



**BUREAU
VERITAS**

FACILITY CONDITION ASSESSMENT FINDINGS

Methacton School District
February 13, 2023

Presenters:
Kaustubh Anil Chabukswar

Successful Asset Management:

Managing assets and budgets through predictive and focused strategies, rather than by unpredictable or reactive actions.

AGENDA

ABOUT BVNA

PROJECT UNDERSTANDING

FACILITY ASSESSMENT APPROACH

FACILITY ASSESSMENT FINDINGS

OVERALL FCI SUMMARY

CONCLUSIONS

BUREAU VERITAS NORTH AMERICA

GLOBALLY AND NORTH AMERICA

\$5
Billion in Revenue

75,000
Employees

140
Countries

\$900
Million In Revenue US

8,000
NA Building Professionals

120
Offices and Laboratories
In all 50 States



Oil & Gas

Building & Infrastructure

Power & Utilities

Building Assessment & Project Mgmt.

Elevators & Escalators

Commissioning

Pressure Vessel Jurisdiction

Construction Compliance

Project Management

Transactional

Asset Management



FOUNDED IN 1828

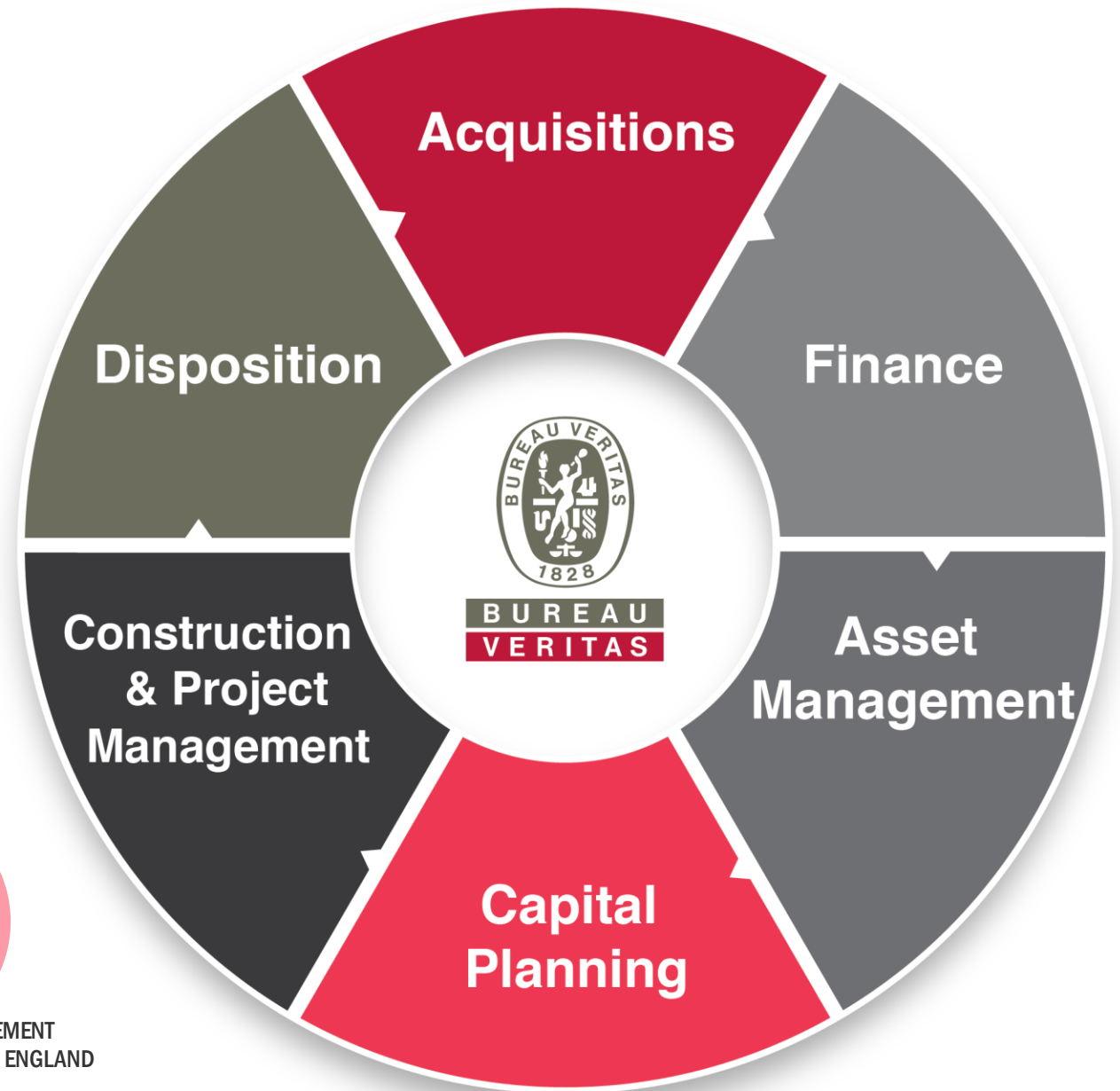


FACILITY SERVICES

- FACILITY CONDITION ASSESSMENTS
- CAPITAL PLANNING
- ADA TRANSITION PLANS
- ENERGY AUDITS AND COMMISSIONING
- CMMS CONSULTING
- PREVENTIVE MAINTENANCE SCHEDULES

120

ASSET MANAGEMENT
CONSULTANTS NEW ENGLAND





PROJECT UNDERSTANDING

FACILITY CONDITION ASSESSMENTS

- Deficiencies / Deferred Maintenance
- Short Term / Long-Range Needs
- Inventory of Assets with Conditions

