional Library	F: 1, S: Electrical	Panel	NRL_MCBE_2
North Regional Library	F: 1, S: Facility Wide	VAV Box	NRL_VAVT_1
North Regional Library	F: 1, S: Hallway by kitchen	Panel, Fire	NRL_FALMP_1
North Regional Library	F: 1, S: Mechanical 1	Variable Frequency Drive	NRL_VFD_3
North Regional Library	F: 1, S: Mechanical 1	Variable Frequency Drive	NRL_VFD_2
North Regional Library	F: 1, S: Mechanical 1	Air Handling Unit	NRL_AHU_4
North Regional Library	F: 1, S: Mechanical 1	Air Handling Unit	NRL_AHU_3

Building	Area Name	Equipment Type	Item Number
North Regional Library	F: 1, S: Mechanical 2	Sprinkler System	NRL_FR_1
North Regional Library	F: 1, S: Mechanical 2	Pump, Fire, Electric	NRL_PFP_1
North Regional Library	F: 1, S: Mechanical 2	Air Compressor	NRL_ACOMP_1
North Regional Library	F: 1, S: Mechanical 3	Energy Recovery Unit	NRL_ERV_1
North Regional Library	F: 1, S: Mechanical 3	Variable Frequency Drive	NRL_VFD_1
North Regional Library	F: 1, S: Mechanical 3	Air Handling Unit	NRL_AHU_2
North Regional Library	F: 1, S: Outside	Condensing Unit	NRL_CUR_1
North Regional Library	F: 1, S: Outside	Condensing Unit	NRL_CUR_3
North Regional Library	F: 1, S: Outside	Panel	NRL_MCBE_1
North Regional Library	F: 1, S: Outside	Condensing Unit	NRL_CUR_2
South Regional Library	F: 1, S: Building	VAV Box	SRL_VAVT_1
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_3
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_1
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_5
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_7
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_4
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Automatic Transfer Switch	SRL_ATS_1
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Switchgear	SRL_SWTCHGR_1
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_2
South Regional Library	F: 1, S: Electrical (inside mechanical 4)	Panel	SRL_MCBE_6
South Regional Library	F: 1, S: Electrical Room (inside Storage 1)	Panel	SRL_MCBE_8
South Regional Library	F: 1, S: Electrical Room (inside Storage 1)	Panel	SRL_MCBE_9
South Regional Library	F: 1, S: Electrical Room (inside Storage 1)	Panel	SRL_MCBE_11
South Regional Library	F: 1, S: Electrical Room (inside Storage 1)	Panel	SRL_MCBE_12
South Regional Library	F: 1, S: Electrical Room (inside Storage 1)	Panel	SRL_MCBE_10
South Regional Library	F: 1, S: Hallway in admin offices	Panel, Fire	SRL_FALMP_1
South Regional Library	F: 1, S: Mechanical 1	Air Handling Unit	SRL_AHU_4
South Regional Library	F: 1, S: Mechanical 1	Variable Frequency Drive	SRL_VFD_3
South Regional Library	F: 1, S: Mechanical 2	Air Handling Unit	SRL_AHU_3
South Regional Library	F: 1, S: Mechanical 2	Variable Frequency Drive	SRL_VFD_2
South Regional Library	F: 1, S: Mechanical 3	Variable Frequency Drive	SRL_VFD_1
South Regional Library	F: 1, S: Mechanical 3	Sprinkler System	SRL_FR_1
South Regional Library	F: 1, S: Mechanical 3	Air Handling Unit	SRL_AHU_2
South Regional Library	F: 1, S: Mechanical 4	Variable Frequency Drive	SRL_VFD_4
South Regional Library	F: 1, S: Mechanical 4	Air Handling Unit	SRL_AHU_1
South Regional Library	F: 1, S: Outside	Condensing Unit	SRL_CUR_2
South Regional Library	F: 1, S: Outside	Emergency Generator	SRL_GEN_1
South Regional Library	F: 1, S: Outside	Condensing Unit	SRL_CUR_1
South Regional Library	F: 1, S: Outside	Transformer	SRL_TRANS_1
South Regional Library	F: 1, S: Outside	Transformer	SRL_TRANS_2
South Regional Library	F: 1, S: Outside	Transformer	SRL_TRANS_3
South Regional Library	F: 1, S: Outside Area #2	Condensing Unit	SRL_CUR_3
South Regional Library	F: 1, S: Outside Area #2	Condensing Unit	SRL_CUR_4

