



The Helena Public Schools educate, engage, and empower each student to maximize his or her individual potential with the knowledge, skills and character essential to being a responsible citizen and life-long learner.

**Board of Trustees
Facilities & Technology Committee Meeting**

Monday, October 14th, 2024– 12:00 p.m.

Lincoln Conference Room and Microsoft Teams

Members of the public are able to attend remotely by clicking here:

[Join the meeting now](#)

AGENDA

I. CALL TO ORDER/INTRODUCTIONS

II. REVIEW OF AGENDA

III. **GENERAL PUBLIC COMMENT:** *This is the time for comment on public matters that are not on the agenda. Public matters do not include any pending legal matters, private personnel issues or private student issues. Please do not attempt to address such issues at this time or you will be ruled out of order. The Board cannot enter into a discussion during General Public Comment.*

IV. REVIEW OF 9.9.24 FACILITIES & MAINTENANCE COMMITTEE MEETING MINUTES

V. NEW BUSINESS

- A. Technology Monthly Update
- B. Facilities Monthly Update
- C. RFQ For Smith Elementary HVAC Design and Project Management
- D. EPA Community Change Grant Presentation

VI. BOARD COMMENTS

VII. ADJOURNMENT



The Helena Public Schools educate, engage, and empower each student to maximize his or her individual potential with the knowledge, skills and character essential to being a responsible citizen and life-long learner.

**Board of Trustees
Facilities & Technology Committee**

Monday, September 9th, 2024,

12:00 p.m.

Lincoln Campus

and via Microsoft Teams

MINUTES

ATTENDEES

Trustees: Others:

Jeff Hindoien, Committee Chair
Kay Satre, Trustee
Rachel Robison, Trustee

Todd Verrill, Facilities Director
Rex Wetz, Superintendent
Candice Delvaux, Executive Assistant
Jane Shawn, HEA President
Gary Myers, Educational Technology Director
Josh McKay, Assistant Superintendent
Karen Ogden, Communications Officer
Keri Mizell, Human Resources Director
Barb Ridgway, Chief of Staff
Janelle Mickelson, Business Manager
Rob Brewer, Facilities Manager
Tim McMahon, Activities Director
Justine Alberts, Curriculum Director
Neal Murray, Safety and Operations Manager
Hannah Warhank, Guest of the Public

I. **CALL TO ORDER**

Facilities and Technology Committee Chair Jeff Hindoien called the meeting to order at 12:04 p.m.

II. REVIEW OF AGENDA

The committee reviewed the agenda, and no changes were requested.

III. GENERAL PUBLIC COMMENT

There was no general public comment.

IV. REVIEW OF MINUTES

Minutes from the 5.13.24 Facilities and Maintenance Committee meeting were reviewed and approved.

V. NEW BUSINESS

A. Technology Monthly Update

Gary Myers, Director of Educational Technology for Helena Public Schools, gave an update on technology projects across the district:

Network and Systems:

- Started off the year with a system-wide network outage! (resolved quickly)
- “Revealed” wireless access points in new buildings
- Updated Phone Extensions
- Current cyber threats minimal

Applications:

- Rolled out Windows 11 to labs for thorough testing before a complete migration
- Enhanced printing management by rolling out PaperCut to Macs, ensuring comprehensive access at all levels
- Optimized Mac, PC, and Chromebook management with behind-the-scenes changes, ensuring streamlined processes and time savings in the long run
- School Year Launch
 - Regular Application Sync
 - New Assessments (MAST, MAPS, Eureka Math)
 - Charter Schools, other OPI data changes
- Ticket statistics for August:
 - Tickets Created: 790
 - Tickets Solved: 652
 - 100% satisfaction
 - Average ticket 1st response time = 3.6 hours
 - Average ticket resolution time from 8/28-9/5 = 49.8 hours

- Password Update
 - Password Complexity to meet CISA requirements
 - Password Philosophy

Chromebook Carts:

- Our dedicated tier 1 Technicians and summer help put in significant effort to repair and set up a substantial number of Chromebooks and ChromeCarts
- Re-deployed carts from Elem (50%) to Middle School
- Middle School students no longer assigned Chromebooks individually
- 1:2 student device ratio in elementary schools

Other Summer Projects Completed:

- Emergency Testing (w/facilities)
- Surplus

Mr. Myers answered any questions the Facilities and Technology Committee had regarding the technology monthly update.

B. Facilities Summer 2024 Project Recap

Todd Verrill, Facilities Director for Helena Public Schools, gave a facilities summer 2024 project recap to the Facilities and Technology Committee. There were eleven projects that took place at seven schools across the district including:

- Smith
 - Roof
 - Interior Painting
 - Soccer Field
 - Compressor
- Bryant
 - Solar
 - SPED Hallway Remodel
- Kessler
 - Playground Improvements
 - Concrete Steps
 - Walking Path Stabilization
- Warren
 - Chlorination System
- Hawthorne
 - Carpet
- Central
 - Gutter Repair
- Rossiter-Sierra Park
 - Irrigation Well Pump

There were nine projects that took place at the two middle schools in the district.

- HMS
 - Carpet
 - Asbestos Abatement
 - Basketball Court
 - Partial Roof Replacement
 - Sink Hole Repair
 - Emergency Exit Stairs
 - Bathroom Remodel
 - Mental Health Office Painting
- CRA
 - Bathroom Remodel

There were around seventeen projects that took place over the summer at the two high schools in the district.

