



FACILITY CONDITION ASSESSMENT

Business Office | November 2020





Executive Summary

Business Office, located at 4701 Col. Vickrey in Vancleave, Mississippi, oldest building is 25 years old (at time of 2020 assessment). It comprises 1,600 gross square feet.

The findings contained within this report are the result of an assessment of building systems performed by building professionals experienced in disciplines including architecture, mechanical, plumbing and electrical. The total current deficiencies for this site, in 2020 construction cost dollars, are estimated at \$27,597. A ten-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Business Office the ten-year need is \$167,462.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined to calculate a Facility Condition Index (FCI). A 5-year FCI was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation. The Business Office facility has a 5-year FCI of 42.45%.

Summary of Findings

The table below summarizes the condition findings at Business Office

Table 1: Facility Condition by Building

Number	Building Name	Current Deficiencies	5-Year Life Cycle Cost	Yrs 6-10 Life Cycle Cost	Total 5 Yr Need (Yr 1-5 + Current Defs)	Total 10 Yr Need (Yr 1-10 + Current Defs)	Replacement Cost	5-Year FCI
Exterior Site								
	Exterior Site	\$1,124	\$14,240	\$0	\$15,364	\$15,364	\$0	
Permanent Building(s)								
01	Business Ofc	\$26,473	\$93,542	\$32,083	\$120,015	\$152,098	\$318,880	37.64%
Sub Total for Permanent Building(s):		\$26,473	\$93,542	\$32,083	\$120,015	\$152,098	\$318,880	
Total for Site:		\$27,597	\$107,782	\$32,083	\$135,379	\$167,462	\$318,880	42.45%



Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

Current Deficiencies: Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

Life Cycle Forecast: Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each site to better identify significant deficiencies.

Facility Deficiency Priority Levels

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

Priority 1 – Mission Critical Concerns: Deficiencies or conditions that may directly affect the site's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

Priority 2 - Indirect Impact to Educational Mission: Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

Priority 3 - Short-Term Conditions: Deficiencies that are necessary to the site's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

Priority 4 - Long-Term Requirements: Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

Priority 5 - Enhancements: Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.



The following table summarizes this site's current deficiencies by building system and priority.

Table 2: System by Priority (Site & Permanent Buildings)

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	\$0	\$0	\$798	\$0	\$326	\$1,124	4.07 %
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Structural	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Exterior	\$0	\$0	\$0	\$250	\$0	\$250	0.91 %
Interior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Mechanical	\$0	\$0	\$5,760	\$0	\$1,624	\$7,384	26.76 %
Electrical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Plumbing	\$0	\$0	\$18,839	\$0	\$0	\$18,839	68.26 %
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Total:	\$0	\$0	\$25,397	\$250	\$1,951	\$27,597	

The building systems at the site with the most need include:

Plumbing	-	\$18,839
Mechanical	-	\$7,384
Site	-	\$1,124



The chart below represents the building systems and associated deficiency costs.

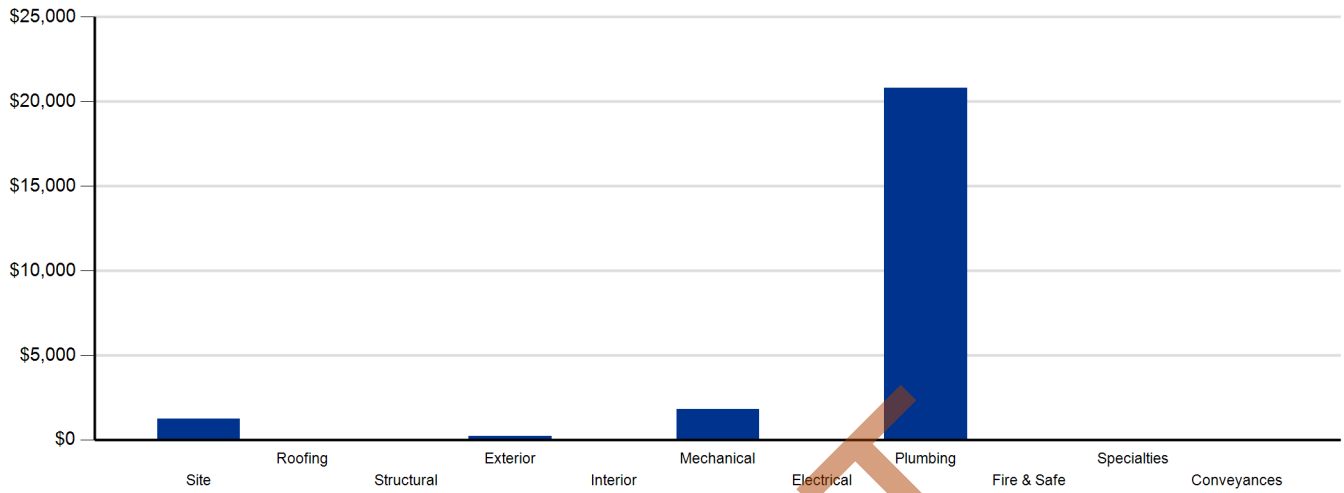


Figure 1: System Deficiencies

DRAFT



Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a ten-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might reach the end of its life before a planned construction project occurs.

