Facilities Management

September 23rd, 2025

INTRODUCTION & GOAL

- Kevin LaFountain – Director of Buildings & Grounds - 2023
- Refrigeration / HVAC Design & Engineering (A.A.S)
- 35 years in K-12 facility management/operations and project management
- 2024 Capital Improvement Referendum - $60 Million

AFFILIATIONS

- ➢ American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)
- ➢ Wisconsin Assoc. of School Business Officials (WASBO)
- ➢ Wisconsin School Safety Coordinators Association (WSSCA)
- ➢ US Green Building Council (USGBC) - Wisconsin

CERTIFICATIONS

- ➢ LEED Green Associate
- ➢ Facilities Manager – WASBO
- ➢ School Safety Coordinator - WSSCA/DPI
- ➢ Third Class Power Plant Operating Engineer
- ➢ Refrigerant Handling Technician
- ➢ NRPA Aquatic Facility Operator

- Provide this committee with a clear and direct assessment of our secondary schools' **mechanical systems, building conditions, remodeling viability, and operational effectiveness.**
- Recommendation on which facilities and sites offer the greatest potential for future use.

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LONG-RANGE FACILITIES PLAN - A GUIDING DOCUMENT

HARDSCAPE, PARKING, & SYNTHETIC TURF INVENTORY

SCHOOL CAMPUS	ASPHALT PAVEMENT (SF)	YEAR OF INSTALLATION	SERVICE LIFE / REPLACEMENT	PARKING STALLS	Parking Total	SYNTHETIC TURF (SF)	YEAR OF INSTALLATION	SERVICE LIFE / REPLACEMENT
EAST HIGH SCHOOL	41,704	2019	2034 - 2039	151 Regular 7 Accessible	158	**118,368**	2019	2029 - 2031
	12,750	2020	2035 - 2040					
EISENHOWER ELEMENTARY SCHOOL	32,355	2008	2023 - 2028	Shared with West High School		8,797	2023	2031 - 2033
	2,929	2021	2036 - 2041					
	11,359	2023	2038 - 2043					
JEFFERSON ELEMENTARY SCHOOL	26,017	XXXX	XXXX - XXXX	0 Regular 0 Accessible		--	--	-- - --
	1,431	2023	2038 - 2043					
LINCOLN ELEMENTARY SCHOOL	9,367	2020	2035 - 2040	0 Regular 0 Accessible		8,505	2020	2028 - 2030
LONGFELLOW MIDDLE SCHOOL	188	1995-2000	2015 - 2020	117 Regular 6 Accessible	223	**10,468**	2017	2027 - 2029
	11,188	2017	2032 - 2037					
	22,608	2018	2033 - 2038					
	1,565	2018	2033 - 2038					
MADISON ELEMENTARY SCHOOL	43,106	2007	2022 - 2027	22 Regular 2 Accessible	24	--	--	-- - --
	12,484	2020	2035 - 2040					
McKINLEY ELEMENTARY SCHOOL	18,010	2021	2036 - 2041	0 Accessible		7,370	2021	2029 - 2031
MONTESSORI ELEMENTARY SCHOOL	413	2010-2013	2018 - 2023	275 Regular 10 Accessible	285	**64,285**	2013	2023 - 2025
	18,432	2013	2028 - 2033					
	2,100	2013	2028 - 2033					
	114,792	2021	2036 - 2041					
ROOSEVELT ELEMENTARY SCHOOL	1,651	2000-2005	2020 - 2025	0 Regular 0 Accessible		8,005	2020	2028 - 2030
	11,784	2020	2035 - 2040					
UNDERWOOD ELEMENTARY SCHOOL	4,102	2000-2005	2020 - 2025	51 Regular 3 Accessible	54	6,051	2020	2028 - 2030
	66,513	2020	2035 - 2040					
	6,758	2020	2035 - 2040					
WASHINGTON ELEMENTARY SCHOOL	22,395	2023	2038 - 2043	0 Regular 0 Accessible		7,533	2023	2031 - 2033
WEST HIGH SCHOOL	19,323	1970	1985 - 1990	360 Regular 10 Accessible	370	**105,526**	2015	2025 - 2027
	1,449	1975-1980	1995 - 2000					
	9,300	2000-2005	2020 - 2025					
	54,228	2011	2026 - 2031					
	2,946	2015-2018	2033 - 2038			**42,037**	2016	2026 - 2028
	4,217	2016	2031 - 2036					
	115,729	2017	2032 - 2037					
	15,460	2017	2032 - 2037					
WHITMAN MIDDLE SCHOOL	1,897	1980-1985	2000 - 2005	195 Regular 6 Accessible	201	**102,340**	2014	2024 - 2026
	17,717	1995-2000	2015 - 2020					
	5,032	2000-2005	2020 - 2025					
	838	2007-2010	2025 - 2030					
	53,468	2015-2018	2033 - 2038					
	25,596	XXXX	XXXX - XXXX					
WILSON ELEMENTARY SCHOOL	10,330	2021	2036 - 2041	0 Regular 0 Accessible		7,064	2021	2029 - 2031
Totals	833,531			1,171 Regular 44 Accessible		496,349		

