



FACILITY CONDITION ASSESSMENT

Blazier ES 4-6 | February 2022



Executive Summary

Blazier ES 4-6 is located at 8601 Vertex Blvd in Austin, Texas. The oldest building is 0 years old (at time of 2020 assessment). It comprises 132,781 gross square feet.

The findings contained within this report are the result of an assessment of building systems and the conditions found on the site at the time of the visit. The assessment was 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 \$13,247. 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 Blazier ES 4-6 the ten-year need is \$2,442,364.

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 Assessment (FCA) score. A 5-year FCA was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCA calculation. The Blazier ES 4-6 facility has a 5-year FCA score of 99.97%.

Summary of Findings

The table below summarizes the condition findings at Blazier ES 4-6

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 FCA
Exterior Site								
	Exterior Site	\$0	\$0	\$0	\$0	\$0	\$0	
Permanent Building(s)								
196A	Main Building	\$13,247	\$0	\$2,429,117	\$13,247	\$2,442,364	\$43,603,960	99.97%
Sub Total for Permanent Building(s):		\$13,247	\$0	\$2,429,117	\$13,247	\$2,442,364	\$43,603,956	
Total for Site:		\$13,247	\$0	\$2,429,117	\$13,247	\$2,442,364	\$43,603,956	99.97%

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	\$0	\$0	\$0	\$0	0.00 %
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Structural	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Exterior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Interior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Electrical	\$0	\$0	\$13,247	\$0	\$0	\$13,247	100.00 %
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
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 %
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Total:	\$0	\$0	\$13,247	\$0	\$0	\$13,247	

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

Electrical	-	\$13,247
Interior	-	\$0
Fire and Life Safety	-	\$0

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

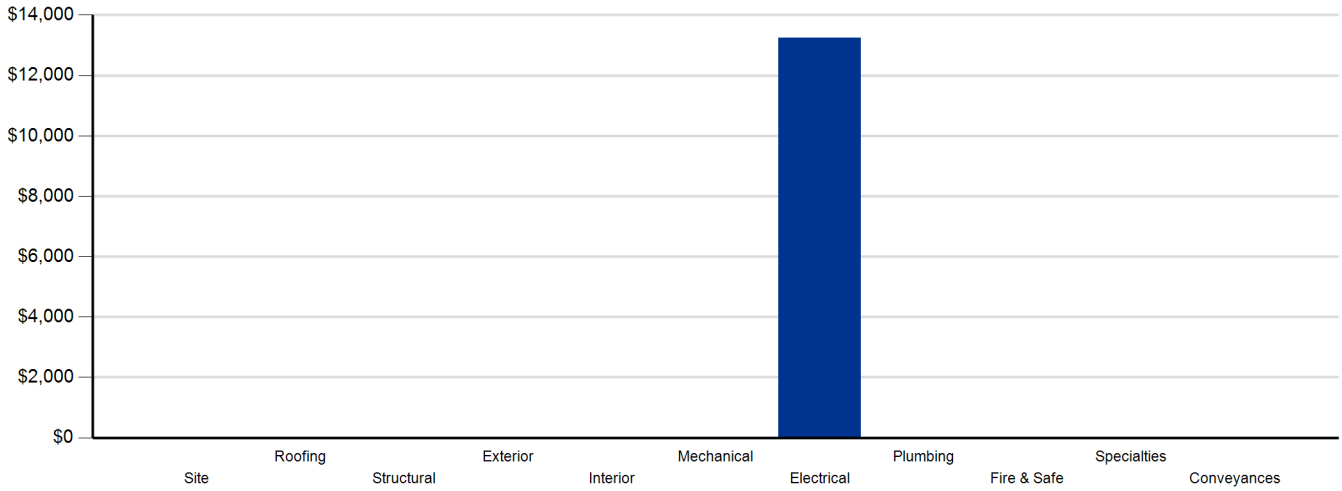


Figure 1: System Deficiencies

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 2023	Year 2 2024	Year 3 2025	Year 4 2026	Year 5 2027	
Site	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$0	\$0
Interior	\$0	\$0	\$0	\$0	\$0	\$0
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0
Electrical	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$0	\$0

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 2028	Year 7 2029	Year 8 2030	Year 9 2031	Year 10 2032		
Site	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interior	\$0	\$0	\$565,233	\$84,051	\$0	\$438,540	\$1,087,824	\$1,087,824
Mechanical	\$0	\$0	\$0	\$0	\$0	\$1,231,863	\$1,231,863	\$1,231,863
Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Plumbing	\$0	\$0	\$0	\$0	\$0	\$60,136	\$60,136	\$60,136
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$49,294	\$49,294	\$49,294
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$565,233	\$84,051	\$0	\$1,779,833	\$2,429,117	\$2,429,117

