

# REPORT OF FACILITY CONDITION ASSESSMENT



## **Rosman Middle and High School**

*Property Address:*  
749 Pickens Hwy  
Rosman, NC 28772

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

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









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	
3	Interiors appeared to be typical finishes and fair condition for an educational establishment. Allowance only includes renewal of interior finishes and minor renovations of restrooms. Does not include reconfiguration of space or address items related to educational adequacy.	Allowance for renewal of interior finishes. Timing and scope will vary based on future program needs. Cycle two.	V	CR	5	3	5	5	18	Low	10	4	35,220	SF	\$60.00					\$2,113,200						\$2,113,200
4	Interiors appeared to be typical finishes and fair condition for an educational establishment. Allowance only includes renewal of interior finishes and minor renovations of restrooms. Does not include reconfiguration of space or address items related to educational adequacy.	Allowance for renewal of interior finishes. Timing and scope will vary based on future program needs. Cycle three.	V	CR	5	3	5	5	18	Low	10	5	35,220	SF	\$60.00					\$2,113,200						\$2,113,200
5	Interiors appeared to be typical finishes and fair condition for an educational establishment. Allowance only includes renewal of interior finishes and minor renovations of restrooms. Does not include reconfiguration of space or address items related to educational adequacy.	Allowance for renewal of interior finishes. Timing and scope will vary based on future program needs. Cycle four.	V	CR	5	3	5	5	18	Low	10	6	35,220	SF	\$60.00					\$2,113,200						\$2,113,200
6	A physical security assessment was provided by Safe Havens International. As part of their assessment, they identified areas within the school which should be provided with a vestibule to limit continued access throughout the school. Based on this recommendation, it is recommended to budget for the installation of vestibules to limit access throughout the school.	Construct vestibules per Physical Security Assessment.	II	CI	3	3	3	3	12	High		2	140,870	SF	\$2.00		\$281,740									\$281,740
<b>Mechanical Required</b>																										
1	The chiller located outside the Cafeteria is in fair condition. It has exceeded its recommended useful life and the site contact reported that it frequently requires repairs. Active alarms indicating cooling circuit failures were noted on the use interface control panel. The chiller serves a large portion of the building and should be replaced early in the term, before it becomes unreliable, or a complete failure occurs.	Replace air-cooled chiller outside the Cafeteria.	III	CR	2	3	3	3	11	High	25	1	110	TON	\$4,200	\$462,000										\$462,000
2	The chiller mounted on the roof serving the northern portion of the building was in fair to good condition. The chiller was manufactured by Trane in 2013. Based on a typical service life of 20 to 25 years, it is recommended to budget for the replacement of the chiller during the study period.	Replace rooftop chiller serving the north end of the building.	IV	CR	3	4	4	5	16	Medium	20	9	60	TON	\$4,200									\$252,000	\$252,000	



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																Year	1	2	3	4	5	6	7	8	9		10
3	Boilers #1 and #2 located in the outdoor amphitheater mechanical room are oil-fired and were in fair to good condition and may remain serviceable with an effective overhaul. Replacement of both boilers is recommended near the middle or end of the study period at the same time.	Replace Boiler #1 and #2 along with associated pumps, valves, and accessories.	III	CR	3	4	3	4	14	Medium	30	5	4,100	MBH	\$110						\$451,000						\$451,000
4	Boiler #3 is located in the basement of the Old Gym and is in good condition. The boiler is oil-fired and was installed in 2014 serving the Old Gym and parts of the Vocational Wing of the High School and reportedly meets the heating needs of these areas. To keep the boiler operating near design specifications, we recommend an overhaul early in the study period.	Refurbish Boiler #3 along with associated pumps, valves, and accessories.	III	SM	3	4	3	4	14	Medium	10	3	1,680	MBH	\$110			\$184,800									\$184,800
5	Boiler #4 in the New Gym is oil-fired and serves the south portion of the building and is fair to good condition. Heating was reported to be adequate when in use. The boiler has reached the end of its recommended useful life and should be replaced early in the term.	Replace Boiler #4 along with associated pumps, valves, and accessories.	III	CR	3	4	3	4	14	Medium	30	3	1,084	MBH	\$110			\$119,240									\$119,240
6	Unit ventilators in the Middle School are becoming problematic and difficult to repair. The unit ventilators have reached the end of their recommended useful life and should be replaced.	Phased replacement of unit ventilators.	III	CR	4	3	4	4	15	Medium	20	1	40	EA	\$15,000	\$600,000											\$600,000
7	AHUs in the High School are either served by the chilled water supply loop or individual pad-mounted condenser units. The AHUs are reportedly becoming problematic and are difficult to access for the proper repairs. Based on the location of the units in the central hallway ceilings and age of the equipment, we recommend replacement of the AHUs during the study period.	Phased replacement of air handling units.	III	CR	4	3	4	4	15	Medium	20	1	28	EA	\$40,000	\$1,120,000											\$1,120,000
8	The Fieldhouse package units operate adequately with minimal downtime and typical needs for repair. The Fieldhouse package units will reach the end of their useful life late in the study period and should be replaced at the same time.	Replace the Fieldhouse package units.	III	CR	4	4	3	3	14	Medium	25	8	2	EA	\$40,000									\$80,000		\$80,000	