- HHS
 - Mental Health Office Paint
 - Partial Roof Replacement
 - Bathroom Remodel
 - Emergency Exit Stairs (x3)
 - CTE Roof Heat Trace
 - Compressor Replacement
- CHS
 - Partial Roof Replacement
 - Bathroom Remodel
 - Emergency Exit Stairs (x2)
 - Basketball Hoops
 - CTE Roof Heat Trace

Other projects that took place across the district this summer included:

- Exterior Door Painting
- Parking Lot Striping
- Grounds Maintenance
- Floor Maintenance
 - All Gym Floors
 - All School Floors

Mr. Verrill answered any questions the Facilities and Technology Committee had regarding the facilities summer 2024 project recap.

C. Smith Elementary HVAC Design Contract

Superintendent Wertz recommended that the Smith Elementary HVAC Design Contract be pulled off the September 10th Full Board Meeting Agenda for this evening because the district's legal counsel recommended that we pull the design contract off for further review and discussion, and it will come before the board again at a future board meeting. The Facilities and Technology Committee moved on to review the annual safety and security report.

D. Annual Safety and Security Report

Gary Myers, Director of Educational Technology, and Facilities Director, Todd Verrill, reviewed the annual safety and security report with the Facilities and Technology Committee and answered any questions the committee had about the report.

CYBERSECURITY

- Updated Cybersecurity Incident Response Plan
- Attended tabletop training exercises for Cybersecurity response
- Migrated staff to 16 character, CISA-compliant passwords
- Updated half of district wireless access points to Wi-Fi 6 devices
- Implemented BrightArrow parent, staff, and student messaging system
- Conducted numerous "phishing" campaigns for staff detection training

OTHER TECHNOLOGY / SECURITY

- Provided training for new administrators and secretaries on access control and cameras
- Conducted yearly audit of doors and buzzers to ensure system integrity
- UPS battery audit for access systems
- Trained building administrators on scheduling door lock/unlock system

SAFETY & SECURITY SYSTEMS

- Added 21 new keyless entry points and 40 cameras at various schools
- Upgraded to InformaCast Fusion for rapid distribution of emergency notifications
- "Red" phone staff training completed (HHS, CHS, BRY). Planning to expand to the middle schools this year
- Quarterly tests of automated security systems and emergency dial codes. All systems functioned as expected
- New hallway security doors and quiet rooms for Bryant SPED

DRINKING WATER SAFETY

- Schools are in compliance with State and Federal standards for water quality
- Started drinking water sampling for lead in April. All schools complete except CHS, HHS, CRA, HMS, BRY, CEN. The sampling deadline is December 2024

- Replaced Warren chlorination system. New chemical pumps and analytical instruments ensure water quality
- Replaced old sink fixtures and drinking fountains with new DEQ reimbursement

FIRE AND MEDICAL SAFETY

- All buildings passed Fire Marshal inspections for 2023-2024
- Abraham Construction completed fire escape repairs and upgrades on six staircases at HMS, HHS, and CHS
- Fire extinguisher training with custodians, summer 2023 and 2024
- Installed 19 AEDs (donated by HPD). Worked with HSD nurses to develop SOP for inspections and training

GENERAL SAFETY

- New playground structure installed at Hawthorne. Old structure was unsafe
- Completed annual playground inspections. Trained custodial staff conducted weekly playground safety inspections throughout the school year
- Both high schools passed inspections by Montana Department of Labor

TRAINING AND EDUCATION

- All schools completed their required practice emergency drills for the year which included 4 fire drills and 4 others
- Conducted monthly new employee safety training
- Certified 50+ HSD employees in AED and CPR resuscitation
- District Crisis Procedure Manual updated and renamed Emergency Operations Plan (EOP)
- Participating in Local Emergency Planning Committee (LEPC), and MCRT with Lona Carter

SECURE ENVIRONMENT CONSULTANTS (SEC) REPORT (Executive Summary Points)

- The district has put forth effort in developing and executing safety and security plans, and it currently provides a generally safe and secure environment for its staff and students
- SEC strongly recommends the district continue to pursue safety levy funding as the current state of security is desperately in need of updates.
- The district has done a remarkable job of maintaining a safe and secure environment despite a lack of ability to make significant investments in improvements
- SEC commends the district on its strategy to enhance existing physical security measures and to expand on both safety and security related equipment and emergency protocol training regimens

SAFETY AWARD

- Helena Public Schools has been selected to receive the 2024 Governor's Safety Achievement Award.

VI. BOARD COMMENTS

There were no further board comments.

VII. ADJOURNMENT

Committee Chair Jeff Hindoien adjourned the meeting at 12:56 p.m.

