

# REPORT OF FACILITY CONDITION ASSESSMENT



## Rosman Elementary

*Property Address:*

167 Rosman School Rd  
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

**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	
<b>Accessibility Required</b>																										
1	The building was constructed before the implementation of the Americans with Disabilities Act. Minor modifications have been made to achieve compliance where possible. Future renovations for the elementary school will require compliance with ADA.	No anticipated capital expenditures.																								\$0
<b>Site Systems Required</b>																										
1	Site asphalt at parking lot and roadway areas was in a fair condition, but would benefit from repair works over the course of the study.	Crack fill, seal coat, and restripe the parking lot and roadway areas.	IV	SM	5	3	4	5	17	Low	7	3	9,165	SY	\$2.00			\$18,330							\$18,330	\$36,660
2	Site asphalt at parking lot and roadway areas was in a fair condition, but asphalt is expected to have deteriorated enough to warrant isolated replacement.	Mill and overlay asphalt (10% of total area) to parking lot and roadway areas.	IV	CR	5	3	4	5	17	Low	15	10	920	SY	\$35.00										\$32,200	\$32,200
3	Site asphalt to the path/walkway around the grass playing field was in a fair condition, but cracked in places and require works over the study.	Crack fill and seal coat the path/walkway areas.	III	SM	5	3	4	5	17	Low	7	3	2,100	SY	\$3.00			\$6,300								\$6,300
4	Site asphalt to the path/walkway around the grass playing field were in a fair condition, but cracked in places and require works over the study.	Mill and overlay asphalt to entire path/walkway area.	IV	CR	5	3	4	5	17	Low	15	10	2,100	SY	\$35.00										\$73,500	\$73,500
5	Play areas are typically provided with mulch beds throughout. Several areas were noted that may not be provided with the sufficient coverage as recommended by industry standards. It is recommended that mulch bed depths at play areas are maintained per industry standards as part of on going maintenance activities.	The depth of playground surfacing should be maintained as part of routine maintenance to comply with playground safety requirements.																								\$0
6	The recreation field if provided with two wood framed structures. The structures appeared to be in fair condition with minor areas of damaged wood and slipped shingles. It is recommended to budget for the refurbishment of the two structures.	Refurbish athletic field structures.	III	DM	5	3	4	5	17	Low	25	1	2	EA	\$5,000	\$10,000										\$10,000
7	The athletic field is provided with three wood and metal framed bleachers which appeared to be in poor condition. It is recommended to budget for the replacement of the bleachers.	Replace athletic field bleachers.	III	DM	5	3	4	5	17	Low	20	1	3	EA	\$4,500	\$13,500										\$13,500
8	Playground equipment is provided on the west side of the property for the elementary school and another set for the day care. This type of equipment typically has a service life of 10 to 15 years if properly maintained. It is recommended to budget for the replacement of the playground equipment and swing set during the study period. Playground surfacing should also be evaluated before replacement of the equipment.	Replace playground equipment and swing set.	IV	CR	5	4	4	5	18	Low	15	8	2	ALLOW	\$250,000									\$500,000	\$500,000	



