





Prepared by:



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Established in Wisconsin in 1964, Cooperative Educational Service Agencies (CESAs) have a long history of partnering with school districts. CESA 10 Facilities Management Department is a nonprofit educational service agency providing facilities management services to local government and school district customers throughout the state of Wisconsin.

With decades of experience and expertise in managing institutional facility needs, CESA 10 has a unique position as a nonprofit educational service agency. This unique position helps to ensure customers benefit from our trusted and unbiased judgment and experience gained through the execution of hundreds of investment grade audits, school energy efficiency, construction, renovation and environmental projects, and other facilities services.

CESA 10 assists public entities in managing their facility needs in health, safety, energy efficiency, referendum and long-term planning, and construction management.

The department's main areas of concentration are:

- Investment Grade Audits, including Long-Term Comprehensive Plans
- Referendum Planning
- Construction Management
- Owner's Representative
- Environmental Health and Safety Consulting
- Environmental Project Consulting and Management







· · · Executive Summary · · ·

At the request of the Wausau School District, CESA 10 technical experts performed a detailed on-site audit of its facilities. This audit provides the District with a comprehensive facilities maintenance and capital project plan, with identified problems, proposed solutions, and estimated costs. The recommendations in this report aim to improve failing and inefficient equipment, systems, and facilities and reduce energy consumption to ensure any taxpayer investment is managed within an appropriate payback period.

According to the 2021 State of our Schools report, public school districts in the U.S. only spend an average of \$56 billion on their facilities' maintenance and operations annually. That's \$27.6 billion short of what is recommended to maintain, operate, and renew facilities to provide healthy and safe 21-century learning environments for all children. Local districts know their available funding options often fall short of maintenance wants and needs. Therefore, it is imperative to engage in proper facilities planning.

Planning should include:

- Having an up-to-date master facilities plan
- Preparing annual District-wide maintenance, repair, and energy management plans
- Defining and disseminating benchmarks for facilities planning
- Analyzing existing and potential technical assistance and tools, environmental health and safety hazards, and ADA-compliance issues
- Establishing a District facilities planning designee or committee

Numerous priority improvement measures have been identified for consideration. Preventative measures are recommended to provide more consistent quality for the ever-aging facilities. These recommendations include documented seasonal inspections, robust preventative maintenance, expeditious corrective actions, and minor and major projects.

It is important to note the prices listed in the strategic plan are only for construction costs. There are additional costs related to construction management, architect/engineer fees, contingencies, permits, plans, and other material costs. Additionally, prices can fluctuate based on the types of materials chosen, the time of year construction occurs, and final project scopes. The recent worldwide pandemic also continues to impact material and labor costs.

The District has effectively utilized the existing buildings and equipment to the best of its available resources. The District can use this report to identify the highest priority facility improvement measures (FIMS) during corrective maintenance, minor project implementation, and capital planning. The recommendations included in this report are meant to help the District maximize capital investment impact, advance the learning environment, conserve energy, reduce operating and maintenance costs, improve occupant comfort, and increase safety and security where applicable.

According to a Preventative Maintenance Report by Dude Solutions, schools performing regular preventative maintenance saw a 50-65% reduction in the rate of emergency work. Additionally, their studies showed a solid preventative maintenance plan for roofing can generate a 30% extension of the life of the roof.



GD Jones

Maine

Total

Hawthorn Hills

Hewitt-Texas

Elementary Strategic Plan



Wausau - Facilities Improvement Budget Deferred Maintenance 1-2 Year **Construction Cost**** Campus 3-5 Year 5-10 Year \$3,748,700 \$597.600 \$148,500 \$4,494,800 Riverview John Marshall \$544,500 \$3,404,500 \$231,500 \$4,180,500 \$12,000 \$2,933,250 \$175,000 \$3,120,250 Lincoln Franklin \$88.900 \$2.567.400 \$437.500 \$3.093.800 Grant \$75.200 \$2,558,500 \$347.500 \$2,981,200 \$37,800 \$868,950 \$1,289,500 \$2,196,250 Rib Mountain Jefferson \$700,000 \$808,800 \$168,500 \$1,677,300 South Mountain \$670,800 \$961,500 \$36,000 \$1,668,300 Stettin \$538,500 \$399,800 \$330,000 \$1,268,300

\$35,000

\$263,500

\$56,500

\$207,000

\$3,726,000

\$627,800

\$324,500

\$41,500

\$291,600

\$16,385,700

\$521,500

\$55,200

\$455,500

\$31,500

\$7,480,100

\$1,184,300

\$643,200

\$553,500

\$530,100

\$27,591,800

^{**} Construction Costs = Hard construction costs only (labor, materials, and equipment)



Elementary Recommended Improvements



Wausau - Facilities Improvement Budget

Recommended Standardization Upgrades

Campus	Construction Cost**
Grant (Pick-Up/Drop-Off Lane, Secure Entrance, Add A/C, Multipurpose Space, Kitchen Enhancements, FF&E)	\$5,175,000
Hawthorn Hills (Multipurpose or Gym Addition, Kitchen Enhancements, minor renovation, FF&E)	\$3,215,000
Lincoln (Multipurpose Space, Kitchen Enhancements, FF&E)	\$2,720,000
Rib Mountain (Multipurpose Space, Kitchen Enhancements, Bathroom Renovations, FF&E)	\$2,635,000
John Marshall (Kitchen Enhancements, Add A/C, Cabinetry, FF&E)	\$2,505,000
Maine (Multipurpose Space, minor kitchen renovation, FF&E)	\$2,390,000
Hewitt-Texas (Multipurpose Space, minor renovation, FF&E)	\$2,370,000
South Mountain (Multipurpose Space, FF&E)	\$2,065,000
Franklin (Add A/C, minor renovation, FF&E)	\$1,190,000
GD Jones (Minor Kitchen Enhancements, FF&E)	\$625,000
Riverview (Minor Renovation, FF&E)	\$550,000
Jefferson (FF&E)	\$375,000
Stettin (FF&E)	\$265,000.
Total	\$26,080,000

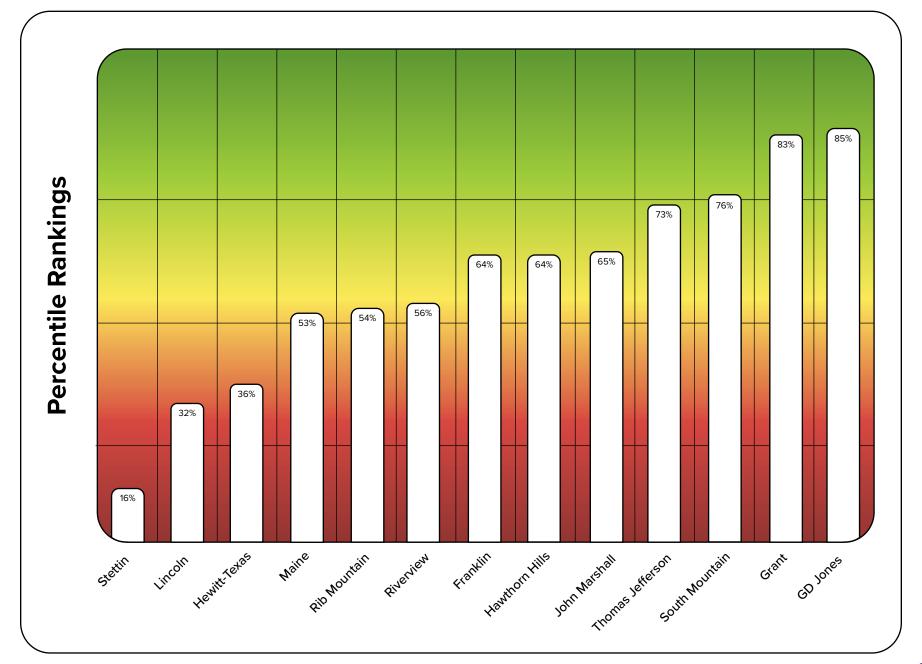
^{*}FF&E = Recommended Furniture, Fixtures, and Equipment

^{**} Construction Costs = Hard construction costs only (labor, materials, and equipment)



Total Energy Use - Full Elementary Analysis









· · · Facility Analysis · · ·

Conducted for the Wausau School District

Conducted on

July 15, 2024

Prepared by CESA 10 Facilities Consultants

Nate Curell and John Berget

School District Personnel

Cale Bushman • Interim Superintendent







Rib Mountain Facility Analysis

The Rib Mountain Elementary School is located at 150801 Robin Ln, Wausau, Wisconsin.

CESA 10 technical experts paid close attention to the site's lighting, building envelope, and security concerns. Items identified in this report are meant to improve the facility's efficiency over the next five to ten years while reducing future operation and maintenance costs.

Wausau School District - Rib Mountain ES		
Year Built	1955	
Building Addition	1961, 1976	
Square Footage	44,500	
Annual Electric Usage (kWh)	263,464	





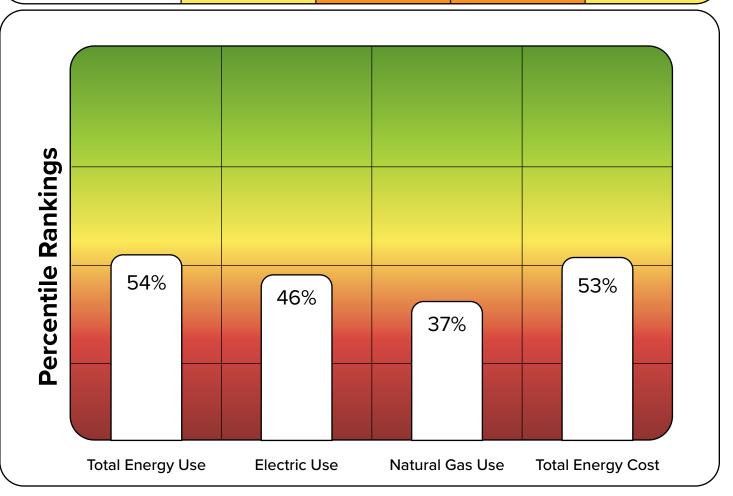


Rib Mountain Utility Analysis

ENERGY USE

The following benchmarking analysis compares Rib Mountain Elementary to an average elementary school in Wisconsin.