Building	Area Name	Equipment Type	Item Number
South Regional Library	F: 1, S: Outside Area #3	Condensing Unit	SRL_CUR_5
South Regional Library	F: 1, S: Outside Area #3	Condensing Unit	SRL_CUR_6
South Regional Library	F: 1, S: Outside Area #4	Condensing Unit	SRL_CUR_7
South Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	SRL_EF_3
South Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	SRL_EF_2
South Regional Library	F: Roof 1, S: Roof	Fan, Exhaust	SRL_EF_1
South Regional Library	F: Roof 1, S: Roof	Package Unit	SRL_RTU_3
South Regional Library	F: Roof 1, S: Roof	Mini Split System	SRL_MINISPLT_1
South Regional Library	F: Roof 1, S: Roof	Package Unit	SRL_RTU_2
South Regional Library	F: Roof 1, S: Roof	Package Unit	SRL_RTU_1

# APPENDICES

# APPENDICES

# Appendix A -Typical System Lifecycles

System and component life cycles used in the cost models for this project were based on average service life as shown in the *Preventive Maintenance Guidebook: Best Practices to Maintain Efficient and Sustainable Buildings* published by Building Owners and Managers Association (BOMA) International. When life cycle information is not provided by BOMA, life cycles have been assigned using ALPHA's professional judgment.

Table 1	<u>ο τ.</u>	ninall	ifa C	valaa
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System	Lifecycle (Years)	System	Lifecycle (Years)
Roofing		Plumbing	
Built-up	25	Plumbing Fixtures	30
Composition Shingle	20	Domestic Water Distribution	30
Metal Panels	25	Sanitary Waste	30
Modified Bitumen	20	Fire Protection	
Standing Seam Metal	35	Fire Sprinklers and Standpipe (Piping and Risers)	25
Building Exterior		Fire Detection (Activation Devices)	10
Exterior Doors	25	Fire Detection (Notification Devices and Control Panels)	15
Exterior Walls (Finishes)	10-30	Fire Detection (Wiring)	30
Exterior Windows	30	HVAC	
Interior Finishes		Cooling Generating	25
Interior Doors	25	Controls	20
Ceiling (Acoustical Tile and Grids)	20	Distribution	30
Ceiling (Painted)	10	Heat Generating	30
Walls	5	Terminal and Package Units	15
Floors	12	Electrical	
Built-in Equip/Specialties		Branch Wiring	30
Built-in Equip/Specialties	20	Lighting	20
Toilet Partitions (Heavy Use)	10	Service and Distribution	40
Toilet Partitions (Light Use)	20	Generators	20
Conveying Systems		Equipment	
Elevators	35	Institutional Equipment	25
Chair Lifts	15	Other Equipment	15-25

#### Appendix B - Supplemental Information

# Capital Planning v. Budgeting

While traditional budgets may be perceived as reacting to short-term needs based on the historical performance of facilities and systems, a capital plan anticipates both short- and long-term degradation by employing a facility condition assessment and predictive cost modeling.

