

Southwest Vermont
Supervisory Union



Southwestern Vermont Supervisory Union

Facilities Management and Operations Team

BEST. ENERGY. TEAM. EVER.
May, 2024



Facilities and Operations Team

Best Facilities and Operations Team Ever!

Facilities: Todd Siclari, Dave Hensley, Tony D'Onofrio,
Darlene Jones, William Pulver, Eric Willard,
Kevin Davis, Jamie Paustian, and Holly Andersen

Operations: Amanda Webber, Aspen Gould, Holly Andersen



SVSU's Facilities Inventory

Total Square Footage

1,033,309

Oldest Building built in 1804

Newest Building built in 2004

Southwest Vermont Union Elementary School District – Director Todd Siclari

Monument Elementary – 66 Main Street, Bennington, VT
Woodford Hollow Elementary – 995 VT Route 9, Woodford, VT
Pownal Elementary – 94 Schoolhouse Rd, Pownal, VT
Bennington Elementary – 128 Park St, Bennington, VT
Molly Stark Elementary – 181 Orchard Road, Bennington, VT
Shaftsbury Elementary – 150 Buck Hill Rd, Shaftsbury, VT
Beech Street School – 246 S Stream Rd, Bennington, VT
The Village School – 9 School St, N Bennington, (Independent)

Mt Anthony Union High School District #14 – Director Tony D’Onofrio

Mount Anthony Middle School – 747 East Rd, Bennington, VT
Mount Anthony High School – 301 Park St, Bennington, VT
– including Onpoint, and Southwest Tech

Arlington School District – Director Jaime Paustian

Arlington Memorial High School – 529 E Arlington Rd, Arlington, VT
Fisher Elementary School – 504 E Arlington Rd, Arlington, VT



Operations – Transportation and Food

Dufour Transportation Services

- Transports 3,058 learners to and from school every day
- Provides special education transportation which changes on a daily basis
- Provides transportation to and from athletic events, including 23 varsity sports



- Feeds 3,058 learners, twice a day, every school day with menus that follow USDA food service guidelines
- Provides dinner meals for after school and athletic activities
- Provides summer meals for learners and their communities



Mission/Vision/History

Shared Vision: *The Southwest Vermont Supervisory Union is committed to developing lifelong learners who contribute to their community and succeed in a diverse and evolving global society.*

Facilities and Operations works toward this vision by:

Building Assessments: Energy efficiency, thermal shell, appearance, functionality, occupancy, comfort

Student Focused: Safety, accessibility, diversity, equity, inclusion, food for all

Faculty/Staff: Address questions, comments, concerns

Administration/Boards: Master planning for the growth, future-proofing facilities, adjusting to the always changing educational landscape and job training needs.



Existing Conditions - Questions

Beginning the master planning process:

- Are school buildings being used to their full capacity? What can we do now to anticipate growth in the student body, flexible programming of spaces, and future proofing our investments in our buildings?
- Strong architectural history – MAUHS, Woodford, Bennington Elementary, Arlington MHS - with varying degrees of deferred maintenance. How can we preserve their history while upgrading, preserving, and re-programming buildings and spaces?
- Move toward sustainable energy sources and eliminate fossil fuels, provide tighter building enclosures, efficient systems



Progress Made During Phase 2 and Associated Impacts

- Baseline Energy Analysis
- Stackable Grant Opportunities
- District Re-lamping
- Curtailable Load Rider Agreements
- Wood Chip Boiler Software and Hardware upgrades
- Student Sustainability Investments



Stackable Grant Opportunities

Retained Guaranteed Clean Energy

- Provided Master Plan for Grant opportunities supporting
- Increased Electrification
- Reduction of fossil fuel use
- Applied for grants
 - Electric School bus
 - Woodchip Controls





Districtwide Re-Lamping Project

Linear Tube Fluorescents with LEDs

- Decreased Electrical usage in all schools
- Saved taxpayers money
- Install correct temperature LEDs to create inviting spaces
- Ensured all spaces are correctly lit





Curtailable Load Rider Agreements

Save Taxpayers Money

- Evaluated each property and potential opportunities
- Partnered with Green Mountain Power & VEIC
- Initiated Curtailable Load Rider Agreements everywhere possible
 - Saved \$\$\$





Wood Chip Biomass Controls

- Over 20 year old biomass systems operating on their original control systems
- Upgraded biomass systems to current technologies
- Integrated into our existing building management system
- Scope included the addition of an O2 trim and VFD's on the auger.