Wausau School District • Benchmarking					
Total Energy Use Electric Use Natural Gas Use Total Energy Co					
Average Elementary School in WI	78.02	5.7	6.9	\$1.24	
Rib Mountain ES	75.2	5.9	7.6	\$1.21	
Percentile Rankings	54%	46%	37%	53%	



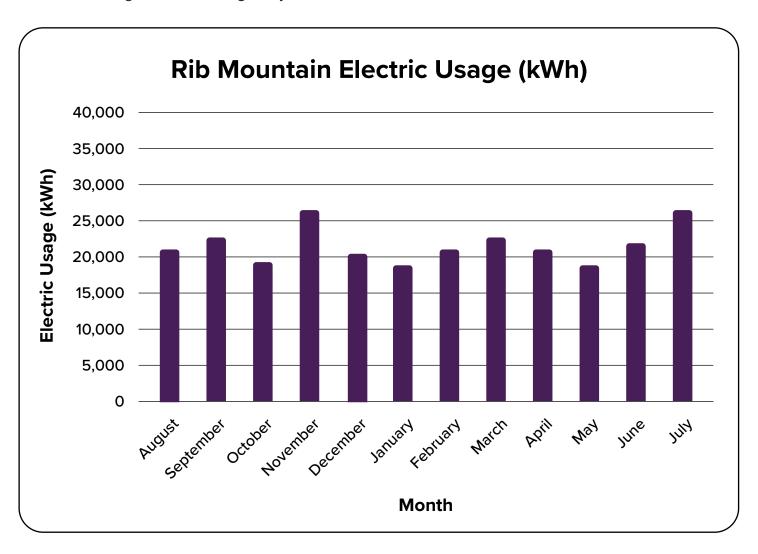




Rib Mountain Utility Analysis

UTILITY ANALYSIS

The utility graph below demonstrates the electrical consumption at the Rib Mountain Elementary School from August 2023 through July 2024.









Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Invasive vegetation in asphalt cracks.	Remove vegetation, crack clean, and crack fill as per common practice in district.	\$1,000
Site & Landscape	Open gaps and deteriorated joints between several concrete slabs.	Replace slabs with open or deteriorated joints.	\$8,500
Site & Landscape	Substantial crack-filled areas without top sealing.	Continue to crack clean and crack fill as needed. Approximately every 3-5 years additionally seal and repaint asphalt.	\$7,500
Site & Landscape	Increase routine planters and mulch landscaping maintenance.	Annually or more often if needed remove vegetation around building perimeters, fencing, hardscape surface edges, utility supply areas, and planters. Refresh and retain mulch to an elevation lower than border, walk, or turf. Consider crushed gravel in lieu of mulch in planters.	\$5,000















Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Outbuilding shed painted wood trim and door frames paint peeling.	Prepare and repaint. Consider replacing with metal or cladding where possible.	\$2,500
Exterior Building	Open ground level roof drain pipe connector.	Refit and repair connection.	\$1,000
Exterior Building	Open roof edge fascia flashing joint.	Refit, repair, and seal flashing joint.	\$1,000
Exterior Building	Exterior exit soffit and fascia paint peeling.	Prepare and paint. Consider cladding.	\$1,800















Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Exterior wood door and frame paint peeling.	Prepare and paint. Consider replacing with steel door and frame.	\$2,000
Interior - Storage Safety	Storage of excess furniture was noted in basement storage rooms, along with mop buckets in a small mechanical closet aside electric motors. Along with freeing up storage space and setting best practice for facilities personnel, cluttered spaces such as this create a fire hazard.	Clean, organize, and purge. Keep mechanical and electrical room spaces used only for their intended purpose, and never store water next to open electrical equipment.	\$1,000
Electrical	Exterior wall bell rusty.	Prepare and repaint. Consider replacing with newer weather resistant bell.	\$1,000
Electrical	Loose junction box and conduit on exterior wall.	Secure box and conduit. Replace if needed.	\$1,000















Building System	General Description	Recommendation	Cost Estimate
Electrical	Exterior wall packs on during daylight hours.	Investigate schedule and/or sensor to determine cause. Clean sensors and reset to appropriate schedule.	\$1,000
Site & Landscape	Open transition gaps between exterior walls and concrete/asphalt walks, landings, and dives.	Back fill gaps with sand and backer rod. Caulk and seal with appropriate joint filler. Heat melt in place material recommended for smooth, clean appearance.	\$5,000
Exterior Building - Roofing	Roof section A is 18 years old and 3 years beyond its warranty period. This roof is showing signs of degradation. Significant ponding water was noted in some areas.	Replace roof section A in the next 1-5 years with an adhered 60 mil black EPDM 20 year warranty roof.	\$275,000
Exterior Building	Failed and missing window caulk, join compound, and sealant.	Remove failed and around areas of missing caulk. Re-caulk without blocking or sealing weeps.	\$1,000















Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Exterior door frame gap.	Fill, caulk, and seal gap.	\$1,000
Exterior Building	Tuck pointing repairs needed. Below grade face brick spalling, corner brick chipped and spalling, lower wall brick cracking and deteriorating, face brick step cracks, open wall base, and deteriorated wall joints.	Re-tuck walls and exterior masonry.	\$85,000
Interior - Wood Doors	Many of the older wood doors throughout the facility are in poor condition; de-laminating, stained, and chipped.	Replace aged and damaged wood doors. Estimate given for 20 doors.	\$25,000
Interior - Acoustical Ceiling	Much of the southern portion of the building has drastically sagging ceiling tile due to past HVAC moisture issues in the facility. This is evident throughout the facility but not to the extent in the south.	Replace ceiling tile in conjunction with a whole building lighting project. Estimate given for 12,000 sq ft, rooms 101-110 area.	\$36,000















Building System	General Description	Recommendation	Cost Estimate
Mechanical - Pipe Insulation	Missing and/or damaged pipe insulation was noted in various locations around the building.	Insulate DHW piping up to water heaters. Replace damaged and missing pipe insulation. Presence of asbestos and abatement needed can drastically change pricing. Pricing given for minimal work noted in mechanical rooms, not potential tunnel abatement.	\$5,000
Mechanical - HVAC	Exterior condenser unit rusting.	Clean, prep for coating, and protect with rust resistant coating or paint. Verify planned unit replacement schedule prior to new coating.	\$5,000
Electrical - Whole Building Upgrade	The facility is in need of a whole building lighting upgrade from fluorescent to LED. Many classrooms were noted having fabric light filters hung over fixtures due to the harshness and intensity of existing lighting systems. Interior lighting projects provide roughly a 6 year simple payback, along with giving building occupants the ability to adjust light levels to their liking. Additionally, the systems have a 20+ year lifespan, drastically reducing maintenance required to change lamps and ballasts.	Replace classrooms, offices, corridors and common large spaces (gym) with appropriate LED fixtures, occupancy sensors, and dimming controls.	\$90,000
Electrical - Bell/PA & Communication	PA/Bell/Clock/mass communication systems due for upgrade. Existing system is obsolete using decades old technology.	Replacement recommended with the district's Single wire system standard.	\$139,200















Building System	General Description	Recommendation	Cost Estimate
Exterior Building - Roofing	Roof section C is 13 years old and under warranty until 2026. This roofing is holding up well and appears in good condition.	Replace roof section C in the next 5-8 years with an adhered 60 mil black EPDM 20 year warranty roof.	\$155,000
Interior - Gym Floor	The gymnasium synthetic floor is holding up well, but scratches and gouges are evident due to lunchroom activities taking place in the space.	Budget to replace the gym floor in the next 5-10 years.	\$100,000
Mechanical - HVAC	The existing mechanical system at Rib Mountain is functioning adequately but it is 25 years old and obsolete to today's standards. Heating is accomplished through large gas fired duct furnaces, there are no boilers in the school. The school is largely heated and cooled with a ducted system through the tunnels, with individual volume dampers for the spaces.	If the district expects Rib Mountain to be a long-term 10+ year part of the elementary portfolio, a major mechanical project should be undertaken in the next five years. This should include, at a minimum, a hot water system running throughout the building. Existing space dampers could be swapped with VAV boxes with reheat, conventional AHU's exchanged with the furnaces. The large DX units have good life remaining, chilled water is not recommended unless the district chooses for further temperature control and efficiency.	\$975,000
Mechanical - Gym Fans	No gym destratification fans are present.	Install gym destrat fans. Include schedulable control through the DDC system so fans can automatically turn on and off as desired.	\$15,000















Building System	General Description	Recommendation	Cost Estimate
Plumbing - Cast Sanitary Pipe	Cast iron sanitary piping was noted below grade level. Piping observed was in fair condition however PVC connections have been made, suggesting past issues.	Estimating costs and predicted life of cast pipe is a difficult endeavor. Typically once failures begin they will continue over time. Addressing this issue can be costly since the piping is often buried in concrete. Estimates given are for a maintenance plan over the next 5-10 years.	\$40,000
Plumbing - Domestic Hot Water	An 8 year old electric 50 gallon domestic hot water heater is in place in the south mechanical room serving the southern bathrooms. The unit likely has 2-5 years of life remaining. Nearby piping to the unit was not insulated.	Consider replacing the electric unit with a gas fired unit to reduce operating costs. Gas is readily available in the room. Insulate all DHW piping in the vicinity and replace damaged insulation. Relocate unit to allow more clearance to the nearby HVAC.	\$4,500
Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertx boards to Mercury LP1502's.	\$8,000
Electrical - Fire Panel	Fire panel at end of expected usable life.	Replace or upgrade to Edwards standard.	\$118,750















Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Front parking area asphalt surface failing.	Mill and resurface parking lot.	\$75,000
Plumbing	Frequently re-occurring grease trap back up associated with detergent/soap use.	Investigate proper installation of grease trap and use of chemical dispensing. Consider running lines with a camera. Correct deficiencies.	\$3,500
Interior - Bathrooms	Rib Mountain is lacking adequate bathroom space. The main original bathroom is undersized and not ADA compliant, secondary bathrooms are also undersized.	Add restrooms if additional students are added to school. Complete this project in conjunction with a cafeteria addition.	\$600,000











Rib Mountain Strategic Plan

The items below highlight high-priority facility issues and associated costs. Projects are broken out by immediate need, one to two-year needs, and those that can wait until up to five years and beyond to complete. This multi-year strategic plan will allow District administration to budget for upcoming costs and maintenance personnel to prioritize projects.