- **Budgeting:** Traditional, cost-based, budgeting practices describe a system by which a prior period's budget is adjusted to provide for the fluctuating cost of maintaining facilities. Traditional budgeting issues may include: 1) anticipated needs; 2) organizational growth; 3) the acquisition of new assets; 4) operations and maintenance; 5) deferred maintenance; and, 6) insurance.
- **Capital Planning:** Capital planning differs from budgeting in that it considers a broader range of financial considerations over an extended timeline so as to more effectively predict and manage the fiscal needs of a real estate portfolio. Financial considerations may include the cost of capital, depreciation, organizational risk and return on investment (ROI). Similar in concept to the accounting principle of anticipating the capital depreciation of plant value, a capital renewal plan anticipates and attempts to counteract the ongoing deterioration of facility systems and components in order to extend a facility's life and value.

# **Facility Condition Index**

A Facility Condition Index is considered to be a key building performance metric. As part of the FCA process, a facility condition index (FCI) is calculated for each facility. The FCI is used to quantify a facility's physical condition at a specific point in time and is calculated using the expired system replacement costs (costs associated with systems that are beyond average service life) and the current replacement value (CRV) of the building. Expired system replacement costs consist of work that is necessary to restore the facility to a condition equivalent to its original (like new) state.

**Example:** Total expired system replacement costs (Requirements) = \$3,000,000

Current Replacement Value (CRV) = \$10,000,000

$$FCI = \frac{\$3,000,000}{\$10,000,000} = .30$$

# **Present Value and Nominal Value**

In the calculation of FCI sums, monetary values can be discounted to incorporate the time value of money, or be expressed in constant terms, ignoring the effects of inflation and interest. Because the cost of capital can vary significantly according to time, portfolio types, and project programs, all monetary terms in this report are expressed as nominal values.

- **Nominal Value:** Expresses monetary values, without adjusting for inflation or interest (also known as face value or par value).
- **Present Value:** The current worth of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows can be discounted at a client specified discount rate to reflect the owner's internal cost of capital.

# Hard and Soft Costs

Unless otherwise stated, the costs indicated in this report represent hard costs only. Because soft costs vary regionally and periodically, provisions for soft cost expenses should be considered in addition to the hard costs indicated. For the purpose of this report, Hard and Soft costs are defined as follows:

- **Hard costs:** Direct costs incurred in relation to a specific construction project. Hard cost may include labor, materials, equipment, etc.
- **Soft cost:** Indirect costs incurred in addition to the direct construction cost. Soft costs may include professional services, financing, taxes, etc.

#### **Building Systems**

A building system describes a mechanism, or group of mechanisms that perform a given role to maintain the functionality of a facility. Examples of building systems may include roofing, plumbing or heating, ventilation and air conditioning (HVAC) systems.

Per the Uniformat classification standard, building systems have been grouped as follows:

- Foundations
- Superstructure
- Exterior Enclosure
- Roofing
- Interior Construction
- Interior Finishes
- Conveying Systems
- Plumbing
- HVAC
- Fire Protection
- Electrical

# **System States**

The design life of a building system or component describes the duration for which a system is expected to perform within normal operational parameters. The design life may be shortened for a variety of reasons including, neglect or inadequate maintenance or extended as a result of robust preventative / predictive maintenance. This extended or shortened design life is defined as a system's useful life, and quantifies the duration for which a system, or component, operates within a minimally accepted level of performance.

As illustrated in the figure below, a facility condition analysis will make an appraisal of systems and components and recommend one of a series of actions necessary to ensure the continued functionality of a facility:

- **Missing:** A system or component may be deemed missing if the element absent, but is required for the operation of a facility (Example: ADA requirements for accessible ramps).
- **Extended:** The life cycle of a system or component may be extended beyond its anticipated design life, if the element is deemed to be performing adequately.
- **Expired:** A system or component may be recommended for replacement (at any time) if the element is deemed to be performing inadequately.





# **System Actions**

A deficiency describes a condition in which there exists the need to repair an item that is damaged, missing, inadequate or insufficient for an intended purpose. Deficiencies are typically associated with underperforming systems or components, and describe activities that are required to extend their useful life.