Technology Update

October 2024

Network and Systems:

- Cyber threats for September:
 - 25 Attacks
 - DNS Phishing, Attempted Admin Control, Web App Attacks
 - All attacks were repelled because our systems are patched correctly

New Chromebook Carts:

- 350 Additional devices and Chargers purchased with ESSER and Title Funds
- Will be deployed in October

Analytics and Insights:

- Assessment and at-risk Dashboards
- Cost Savings

Current Support Issues

- State Reporting Challenges
- Charter Integration
- Aging devices
- Device build quality post-covid
- Increased costs (inflation)
- Specialized CTE support
- Surplus

Applications:

- Welcome new technician, Shane McTaggart
- Ticket statistics for September:
 - Tickets Created: 856
 - Tickets Solved: 902
- Password Update
 - Second notices
 - Final Lockout

Facilities and Maintenance Update

October 2024

Projects Last 30 Days:

- Bryant Elementary solar project completed
- Crosstown football game support
- Grounds...fall maintenance and athletic field support
- Routine scheduled maintenance (filters, adjustments, lube, etc.)

Current Projects

- Vigilante stadium concession stand siding/roof renovations...and ticket booth painting
- Fleet reduction...all vehicles sold at auction
- Lincoln Center entrance remodel
- Smith Elementary School HVAC RFQ (see attachment)
- EPA Environmental and Climate Justice Community Change Grant application (see presentation)
 - Collaborative effort with local partners:
 - Northern Plains Resource Council
 - Sleeping Giant Citizens Council
 - Slate Architecture
 - Ameresco
 - Madalyn Quinlan is writing the grant
 - Many other volunteers

SEP Work Orders

Completed: 743

Custodial Update

Custodial Projects:

- Prep for fall break flooring projects
 - HHS and CHS gym floor maintenance
 - HHS orchestra room carpet

Staff:

- Two new employees hired in SEP and OCT
- Current # vacancies: 5 (HMS-evening, CRA-evening, CHS-evening, HHS-evening and float)
- 72 hours of overtime this quarter

Safety and Security Update

- Coordinating with a seismic working group to fund new assessments for our schools (schools TBD)
- Emergency drills at all schools
- System checks at all schools
- Fire marshal inspections
- MT DOL inspections

Helena Public Schools
Smith Elementary HVAC Design and Project Management
Request for Qualifications (RFQ)

Date: 10 October 2024

Issued by: Helena Public Schools

Contact Person: Todd Verrill, Director of Facilities

Contact Information: (406) 324-1734, tverrill@helenaschools.org

Response Due Date: 8 November 2024

1. Introduction

Helena Public Schools is seeking qualifications from experienced professional mechanical engineering firms to provide design services and project management for a new heating, ventilation, and air conditioning (HVAC) system for Smith Elementary School, located at 2320 Fifth Avenue, Helena, MT 59601. The selected firm will collaborate with school administrators, stakeholders, and local authorities to ensure the system meets the needs of the school community and complies with all applicable codes and standards.

2. Project Overview

The existing HVAC system at Smith Elementary is outdated and inefficient, leading to poor indoor air quality and comfort issues for students and staff. The project aims to design a modern, energy-efficient HVAC system that enhances comfort, reduces energy consumption, and supports the school's educational mission.

3. Scope of Work

The selected firm will provide full-service design and construction administration to include the following:

- a. Conducting a detailed assessment of the existing HVAC system.
- b. Developing a design for the new HVAC system that meets the specific needs of the school, ensuring compliance with all applicable codes and regulations.
- c. Providing energy-efficient solutions to reduce operational costs and maintenance requirements.
- d. Preparing the construction bid package in conformance with the applicable federal and state requirements and supervising the bid advertising, tabulation, and award process, including preparing the advertisements for bid solicitation, conducting the bid opening and issuing the notice to proceed.
- e. Conducting the preconstruction conference.
- f. Providing regular oversight of construction work, facilitating and recording weekly construction meetings, construction administration and preparing inspection reports.
- g. Providing quality control to ensure the contractor is providing materials, labor and products consistent with what is identified in the design and specifications.
- h. Providing quality control to ensure compliance with technical specifications and conformance with codes and standards.

Facilities and Maintenance Update – October 2024

- i. Reviewing and approving all contractor requests for payment and submitting approved requests to owner for payment.
- j. Providing one complete set of as-built, reproducible plan drawings to owner upon project completion, based on General Contractors redlines.
- k. Conducting final inspection necessary for certificate of completion, etc.

4. Proposal Content

Three (3) hard copies are required to be submitted. Legibility, clarity, and completeness are essential. Proposals should provide assurance that the firm has the professional capability, availability, and to satisfactorily and timely complete all the tasks as described in this RFQ. Responses should include:

- a. The firm's legal name, address, and telephone number.
- b. The principal(s) of the firm and their experience and qualifications.
- c. The experience, qualifications, and specific roles of other staff to be assigned to the project.
- d. A description of the firm's prior experience, including design and construction management of similar projects (including information on size and cost, specific accessibility and special needs requirements, size of community, location, original construction estimate and final project costs, and name of the owner's representative who is knowledgeable regarding the firm's performance);
- e. A description of the firm's current work activities and how these would be coordinated with the project, as well as the firm's anticipated availability during the term of the project; and
- f. Breakdown of the costs for these services.