WHAT WE KNOW

The Districts 2024 Long Range Facilities Plan outlines a strategy for managing and maintaining the school portfolio, serving as a dynamic guide for evaluating the operational and educational adequacy of all schools.

Name of School	Age of Building	# of Acres	Total Square Footage	2026 Deferred Maintenance Cost (Major System Life Cycle) At least approx.
Eisenhower	1966 (58 Years)	35*	56,000	$ 6,016,121
Jefferson	1958 (66 Years)	1.66	51,737	$8,126,841
Lincoln	2020 (4 Years)	2.87	80,995	$0
Madison	1957 / 1959 / 1975 (67 Years)	9.86	64,600	$7,574,494
McKinley	2021 (3 Years)	3.81	77,660	$0
Roosevelt	1929 / 1949 / 1952 / 1993 (95 Years)	3.17	64,950	$ 6,470,278
Underwood	2020 (4 Years)	14.66	77,345	$0
Washington	1921 / 1924 / 1926 / 1929 / 1959 / 1993 (103 Years)	2.78	62,450	$ 8,401,721
Wilson/WSTEM	2021 (3 years)	3.12	81,435	$0
Montessori/Fisher	1956 (68 Years)	21.68	63,200	$ 7,035,034
Longfellow	1956 (68 Years)	19.89	191,200	$ 14,552,024
Whitman	1959 (65 Years)	21.5	141,175	$ 11,659,718
Wauwatosa East	1927 / 1930 / 1938 / 1939 / 1958 / 1972 / 1975 / 2021 (97 Years)	11.4	475,000	$48,887,714
Wauwatosa West	1967 (57 Years)	35*	297,635	$ 22,254,881

*Site shared with West High School / Eisenhower Elementary

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FISHER BUILDING AND SITE

- Constructed 1956 (69 years)
- 63,200 sq ft. - 21.68 acres – 285 parking
- Calendar year 2024 Elec/Gas = $53,557
- Breitlow Complex – 2013
- Heating system original
- Lighting – mix of led and fluorescent
- Montessori HVAC good condition unit ventilators w/DX cooling typical
- District Offices HVAC – Original unit ventilators & RTU cooling
- Obsolete building automation entire facility.
- No working elevator
- 2024 Referendum Budget - $7 million (2027)

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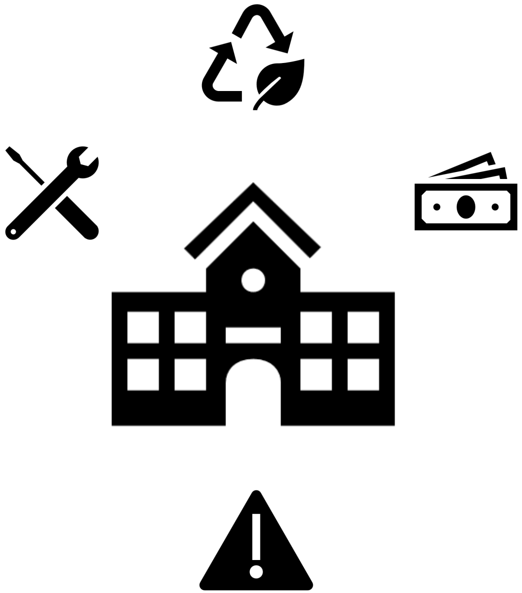
EVIDENCE OF WHAT WE KNOW

- Secondary school buildings are inefficient structures with aging infrastructure, outdated design, and environmental hazards that can impact operations and the teaching and learning environment.