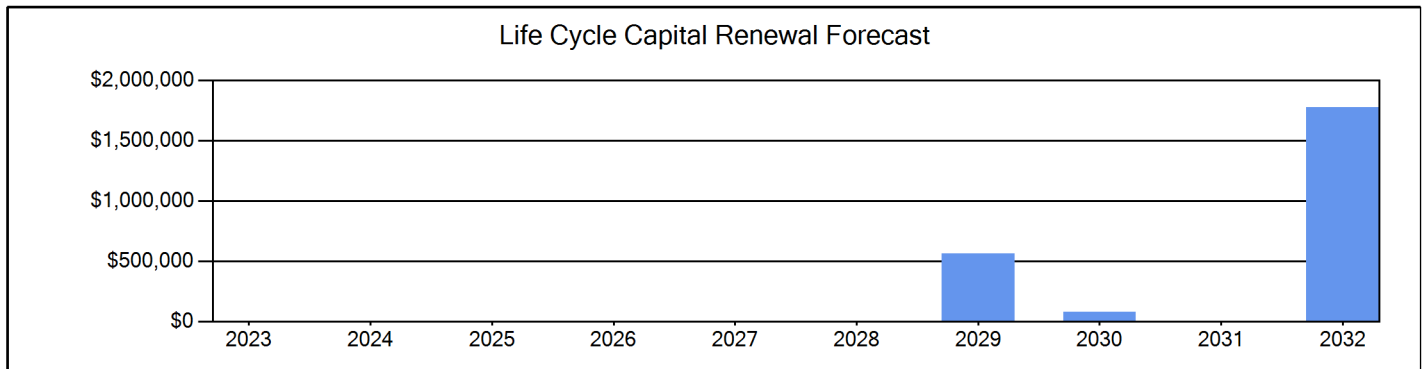


Figure 2: Ten Year Capital Renewal Forecast

Facility Condition Assessment Score

The Facility Condition Assessment Score (FCAS) is used throughout the facility condition assessment industry as a general indicator of a building’s health. The FCAS is used to benchmark the relative condition of a group of sites. The FCAS is derived by dividing the total repair cost, site-related repairs, by the total replacement cost and subtracting it from 100. A facility with a lower FCAS percentage has more need, or higher priority, than a facility with a lower FCAS. It should be noted that costs in the New Construction category are not included in the FCAS calculation.

$$FCAS = 100 - (\text{Total Repair Cost} / \text{Replacement Cost})$$

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 FCAS was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCAS calculation.

- Very Unsatisfactory (0-35)
- Unsatisfactory (36-50)
- Average (51-65)
- Satisfactory (66-80)
- Very Satisfactory (81-100)

Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair sites with a FCAS of 35 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 FCAS 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, FCAS 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.

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 Austin area. The estimated replacement cost for this facility is \$43,603,956. For planning purposes, the total 5-year need at the Blazier ES 4-6 is \$13,247 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Blazier ES 4-6 facility has a 5-year FCA of 99.97%.

5-Year Need vs. Replacement

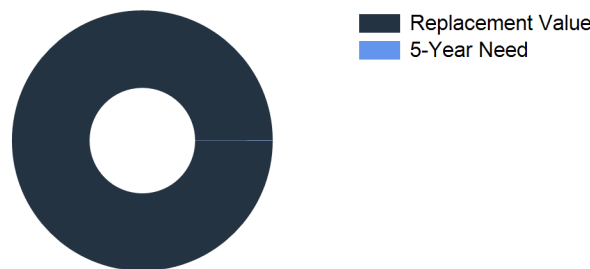


Figure 3: 5-Year FCA

Blazier ES 4-6 - Deficiency Summary

Building: 196A - Main Building

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Lightning Protection Terminal Replacement	Deferred Maintenance	79,000	SF	3	\$13,247	4056

Note: Missing

Location: Roof

Sub Total for System	1 items	\$13,247
Sub Total for Building 196A - Main Building	1 items	\$13,247
Total for Campus	1 items	\$13,247

Blazier ES 4-6 - Life Cycle Summary Yrs 1-10

Building: 196A - Main Building

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	126,142	SF	\$565,233	7
Carpeting	Carpet	6,639	SF	\$84,051	8
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	99,586	SF	\$336,277	10
Suspended Plaster and	Painted ceilings	13,278	SF	\$27,653	10
Compartments and Cubicles	Toilet Partitions	37	Stall	\$74,610	10
Sub Total for System		5	items	\$1,087,823	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heat Generation	Boiler - Copper Tube (3200 MBH)	2	Ea.	\$298,342	10
Note: 3,500 MBH					
Heating System Supplementary Components	Controls - DDC (Bldg.SF)	132,781	SF	\$358,140	10
Central Cooling	Chiller - Outdoor Air Cooled (300 Tons)	1	Ea.	\$275,717	10
Other HVAC Distribution Systems	VFD (40 HP)	2	Ea.	\$27,872	10
Note: 30 hp					
Other HVAC Distribution Systems	VFD (15 HP)	2	Ea.	\$15,117	10
Other HVAC Distribution Systems	VFD (5 HP)	2	Ea.	\$8,786	10
Note: 2 hp					
Other HVAC Distribution Systems	VFD (10 HP)	2	Ea.	\$11,415	10
Other HVAC Distribution Systems	VFD (7.5 HP)	4	Ea.	\$20,893	10
Facility Hydronic Distribution	Pump - 5HP	2	Ea.	\$13,700	10
Note: 2 hp					
Facility Hydronic Distribution	Pump - 50HP - (Ea.)	3	Ea.	\$173,118	10
Note: 30 hp					
Facility Hydronic Distribution	Pump- 25HP (Ea.)	2	Ea.	\$28,763	10
Note: 15 hp					
Sub Total for System		11	items	\$1,231,863	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Water Heater - Electric - 80 gallon	4	Ea.	\$17,841	10
Domestic Water Equipment	Water Heater - Electric - 120 gallon	1	Ea.	\$5,719	10
Domestic Water Equipment	Water Heater - Electric - 20 gallon	1	Ea.	\$1,587	10
Domestic Water Equipment	Water Heater - Gas - 100 Gallon	1	Ea.	\$6,384	10
Note: 116 gallon					
Plumbing Fixtures	Non-Refrigerated Drinking Fountain	12	Ea.	\$28,605	10
Sub Total for System		5	items	\$60,136	

Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Water-Based Fire-Suppression	Fire Pump	1	Ea.	\$49,294	10
Note: 1/6 hp jockey pump					
Sub Total for System		1	items	\$49,294	
Sub Total for Building 196A - Main Building		22	items	\$2,429,116	
Total for: Blazier ES 4-6		22	items	\$2,429,116	

Supporting Photos

General Site Photos



North Elevation, Main Entrance