The following tables show current deficiencies and the subsequent ten-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

Table 3a: Capital Renewal Forecast (Yrs 1-5)

System	Life Cycle Capital Renewal Projections					Total 1-5
	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	
Site	\$0	\$14,240	\$0	\$0	\$0	\$14,240
Roofing	\$0	\$0	\$0	\$31,461	\$0	\$31,461
Exterior	\$0	\$0	\$0	\$0	\$0	\$0
Interior	\$0	\$0	\$13,556	\$7,903	\$5,892	\$27,351
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$1,609	\$26,182	\$27,791
Plumbing	\$0	\$0	\$0	\$6,939	\$0	\$6,939
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$14,240	\$13,556	\$47,912	\$32,074	\$107,782



Table 3b: Capital Renewal Forecast (Yrs 6-10)

System	Life Cycle Capital Renewal Projections						Total 6-10	Total 1-10
	Total 1-5	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030		
Site	\$14,240	\$0	\$0	\$0	\$0	\$0	\$0	\$14,240
Roofing	\$31,461	\$0	\$0	\$0	\$0	\$0	\$0	\$31,461
Exterior	\$0	\$7,083	\$3,558	\$0	\$0	\$2,408	\$13,049	\$13,049
Interior	\$27,351	\$0	\$1,744	\$0	\$0	\$0	\$1,744	\$29,095
Mechanical	\$0	\$11,297	\$0	\$0	\$0	\$2,209	\$13,506	\$13,506
Electrical	\$27,791	\$0	\$0	\$3,784	\$0	\$0	\$3,784	\$31,575
Plumbing	\$6,939	\$0	\$0	\$0	\$0	\$0	\$0	\$6,939
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$107,782	\$18,380	\$5,302	\$3,784	\$0	\$4,617	\$32,083	\$139,865

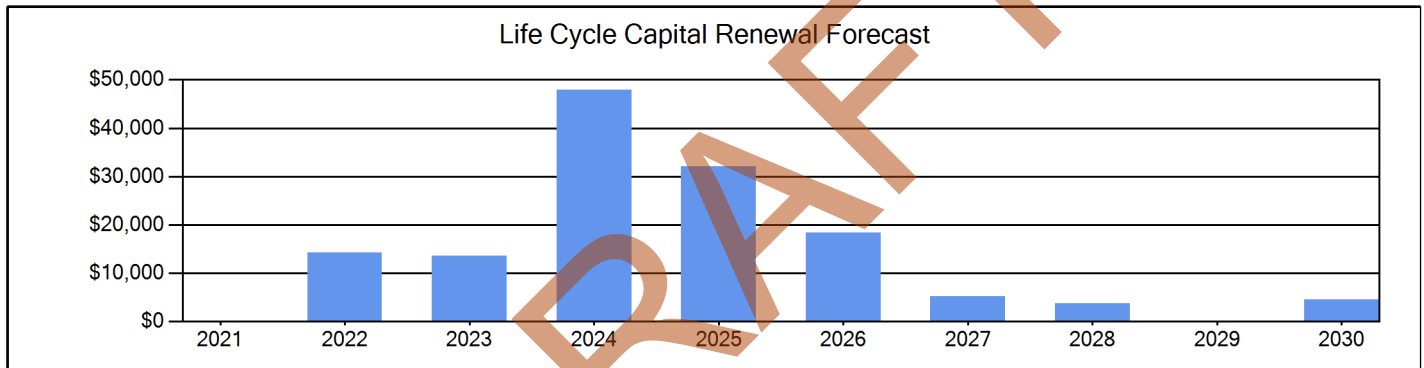
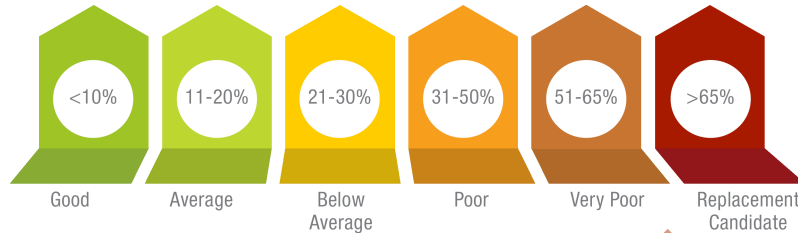


Figure 2: Ten Year Capital Renewal Forecast



Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building’s health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of sites. The FCI is derived by dividing the total repair cost, including educational adequacy and site-related repairs, by the total replacement cost. A facility with a higher FCI percentage has more need, or higher priority, than a facility with a lower FCI. It should be noted that costs in the New Construction category are not included in the FCI calculation.



Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair sites with a FCI of 65 percent or greater. This is due to efficiency gains with facilities that are more modern and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners and facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making campus facility decisions.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A 5-year FCI was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today’s estimated cost of construction in the Jackson, MS area. The estimated replacement cost for this facility is \$318,880. For planning purposes, the total 5-year need at the Business Office is \$135,379 (Life Cycle Years 1-5 plus the FCI deficiency cost). The Business Office facility has a 5-year FCI of 42.45%.