Wausau - Rib Mountain ES			
Project	Estimated Cost		
1-2 Year Needs			
Replace Damaged Concrete Slabs	\$8,500		
Top Seal Asphalt Cracks	\$7,500		
Increase Routine Landscaping Maintenance	\$5,000		
Repair Frequent Grease Trap Back Up	\$3,500		
Repaint Outbuilding Shed	\$2,500		
Repair Exterior Wood Door and Frame	\$2,000		
Repair Exit Soffit and Fascia	\$1,800		
Remove Vegetation from Asphalt	\$1,000		
Repair Roof Drain Pipe Connector	\$1,000		
Repair Roof Edge Fascia Flashing Joint	\$1,000		
De-clutter Basement Storage Rooms	\$1,000		
Repair or Replace Exterior Wall Bell	\$1,000		
Secure Junction Box and Conduit on Exterior Wall	\$1,000		
Fix Exterior Wall Packs to Appropriate Schedule	\$1,000		
Total	\$37,800		





Rib Mountain Strategic Plan

Wausau - Rib Mountain ES		
Project	Estimated Cost	
3-5 Yea	r Needs	
Replace Roof Section A	\$275,000	
Replace Bell/PA System	\$139,200	
Upgrade Fire Panel	\$118,750	
Upgrade Facility Lighting to LED	\$90,000	
Re-tuck Walls and Exterior Masonry	\$85,000	
Mill and Resurface Parking Lot	\$75,000	
Ceiling Tile Replacement	\$36,000	
Replace Interior Wood Doors (approx. 20)	\$25,000	
Card Access System	\$8,000	
Fix Exterior Wall/Walk Transition Gaps	\$5,000	
Address Missing or Damaged Pipe Insulation	\$5,000	
Address Exterior Condenser Unit Rust	\$5,000	
Repair Window Caulk	\$1,000	
Repair Exterior Door Frame Gap	\$1,000	
Total	\$868,950	





Rib Mountain Strategic Plan

Wausau - Rib Mountain ES			
Project	Estimated Cost		
5-10 Yea	ar Needs		
HVAC Mechanical Project	\$975,000		
Replace Roof Section C	\$155,000		
Replace Gym Floor	\$100,000		
Address Cast Iron Sanitary Piping	\$40,000		
Install Gym Destratification Fans	\$15,000		
Replace Domestic Hot Water Heater	\$4,500		
Total	\$1,289,500		

Wausau - Rib Mountain ES			
Project	Estimated Cost		
Recommended Standardization Upgrades			
Multipurpose Space and Kitchen Enhancements	\$1,800,000		
Restroom Renovations	\$600,000		
FF&E	\$235,000		
Total	\$2,635,000		





Grant Facility Analysis

The Grant Elementary School is located at 500 N 4th Ave, Wausau, Wisconsin.

CESA 10 technical experts paid close attention to the site's lighting, building envelope, and security concerns. Items identified in this report are meant to improve the facility's efficiency over the next five to ten years while reducing future operation and maintenance costs.

Wausau School District - Grant ES		
Year Built	1910	
Building Addition	1987, 2001	
Square Footage	52,500	
Annual Electric Usage (kWh)	195,967	





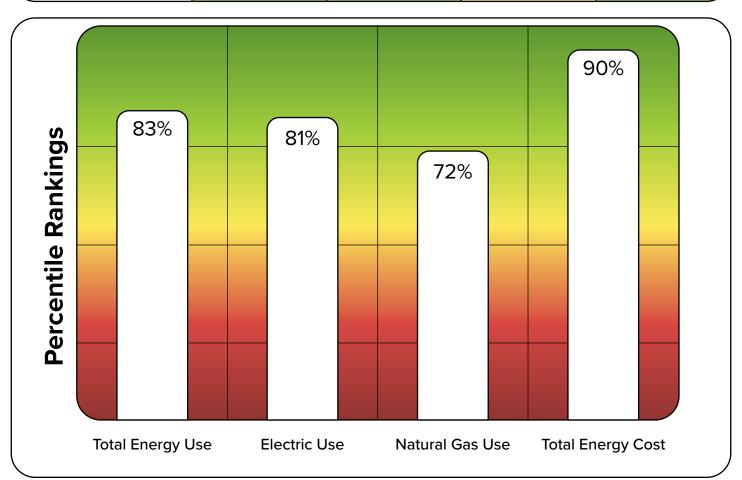


Grant Utility Analysis

ENERGY USE

The following benchmarking analysis compares Grant Elementary to an average elementary school in Wisconsin.

Wausau School District • Benchmarking				
	Natural Gas Use Btu/ ft²/HDD	Total Energy Cost \$/ft²		
Average Elementary School in WI	78.02	5.7	6.9	\$1.24
Grant ES	53.5	3.7	5.6	\$0.67
Percentile Rankings	83%	81%	72%	90%



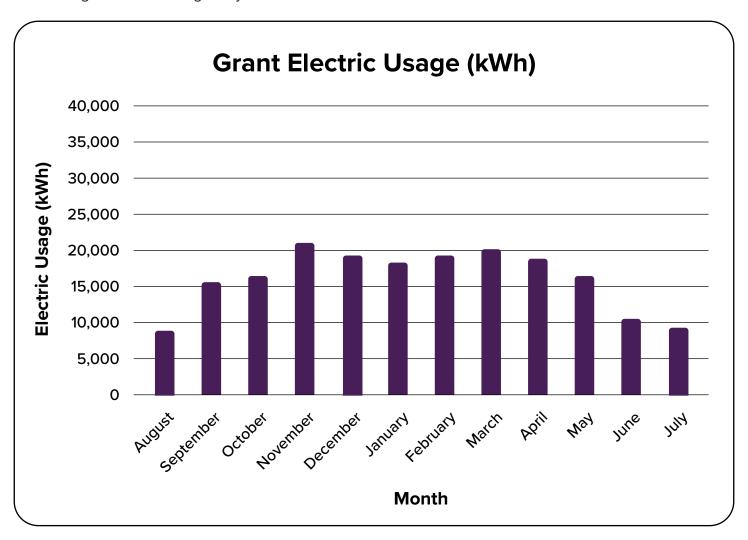




Grant Utility Analysis

UTILITY ANALYSIS

The utility graph below demonstrates the electrical consumption at the Grant Elementary School from August 2023 through July 2024.









Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Cracks across asphalt walking path areas.	Clean and fill cracks. Schedule every 3-5 years crack clean, seal, and repaint asphalt.	\$3,500
Site & Landscape	Concrete stairs post base open and cracked.	Cut and repair. Consider stair replacement.	\$2,500
Site & Landscape	Uneven hardscape transitions.	Realign, replace, patch, cut, grind and/or mud jacking as needed.	\$12,000
Site & Landscape	Mulch filled above exterior brick wall drip edge.	Refresh and retain mulch to an elevation lower than wall weeps, drip edges, border, walk, or turf. Consider crushed gravel in lieu of mulch in planters.	\$1,500















Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Building perimeter wall base concrete and stone curbs cracked.	Fill, patch, and seal cracks. Consider completion as more extensive exterior wall corrective project.	\$18,000
Exterior Building	Exterior wall base open mortar.	Fill, patch, and seal openings. Consider completion as more extensive exterior wall corrective project.	\$18,000
Exterior Building	Wall mildew stains above covered exits.	Verify cause and remedy. Remove stains. Consider completion as more extensive exterior wall corrective project.	\$3,700
Exterior Building	Missing masonry drip edge bricks.	Replace missing bricks, caulk, and seal top surfaces. Consider completion as more extensive exterior wall corrective project.	\$5,000













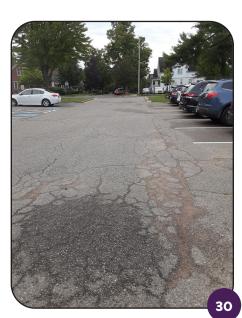


Building System	General Description	Recommendation	Cost Estimate
Interior - Storage Safety	Storage of excess furniture was noted in mechanical rooms. Along with freeing up maintenance space and setting best practice for facilities personnel, clutter spaces such as this create a fire hazard.	Clean, organize, and purge. Keep mechanical and electrical room spaces used only for their intended purpose.	\$500
Mechanical - Pipe Insulation	Missing and/or damaged pipe insulation was noted in various locations around the building.	Replace damaged and missing pipe insulation. Presence of asbestos and abatement needed can drastically change pricing. Pricing given for minimal work noted in mechanical rooms.	\$5,000
Plumbing - Domestic Hot Water	The 100-gallon gas-fired water heater in the boiler room is 18 years old and beyond its expected useful life.	Replace water heater with a high efficiency unit within the next 1-3 years.	\$7,500
Site & Landscape	Excessive cracks (alligator) on asphalt drive and parking area. Failed top asphalt layer in several areas.	Mill and resurface poor asphalt surface areas.	\$45,000















Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Multiple walk concrete slabs with transitional and divided cracks.	Replace cracked concrete walk slabs.	\$25,000
Site & Landscape	Drive concrete curbs cracked and open.	Replace, patch, cut, grind and/or mud jacking as needed.	\$17,500
Site & Landscape	Open concrete planter curb and stair base.	Patch and seal curb and base. Consider replacement with stairs replacement.	\$1,500
Site & Landscape	Open gaps between hardscapes and exterior wall perimeters.	Back fill gaps with sand and backer rod. Caulk and seal with appropriate joint filler. Heat melt in place material recommended for smooth, clean appearance.	\$7,500















Building System	General Description	Recommendation	Cost Estimate
Exterior - Roofing	Roof sections A-C are 23 years old and holding in good condition, however are at their expected useful life and out of warranty. Some areas of sections A & B are ponding water. Roof section D is in excellent condition with 20 years of warranty remaining.	Replace roof sections A-C in the next 2-5 years with an adhered 60 milk black EPDM 20 year warranty roof. The small elevator shaft roof within Roof B is severely holding water and should be closely monitored for leaks prior to reroofing this section.	\$95,000
Exterior - Doors	Although minimal, some sets of exterior street doors are deteriorating. One set of gym doors is rusting through.	Complete a thorough facility exterior door inventory and replace as necessary. Expect to replace several doors in the next 1-5 years.	\$15,000
Exterior Building	Roof edge cornice paint peeling.	Prepare and paint. Consider completion as more extensive exterior wall corrective project.	\$3,000
Exterior Building	Roof edge cornice masonry deteriorating.	Replace edge masonry. Consider completion as more extensive exterior wall corrective project.	\$12,000













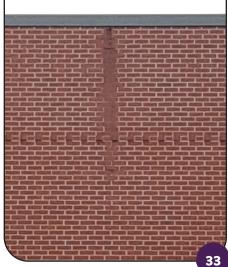


Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Upper wall to roof edge corner joint deteriorated and stained.	Verify cause and remedy for staining. Remove joint material and replace. Clean stains. Consider completion as more extensive exterior wall corrective project.	\$5,000
Exterior Building	Stained exterior wall sills and decorative stone.	Verify cause and remedy. Professionally clean wall sills and decorative stone. Consider completion as more extensive exterior wall corrective project.	\$12,500
Exterior Building	Failing aluminum door frames.	Replace doors and frames.	\$15,000
Exterior Building	Below roof edge flashing stain.	Verify and remedy cause. Remove stain.	\$1,000















Building System	General Description	Recommendation	Cost Estimate
Interior - Door Safety	The original boiler blast door is still in place to the main student ground floor corridor. This door is unsecured giving students or intruders access to the boiler and electrical rooms, where they could harm themselves, and/or shut down or damage equipment.	Replace the door with a hollow metal steel door with lockset.	\$7,500
Interior - Paint & Plaster	Minor scratches, wall damage, and needed painting was noted throughout the building, indicative of its age. Mainly in drywall and plaster, occasionally on wood doors and street shrouds.	Address plaster and drywall issues, paint.	\$7,500
Mechanical - Boilers	Grant Elementary is heated by two 18 year old standard efficiency boilers, each 1MBTU. The boilers are holding up well, however approaching their expected useful life, and inefficient to today's standards. The boiler system seems to be undersized for the facility, however maintenance staff reported no issues.	Replace the boilers and pumps in the next 5-10 years with high efficiency condensing boilers.	\$275,000
Mechanical - HVAC	Grant Elementary is provided HVAC through the older section of the facility with 1987 vintage multizone units, along with radiant wall fin heat. The gym and music areas are served by 2000 vintage mechanical. The 2000 era equipment was originally installed with evaporative cooling units which have since been disconnected, along with supplemental mechanical cooling. The 1987 equipment is beyond it's expected service life, the 2000 vintage equipment should have 5-10 years of life remaining, however is no longer operating as originally designed.	Undergo a full facility HVAC renovation in the next 3-7 years replacing all air handlers. If full facility air conditioning is not required, mechanically cool the gym and AHU4 served spaces as cooling these areas is more feasible given existing conditions. Add a dedicated office staff AHU with DX cooling.	\$1,550,000















Building System	General Description	Recommendation	Cost Estimate
Mechanical - Pipe Insulation	Missing and/or damaged pipe insulation was noted in various locations around the building.	Replace damaged and missing pipe insulation. Presence of asbestos and abatement needed can drastically change pricing. Pricing given for minimal work noted in mechanical rooms.	\$5,000
Plumbing	Some bathrooms currently have no isolation valves necessary to perform maintenance when problems occur.	Install missing isolation valves for bathroom fixtures.	\$10,000
Electrical - Whole Building Lighting Upgrade	The facility is in need of a whole building lighting upgrade from fluorescent to LED. Many classrooms were noted having fabric light filters hung over fixtures due to the harshness and intensity of existing lighting systems. Interior lighting projects provide roughly a 6 year simple payback, along with giving building occupants the ability to adjust light levels to their liking. Additionally, the systems have a 20+ year lifespan, drastically reducing maintenance required to change lamps and ballasts.	Replace classrooms, offices, corridors and common large spaces (gym) with appropriate LED fixtures, occupancy sensors, and dimming controls.	\$105,000
Electrical - Bell/PA & Communication	PA/Bell/Clock/mass communication systems due for upgrade. Existing system is obsolete using decades old technology.	Replacement recommended with the district's Single-wire system standard.	\$132,000















Building System	General Description	Recommendation	Cost Estimate
Electrical	Exterior wall bell/speaker box rusty.	Prepare and repaint. Consider replacing with a newer, weather-resistant bell.	\$1,000
Exterior Building	Tuck pointing and masonry repairs needed. Severely stained with face brick spalling, corner brick chipped spalling, lower perimeter stone cracking and deteriorating, open wall base, missing bricks, and damaged decorative stone.	Re-tuck walls, replace missing and damaged masonry, and professionally clean stone and bricks. (Several specific examples listed with pictures)	\$250,000
Exterior Building	Discolored exterior wall brick and mortar.	Professionally clean walls. Consider completion as more extensive exterior wall corrective project.	\$25,000
Interior - Ceilings	By in large, ceilings across the facility are in excellent condition. The main corridor hall of ground floor is open, revealing exposed piping, valves, conduit, and ductwork.	Install a drop ceiling in the ground floor corridor, as high as possible, to conceal potentially dangerous utilities and improve aesthetics.	\$7,500









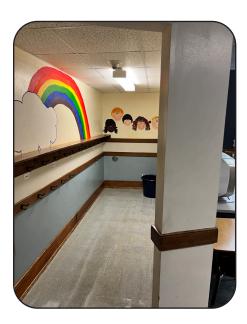


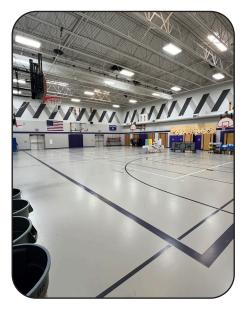




Wausau - Grant Elementary School

Building System	General Description	Recommendation	Cost Estimate
Interior - Flooring	Although most of the facility flooring is in good condition, spot areas of aged VCT and traffic-worn carpeting are evident.	Replace older VCT with surfaces of district choice. Some VCT appeared of a vintage where asbestos mastic was likely. Replace stained and foot traffic worn carpeting as desired. Pricing given to address 5,000 sq ft of carpet/VCT, not including abatement.	\$40,000
Mechanical - Gym Ceiling Fans	No gym destratification fans are present. Ceiling fans in high ceiling spaces help distribute heat from the ceiling to the occupants in winter, and can help maintain comfort in spring/fall.	Install gym destrat fans. Include schedulable control through the DDC system so fans can automatically turn on and off as desired.	\$25,000
Exterior Building	Exterior wall decorative corner stones damaged.	Replace stones. Consider completion as more extensive exterior wall corrective project.	\$18,500
Site & Landscape	Poor traffic flow for pick up and drop off. Tight urban site with minimal traffic options.	Reroute and modify perimeter street traffic between school and ancillary parking lot.	\$85,000















Wausau - Grant Elementary School

Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Exterior door do not close and latch.	Adjust or replace door closures. Consider replacement of all rusty and failed metal doors and door frames.	\$35,000
Exterior Building	Exterior or abandoned chimney deteriorating.	Prepare, seal and paint chimney top and vertical perimeter.	\$12,000
Interior - Entrance Security	Although the main entrance is "secure", with a second set of vestibule locked doors, there is a great distance and elevation change between the entrance and the main office. Other sets of doors to the gym and receiving are present within the vestibule, creating additional hiding areas and security challenges.	Given existing conditions, creating a true secure entrance on ground floor to this facility will be challenging without a build out of additional new square footage. As an immediate step we recommend investment in additional cameras and electronic vetting. Upgrade camera quality and move to an IP based system where visitors can be viewed on any PC with main door control. Estimate given for increasing electronic capabilities. Assume a \$1M project for a main office build out near the existing entrance.	\$50,000
Electrical	Minimal area lighting in fenced in play areas.	Install additional LED area lighting to improve security and safety inside of play areas.	\$18,000