5. Timeline

The proposals must be received no later than 1:00 p.m. 8 October 2024, at the Helena Public Schools Facilities Office located at 1201 Boulder Ave., Helena, MT, where proposals will then be opened publicly. Once opened proposals will then be given to a three-person committee to evaluate. Recommendations will then be given to the Helena Public Schools Board of Trustees in a public meeting at a later date. All proposals must be submitted in printed format. Proposals received after the aforementioned time and date will not be considered. Please provide three (3) copies of all proposal documents. Responses may not exceed 4 one-sided pages, not including resumes of key personnel, and cover letter. The architect/engineering contract will be awarded after all appropriate approvals. It is anticipated that the preliminary design will be started in winter of 2024 and construction will commence no later than June 2025 for completion by 15 August 2025

6. Evaluation Criteria

Qualifications will be evaluated based on:

- a. Relevant experience and past performance – demonstrated competence and qualifications for service required
- b. Technical expertise and qualifications of the proposed team
- c. Understanding of the project requirements and proposed approach
- d. Overall quality of the proposal
- e. Overall cost of services
- f. Client references

Facilities and Maintenance Update – October 2024

The selection may be made from this RFQ or selected finalists may be interviewed and will be based on a selection committee's evaluation of the written responses. Contract negotiations will commence with the highest-ranked engineering firm. The contract will be awarded upon reaching an appropriate price for this work. If an appropriate agreement cannot be reached with the highest-ranked firm, the second-ranked architectural firm will be approached, and so on.

This solicitation is being offered in accordance with federal and state statutes governing procurement of professional services. Accordingly, the owner reserves the right to negotiate an agreement based on fair and reasonable compensation for the scope of work and services proposed, as well as the right to reject any and all responses deemed unqualified, or unsatisfactory. The award will be made to the most qualified offeror whose proposal is deemed most advantageous to Helena Public Schools; all factors considered. Unsuccessful offerors will be notified as soon as possible. Helena Public Schools reserves the right to increase the scope of work with the contractor as long as the increase is within the contractor's ability.

7. Questions

All inquiries regarding this RFQ should be directed to Robert Brewer at (406) 324-1702 or rbrewer@helenaschools.org

We look forward to your qualifications and appreciate your interest in contributing to the improvement of our educational facilities.

Sincerely,

Todd J. Verrill
Director of Facilities
Helena Public Schools

10 October 2024



Environmental and Climate Justice Community Change Grant Program



Background: Community Change Grant

- Created as part of the Inflation Reduction Act (IRA) in 2022
- Intended to fund community-driven projects that address climate challenges and reduce pollution while strengthening communities through thoughtful implementation.
- Focus areas:
 - 1.Reducing and preventing pollution;
 - 2.Building resilience to climate change;
 - 3.Enhancing meaningful involvement in government processes;
 - 4.Expanding access to high-quality jobs; and
 5. Ensuring local residents receive the benefits of investments