COST ESTIMATES

- Repair / Replace Options

PLANNING

- Priority and Portfolio Ranking
- Capital Plan Forecast
- FCI Benchmark



FACILITY ASSESSMENT APPROACH



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METHODOLOGY

Kick-Off Phase

- Kickoff Meeting
- Documents Review
- Scheduling
- Interviews and Questionnaires

Field Phase

- Field Assessments
- Equipment Inventory
- Building Components
- System Capture

Reporting Phase

- Building Reports
- Cost Estimating
- FCI Index
- Recommended Actions

Final Deliverable

- Final FCA Reports

MOBILE DATA COLLECTION

Field Data Entry | Library Technology Center

CountsCalcNotesPhotosAssets

OverviewStrucFacadeRoofInteriorElevatorPlumHVACElecFireO

ElevationsBuilding InfoSpace PhotosPlans / Sketches / Certificates

Building Name

14052 Monterey

Library Technology Center

Front Elevation

Rear Elevation

Right Elevation

Size

Built

Renovated

67,044 sq ft

2002

Rear Picnic Area

EXTRA PHOTO

EXTRA PHOTO

EXTRA PHOTO

Caption

Caption

Caption

Asset DetailsCostInventoryNAClose

Condensing Unit/Heat Pump, Split System, 8 to 1021399 | D3032

LabelCondensing Unit/Heat Pump, Split System, 8 to 10 Ton, Replace

Quantity1EA

Capacity8.7TON

LocationMain Roof

Plan TypeLifecycle/RenewalPerformance/IntegritySafetyModernization/AdaptationAccessibilityEnvironmental