Wausau - Grant Elementary School

Building System	General Description	Recommendation	Cost Estimate
Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertx boards to Mercury LP1502's.	\$4,000
Mechanical - Pipe Insulation	Missing and or damaged pipe insulation was noted in various locations around the building.	Replace damaged and missing pipe insulation. Presence of asbestos and abatement needed can drastically change pricing. Pricing given for minimal work noted in mechanical rooms.	\$3,000
Mechanical - Chilled Water	The facility is largely non-airconditioned. Given the age and construction of this facility, 2nd and 3rd floors are commonly very hot in the cooling season, creating an environment not conducive to teaching and learning.	Install chilled water based mechanical cooling to the entire facility.	\$850,000
Site- Pickup/Drop- Off Lane	The 5 acre Grant block is confined on three sides by residential housing and Bridge St on the other. This creates an unsafe situation for pickup/drop-off and pedestrians crossing traffic areas.	Design and install a student pickup/drop-off area running through the West side of the school lot, eliminating the baseball and soccer activities. This would allow for a safer transfer of bussed and vehicle transferred students.	\$950,000













Grant Strategic Plan

Wausau - Grant ES			
Project	Estimated Cost		
1-2 Yea	r Needs		
Repair Wall Base Concrete and Stone Curbs	\$18,000		
Address Wall Base Open Mortar	\$18,000		
Address Uneven Hardscape Transitions	\$12,000		
Replace Water Heater	\$7,500		
Replace Missing Masonry Drip Edge Bricks	\$5,000		
Investigate Wall Mildew Stains Above Exits	\$3,700		
Repair Asphalt Walk Path Areas	\$3,500		
Replace Missing or Damaged Pipe Insulation	\$3,000		
Cut and Repair Concrete Stairs Post Base	\$2,500		
Fix Mulch Above Exterior Brick Wall Drip Edge	\$1,500		
Remove Clutter From Mechanical Rooms	\$500		
Total	\$75,200		

Wausau - Grant ES				
Project	Estimated Cost			
3-5 Year Needs				
Full Facility HVAC Renovation	\$1,550,000			
Replace Boilers and Pumps	\$275,000			
Replace Bell and PA System	\$132,000			
Whole Building Lighting Upgrade	\$105,000			
Replace Roof Sections A-C	\$95,000			
Reroute Street Traffic	\$85,000			





Grant Strategic Plan

Wausau - Grant ES			
Project	Estimated Cost		
3-5 Year Need	ls (Continued)		
Evaluate and Renovate Secure Entrance	\$50,000		
Mill and Resurface Poor Asphalt Surface Areas	\$45,000		
Adjust or Replace Door Closures	\$35,000		
Replace Cracked Concrete Walk Slabs	\$25,000		
Replace Decorative Corner Stones	\$18,500		
Install Additional LED Lighting in Play Areas	\$18,000		
Repair Drive Concrete Curbs	\$17,500		
Replace Exterior Doors	\$15,000		
Replace Aluminum Door Frames	\$15,000		
Clean Wall Sills and Decorative Stone	\$12,500		
Replace Roof Edge Masonry	\$12,000		
Address Deteriorating Chimney	\$12,000		
Install Missing Isolation Valves in Bathrooms	\$10,000		
Fill Hardscape and Exterior Wall Gaps	\$7,500		
Replace Boiler Door to Improve Security	\$7,500		
Address Plaster and Drywall Issues	\$7,500		
Address Exterior Joint Deterioration and Staining	\$5,000		
Replace Missing and/or Damaged Pipe Insulation	\$5,000		
Card Access System	\$4,000		
Replace or Repaint Roof Edge Cornice	\$3,000		
Repair Concrete Planter Curb and Stair Base	\$1,500		
Remove Flashing Stain Below Roof Edge	\$1,000		
Replace Exterior Wall Bell/Speaker Box	\$1,000		

Total \$2,558,500

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Grant Strategic Plan

Wausau - Grant ES				
Project	Estimated Cost			
5-10 Year Needs				
Complete Tuck Pointing and Masonry Repairs	\$250,000			
Replace Worn VCT & Carpeting Areas	\$40,000			
Professionally Clean Exterior Brick and Mortar	\$25,000			
Install Gym Destratification Fans	\$25,000			
Install Drop Ceiling in Ground Floor Corridor	\$7,500			
Total	\$347,500			

Wausau - Grant ES				
Project	Estimated Cost			
Recommended Standardization Upgrades				
Add Multipurpose/Cafeteria Space	\$2,150,000			
Secure Entrance	\$1,000,000			
Design and Install a Student Pickup/Drop-Off Area	\$950,000			
Install Chilled Water Based Mechanical Cooling	\$850,000			
FF&E	\$225,000			
Total	\$5,175,000			





Lincoln Facility Analysis

The Lincoln Elementary School is located at 720 S 6th Ave, Wausau, Wisconsin.

CESA 10 technical experts paid close attention to the site's lighting, building envelope, and security concerns. Items identified in this report are meant to improve the facility's efficiency over the next five to ten years while reducing future operation and maintenance costs.

Wausau School District - Lincoln ES			
Year Built	1967		
Building Addition			
Square Footage	40,500		
Annual Electric Usage (kWh)	407,223		





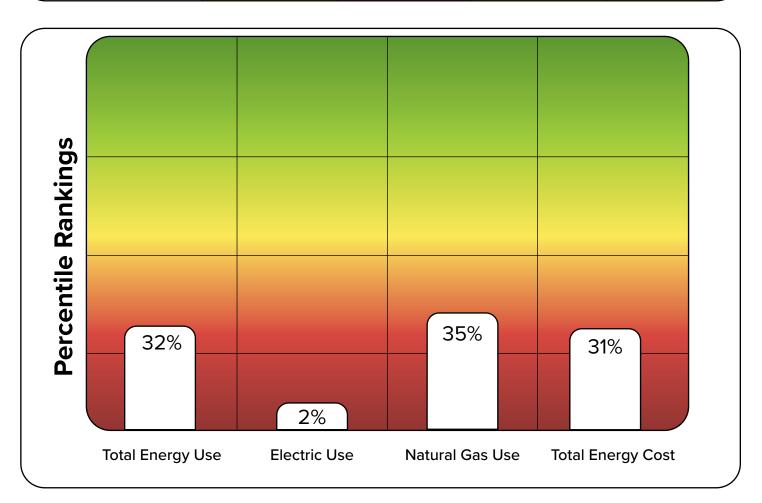


Lincoln Utility Analysis

ENERGY USE

The following benchmarking analysis compares Lincoln Elementary to an average elementary school in Wisconsin.

Wausau School District • Benchmarking				
	Total Energy Use kBu/ft²	Electric Use kWh/ft²	Natural Gas Use Btu/ ft²/HDD	Total Energy Cost \$/ft²
Average Elementary School in WI	78.02	5.7	6.9	\$1.24
Lincoln ES	90.1	10.1	7.7	\$1.45
Percentile Rankings	32%	2%	35%	31%



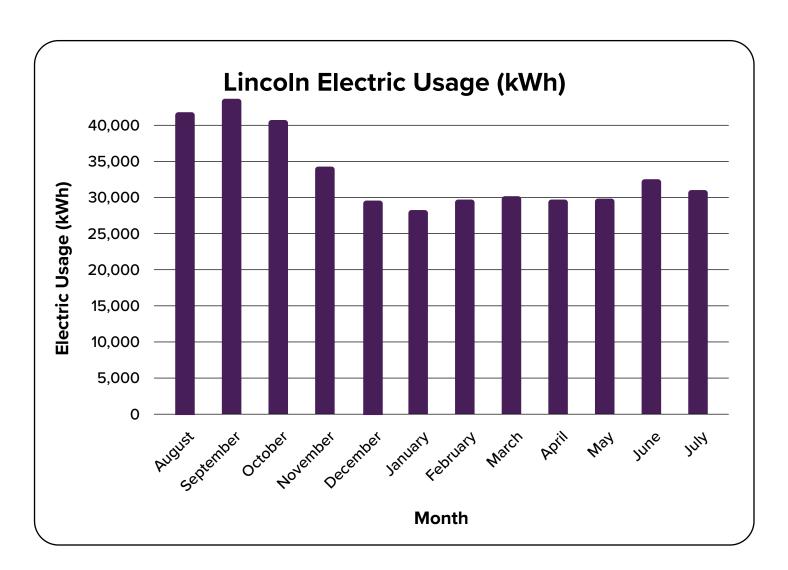




Lincoln Utility Analysis

UTILITY ANALYSIS

The utility graph below demonstrates the electrical consumption at the Lincoln Elementary School from August 2023 through July 2024.