- Hazardous materials such as asbestos and lead-based paint are common in our secondary schools, making them more complex and resource-intensive to maintain while impeding maintenance activities.

- Modern buildings engineered with a high-performance building envelope works in harmony with its mechanical systems = Energy savings of 30% or more annually compared to a renovated building.

- By comparison, old renovated buildings with new mechanicals are more expensive to operate than newer counterparts.



EVIDENCE OF CURRENT CONDITIONS
Professional Analysis of Essential Systems

	HVAC	PLUMBING	ELECTRICAL	SECURITY AND ACCESS SYSTEMS	BUILDING ENVELOPE (ROOF / WINDOWS)	BUILDING AUTOMATION AND CONTROLS
Wauwatosa East HS	1 / 2	2 / 3	1 / 4 / 5***	2 / 3	1 / 2*	1
Wauwatosa West HS	2 / 5**	5	1	2 / 3	1 / 2^	5 / 1****
Longfellow MS	5**	4	4	2	1 / 3^^	5
Whitman MS	5**	4	1 / 4 / 5	2 / 3	1 / 3^^^	5 / 1****

1 Critical / End of Life	2 Poor / Needs Major Improvement	3 Fair / Adequate but Aging	4 Good / Reliable	5 Excellent / Modern and Efficient
System is failing or obsolete	System is unreliable and inefficient	System is functional but dated	System is in good working condition	Recently installed or upgraded
Frequent breakdowns, high maintenance costs	Significant ongoing repairs	Moderate repairs and maintenance needed	Meets most current standards and needs	Highly reliable, energy-efficient, and fully compliant with codes
Does not meet current codes or safety standards	May pose operational or compliance risks	Limited efficiency compared to modern systems	Regular maintenance keeps it functional	Minimal maintenance needed
Immediate replacement required	Short remaining useful life 0 - 5 years	Remaining useful life 5 - 10 years	Remaining useful life 10 - 15 years	Long remaining useful life 15+ years

EVIDENCE ON BUILDING PERFORMANCE

ENERGY STAR® PortfolioManager®

Dashboard (Metrics current as of 09/18/2025 05:46 PM EDT)

Search

Comparison Weather Normaliz | Energy Highlights | **Refresh Metrics**

Add/Edit/Delete Groups | Add/Edit/Delete Views

Name	Energy Current Date	Weather Normalized Site EUI (kBtu/ft²)
Focus On Energy, Wauwatosa School Dis, Underwood Elementary [FOCU036142] 6650602	05/31/2025	42.3
Focus On Energy, Wauwatosa School Dis, Eisenhower Elementary School 6639790	05/31/2025	66.1
Focus On Energy, Wauwatosa School Dis, Roosevelt Elementary [FOCU035013] 6650295	05/31/2025	82.7

Dashboard (Metrics current as of 09/20/2025 11:34 AM EDT)

Search

Secondary Schools EUI Norma | Energy Highlights | **Refresh Metrics**

Add/Edit/Delete Groups | Add/Edit/Delete Views

Name	Other Year	Weather Normalized Site EUI (kBtu/ft²)
Focus On Energy, Wauwatosa School Dis, East High School 6639770	12/31/2024	115.1
Focus On Energy, Wauwatosa School District, Whitman Middle School [FOCU035208] 6650732	12/31/2024	102.2
Focus On Energy, Wauwatosa School District, West High School [FOCU035164] 6650699	12/31/2024	89.4
Focus On Energy, Wauwatosa School Dis, Longfellow Middle School 6648173	12/31/2024	66.7

- **kBtu/ft²** is a metric that gauges a building's energy efficiency by measuring its total energy use per square foot. A lower value signifies better performance, while a high value often indicates issues with the building's envelope, outdated equipment, or operational problems.

Older buildings renovated with new mechanicals are more expensive to operate than a new building.