\$2B in awards available

Applications due: 21 NOV

Partners

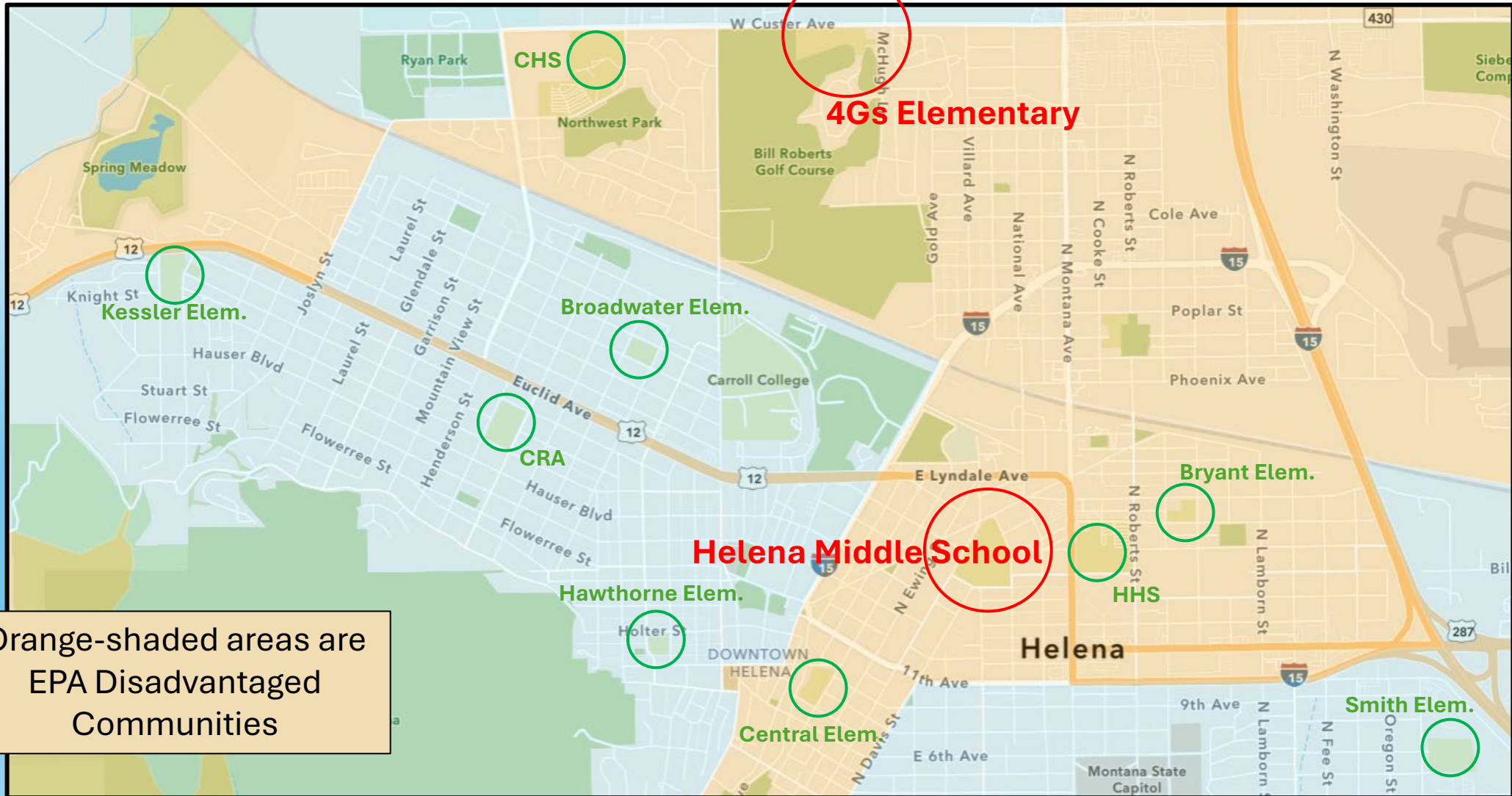
Community/ Govt Partners

- Northern Plains Resource Council
 - Sleeping Giant Citizens Council
- Helena Indian Alliance
- St. Peter's Health (tentative)
- MT DEQ (tentative)
- City of Helena (tentative)

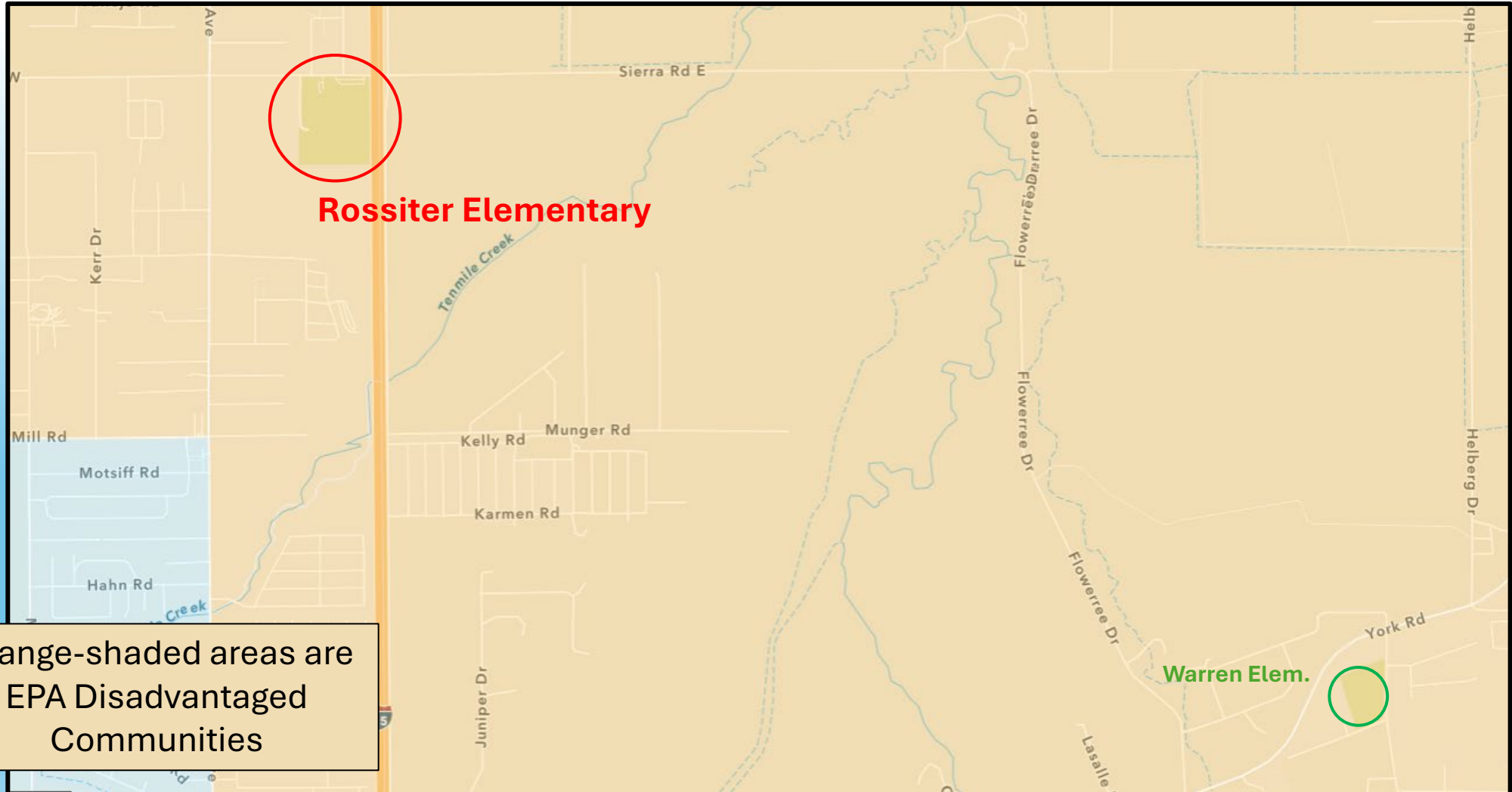
Technical Business Partners

- Slate Architecture
- Ameresco

EPA Disadvantaged Communities Map



EPA Disadvantaged Communities Map



Orange-shaded areas are
EPA Disadvantaged
Communities

Target Schools

- Four Georgians Elementary School
- Helena Middle School
- Rossiter Elementary School