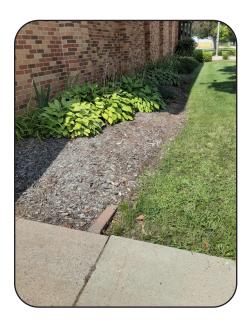








Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Mulch pouring over border and on to turf.	Annually or more often if needed remove vegetation around building perimeters, fencing, hardscape surface edges, utility supply areas, and planters. Refresh and retain mulch to an elevation lower than border, walk, or turf. Consider crushed gravel in lieu of mulch in planters.	\$3,500
Site & Landscape	Mulch filled above exterior brick wall drip edge.	Refresh and retain mulch to an elevation lower than wall weeps, drip edges, border, walk, or turf. Consider crushed gravel in lieu of mulch in planters.	\$1,000
Site & Landscape	Invasive vegetation inside mechanical area isolation fence.	Annually or more often i needed remove vegetation around building perimeters, fencing, hardscape surface edges, mechanical equipment areas, utility supply areas, and planters.	\$1,000
Site & Landscape	Outbuilding metal door and frame faded and paint peeling.	Prepare and paint.	\$1,000















Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Entrance metal beam rusty and paint missing.	Prepare and apply durable weather/salt proof coating.	\$1,000
Exterior Building	Exterior wall base brick and foundation cracked and open.	Fill, patch, and seal openings.	\$2,500
Interior - Kiln Safety	Art kiln is located within a janitorial closet with materials stacked on and around the kiln. Exhaust measures taken for the kiln are in poor condition and mismatched duct size.	If the kiln is to remain in the janitorial closet, clean and organize the space. Refurbish exhaust ductwork.	\$2,000
Site & Landscape	Open gaps between hardscapes and exterior wall perimeters.	Back fill gaps with sand and backer rod. Caulk and seal with appropriate joint filler. Heat melt in place with material recommended for smooth, clean appearance.	\$5,500















Building System	General Description	Recommendation	Cost Estimate
Exterior Building - Exposed Wood	Exposed wood beam roof outlookers across the facility are deteriorating.	Minimal examination shows little evasive rot. No rot was known to have transferred across into the building. Have an exterior professional examine each outlooker. Likely remedy is to clean, prep, and paint. Follow up by roofing contractor encapsulating the outlookers in metal flashing and caulk.	\$60,000
Exterior Building - Caulk	Although not rampant across the facility, some building exterior caulk at soffit joints and mechanical louvers is well past its life.	Perform a thorough examination of all exterior caulking and replace where necessary.	\$20,000
Exterior Building	Wood soffit paint peeling.	Prepare and paint. Consider cladding soffits with metal to extend life and reduce maintenance.	\$12,000
Exterior Building	Exterior wall base foundation blocks mortar open.	Patch, caulk, and seal.	\$1,500















Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Debris in pipe well/chase.	Remove debris. Seasonally clean well. Consider cover panel or filling with permeable and easy to remove material (clean sand or pea gravel).	\$1,000
Exterior Building	Exit metal door and frame faded and paint peeling.	Prepare and paint.	\$5,00
Interior - Ceilings	Several classrooms were noted to have stained and pillowed/curling ceiling tile, this was not the condition in the majority of the school. However, with the overhead HVAC renovation measure being recommended, all ceiling tile in the facility will need to be replaced, along with tile added where there is none.	Complete a full facility new acoustical ceiling tile project, paired with an HVAC renovation. If the HVAC project does not occur, budget to replace three classrooms in the next 2 years.	\$90,000
Interior - Flooring	The majority of the flooring throughout the school is in very good condition. One corridor was noted to have carpet tile not holding well with raised seems.	Budget to replace minimal carpeting in the school in the next 2-5 years.	\$15,000















Building System	General Description	Recommendation	Cost Estimate
Interior - Bathrooms	In general bathrooms in the facility were in aged, but good, condition. Floor patching has taken place over the years. The main boys bathroom is in need of wall tile repair.	Complete a thorough inspection of all bathroom tile. Repair tile as necessary.	\$15,000
Interior - Wood Doors	Several older wood doors throughout the facility are in poor condition; delaminating, stained, and chipped.	Replace aged and damaged interior wood doors. Estimate given for 10 doors.	\$15,000
Interior - Secure Entrance	Although the entrance is secure with a vestibule and electronic vetting area, visitors are not directly routed through the office prior to being given access to the building. This can be accomplished cost effectively at Lincoln ES with the addition of a wall or storefront glass and door modifications.	Install secure entrance measures routing visitors through the office prior to being given access to the full school.	\$100,000
Mechanical - Boilers	Lincoln ES is heated by two boilers of varying age, one 21 years old and one 14, each 1.5MBTU. The boilers are holding up well, however are approaching their expected useful life and inefficient to today's standards.	Expect to replace the older boiler in the next 2-5 years, and the newer boiler in 7-12 years. High efficiency condensing boilers are recommended. Estimate given for replacing one boiler.	\$100,000















Building System	General Description	Recommendation	Cost Estimate
Mechanical - Pipe Insulation	Missing and/or damaged pipe insulation was noted in various locations around the building. Hard pipe fittings were evident, suggesting the presence of asbestos.	Replace damaged and missing pipe insulation, abate where necessary. Presence of asbestos and needed abatement can drastically change pricing. Pricing given for minimal work noted in mechanical rooms.	\$25,000
Electrical - Main Service	Original 1967 main and distribution subpanels are beyond expected service life and no longer supported. Used and refurbished breakers must be found when problems arise.	Replace main electrical service and all original subpanels and disconnects downstream.	\$450,000
Electrical - Code	A small electric water heater was installed in a janitorial closet off the IMC which is not installed to code. An electrical panel is on top of the water heater.	Relocate the water heater.	\$3,500
Electrical - Whole Building Lighting Upgrade	The facility is in need of a whole building lighting upgrade from fluorescent to LED. Many classrooms were noted having fabric light filters hung over fixtures due to the harshness and intensity of existing lighting systems. Interior lighting projects provide roughly a 6 year simple payback, along with giving building occupants the ability to adjust light levels to their liking. Additionally, the systems have a 20+ year lifespan, drastically reducing maintenance required to change lamps and ballasts.	Replace classrooms, offices, corridors and common large spaces (gym) with appropriate LED fixtures, occupancy sensors, and dimming controls. Complete this project at the same time of any major HVAC/ceiling work.	\$81,000















Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Cracked concrete slab corner.	Cut and patch.	\$1,000
Site & Landscape	Raised fence post concrete base.	Resent fence post. Consider raising elevation inside of fence to back fill around base and set slope away from inside of fence.	\$1,000
Site & Landscape	Significant cracks (alligator) on asphalt drive and parking area. Predecessor to failed top asphalt layers.	Mill and resurface poor asphalt surface areas.	\$25,000
Site & Landscape	Multiple drive concrete slabs with transitional and divided cracks.	Replace cracked concrete drive slabs. Ensure below grade fill and slab thickness is appropriate for larger trucks (garbage & food delivery).	\$20,000









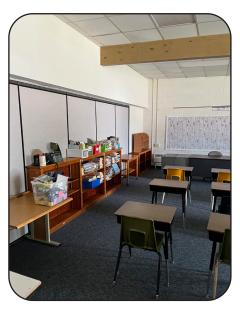




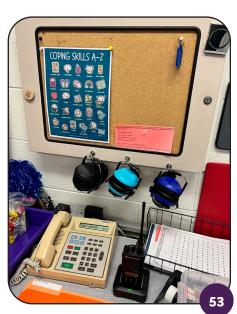


Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Faded metal window/spandrel panels.	Paint or replace.	\$18,000
Interior - Partition Walls	One movable partition wall was noted between rooms 111 and 112, likely no longer of use. Building a solid stud was in this location will block noise between the classrooms and allow for electric and data in the wall.	Replace partition wall with solid stud wall. Include sound batts and electrical/IT.	\$10,000
Mechanical - HVAC	Air-side HVAC in Lincoln is provided by original 1967 air handlers. This equipment is 25 years past its expected service life and obsolete. Air is provided to perimeter classrooms directly through the tunnel systems unducted. Asbestos is present in the tunnels, however the tunnels themselves appear to be dry and in very good condition. Chilled water is provided by a 2016 40 Ton air cooled chiller with 10+ years of service life remaining.	Complete HVAC replacement moving to overhead air distribution. Although the chiller has much life remaining, it is likely not adequately sized to cool the entire facility. If partial cooling is acceptable, the chiller may be reused, or supplemented with additional DX cooling.	\$1,680,000
Electrical - Bell/PA & Communication	PA/Bell/Clock/mass communication systems due for upgrade. Existing system is obsolete using decades old technology.	Replacement recommended with the district's Single-wire system standard.	\$144,000















Building System	General Description	Recommendation	Cost Estimate
Electrical - Fire Panel	Fire panel at end of expected usable life.	Replace or upgrade to Edwards standard.	\$101,250
Interior - Gym Floor	Although the gym floor is VCT, the floor is holding up well for it's age.	Consider replacing the gym floor with a softer synthetic poured floor.	\$100,000
Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertx boards to Mercury LP1502's.	\$8,000
Interior - Kitchen	The serving kitchen is in very good condition and well maintained, however small, with virtually no storage space.	Consider a renovation of the kitchen/PE storage/PE Office space to allow for additional food service storage.	\$300,000













Lincoln Strategic Plan

Wausau - Lincoln ES		
Project	Estimated Cost	
1-2 Year	r Needs	
Address Mulch Overflowing on Turf	\$3,500	
Repair Exterior Wall Base Brick and Foundation	\$2,500	
Address Art Kiln Surroundings and Exhaust	\$2,000	
Address Mulch Filled Above Exterior Drip Edge	\$1,000	
Remove Vegetation From Mechanical Areas	\$1,000	
Paint Outbuilding Metal Door and Frame	\$1,000	
Repair Rusty Metal Beam at Entrance	\$1,000	
Total	\$12,000	

Wausau - Lincoln ES		
Project	Estimated Cost	
3-5 Year Ne	eeds	
Complete HVAC Replacement	\$1,680,000	
Replace Main Electrical and Distribution Subpanels	\$450,000	
PA/Bell/Clock/Mass Communication System	\$144,000	
Replace or Upgrade Fire Panel	\$101,250	
Install Secure Entrance Measures	\$100,000	
Replace Older Boiler	\$100,000	
Full Facility New Acoustical Ceiling Tile Project	\$90,000	
Whole Building Lighting Upgrade	\$81,000	
Repair Exposed Wood Beam Roof Outlookers	\$60,000	





Lincoln Strategic Plan

Wausau - Lincoln ES		
Project	Estimated Cost	
3-5 Year Needs	s (Continued)	
Replace Damaged or Missing Pipe Insulation	\$25,000	
Replace Exterior Caulking Where Necessary	\$20,000	
Replace Remaining Carpet	\$15,000	
Repair Bathroom Tile as Necessary	\$15,000	
Replace Aged and Damaged Interior Wood Doors	\$15,000	
Prepare and Paint Wood Soffit	\$12,000	
Card Access System	\$8,000	
Fix Hardscape and Exterior Wall Perimeter Gaps	\$5,500	
Prepare and Paint Metal Exterior Door and Frame	\$5,500	
Relocate Water Heater in Janitorial Closet	\$3,500	
Caulk and Seal Exterior Wall Base Foundation	\$1,500	
Remove Debris From Pipe Well/Chase	\$1,000	
Total	\$2,933,250	





Lincoln Strategic Plan

Wausau - Lincoln ES		
Project	Estimated Cost	
5-10 Year	r Needs	
Replace Gym Floor	\$100,000	
Mill and Resurface Poor Asphalt Surface Areas	\$25,000	
Replace Cracked Concrete Drive Slabs	\$20,000	
Replace Faded Metal Window/Spandrel Panels	\$18,000	
Replace Partition with Solid Stud Wall	\$10,000	
Repair Cracked Concrete Slab Corner	\$1,000	
Reset Fence Post	\$1,000	
Total	\$175,000	

Wausau - Lincoln ES		
Project	Estimated Cost	
Recommended Standardization Upgrades		
Multipurpose Space	\$2,150,000	
FF&E	\$300,000	
Kitchen Enhancements	\$270,000	
Total	\$2,720,000	





Franklin Facility Analysis

The Franklin Elementary School is located at 1509 N 5th Street, Wausau, Wisconsin.