Asset TagCU-2

MakeCarrier

Model38ARZ012---501LA

Serial0406G30088

Barcodeleave BLANK unless barcoding

Year Installed2006

Age14

EUL15

RUL3

PublicPrivate

Private Notes

SketchVoice Note

ExcellentGoodFairPoorFailedNA

condition guidebook


Asset Tag

PhotoPhotoPhotoStock Photos

Set GPSGPS Coordinates

100% complete

Complete & CloseDuplicateDeleteAdd to Counts



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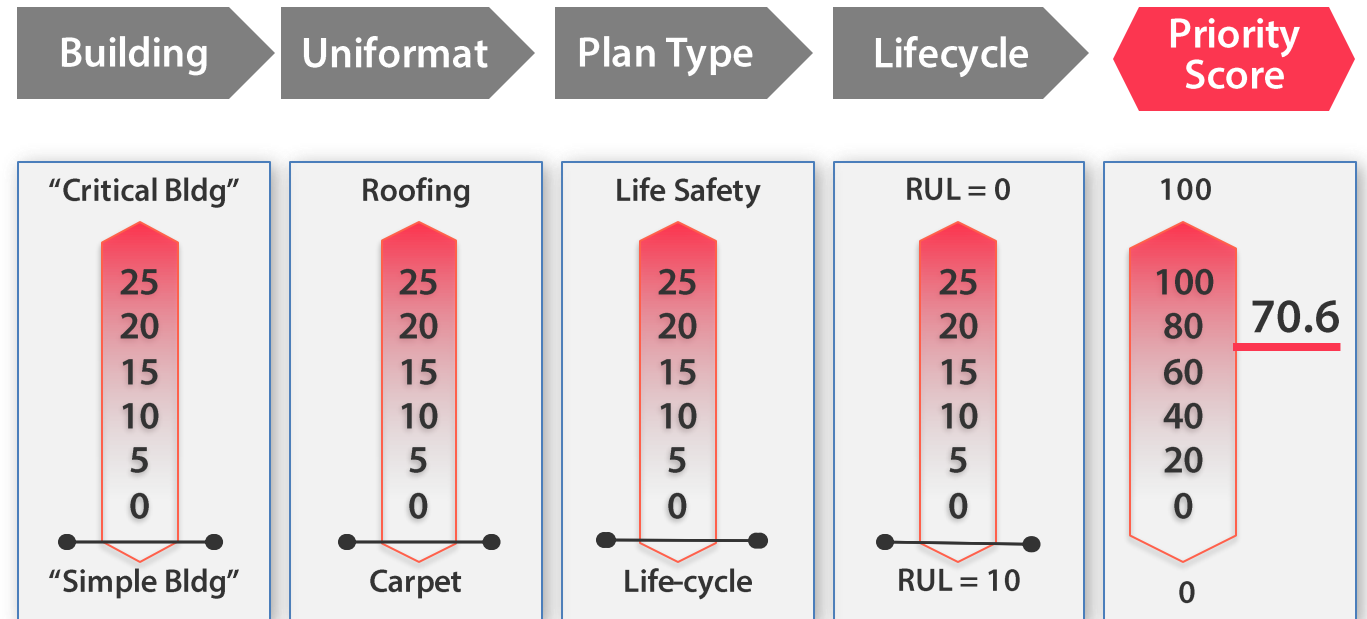
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PRIORITIZATION

PRIORITY RANKING OF RECOMMENDATION



PRIORITY RANKING BY WEIGHTED VALUES





FINDINGS

PROJECT ORGANIZATION

Facility(year built)	Total SF	Replacement Value
Administration Building (1956)	13,600	\$3,971,200
Arcola Intermediate/Skyview and Upper Elementary (1971)	346,207	\$129,827,625
Arrowhead Elementary (2022)	86,000	\$32,250,000
Eagleville Elementary School (2002)	67,132	\$25,174,500
Facilities Building (1998)	11,500	\$3,358,000
Methacton High School (1970)	315,562	\$119,913,560
Transportation Building (1961)	6,250	\$1,825,000
Woodland Elementary (1969)	84,000	\$31,500,000
Worcester Elementary (1999)	66,959	\$25,109,625