- Other schools within designated disadvantaged community
 - CHS and HHS: potential bonding within next 5 years
 - Warren: potential site of new school within next 10 years
 - Central and Bryant: new schools

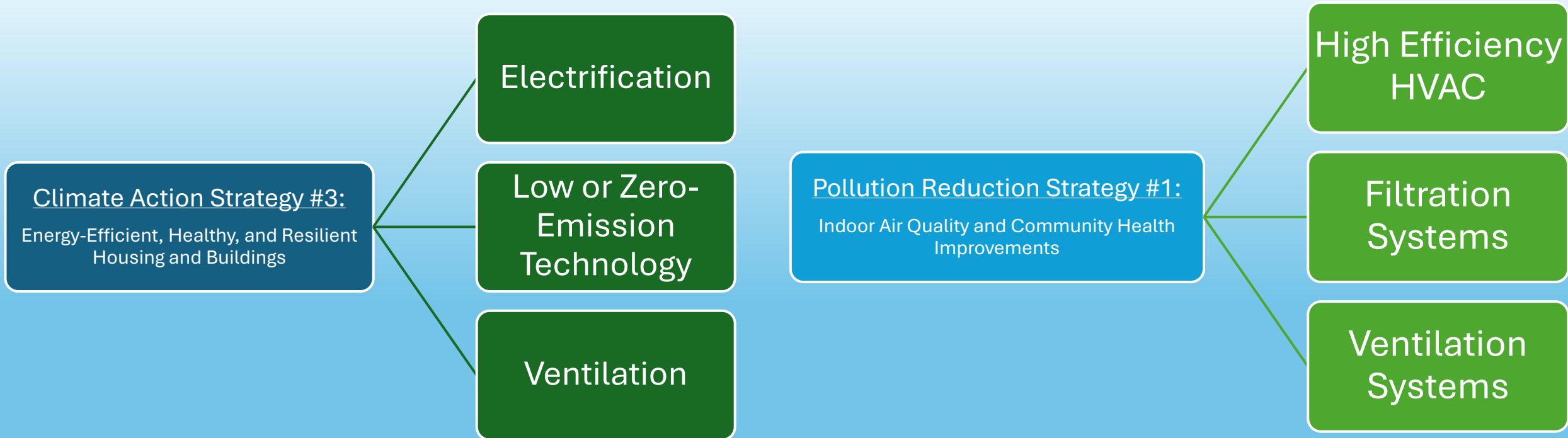
Proposed Upgrades

- HVAC Systems
 - High efficiency system to include heat pumps
 - Air conditioning
 - Air filtration to improve indoor air quality
- Solar
 - 50Kw systems
 - Preferably roof-mounted
- LED
 - Full fixture replacement
 - Wireless controls
- Project Management
- District Indirect Costs
- Grant Professional Consultation Fees

Climate Action and Pollution Reduction Requirements

- “Each application for Track I must address one:
 - Climate Action Strategy
 1. Green Infrastructure and Nature-based Solutions
 2. Mobility and Transportation Options for Preventing Air Pollution and Improving Public Health and Climate Resilience
 3. **Energy-Efficient, Healthy, Resilient Housing and Buildings**
 4. Microgrid Installation for Community Energy Resilience
 5. Community Resilience Hubs
 6. Brownfields Redevelopment
 7. Waste Reduction and Management to Support a Circular Economy
 8. Workforce Development Programs for Occupations that Reduce GHG Emissions and Air Pollutants
 - Pollution Reduction Strategy
 1. **Indoor Air Quality and Community Health Improvements**
 2. Outdoor Air Quality and Community Health Improvements
 3. Clean Water Infrastructure to Reduce Pollution Exposure and Increase Overall System Resilience
 4. Safe Management and Disposal of Solid and Hazardous Waste

HVAC Upgrades



HVAC Upgrades

Replacing old HVAC systems in schools can significantly enhance energy efficiency in several ways:

- 1. Modern Technology:** New HVAC systems often incorporate advanced technologies, such as variable speed motors and smart thermostats, which optimize energy use based on real-time demand.
- 2. Better Efficiency Ratings:** Modern systems typically have higher Seasonal Energy Efficiency Ratios (SEER) and Energy Efficiency Ratios (EER), meaning they use less energy to provide the same level of heating or cooling compared to older systems.
- 3. Improved Controls:** Upgraded HVAC systems often include sophisticated control systems that allow for better zoning and scheduling. This means different areas of the school can be heated or cooled as needed, reducing waste.
- 4. Enhanced Filtration:** New systems often come with improved air filters that not only enhance indoor air quality but also reduce the energy required for airflow, as cleaner filters allow for better airflow.
- 5. Reduced Maintenance Needs:** Older systems may require frequent repairs and maintenance, which can lead to inefficiencies. New systems tend to be more reliable and require less maintenance, reducing downtime and energy waste.
- 6. Integration with Renewable Energy:** Modern HVAC systems can be designed to work alongside renewable energy sources, such as solar panels, making them more energy-efficient and cost-effective over time.
- 7. Decreased Energy Consumption:** By using less energy for heating and cooling, new systems can significantly lower a school's overall energy consumption, leading to reduced utility bills.
- 8. Improved Comfort and Air Quality:** A more efficient HVAC system ensures better temperature regulation and air circulation, creating a healthier and more comfortable learning environment for students and staff.
- 9. Longer Lifespan:** Newer systems generally have longer lifespans than older models, meaning schools won't have to replace them as frequently, leading to long-term cost savings.