- **Repair:** Describes a condition in which it is recommended that the building system or component be serviced to provide additional useful life. Repairs are curative in nature, while maintenance by contrast is preventative.
- **Replace:** Describes a condition in which it is recommended that the building system or component be removed and replaced with a new system or component. Replacement needs may vary according to building type, region, use, and maintenance management.

Multiple building systems are considered "non-renewable" because the replacement of those systems would typically be so costly as to require the replacement of the entire facility (Example: Foundations). Accordingly, there are no deficiencies or costs associated to non-renewable system.

Additionally, per client preferences, many aspects of the built environment may not be part of the scope of a facility condition analysis.

# **Cost Models**

Cost estimation models are parametric equations used to predict the costs or the life cycle of a building system or component. The projections of the cost models are factored into capital plans, budgeting tools and other financial planning mechanisms. The rough order of magnitude cost estimates contained in this report are based on the cost models available within the client's database platform.

It is important to note that there are a variety of cost model equations employed in the building industry and it is not uncommon for prices derived from the client's database platform to vary from external references. If required, adjustments can typically be made to the facility condition data in order to facilitate comparison with external cost models, better reflect local conditions or perform sensitivity analyses.

#### Appendix C - Glossary

ACBM: Asbestos-containing Building Material

ADA: Americans with Disabilities Act

AHERA: Asbestos Hazard Emergency Response Act

ALPHA: ALPHA Facilities Solutions, LLC

**Alterations:** Work performed to change the interior arrangements or other physical characteristics of an existing facility or fixed equipment so that it can be used more effectively for its current designated purpose or adapted to a new use.

ASHRAE: American Society of Heating, Refrigerating and Air Conditioning Engineers

**ASTM:** American Society for Testing and Materials

**BOMA:** Building Owners and Managers Association

**Budgeting:** A system by which a prior period's estimate of income and expenditure is adjusted to account for operational realities in order to provide for the cost of maintaining facilities. Traditional budgeting issues may include anticipated needs, organizational growth, the acquisition of new assets, operations and maintenance, deferred maintenance and insurance.

Building: An enclosed and roofed structure that can be traversed without exiting to the exterior.

**Building Addition:** An area, space or component of a building added to the existing structure, after the original building's year built date.

**Capital Renewal:** The planned replacement of building subsystems such as roofs, electrical systems, HVAC systems, and plumbing systems that have reached the end of their useful lives. Without significant reinvestment in building subsystems, older facilities will fall into a state of deteriorating condition and functionality, and the repair and maintenance costs will increase (International Facilities Management Association).

**Calculated Next Renewal:** The year a system or element would be expected to expire, based solely on the date it was installed and the expected service life of the system.

**Condition:** Condition refers to the state of physical fitness or readiness of a facility, system or systemic element for its intended use.

**Cost Model:** Parametric equations used to quantify the condition of building systems and estimate the cost necessary to sustain a facility over a given set of reporting periods. These estimated costs can be presented over a timeline to represent a capital renewal schedule.

**Current Replacement Value (CRV):** CRV is a standard industry cost estimate of materials, supplies and labor required to replace facility at existing size and functional capability. Please note that the terms Plant Replacement Value and Current Replacement Value have the same meaning in the context of determining Facility Condition Index.

**Deficiency:** A deficiency describes a condition in which there exists the need to repair a building system or component that is damaged, missing, inadequate or insufficient for an intended purpose.

Element: Elements are the major components that comprise building systems.

**Facility:** A facility refers to site(s), building(s), or building addition(s) or combinations thereof that provide a particular service or support of an educational purpose.

**Facility Condition Assessment (FCA):** The process of performing a physical evaluation of the condition of a facility and its systems. The findings of this analysis may be used in conjunction with cost models to estimate the current and future funding streams necessary to maintain a real estate portfolio.

**Facility Condition Index (FCI):** FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities – the higher the FCI, the poorer the condition of the facility. After an FCI is established for all buildings within a portfolio, a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

**Gross Square Feet (GSF):** The size of the enclosed floor space of a building in square feet, measured to the outside face of the enclosing walls.