TEN-YEAR NEEDS BY BUILDING

Location	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total Escalated Estimate
Administration Building	\$0	\$15,304	\$131,775	\$319,522	\$656,063	\$230,021	\$18,619	\$11,618	\$44,752	\$0	\$244,311	\$1,671,985
Arcola Intermediate/Skyview and Upper Elementary	\$0	\$1,382,879	\$9,037,420	\$1,047,612	\$2,016,920	\$1,657,620	\$22,067	\$1,899,026	\$769,611	\$2,826,095	\$5,866,421	\$26,525,671
Arrowhead Elementary	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$448,544	\$448,544
Eagleville Elementary School	\$0	\$30,471	\$74,775	\$76,018	\$129,172	\$1,985,288	\$0	\$154,087	\$13,426	\$311,523	\$2,762,669	\$5,537,429
Facilities Building	\$0	\$1,360	\$51,490	\$37,887	\$11,731	\$194,775	\$0	\$19,974	\$3,341	\$0	\$178,369	\$498,928
Methacton High School	\$17,325,772	\$39,676	\$48,067,539	\$3,054,808	\$7,375,061	\$2,533,520	\$3,720,960	\$1,669,851	\$5,724,814	\$5,430	\$8,369,692	\$97,887,123
Transportation Building	\$1,199	\$61,725	\$630,617	\$1,839	\$15,302	\$190,780	\$68,270	\$0	\$1,343	\$0	\$170,487	\$1,141,562
Woodland Elementary	\$5,450	\$0	\$1,893,148	\$33,718	\$62,227	\$5,927,508	\$5,241	\$1,315,629	\$46,973	\$70,434	\$1,592,169	\$10,952,497
Worcester Elementary	\$98	\$0	\$1,008,169	\$322,517	\$135,676	\$585,011	\$244,532	\$1,293,491	\$396,657	\$0	\$1,406,071	\$5,392,222
Grand Total	\$17,332,519	\$1,531,414	\$60,894,935	\$4,893,921	\$10,402,152	\$13,304,523	\$4,079,689	\$6,363,676	\$7,000,918	\$3,213,482	\$21,038,731	\$150,055,960

FACILITY CONDITION INDEX (FCI) RATING

The Current Year FCI is the ratio of Immediate Repair Costs to the building's Current Replacement Value.

FCI CONDITION RATING	DEFINITION	PERCENTAGE VALUE
Good	In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.	> than 5% to 10%
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	> than 10% to 30%
Very Poor	Has reached the end of its useful or serviceable life. Renewal is now necessary.	> than 60%