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EVIDENCE ON COSTS

Calendar Year 2024	Total $ Electric/Gas ($179,110)	Electric	Gas	Energy Use Intensity (EUI) kBtu/ft^2
East High School 1927 / 1930 / 1938 / 1939 / 1958 / 1972 / 1975 / 2021 (97 Years)	**$566,545**	$441,334	$125,211	115.1 kBtu/ft^2
West High School 1967 (57 Years)	**$387,435**	$279,986	$107,449	89.4 kBtu/ft^2

East High School Base Electric Load 300 - 400 kw

West High School Base Electric Load 100 kw

*August 2025

DOING NOTHING IS NOT AN OPTION - Resources will be needed one way or another

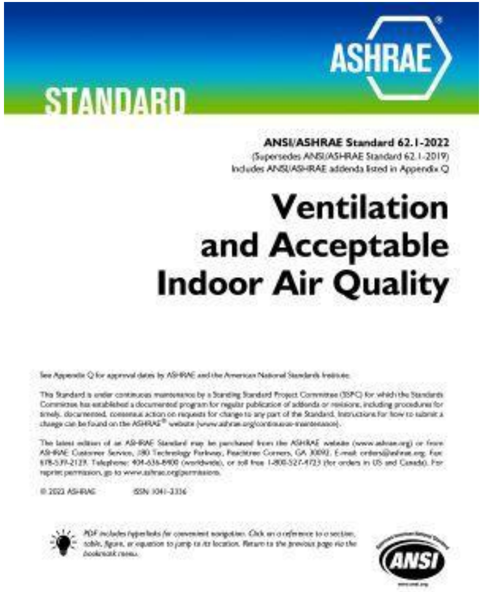
Systemic Obsolescence and Safety Concerns ~ $150 Million - Facilities Assessment – 2017 / 2023 / 2025

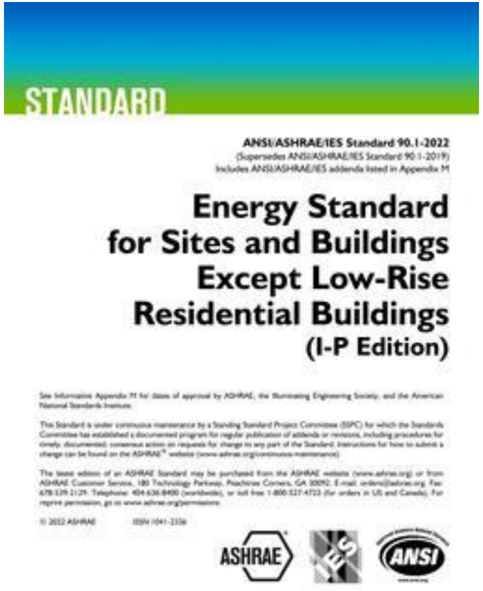
Greater cost, greater risk, declining reliability, and disruption to learning environments.

The evidence provides clarity that the current state of operation cannot continue.

QUESTIONS?

Supporting Documents





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EVIDENCE – RESEARCH – CASE STUDIES

ASHRAE Standards and Research: Foundational to modern building energy codes.

- ASHRAE Standard 90.1 sets the minimum energy-efficient design requirements for most buildings and is continuously updated with stricter metrics and new technologies. Older buildings are inherently less efficient because they predate these advanced standards, such as the 2022 version's requirements for on-site renewable energy and metrics like TSPR (Total System Performance Ratio). Older buildings predate these advancements, making them inherently less efficient.
- ASHRAE Standard 189.1 sets the requirements for high-performance green buildings, covering more than just energy. A new building designed to this standard will be significantly more sustainable and cost-effective throughout its lifespan because it addresses key areas like site sustainability, water efficiency, indoor environmental quality, and material use.
- ASHRAE Standard 62.1 provides the minimum ventilation rates and other requirements to ensure acceptable indoor air quality and minimize health risks for occupants in buildings

The Department of Energy's (DOE) Building Energy Codes Program (BECP) helps states implement energy codes based on ASHRAE standards. The BECP's analysis of these updated codes, like ASHRAE Standard 90.1-2019, consistently shows they generate millions in cost savings and significantly cut carbon emissions over a building's lifespan.

Case Studies: The DOE, through its various programs like ENERGY STAR, publishes case studies and data on the performance of new, certified buildings. These reports often compare the energy usage of new construction to existing building stock, showing that certified new buildings use a fraction of the energy of their older counterparts, leading to substantial utility cost savings.