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																Year	1	2	3	4	5	6	7	8	9	
9	A physical security assessment was provided by Safe Havens International. As part of their assessment, they identified areas around the site where additional fencing should be provided. It is recommended to budget an allowance for the installation of additional perimeter fencing per the Physical Security Assessment. Cost is a placeholder and could fluctuate.	Install additional site fencing.	III	CI	3	3	4	4	14	Medium	15	2	400	LF	\$90		\$36,000									\$36,000
<b>Structural Systems Required</b>																										
1	The building structural systems appeared to be in good condition and should continued to be monitored.	No anticipated capital expenditures.																								\$0
<b>Roofing Systems Required</b>																										
1	The standing seam metal roofing at the covered walkway areas was in a fair condition but is stained on the top layer.	Clean existing roof and paint with a suitable metal paint.	III	SM	5	2	5	5	17	Low	10	1	6,300	SF	\$3.00	\$18,900										\$18,900
2	The modified bitumen roof across the low-slope roof areas was in a poor condition. The roof is at the end of its useful life.	Fully strip off and replace the modified bitumen roof with a TPO membrane.	II	DM	3	2	3	2	10	High	20	1	37,000	SF	\$20.00	\$740,000										\$740,000
3	Asphalt shingles to the northern roof (excluding the gym, which has been recently re-roofed) were in a fair condition, but roof shingles are stained and based on age are expected to require replacement during the term.	Replace the asphalt roof shingles on a like-for-like basis.	III	CR	4	3	4	4	15	Medium	20	5	9,000	SF	\$5.00					\$45,000						\$45,000
<b>Exterior Elements Required</b>																										
1	Exterior movement joints within the brickwork are filled with elastomeric sealant. Sealant joints across the building were in poor condition and were cracked and have dried out.	Replace exterior sealant joints.	III	DM	4	3	3	4	14	Medium	10	1	1,400	LF	\$10	\$14,000										\$14,000
2	Exterior windows and doors are set within exterior masonry walls. At the perimeters of the metal frames and the brickwork, a perimeter bead of elastomeric sealant is installed. Sealant joints were in a fair condition, but are expected to need replacement in the mid-term of the study.	Replace perimeter window sealant joints.	III	SM	4	4	4	5	17	Low	10	5	1,850	LF	\$10					\$18,500						\$18,500
3	The metal canopy structure was in a good condition and the majority of the supporting structure appeared to have been recently repainted. However the section at the south of the building was in poor condition and should be repainted as an operational expense. We anticipate that the metalwork will need to be repainted in the mid-term of the study.	Prepare metalwork to canopy walkway structure and repaint.	V	CR	5	4	4	5	18	Low	10	5	7,200	SF	\$8					\$57,600						\$57,600







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																Year	1	2	3	4	5	6	7	8	9		10
<b>Plumbing</b>																											
<b>Required</b>																											
1	Domestic water is provided to the site via an onsite well. The well was not directly observed but was reported to be operational with no major deficiencies. We typically recommend periodic water quality testing along with ongoing preventative maintenance. Well pump replacements typically cost less than \$2,000 and are covered by operational expenses.	No anticipated capital expenditures.																								\$0	
2	Domestic hot water is primarily provided by one oil fired water heater manufactured by PVI in 2017. Water heaters of this type typically have a 15 year service life. It is recommended to budget for the replacement of the water heater during the study period.	Replace 2017 PVI water heater.	IV	CR	3	4	4	5	16	Medium	15	8	1	EA	\$45,000											\$45,000	\$45,000
3	The heating hot water boilers utilize No. 2 fuel oil which is stored in a reported 20,000-gal underground storage tank. It was reported that the tank is single walled and installed in circa 1976. Based on the age of the tanks it is recommended to continue to monitor the condition of the tanks through annual testing and active monitoring. An allowance for removal of the tanks has been provided; however, the timing will be driven by monitoring and testing results.	Remove underground storage tank and install new above ground code/regulation compliant storage tank.	III	CR	3	3	4	4	14	Medium	30	4	1	ALLOW	\$175,000				\$175,000								\$175,000
<b>Fire &amp; Life Safety</b>																											
<b>Required</b>																											
1	The building is monitored by a Notifier AFP-400 fire alarm panel. The panel is in fair condition, but is now obsolete and is anticipated to be over 20 years old. Trouble alarms were also noted at the time of our site visit. It is recommended to budget for the replacement of the fire alarm control panel. Cost is based on the assumption that no upgrades to wiring or devices will be required.	Upgrade fire alarm control panel, annunciator, and as needed devices.	II	CR	1	3	4	4	12	High	15	1	1	ALLOW	\$25,000	\$25,000											\$25,000
<b>Conveyance Systems</b>																											
<b>Required</b>																											
1	Conveyance systems are not installed at the building.	No recommendations.																									\$0