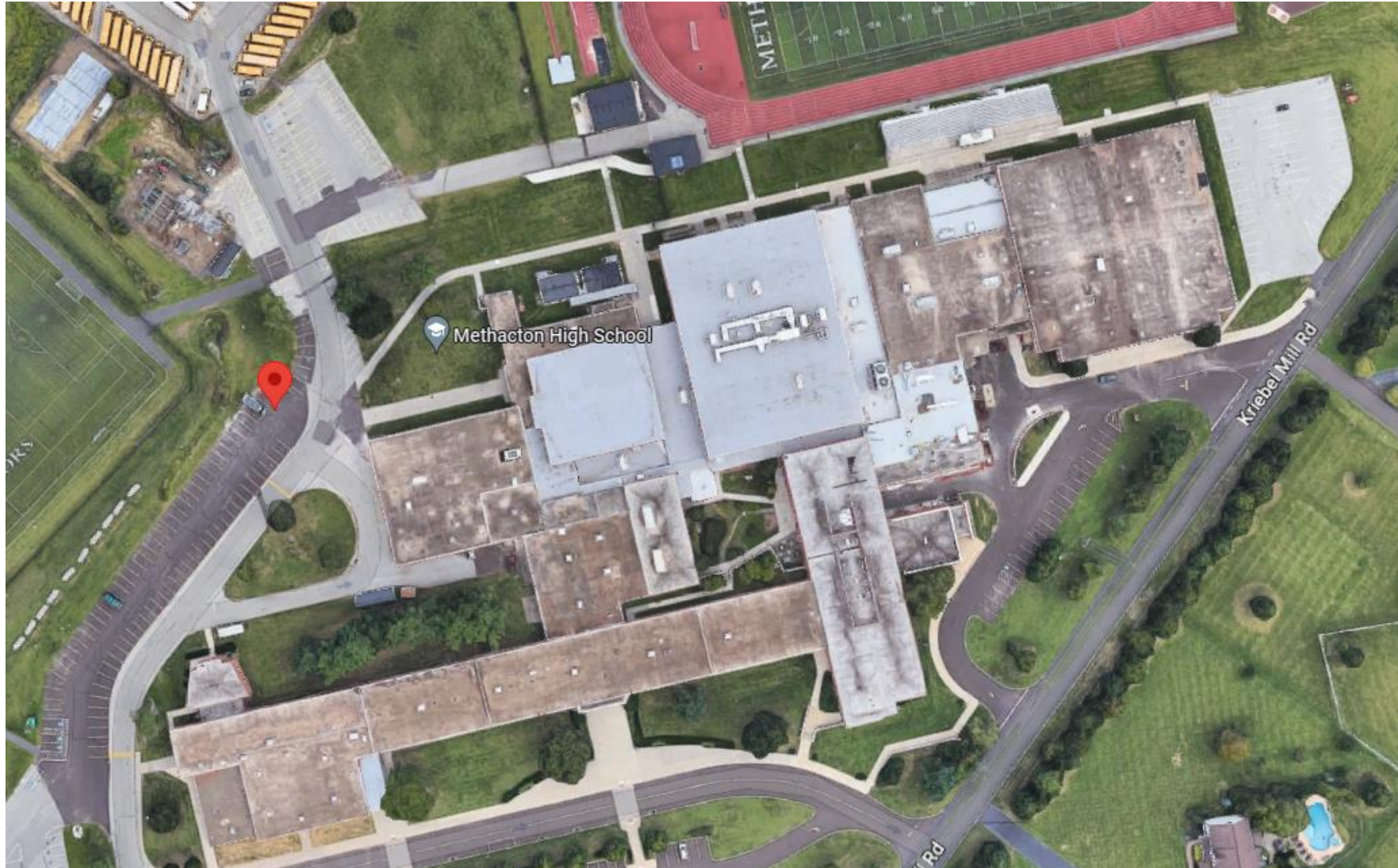
RESULTS: FCI SUMMARY

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Administration Building (1956)	\$292	13,600	\$3,971,200	0.0%	11.4%	30.2%	37.6%
Arcola Intermediate/Skyview and Upper Elementary (1971)	\$375	346,207	\$129,827,625	0.0%	7.3%	10.0%	18.1%
Arrowhead Elementary (2022)	\$375	86,000	\$32,250,000	0.0%	0.0%	0.0%	1.4%
Eagleville Elementary School (2002)	\$375	67,132	\$25,174,500	0.0%	0.3%	8.5%	18.5%
Facilities Building (1998)	\$292	11,500	\$3,358,000	0.0%	2.3%	5.1%	9.7%
Methacton High School (1970)	\$380	315,562	\$119,913,560	14.2%	54.8%	62.4%	71.5%
Transportation Building (1961)	\$292	6,250	\$1,825,000	0.0%	8.2%	18.2%	27.6%
Woodland Elementary (1969)	\$375	84,000	\$31,500,000	0.0%	6.1%	25.1%	32.9%
Worcester Elementary (1999)	\$375	66,959	\$25,109,625	0.0%	5.1%	7.9%	18.9%