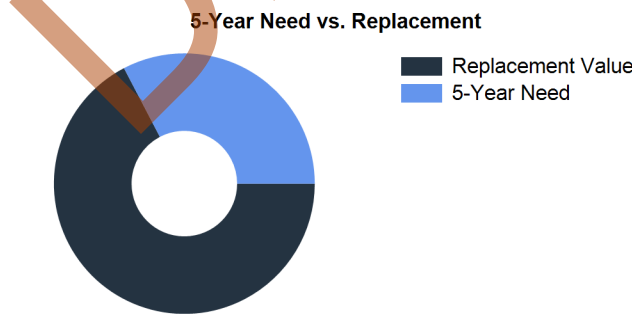


Figure 3: 5-Year FCI



Business Office - Deficiency Summary

Site Level Deficiencies

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Car Accessible Parking Spaces Restriping	ADA Compliance	1	Ea.	3	\$101	4
The Van Accessible Parking Spaces Do Not Meet ADA Requirements	ADA Compliance	1	Ea.	3	\$697	5
Note: Sign not legible Location: Main entry						
Paving Restriping	Deferred Maintenance	11	CAR	5	\$326	3
Location: Parking spaces site wide						
Sub Total for System		3 items			\$1,124	
Sub Total for School and Site Level		3 items			\$1,124	

Building: 01 - Business Ofc

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Exterior Painting (Bldg SF)	Capital Renewal	160	SF	4	\$250	867
Note: Exterior paint id beyond its useful life, worn and faded.						
Sub Total for System		1 items			\$250	

Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
HVAC Study Recommended	Functional Deficiency	1	LS	3	\$5,760	1
Note: Owner mentioned when new split system was installed contractor used original line-sets. Line-sites could potentially be incorrect sizes. Verify correct line-set installed. Repair/replace as necessary (20 LF)						
Location: Building wide						
Duct Cleaning	Deferred Maintenance	1,600	SF	5	\$1,624	2
Note: Suspect materials, clean ducts Location: Building wide						
Sub Total for System		2 items			\$7,384	

Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Restroom Is Not ADA Compliant	ADA Compliance	200	SF	3	\$18,839	6
Note: Restroom is not ADA compliant						
Sub Total for System		1 items			\$18,839	
Sub Total for Building 01 - Business Ofc		4 items			\$26,473	
Total for Campus		7 items			\$27,597	



Business Office - Life Cycle Summary Yrs 1-10

Site Level Life Cycle Items

Site

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Parking Lot Pavement	Asphalt	11	CAR	\$14,240	2
		Sub Total for System		1 items	\$14,240
		Sub Total for Building -		1 items	\$14,240

Building: 01 - Business Ofc

Roofing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Steep Slope Roofing	Composition Shingle	1,920	SF	\$31,461	4
		Sub Total for System		1 items	\$31,461

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Entrance Doors	Storefront Doors - Glass/Aluminum	2	Door	\$7,083	6
Exterior Wall Veneer	Exterior Painting - Bldg SF basis	160	SF	\$250	7
		Note: Wood siding			
Exterior Entrance Doors	Steel - Insulated and Painted	1	Door	\$3,308	7
Exterior Wall Veneer	Wood / Composite Siding - Bldg SF basis	160	SF	\$2,408	10
		Sub Total for System		4 items	\$13,049

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Carpeting	Carpet	1,200	SF	\$13,556	3
Wall Painting and Coating	Painting/Staining (Bldg SF)	320	SF	\$1,279	4
Interior Door Supplementary Components	Door Hardware	5	Door	\$6,624	4
Suspended Plaster and	Painted ceilings	1,600	SF	\$2,973	5
		Note: Gyp board painted ceiling			
Resilient Flooring	Vinyl Composition Tile Flooring	400	SF	\$2,919	5
Interior Swinging Doors	Wooden Door	5	Door	\$1,744	7
		Sub Total for System		6 items	\$29,096

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
HVAC Air Distribution	Ductwork (Bldg.SF)	1,600	SF	\$11,297	6
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	1,600	SF	\$2,209	10
		Sub Total for System		2 items	\$13,506

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Building Mounted Fixtures (Ea.)	2	Ea.	\$1,609	4
Lighting Fixtures	Light Fixtures (Bldg SF)	1,600	SF	\$26,182	5
Power Distribution	Panelboard - 120/208 125A	1	Ea.	\$1,302	8
Power Distribution	Panelboard - 120/208 100A	1	Ea.	\$2,482	8
		Sub Total for System		4 items	\$31,575

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Restroom Lavatory	1	Ea.	\$2,424	4
Plumbing Fixtures	Toilets	1	Ea.	\$4,515	4
		Sub Total for System		2 items	\$6,938
		Sub Total for Building 01 - Business Ofc		19 items	\$125,625
		Total for: Business Office		20 items	\$139,866



Supporting Photos



Main Entrance North Elevation



ADA signage and parking space Restripe



Ductwork to the air handler



Boys locker room, replace Restroom partitions