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

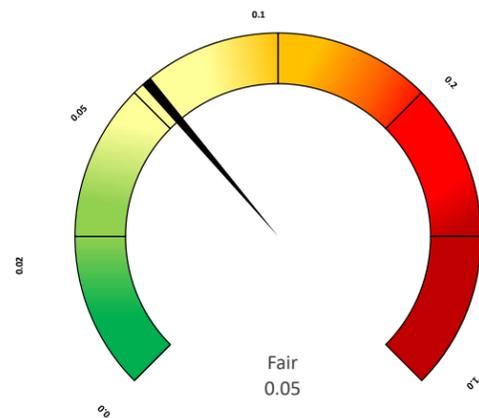
Risk	Definition
Critical	Critical (4-8)
High	High (9-13)
Medium	Medium (14-16)
Low	Low (17-20)

Required Cost (2023 US-Dollars)	\$821,400	\$1,930,780	\$24,630	\$175,000	\$2,771,100	\$0	\$468,000	\$545,000	\$48,000	\$124,030	\$6,907,940
Required Cost (Inflated @ 8% for 1st 3 years then 3% Per Yr.)	\$887,112	\$2,252,062	\$31,027	\$196,964	\$3,212,464	\$0	\$575,581	\$690,390	\$62,629	\$166,686	\$8,074,915
Total Cost (2023 \$/ SF/ Yr.)	\$15.50	\$36.43	\$0.46	\$3.30	\$52.28	\$0.00	\$8.83	\$10.28	\$0.91	\$2.34	\$130.34

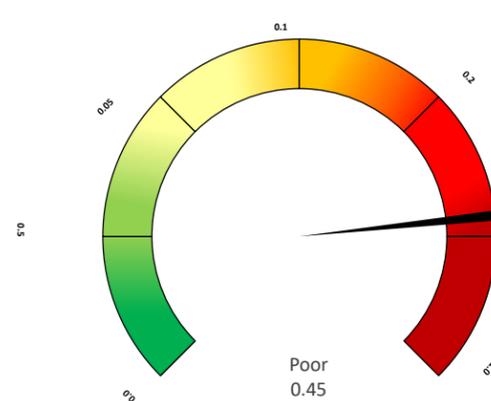


## Financial Summary

**Facility Condition Index**



**10 Year Facility Condition Index**

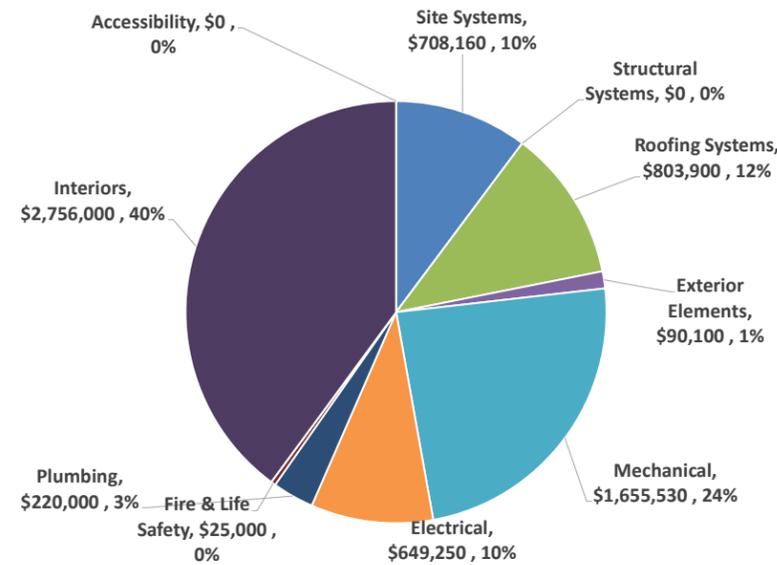


FCI Range	Condition Description
0.00 – 0.02	Excellent condition, typically new construction
0.02 – 0.05	Good Condition, renovations occur on schedule
0.05 – 0.1	Fair Condition, in need of normal renovation
0.1 – 0.2	Below average condition, major renovation required
0.2 – 0.5	Poor condition, total renovation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