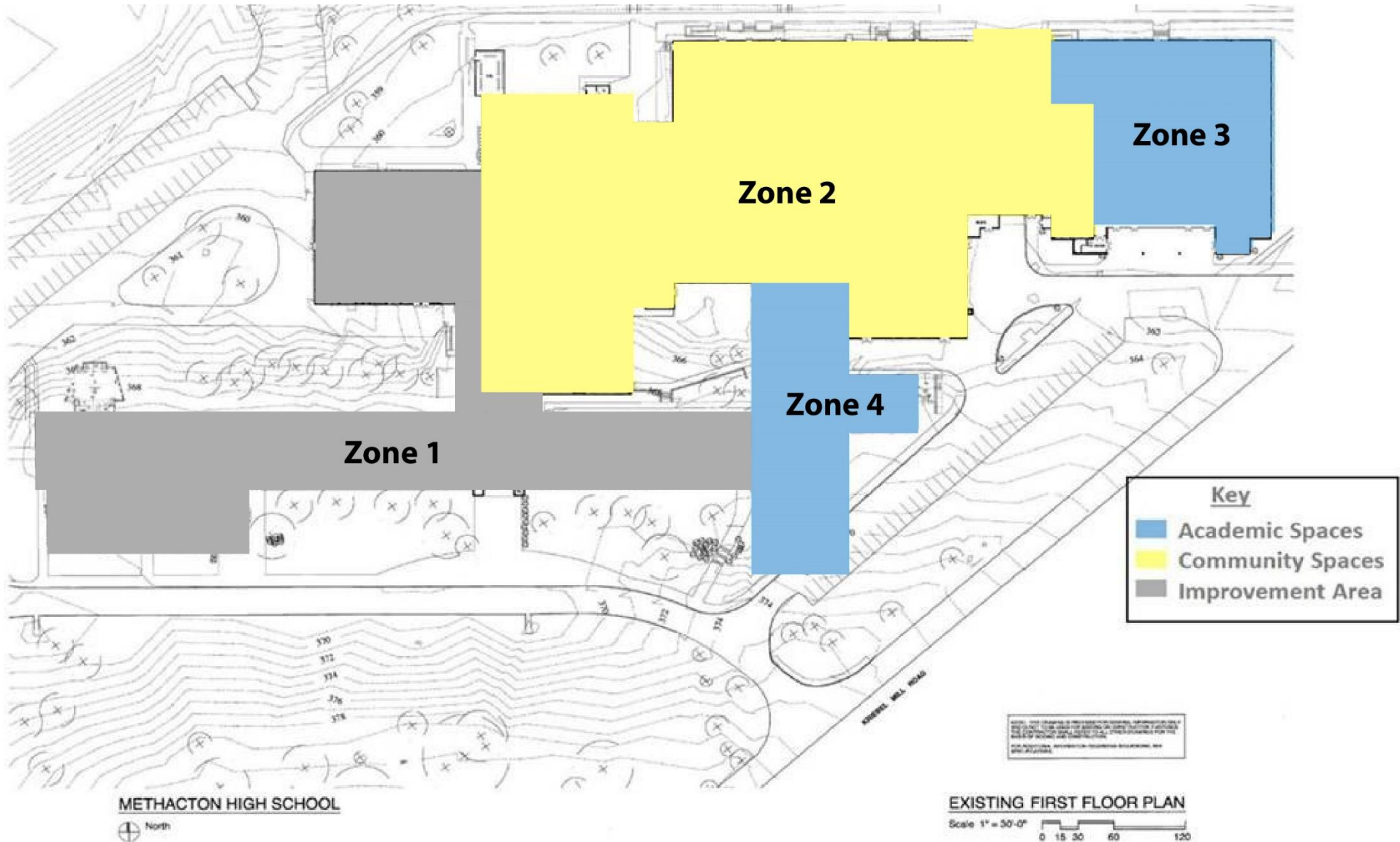


**METHACTON
HIGH SCHOOL**

RESULTS: METHACTON HIGH SCHOOL – SITE MAP



RESULTS: METHACTON HIGH SCHOOL – ZONES



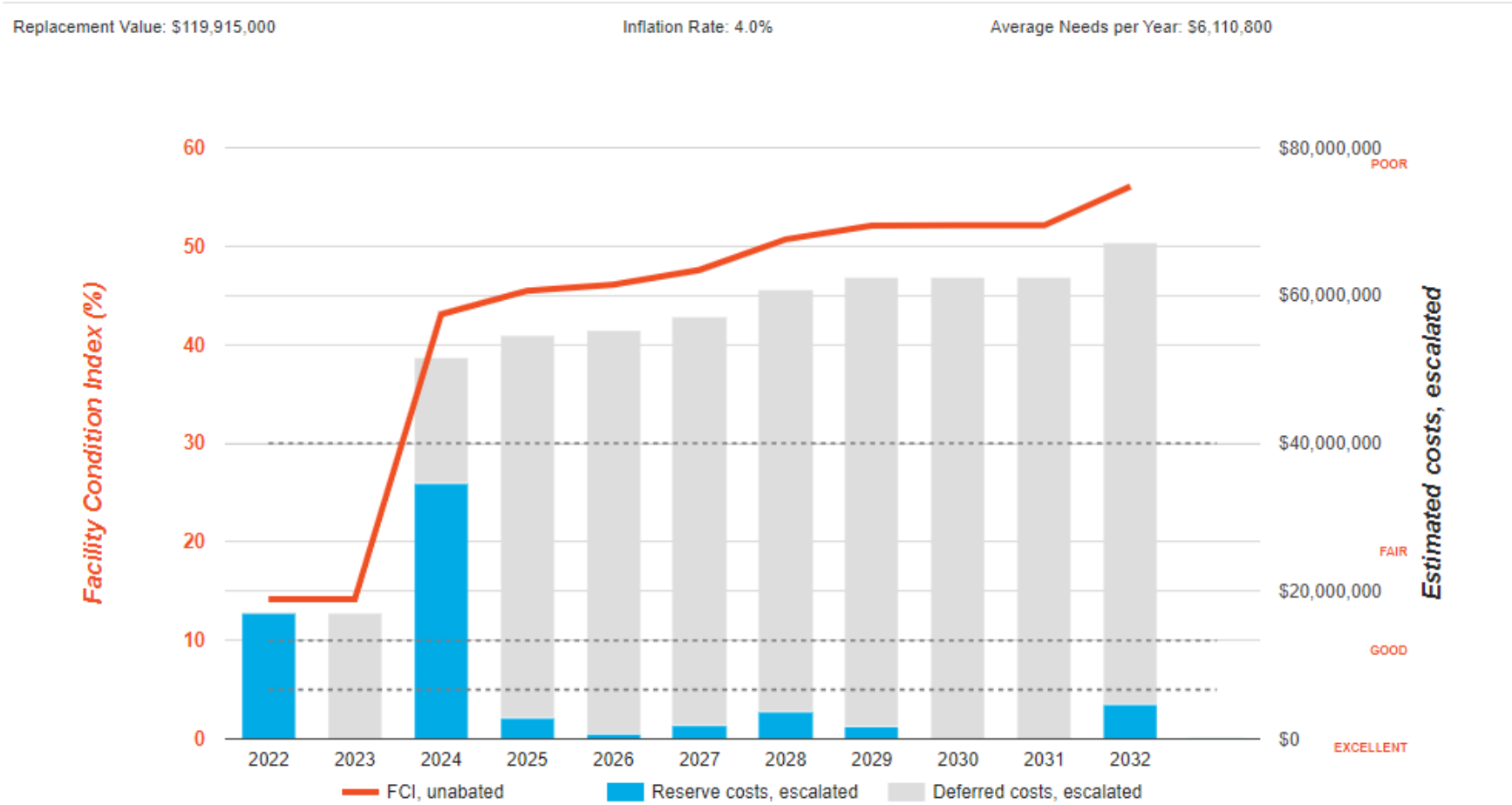
RESULTS: METHACTON HIGH SCHOOL FCI

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Methacton High School / Football Press Box	\$312	300	\$93,600	0.0%	0.6%	2.5%	20.3%
Methacton High School / Football Restrooms	\$312	1,800	\$561,600	0.0%	2.5%	2.5%	3.8%
Methacton High School / Methacton High School Bldg. / Zone-1	\$380	93,028	\$35,350,640	33.7%	63.5%	63.7%	65.4%
Methacton High School / Methacton High School Bldg. / Zone-2	\$380	114,423	\$43,480,740	10.3%	21.2%	26.6%	33.6%
Methacton High School / Methacton High School Bldg. / Zone-3	\$380	66,390	\$25,228,200	0.0%	39.4%	39.7%	46.2%
Methacton High School / Methacton High School Bldg. / Zone-4	\$380	41,723	\$15,854,740	3.9%	42.0%	42.2%	42.3%
Methacton High School / Snack Bar	\$312	1,200	\$374,400	0.0%	0.1%	1.3%	12.9%

RESULTS: METHACTON HIGH SCHOOL FCI



FCI Analysis: Methacton High School Methacton High School Bldg.