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<b>Conveyance Systems Required</b>																											
1	The age of the hydraulic elevator is unknown, but assumed to have been installed circa 2000. The elevator was in fair condition, but would benefit from modernization. Fully modernize the elevator, including replacement of the hydraulic pump unit, controller, car top equipment, and interior cab finishes.	Modernize hydraulic elevator.	III	CR	4	3	4	5	16	Medium	25	2	1	EA	\$200,000		\$200,000									\$200,000	
																<b>Required Cost (2023 US-Dollars)</b>	\$4,699,150	\$4,103,960	\$2,788,240	\$2,378,200	\$2,577,040	\$2,113,200	\$50,000	\$80,000	\$252,000	\$0	\$19,041,790
																<b>Required Cost (Inflated @ 8% for 1st 3 years then 3% Per Yr.)</b>	\$5,075,082	\$4,786,859	\$3,512,379	\$2,676,685	\$2,987,496	\$2,523,271	\$61,494	\$101,342	\$328,803	\$0	\$22,053,410
																<b>Total Cost (2023 \$/ SF/ Yr.)</b>	\$33.36	\$29.13	\$19.79	\$16.88	\$18.29	\$15.00	\$0.35	\$0.57	\$1.79	\$0.00	\$135.17

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

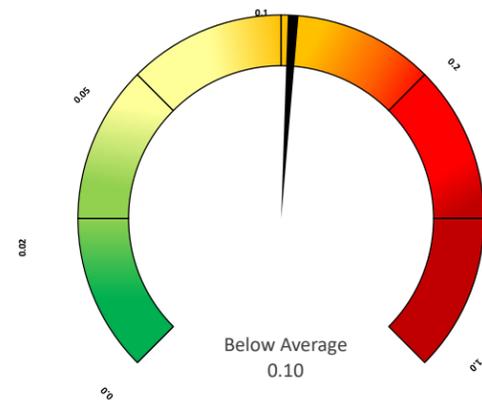
Priority	Definition
I	Currently Critical
II	Potentially Critical
III	Necessary / Not yet Critical
IV	Recommended
V	Appearance
VI	Does Not Meet Codes / Standards

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

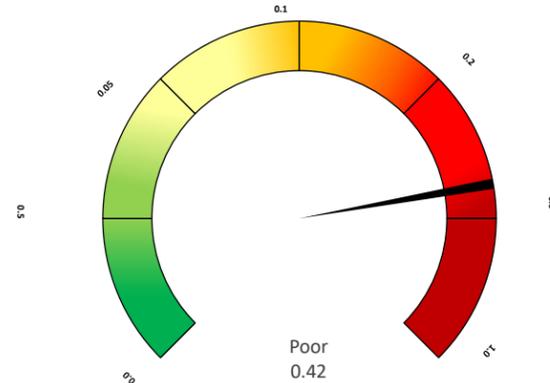


## Financial Summary

**Facility Condition Index**



**10 Year Facility Condition Index**

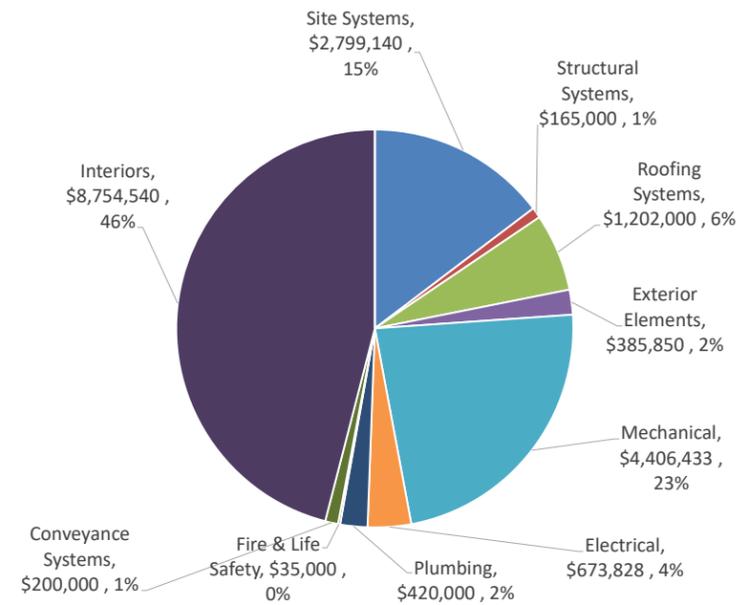


FCI Range	Condition Description
0.00 – 0.02	Excellent condition, typically new construction
0.02 – 0.05	Good Condition, renovations occur on schedule
0.05 – 0.1	Fair Condition, in need of normal renovation
0.1 – 0.2	Below average condition, major renovation required
0.2 – 0.5	Poor condition, total renovation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