**Hard Costs:** Direct costs incurred in relation to a specific construction project. Hard costs may include labor, materials, equipment, etc.

Heating, Ventilation and Air Conditioning (HVAC): A term used to describe building systems responsible for maintaining the temperature, humidity and air quality control.

IFMA: International Facilities Management Association.

**Indoor Air Quality (IAQ):** A metric used to quantify the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants.

**Install Year:** The year a building or system was built or the most recent major renovation date (where a minimum of 70% of the system's Current Replacement Value (CRV) was replaced).

**Inflation:** The trend of increasing prices from one year to the next, representing the rate at which the real value of an investment is eroded and the loss in spending power over time.

**Interest:** The charge for the privilege of borrowing money, typically expressed as an annual percentage rate and commonly calculated using simple or compound interest calculation.

Life Cycle: The period of time that a building, system or element can be expected to adequately serve its intended function.

**Maintenance:** Work necessary to realize the originally anticipated life of a fixed asset, including buildings, fixed equipment and infrastructure. Maintenance is preventative, whereas repairs are curative.

**Mechanical, Electrical and Plumbing (MEP):** A term used to describe building systems related to the provision of HVAC, electric and plumbing services to a facility.

Needs: In the context of this report, needs are the backlog of capital renewal requirements.

**Next Renewal:** The assessor adjusted expected useful life of a system or element as a result of on-site inspection.

**Nominal Value:** A value expressed in monetary terms for a specific year or years, without adjusting for inflation – also known as face value or par value.

**Operations:** Activities related to normal performance of the functions for which a building is used (e.g., utilities, janitorial services, waste treatment).

**O&M:** Operations and Maintenance

**Parametric Cost Modeling:** Parametric statistics is a branch of statistics that assumes that the data has come from a type of probability distribution and makes inferences about the parameters of the distribution.

**Plant Replacement Value (PRV):** PRV represents the cost to design and construct a notional facility to current standards to replace an existing facility at the same location. Please note that the terms Plant Replacement Value (PRV) and Current Replacement Value (CRV) have the same meaning in the context of determining Facility Condition Index (FCI).

**Present Value (PV):** The current worth of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows are discounted at a client specified discount rate.

**Real Interest Rate:** A net interest rate adjusted to remove the effects of inflation. It is the amount by which the nominal interest rate is higher than the inflation rate.

**Repairs:** Work to restore damaged or worn-out facilities to normal operating condition. Repairs are curative, whereas maintenance is preventative.

**Replacements:** An exchange of one fixed asset for another that has the same capacity to perform the same function. In contrast to repair, replacement generally involves a complete identifiable item of reinvestment (e.g., a major building component or subsystem).

**Return on Investment (ROI):** ROI is a financial indicator used to evaluate the performance of an investment and as a means to compare benefit.

Rough Order of Magnitude (ROM): ROM cost estimates are the most basic of cost estimate classifications.

**RSMeans:** An independent third-party provider of building industry construction cost data.

**Site:** A facility's grounds and its utilities, roadways, landscaping, fencing and other typical land improvements needed to support the facility.

**Soft Costs:** Indirect costs incurred in addition to the direct construction cost. Soft costs may include professional services, financing, taxes, etc.

**System:** System refers to building and related site work elements as described by ASTM Uniformat II, Classification for Building Elements (E1557-97), a format for classifying major facility elements common to most buildings. Elements usually perform a given function, regardless of the design specification, construction method or materials used. See also, "Uniformat II".

**Uniformat II:** Uniformat II (commonly referred to simply as Uniformat), is ASTM Uniformat II, Classification for Building Elements (E1557-97) – A methodology for classifying major facility components common to most buildings.

**Year Built:** The year that a building or addition was originally built, based on substantial completion or occupancy.



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