

REPORT OF FACILITY CONDITION ASSESSMENT



Pisgah Forest Elementary School

Property Address:
1160 Ecusta Road
Brevard, NC 28712

Prepared For:
Transylvania County
Board of Commissioners
101 South Broad Street
Brevard, NC 28712

Prepared By:
Axias
Project No. GA23-017
February 26, 2024

Axias
BUILDING VALUE



Item No.	Condition	Recommendation	Priority Category	Deficiency Category	Impact of Failure	Condition	Probability of Failure	Frequency of Failure	Risk Score	Risk Category	Estimated Useful Life	Remaining Useful Life	Quantity	Unit of Measure	Unit Cost	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Required
																Year	1	2	3	4	5	6	7	8	9	
4	The HVAC control system consists of a combination of pneumatic and low voltage controllers. The school is provided with a BMS to control and program system setpoints. Based on the age of the control system and component obsolescence, it is recommended to budget for upgrading the HVAC control system.	Replace HVAC control system, including BMS upgrades.	III	CR	3	3	4	4	14	Medium	25	2	69,898	SF	\$3.25		\$227,169									\$227,169
Electrical Required																										
1	Emergency power for miscellaneous loads is provided by one emergency power generator rated at 10-Kw manufactured in circa 1990. It is recommended to budget for the life cycle replacement of the generator during the study period.	Replace emergency generator and associated ATS be replaced in the mid-term.	III	CR	4	3	4	4	15	Medium	20	3	10	kW	\$1,500.00			\$15,000								\$15,000
2	A security and access control system is typically not installed throughout the school. It is recommended to upgrade/expand the security and access control system throughout the school. Final system design could impact the cost recommendation.	Allowance to improve school security systems and school safety.	III	CI	3	4	4	4	15	Medium	20	3	98,898	SF	\$3.25			\$321,419								\$321,419
Plumbing Required																										
1	The domestic water heater was manufactured by Ventura and installed in 2009. The plumbing system appeared to be in fair condition ; however, it is recommended to budget for the replacement of the domestic water heater.	Replace domestic water heater (125 gallon, 399,000 BTU/Hr.).	III	CR	3	4	5	5	17	Low	15	2	1	EA	\$40,000		\$40,000									\$40,000
2	The school has one 20,000-gallon underground storage tank which stores No. 2 fuel oil. The tank was reportedly installed in 1992 and reported to be a single wall FRP type tank. Based on the age of the tank it is recommended to remove the tank and provide a new above ground storage tank which complies with current codes and regulations should No. 2 fuel oil still be needed.	Remove underground storage tank and install new above ground code/regulation compliant storage tank.	IV	CR	2	4	4	4	14	Medium	30	7	1	ALLOW	\$175,000							\$175,000				\$175,000



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															Year	1	2	3	4	5	6	7	8	9	10	
Fire & Life Safety																										
Required																										
1	A fire detection and alarm system is provided within the building. The system was manufactured by Notifier. The model installed is no longer supported by Notifier which will eventually lead to limited availability of replacement components. It is recommended to upgrade the main fire alarm control panel, annunciator panel, and as needed devices.	Upgrade the fire alarm control panel, annunciator panel, and as needed devices.	II	CR	3	3	4	5	15	Medium	25	1	1	EA	\$25,000	\$25,000										\$25,000
2	Existing drawings detailing to which codes the school was designed in accordance were not available for review. The school is not provided with a fire-sprinkler system. Buildings of this size typically are required to either have a sprinkler system or an approved rated assembly to protect structural elements. It is recommended to complete a more detailed fire and life safety assessment to review the code enforced at construction and the last renovation along with any details on how these ratings were achieved.	Complete life safety and code evaluation.	III	CI	3	3	4	4	14	Medium		1	1	EA	\$10,000	\$10,000										\$10,000
Conveyance Systems																										
Required																										
1	A wheelchair platform lift provides access to the double fronted stage between the gymnasium / dining hall area. It was manufactured in 1991 by The National Wheel-O-Vator Co., Inc. It is recommended to replace the platform lift within the study period.	Replace platform lift.	III	CR	4	4	5	5	18	Low	20	4	1	EA	\$20,000				\$20,000							\$20,000

Deficiency	Definition
SM	Scheduled Maintenance
DM	Deferred Maintenance
CR	Capital Renewal
EN	Energy & Sustainability
CI	Capital Improvement

Priority	Definition
I	Currently Critical
II	Potentially Critical
III	Necessary / Not yet Critical
IV	Recommended
V	Appearance
VI	Does Not Meet Codes / Standards

Risk	Definition
Critical	Critical (4-8)
High	High (9-13)
Medium	Medium (14-16)
Low	Low (17-20)

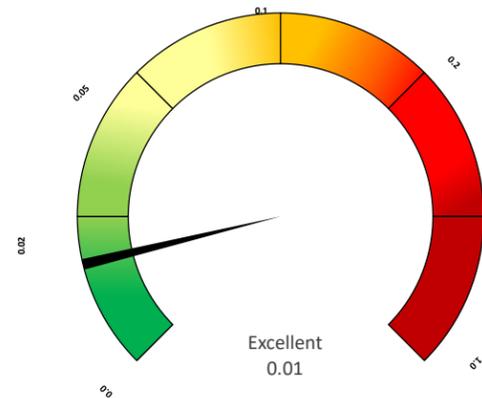
Required Cost (2023 Charts/P47US-Dollars)	\$269,625	\$1,228,169	\$381,419	\$318,760	\$4,993,370	\$240,000	\$191,860	\$0	\$0	\$0	\$7,623,202
Required Cost (Inflated @ 8% for 1st 3 years then 3% Per Yr.)	\$291,195	\$1,432,536	\$480,477	\$358,767	\$5,788,684	\$286,573	\$235,964	\$0	\$0	\$0	\$8,874,196
Total Cost (2023 \$/ SF/ Yr.)	\$3.86	\$17.57	\$5.46	\$4.56	\$71.44	\$3.43	\$2.74	\$0.00	\$0.00	\$0.00	\$109.06