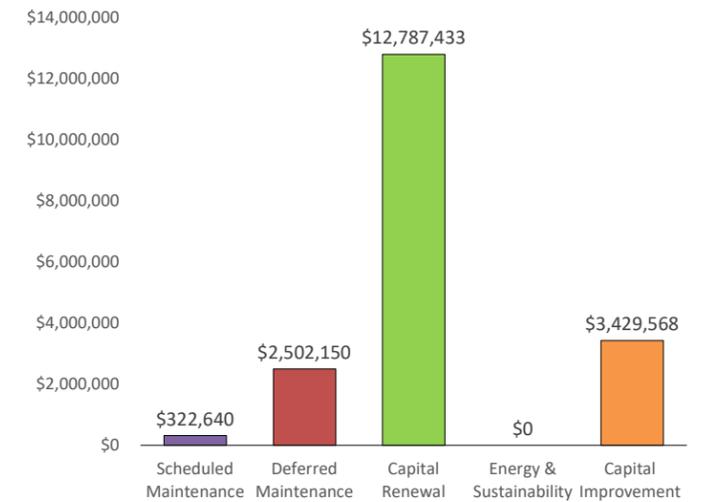
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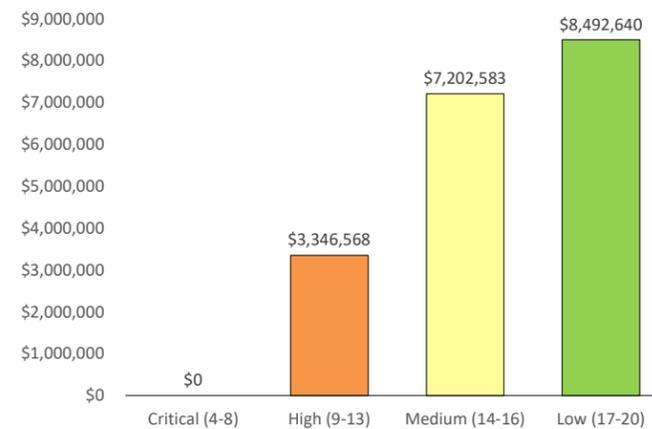
**Summary by System**



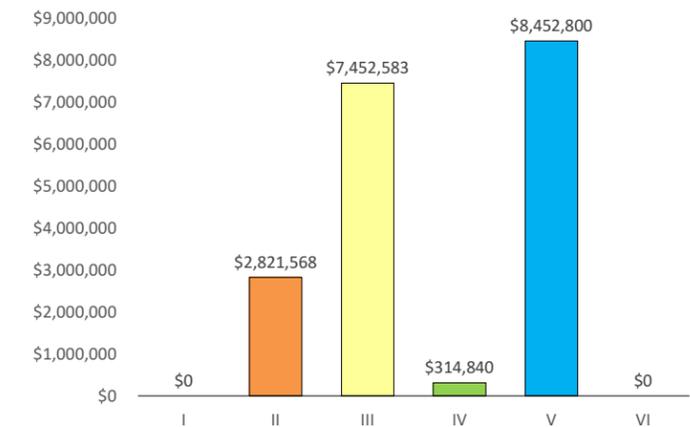
**Expenditures by Deficiency Category**



**Expenditures by Risk**



**Expenditures by Priority Category**



## Representative Photos



Deteriorated paving at rear of New Gym area



Cracked asphalt paving



Structural cracking at Old Gym building



Structural movement at Old Gym building



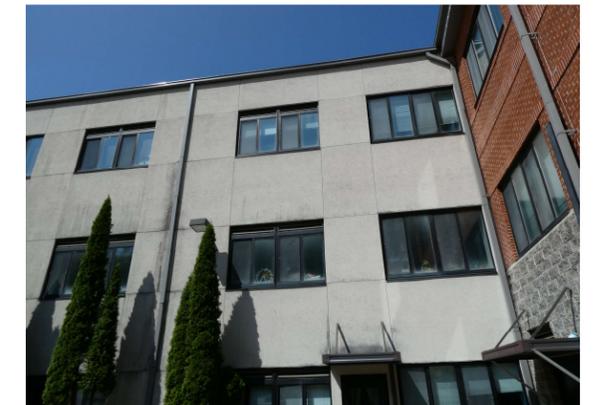
Deteriorated roof covering and former repairs



Standing water on roof



Fogged IGUs at bell tower



Stained/discolored EIFS



Rooftop chiller



Sump pump in bandroom closet



Fire alarm panel



Elevator controller