CESA 10 technical experts paid close attention to the site's lighting, building envelope, and security concerns. Items identified in this report are meant to improve the facility's efficiency over the next five to ten years while reducing future operation and maintenance costs.

Wausau School District - Franklin ES		
Year Built	1966	
Building Addition	1991	
Square Footage	55,000	
Annual Electric Usage (kWh)	255,763	





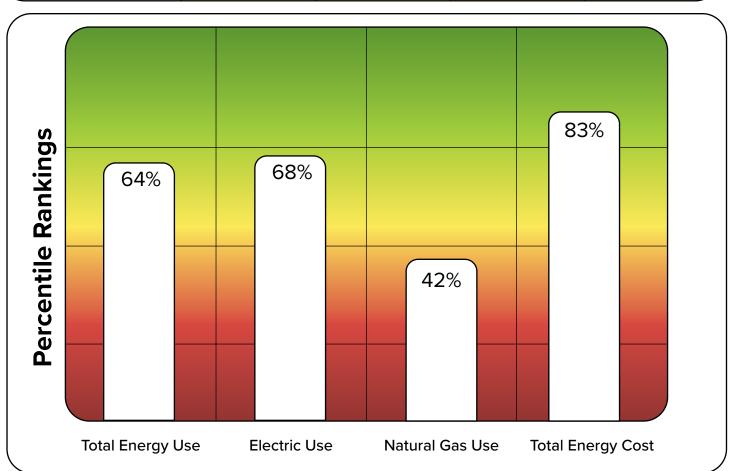


Franklin Utility Analysis

ENERGY USE

The following benchmarking analysis compares Franklin Elementary to an average elementary school in Wisconsin.

Wausau School District • Benchmarking				
	Total Energy Use kBu/ft²	Electric Use kWh/ft²	Natural Gas Use Btu/ ft²/HDD	Total Energy Cost \$/ft²
Average Elementary School in WI	78.02	5.7	6.9	\$1.24
Franklin ES	68.7	4.7	7.3	\$0.83
Percentile Rankings	64%	68%	42%	83%



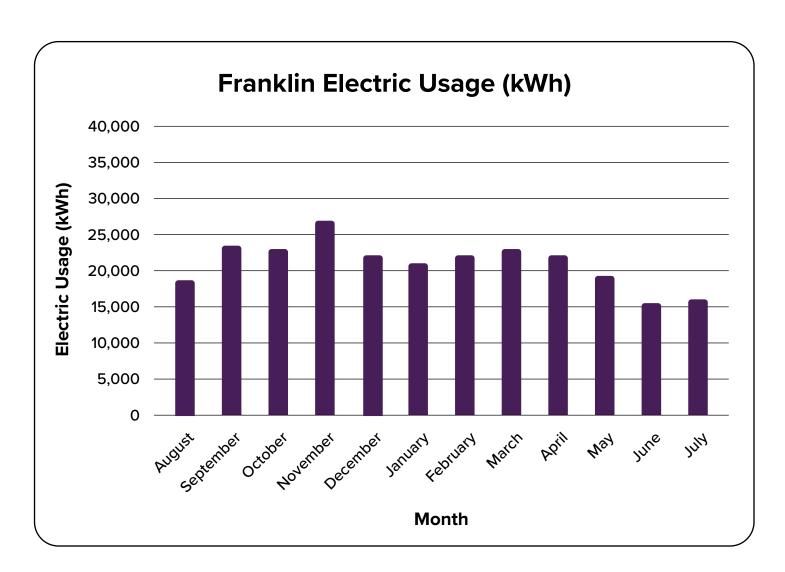




Franklin Utility Analysis

UTILITY ANALYSIS

The utility graph below demonstrates the electrical consumption at the Franklin Elementary School from August 2023 through July 2024.

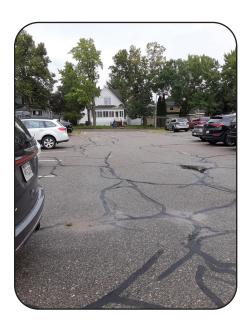






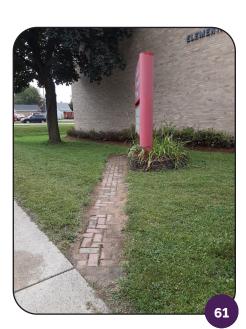


Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Substantial crack-filled areas without top sealing.	Continue to crack clean and crack fill as needed. Approximately every 3-5 years additionally seal and repaint asphalt.	\$7,500
Site & Landscape	Open gaps and deteriorated joints between several concrete slabs.	Replace slabs with open or deteriorated joints.	\$18,500
Site & Landscape	Invasive vegetation inside of dumpster fence.	Annually, or more often if needed, remove vegetation around building perimeters, fencing, hardscape surface edges, utility supply areas, and planters.	\$1,400
Site & Landscape	Sand covering path pavers.	Clear and remove sand seasonally.	\$1,000















Building System	General Description	Recommendation	Cost Estimate
Exterior Building - Roofing	Two small roof sections on Franklin are in poor condition. Roof G is 24 years old, out of warranty, and leaking. Also, the exposed concrete canopy, currently with no membrane roof, is deteriorating.	Replace roof section G next summer. Insulation replacement is likely. Install a membrane roof and metal flashing over the concrete canopy roof to extend its life. Minor masonry repair will be necessary prior.	\$22,500
Interior - Structural	Minor structural settling has occurred in room 102/the bathroom area. It does not appear to have gotten worse in recent years.	Mark walls and monitor semi-annually to ensure no further settling.	\$500
Plumbing - Domestic Hot Water	The atmospheric gas fired water heater in the boiler room is 27 years old and far beyond its expected useful life.	Replace water heater with a high efficiency power vent unit withing the next year.	\$7,500
Electrical Availability	Throughout some portions of the building, extra power sources were noted to run in external raceway on block walls feeding outlets. Some were observed in special ed areas creating a safety hazard.	Rerun power internally in block wall cavities, if possible. The circuit pictured appears to be overloaded and not to code. As an immediate step, install tamper proof outlet protectors.	\$15,000















Building System	General Description	Recommendation	Cost Estimate
Interior - Kitchen Equipment	The kitchen is functioning well for the current school capacity. Equipment however is aging and beginning to cause downtime.	Invest in new kitchen equipment over the next 2-10 years.	\$75,000
Site & Landscape	Multiple walk concrete slabs with transitional and divided cracks.	Replace cracked concrete walk slabs.	\$23,000
Site Utilities	Gas valve on side of the building not secured inside fencing.	Enclose and secure valve access.	\$4,500
Site & Landscape	Minor bent fence pickets in perimeter fencing.	Repair bent pickets.	\$1,000









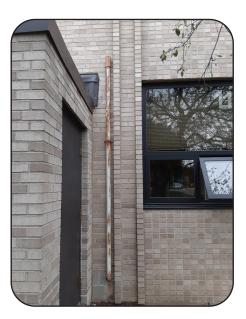






Building System	General Description	Recommendation	Cost Estimate
Exterior Building - Roofing	Roof sections E & F are 19 years old and out of warranty. Both sections are holding ponding water but no major leaks were reported.	Replace roof sections E & F in the next 1-5 years. Correct insulation elevation for proper drainage of roof sections. Recommend a 60 mil 20 year adhered black EPDM membrane.	\$112,000
Exterior Building	Exterior wall vertical pipe unguarded and rusty.	Prepare and coat pipe with weather durable coatings. Consider guarding pipe to eliminate use as climbing assistance to adjacent roof.	\$2,000
Exterior Building	Exterior wall open wall base metal flashing.	Remove, seal, and replace.	\$3,800
Exterior Building	Exterior wall loose roof edge corner brick.	Stabilize area, repair, and replace.	\$5,500