EVIDENCE ON CURRENT CONDITIONS
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1	2	3	4	5
Critical / End of Life	Poor / Needs Major Improvement	Fair / Adequate but Aging	Good / Reliable	Excellent / Modern and Efficient

^Windows appear largely original to the school and are not energy efficient - immediate replacement needed. Roofs located at sections F, G, I, J, L, O, P, Q, V, W to be replaced within 0-5 years. Roofs located at sections C, E, H, K, M, N to be replaced within 5-10 years.

^^Roof at section D to be replaced 0 - 5 years. Windows are aged and inefficient. Sealant replacement / minor masonry tuckpointing needed on exterior envelope.

* Widespread failures with exterior brick veneer requires replacement of damaged bricks and mortar, tuckpointing, and new expansion joints (especially at 1920's / 1930's buildings). Windows appear largely original to the school and are not energy efficient - immediate replacement needed. Roof replacement required for majority of building within 5-10 years (TBV)

** Significant mechanical equipment have been recently updated, which is what this rating is based on. Please see assessment spreadsheets for other individual components noted that may want to be upgraded, but the overall rating is for the equipment recently updated.

*** The main normal and emergency equipment was upgraded and replaced a couple years ago which includes a "5" rating. Other areas such as the pool and Industrial Arts the electrical system was upgraded within 10 years which includes a "4" rating. The remainder of the building's electrical equipment is very old, some approaching 100 years of service. Refer to the individual component assessment spreadsheet for details.

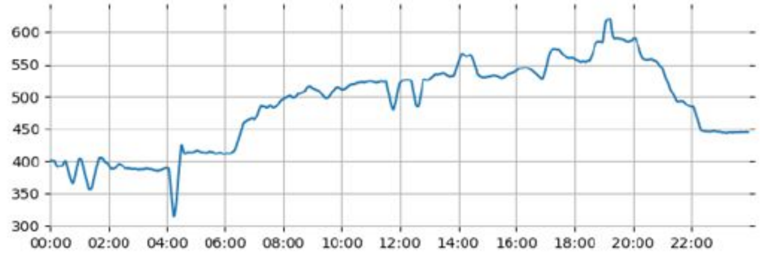
**** Denotes remaining controls that haven't been replaced. New equipment has been upgraded to DDC. Whitman likely has the most, but West also has some existing equipment that did not appear to be upgraded.

^^^Most windows are still original single pane glass with operable portions that are aged and inefficient - replacement recommended. Water damage and staining is present on brick at many locations around perimeter. Wash and tuckpoint brick as required.

EVIDENCE ON BUILDING PERFORMANCE

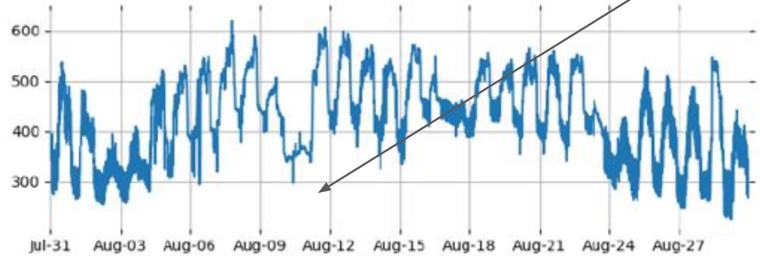
East High School

Monthly Demand Peak Day - Profile



Monthly Demand Peak	620	08/07/2025 7:15 PM

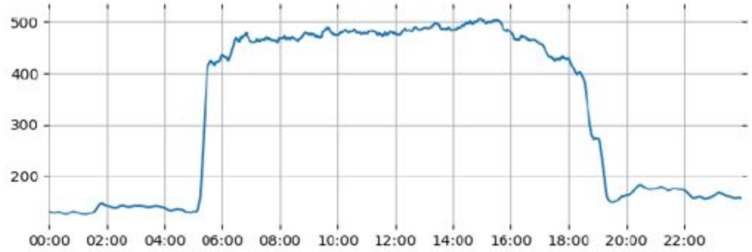
Daily Peaks - Full Billing Cycle



East Baseload
300-400 kw
West Baseload
100 kw

West High School

Monthly Demand Peak Day - Profile



Monthly Demand Peak	488	08/07/2025 3:00 PM

Daily Peaks - Full Billing Cycle