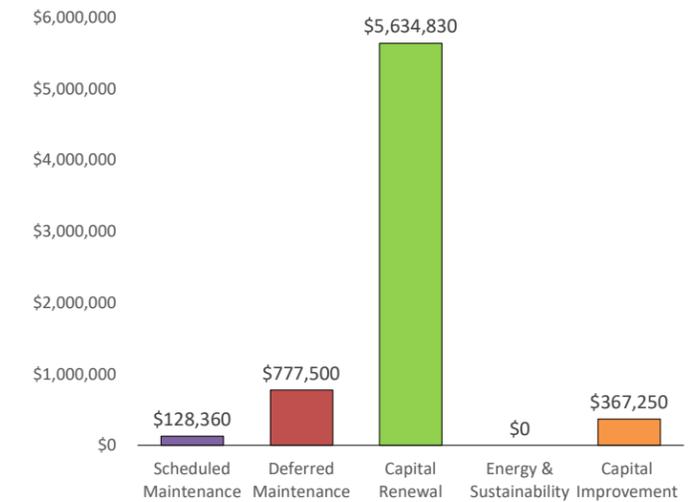
Risk	Definition
Critical	Critical (4-8)
High	High (9-13)
Medium	Medium (14-16)
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Priority	Definition
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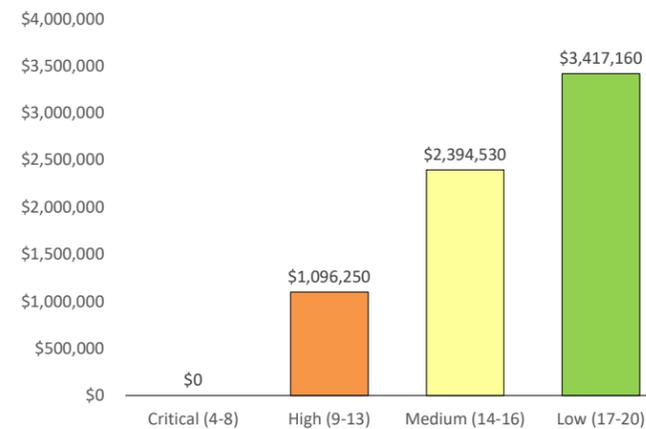
**Summary by System**



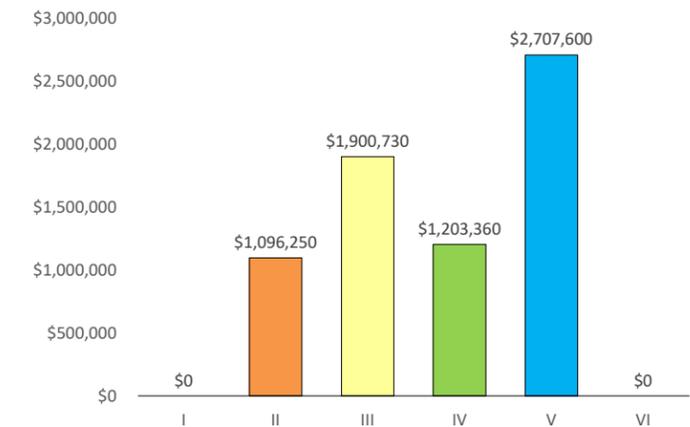
**Expenditures by Deficiency Category**



**Expenditures by Risk**



**Expenditures by Priority Category**



## Representative Photos



Exterior walkway and sidewalk/path areas



Exterior site features



Deteriorating asphalt shingle roof covering



Previous repairs to modified bitumen roof



Deteriorated modified bitumen roof and previous repairs



Deteriorated movement joints in brickwork



Air-cooled chiller installed on roof



Air handler in mechanical room



Aged electrical switchgear



Commercial water heater



Fire alarm control panel



Restroom with partial accessibility upgrades