Building: Pisgah Forest Elementary
GSF: 69898
Age: 1991 (32 years) Extension 2000 (23 years)
Address: 1160 Ecusta Rd
 Brevard, NC 28712

Financial Summary

Facility Condition Index



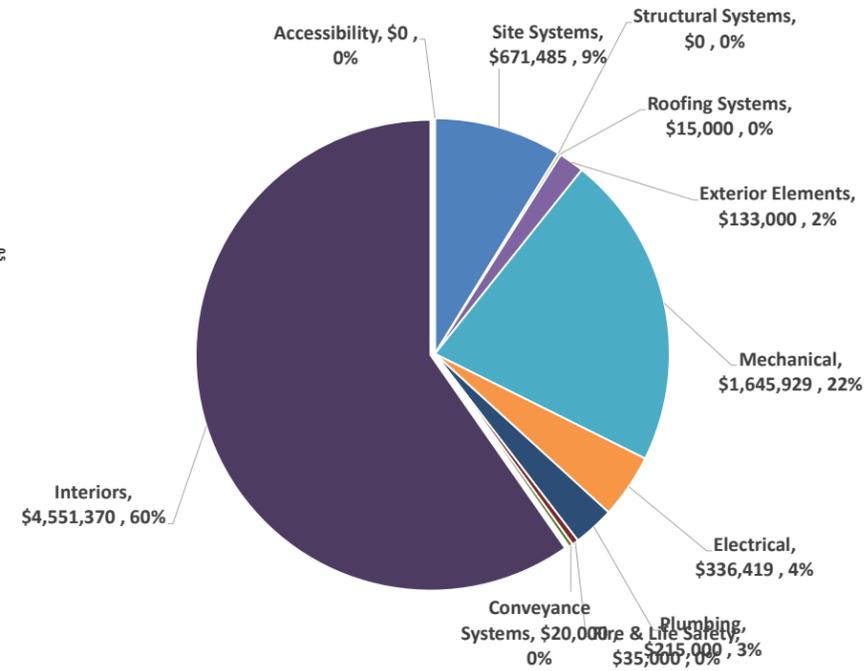
10 Year Facility Condition Index



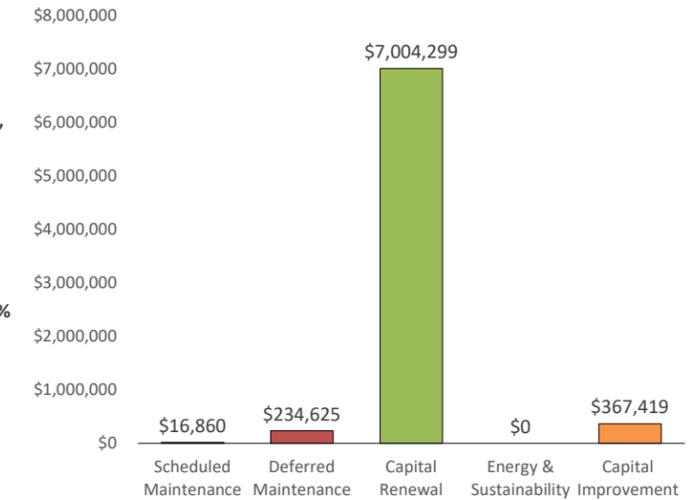
FCI Range	Condition Description
0.00 – 0.02	Excellent condition, typically new construction
0.02 – 0.05	Good Condition, renovations occur on schedule
0.05 – 0.1	Fair Condition, in need of normal renovation
0.1 – 0.2	Below average condition, major renovation required
0.2 – 0.5	Poor condition, total renovation needed
0.5 – 1	Complete facility replacement indicated

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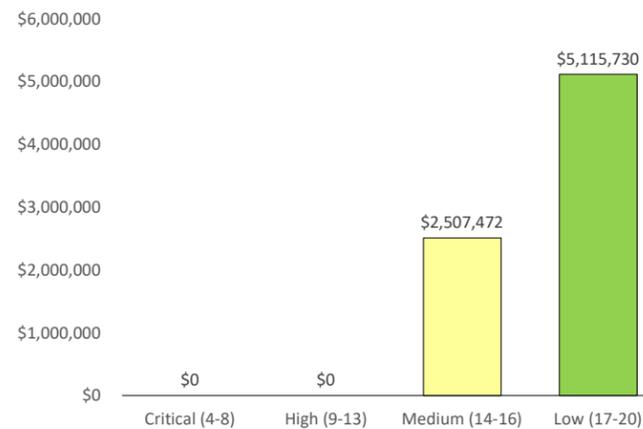
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Expenditures by Deficiency Category



Expenditures by Risk



Expenditures by Priority Category



Representative Photos



Typical concrete sidewalk deterioration



Asphalt parking lot with surface deterioration



Damaged column at entrance



Typical concrete panel sidewalk damage extending around column



Stairstep cracking on interior painted CMU



Exterior window view with one of the classrooms' moisture



Asphalt shingle roof and aluminum gutters



Exterior brick masonry with deteriorated sealants and spalled brick



Staining from moisture in ceiling in front of the media center



Air-cooled chiller by McQuay



Fire detection and alarm system by Notifier



Platform elevator lift in gymnasium/ theatre