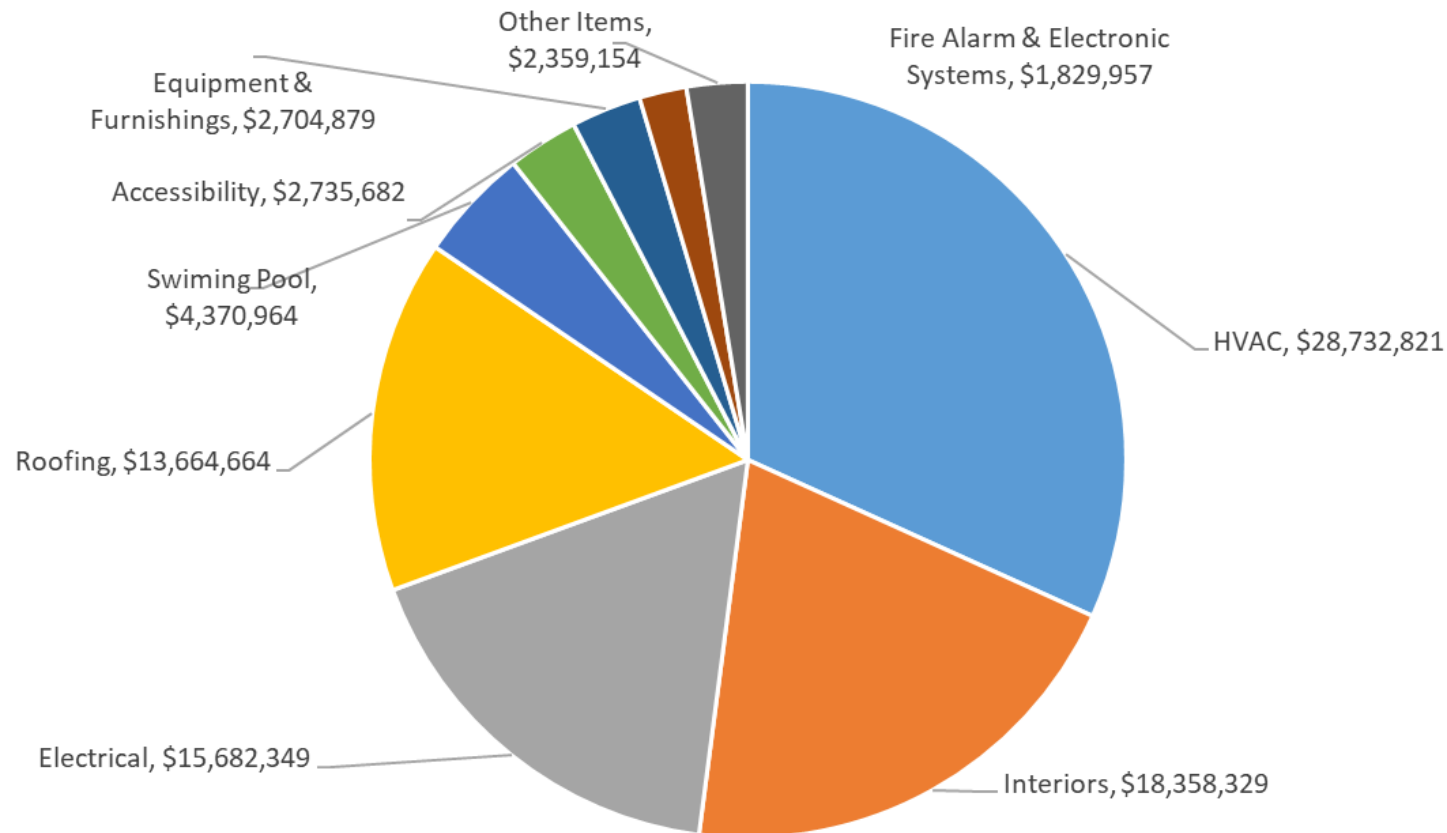


Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Methacton High School / Methacton High School Bldg. (1979)	\$380	315,564	\$119,914,320	14.2%	45.5%	47.6%	56.1%



RESULTS: METHACTON HIGH SCHOOL FCI

Methacton High School - Expenditure Forecast



Key Projects

- Roof Replacement
- HVAC Modernization
- ADA Accessibility Modification
- Swimming Pool Leak
- Classroom Modification
- Auditorium Modification
- Gym Floor Replacement
- Lighting Upgrade

CONCLUSIONS / RECOMMENDATION

- High School has been built in phases
- HVAC – Challenges include humidity control due to two pipe system
- Space Data- Classrooms in Zone 1 are smaller in size than state mandated minimum threshold
- Auditorium system is antiquated, additionally seats only 300 as compared to 1200 student
- Roofs are at the end of their life and need replacement
- Pool leaks approximately 1500 gals of water per day, this is a major structural issue and needs to be addressed
- Lighting is outdated
- Based on FCI a major rehab / rebuild should be considered.





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THANK YOU

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