Building System	General Description	Recommendation	Cost Estimate
Interior - Ceilings	Although minimal, some rooms are showing early signs of ceiling failure with curled corners. Ceiling is mainly of 2x4 construction, which degrades faster than 2x2.	Replace ceiling of 5 classrooms in 3-5 years, recommend switching to 2x2 grid layout. Postpone ceiling work if large scale above-ceiling HVAC measures are being considered.	\$20,000
Mechanical - Boilers	Lincoln ES is heated by two 20-year-old boilers, each 2.0MBTU. The boilers are holding up well, however approaching their expected useful life, and inefficient to today's standards.	Expect to replace the boilers and pumps in the next 3-5 years. High efficiency condensing boilers are recommended.	\$200,000
Electrical - Whole Building Lighting Upgrade	The facility is in need of a whole building lighting upgrade from fluorescent to LED. Many classrooms were noted having fabric light filters hung over fixtures due to the harshness and intensity of existing lighting systems. Interior lighting projects provide roughly a 6 year simple payback, along with giving building occupants the ability to adjust light levels to their liking. Additionally, the systems have a 20+ year lifespan, drastically reducing maintenance required to change lamps and ballasts.	Replace classrooms, offices, corridors and common large spaces (gyms) with appropriate LED fixtures, occupancy sensors, and dimming controls. Complete this project at the same time of any major HVAC/ceiling work.	\$110,000
Site & Landscape	Dumpster roll over concrete curbs cracked and open.	Replace, patch, cut, grind, and/or mud jack as needed.	\$8,500







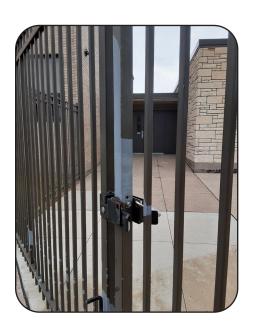




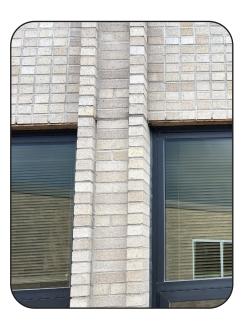




Building System	General Description	Recommendation	Cost Estimate
Site & Landscape	Fence paint missing and peeling.	Prepare and coat with weather durable coatings. Consider electrostatic painting of high use, metal-on-metal areas.	\$20,000
Exterior Building	Exterior wall brick and mortar stained.	Professionally clean walls. Consider completion as more extensive exterior wall corrective project.	\$25,000
Exterior Building	Exterior tuck pointing repairs needed. Masonry, concrete, and expansion joint deteriorating; face brick repair, open mortar joints, and door and window lintels.	Re-tuck walls and exterior masonry.	\$170,000
Exterior Building	Exterior window and door de-laminating glazing film.	Repair or replace de-laminated and damaged window and door glazing film.	\$26,000















Building System	General Description	Recommendation	Cost Estimate
Mechanical - HVAC	Air-side HVAC in Franklin is mainly provided by original 1965 air handlers, 60 years old. This equipment is 25 years past its expected service life and obsolete. Air is provided to perimeter classrooms directly through the tunnel systems unducted. Asbestos is present in the tunnels, however the tunnels themselves appear to be dry and in very good condition.	Complete HVAC replacement of approximately 80% of the facility moving to overhead air distribution and vacating the tunnels. Pricing given assuming the 1991 Classroom/Multi/IMC addition will remain as is, however it may be desired to replace these units to add them to chilled water. Asbestos abatement will be necessary.	\$1,725,000
Mechanical - Gym Ceiling Fans	No gym destratification fans are present. Ceiling fans in high ceiling spaces help distribute heat from the ceiling to the occupants in winter, and can help maintain comfort in spring/fall.	Install gym destrat fans. Include schedulable control through the DDC system so fans can automatically turn on and off as desired.	\$20,000
Electrical	Minimal exterior area lighting inside of play area fencing.	Add LED area lighting to play areas for improved security and safety.	\$18,000
Electrical - Bell/PA & Communication	PA/Bell/Clock/mass communication systems due for upgrade. Existing system is obsolete using decades old technology.	Replacement recommended with the district's Single-wire system standard.	\$177,600















Building System	General Description	Recommendation	Cost Estimate
Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertx boards to Mercury LP1502's.	\$8,000
Electrical - Main Service	Subsequent breakers downstream from the main breaker are original 1965. These components are 60 years old, beyond their expected life and obsolete. Parts will be very difficult to find if problems arise.	Replace all original subpanels and disconnects downstream of the main.	\$100,000
Electrical - Main Service	The electrical main is 33 years old, and obsolete. Parts will be difficult to find if problems arise.	Replace main breaker in the next 5-10 years.	\$150,000
Interior - Stage Renovation	The stage area off the gym is original and dated. Stage curtain appears to be original and of a combustible materials commonly called out by insurance for replacement.	Renovate the space into usable square footage, consider removing the curtain entirely if never used.	\$150,000















Building System	General Description	Recommendation	Cost Estimate
Interior - Window Treatments	Window treatments were observed as being low quality for a school and often damaged.	Replace plastic blinds with roller shades across the school.	\$30,000
Mechanical - Air Conditioning	The facility is mainly unairconditioned, creating an uncomfortable environment for teaching and learning.	Install chilled water based air conditioning. Pricing given assuming the large HVAC renovation recommendation occurs simultaneously.	\$600,00









Franklin Strategic Plan

Wausau - F	ranklin ES
Project	Estimated Cost
1-2 Year	Needs
Replace/Repair Roof G and Concrete Canopy	\$22,500
Replace Slabs with Open or Deteriorated Joints	\$18,500
Address Electrical Availability Hazard	\$15,000
Add LED Area Lighting to Play Areas	\$15,000
Repair Asphalt Cracks and Seal/Repaint as Needed	\$7,500
Replace Water Heater	\$7,500
Remove Invasive Vegetation - Dumpster Fence	\$1,400
Clear Sand Covering Path Pavers	\$1,000
Monitor Structural Settling - Room 102/Bathroom	\$500
Total	\$88,900





Franklin Strategic Plan

Wausau - Franklin ES				
Project	Estimated Cost			
3-5 Year Needs				
HVAC Replacement (Approx. 80% of Facility)	\$1,725,000			
Replace boilers and pumps	\$200,000			
PA/Bell/Clock/Mass Communication System	\$177,600			
Replace/Repair Roof Sections E and F	\$112,000			
Whole Building Lighting Project (LED)	\$110,000			
Replace All Subpanels and Disconnects	\$100,000			
Invest in New Kitchen Equipment	\$75,000			
Replace Cracked Concrete Walk Slabs	\$23,000			
Replace Ceiling of 5 Classrooms	\$20,000			
Card Access System Upgrades	\$8,000			
Repair Loose Roof Edge Corner Brick	\$5,500			
Enclose and Secure Gas Valve Access	\$4,500			
Address Exterior Wall Open Wall Base	\$3,800			
Coat and Guard Exterior Wall Vertical Pipe \$2,000				
Repair Bent Fence Pickets	\$1,000			
Total	\$2,567,400			





Franklin Strategic Plan

Wausau - Franklin ES				
Project	Estimated Cost			
5-10 Year Needs				
Re-tuck Walls and Exterior Masonry	\$170,000			
Replace Main Electrical Breaker	\$150,000			
Repair De-laminated and Damaged Glazing Film	\$26,000			
Professionally Clean Exterior Walls	\$25,000			
Address Missing and Peeling Fence Paint	\$20,000			
Install Gym Destrat Fans	\$20,000			
Add LED area Lighting to Play Areas	\$18,000			
Repair Dumpster Roll Over Concrete Curbs	\$8,500			
Total	\$437,500			

Wausau - Franklin ES				
Project	Estimated Cost			
Recommended Standardization Upgrades				
Install Chilled Water-Based Air Conditioning	\$600,000			
FF&E	\$290,000			
Minor Renovations	\$300,000			
Total	\$1,190,000			





Hewitt-Texas Facility Analysis

The Hewitt-Texas Elementary School is located at 164475 Granite Road, Wausau, Wisconsin.

CESA 10 technical experts paid close attention to the site's lighting, building envelope, and security concerns. Items identified in this report are meant to improve the facility's efficiency over the next five to ten years while reducing future operation and maintenance costs.

Wausau School Distr	rict - Hewitt-Texas ES
Year Built	1962
Building Addition	1990
Square Footage	21,500
Annual Electric Usage (kWh)	138,767





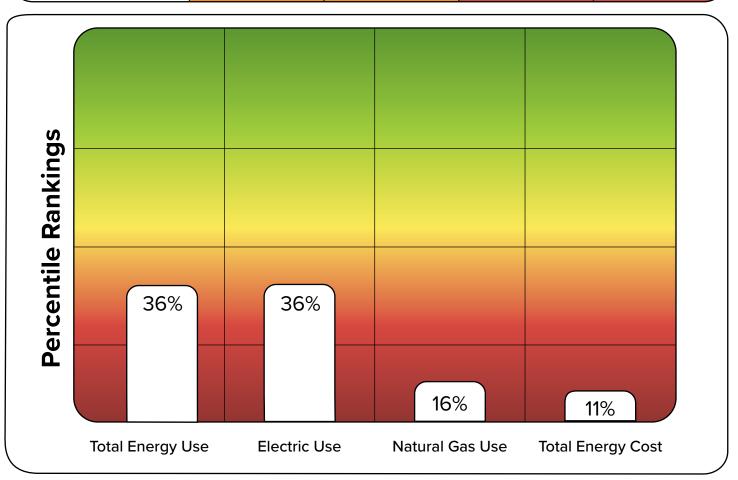


Hewitt-Texas Utility Analysis

ENERGY USE

The following benchmarking analysis compares Hewitt-Texas Elementary to an average elementary school in Wisconsin.

Wausau School District • Benchmarking					
	Total Energy Use kBu/ft²	Electric Use kWh/ft²	Natural Gas Use Btu/ ft²/HDD	Total Energy Cost \$/ft²	
Average Elementary School in WI	78.02	5.7	6.9	\$1.24	
Hewitt-Texas ES	87.3	6.5	9.0	\$1.78	
Percentile Rankings	36%	36%	16%	11%	







Hewitt-Texas Utility Analysis

UTILITY ANALYSIS

The utility graph below demonstrates the electrical consumption at the Hewitt-Texas Elementary School from August 2023 through July 2024.