By investing in modern HVAC systems, schools can enhance energy efficiency, reduce costs, and create a better environment for learning.

Windows and Doors



Window and Door Upgrades

Replacing older windows and doors in schools can significantly enhance energy efficiency in several ways:

- 1. Improved Insulation:** Newer windows and doors often feature better insulation materials and technologies, reducing heat loss in winter and heat gain in summer. This helps maintain a consistent indoor temperature.
 - 2. Reduced Air Leakage:** Older windows and doors may have gaps and drafts that allow conditioned air to escape and outside air to enter. Upgrading to modern, well-sealed options minimizes air leaks, improving overall energy efficiency.
 - 3. Energy-Efficient Glass:** Many new windows are designed with low-emissivity (Low-E) coatings that reflect heat back into the building in winter and block UV rays in summer. This can help reduce reliance on heating and cooling systems.
 - 4. Natural Lighting:** Larger or strategically placed windows can enhance natural light in classrooms, reducing the need for artificial lighting during the day. This not only saves energy but can also improve student focus and well-being.
 - 5. Durability and Maintenance:** New windows and doors are often made from more durable materials that require less maintenance, resulting in fewer replacements and lower long-term costs.
 - 6. Lower Energy Bills:** With improved insulation and reduced air leakage, schools can see a significant decrease in energy consumption, leading to lower utility bills.
 - 7. Enhanced Comfort:** Better windows and doors help maintain a comfortable indoor environment, which can lead to improved concentration and productivity among students and staff.
 - 8. Sustainability Goals:** Upgrading to energy-efficient windows and doors can contribute to a school's sustainability initiatives, helping to meet energy reduction targets and potentially qualify for grants or funding.
- Overall, these upgrades not only enhance the learning environment but also promote long-term cost savings and environmental responsibility.

Solar

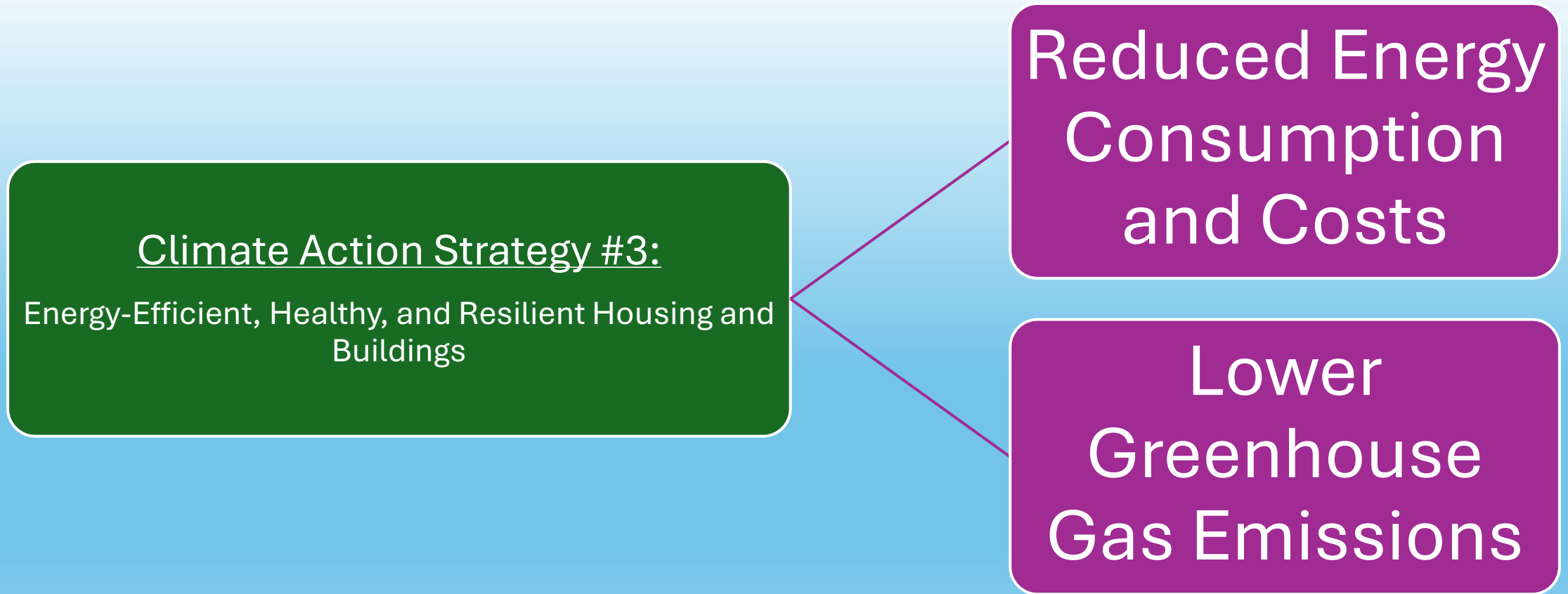


Solar

Installing solar panels in schools can significantly improve energy efficiency and offer various benefits:

- 1. Reduced Energy Costs:** Solar panels generate electricity from sunlight, allowing schools to offset their energy consumption and reduce utility bills. This is particularly beneficial for schools with high energy demands.
 - 2. Sustainable Energy Source:** Solar energy is renewable and abundant, helping schools reduce their reliance on fossil fuels. This contributes to a lower carbon footprint and aligns with sustainability goals.
 - 3. Energy Independence:** By generating their own electricity, schools can become less vulnerable to fluctuating energy prices and supply disruptions, enhancing their energy security.
 - 4. Educational Opportunities:** Installing solar panels provides a practical teaching tool for students, promoting awareness of renewable energy and sustainability practices. This can enrich the curriculum and inspire future generations.
 - 5. Improved Energy Efficiency:** Solar installations can be combined with energy-efficient upgrades (like LED lighting or advanced HVAC systems) to maximize overall energy savings and efficiency.
 - 6. Funding and Grants:** Northwestern Energy provides grants to support solar installations in schools, making it a financially viable option that can lead to long-term savings.
- By harnessing solar energy, schools can not only improve their energy efficiency but also foster a culture of sustainability, benefiting both the environment and the educational community.

LED Lighting



LED Lighting Upgrades

Replacing fluorescent lights with LED lights in schools can significantly enhance energy efficiency through several key benefits:

- 1. Lower Energy Consumption:** LED lights use about 75% less energy than fluorescent bulbs to produce the same amount of light. This reduction directly translates to lower electricity bills.
- 2. Longer Lifespan:** LEDs typically last much longer than fluorescent lights—up to 25,000 hours or more compared to about 10,000 hours for fluorescents. This longevity means fewer replacements and reduced maintenance costs.
- 3. Reduced Heat Emission:** LEDs emit very little heat compared to fluorescent bulbs, which waste energy as heat. This can help maintain a more comfortable indoor temperature, reducing the load on HVAC systems.
- 4. Instant On/Off:** Unlike fluorescent lights, which can take time to warm up, LEDs provide immediate full brightness. This is especially beneficial in classrooms where instant lighting is needed.
- 5. Dimmability:** Many LED fixtures are dimmable, allowing schools to adjust lighting levels based on specific activities or times of day, further optimizing energy use.

Cost Estimate



Scope of Work	School			TOTAL
	Four Georgians	Rossiter	Helena Middle	
HVAC	\$ 1,572,666.00	\$ 1,626,393.20	\$ 5,741,030.00	\$ 8,940,089.20
Solar	\$ 255,000.00	\$ 255,000.00	\$ 255,000.00	\$ 765,000.00
Lighting	\$ 320,298.75	\$ 246,335.63	\$ 912,262.50	\$ 1,478,896.88
TOTAL ELEMENTARY	\$ 2,147,964.75	\$ 2,127,728.83	\$ 6,908,292.50	\$ 11,183,986.08
SUB TOTAL	\$ 2,147,964.75	\$ 2,127,728.83	\$ 6,908,292.50	\$ 11,183,986.08
General Contractors Gen, O&P (18%)	\$ 386,633.66	\$ 382,991.19	\$ 1,243,492.65	\$ 2,013,117.49
Gross Receipt Tax (1%)	\$ 25,345.98	\$ 25,107.20	\$ 81,517.85	\$ 131,971.04
Design Fees (8%)	\$ 204,795.55	\$ 202,866.18	\$ 658,664.24	\$ 1,066,325.97
Owners Contingency (10%)	\$ 253,459.84	\$ 251,072.00	\$ 815,178.52	\$ 1,319,710.36
Owners Rep. (3%)	\$ 76,037.95	\$ 75,321.60	\$ 244,553.55	\$ 395,913.11
Hazardous Material (2%)	\$ 50,691.97	\$ 50,214.40	\$ 163,035.70	\$ 263,942.07
TOTAL PROJECT COST	\$ 3,144,929.70	\$ 3,115,301.39	\$ 10,114,735.01	\$ 16,374,966.11
4% 3 Year Inflation	\$ 3,537,618.20	\$ 3,504,290.39	\$ 11,377,701.29	\$ 18,419,609.88

Additive Alternate	Four Georgians	Rossiter	Helena Middle	Total
Doors/Windows	\$ 249,200.00	\$ 303,200.00	\$ 851,000.00	\$ 1,403,400.00
Soft Costs (42%)	\$ 104,664.00	\$ 127,344.00	\$ 357,420.00	\$ 589,428.00
TOTAL PROJECT COST	\$ 353,864.00	\$ 430,544.00	\$ 1,208,420.00	\$ 1,992,828.00
4% 3 Year Inflation	\$ 398,048.87	\$ 484,303.45	\$ 1,359,308.15	\$ 2,241,660.48
GRAND TOTALS (W/ INFLATION)	\$ 3,935,667.08	\$ 3,988,593.83	\$ 12,737,009.44	\$ 20,661,270.35

Questions