Purchase of electric groundskeeping equipment

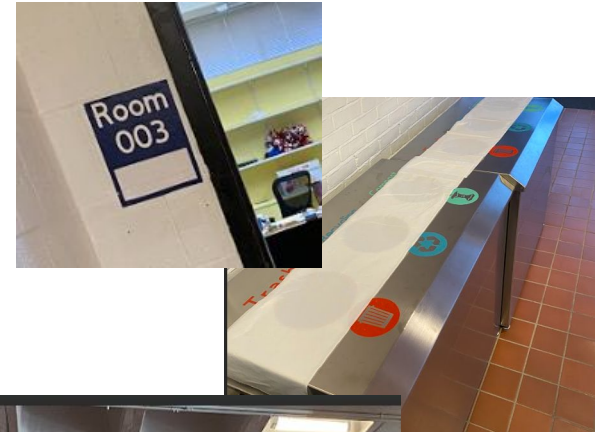
- Reduced fossil fuel use
- Reduced operational noise, ensuring operation during classes in session
- Better working conditions for staff, and less maintenance heavy
- The below equipment was purchased to support three school districts and over 10 school grounds:
 - 2 60" Optimus Ride-on Zero Turn Mowers
 - 6 Backpack Blowers
 - 9 Line Trimmers
 - 3 Hedge Trimmer
 - 5 Chainsaws
 - 1 Self Propelled Mower
 - 2 SIPs





Student Sustainability Investments

- **Composting Club**
 - New containers in cafeteria
 - Student Club marketing & student education
- **Wayfinding Project**
 - Student design, voting and installation
 - New signage inside & outside
 - Supporting First Responder needs
- **Lamp Project**
 - Student engagement, education
 - Installation participation





\$\$\$\$ Results \$\$\$\$ Results \$\$\$\$

- All Physical Completed Projects Expenditures \$179,393
Incentives \$121,310

Annual Savings \$382,629
138.8 kWh
10,554 MMBTU



- Spotlight: MAUHS & MS upgrades Expenditures \$77,200
Incentives & Grant \$70,000
Net cost \$7,200

Immediate savings of 10,759 MMBTU's and sequestering 1,136,821 pounds of carbon.





Implementation Next Steps

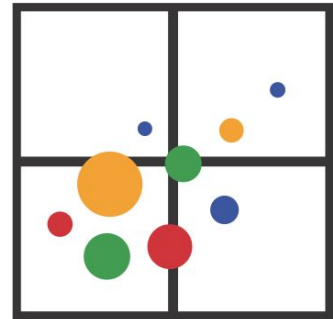
- Review Community Engagement Questions
 - Creativity
 - Community
 - Finance
 - Responsibility
 - Stewardship





Creativity

- How do we create opportunities for innovation and emerging directions of education?
- How do these intersect with technology improvements?





Community

- How do we model for inclusivity, accessibility, and health?





Finance

- How do we synthesize costs holistically and evaluate ROI?





Responsibility

- How do we future proof our buildings to accommodate a dynamic population over time?





Stewardship

- How do we do all this while keeping climate change in the front of our minds while balancing tax burden for the community at large?





Future Perspectives & Goals

- Create Community with Classroom Inventory
- Adaptable spaces with a Time Utilization Study
- Expanding Accessibility and providing student wellness spaces
- Continued Innovation with a Field of Study Trend Analysis
- Our Final Work product, in whatever form it takes, needs to address:
- Provide growth in the student body and programming of spaces
- Preserving, upgrading, and re-programming buildings and spaces
- Move toward sustainable energy sources and eliminate fossil fuels
- Work to provide equity for all learners experiences



Current Projects in Planning: Summer 2024

- MAU Middle School AC and BMS Controls
- Shaftsbury, Pownal, Monument, Molly, Benn El Air Tempering Project
 - Adding cooling coils, insulation ductwork, AOE ASHRAE standards, temperature range, and dehumidification
- Bennington Elementary Elevator
- Woodford Elementary– Ventilation Project
- Arlington High School– Bathroom and Library renovation
- MAU High School Ventilation Project

All projects incorporate efficiency measures including lighting, VFD's, heat pump technology and more.



Next Steps—

- Create Community with Classroom Inventory
- Adaptable spaces with a Time Utilization Study
- Expanding Accessibility and providing student wellness spaces
- Continued Innovation with a Field of Study Trend Analysis





Goals with Priorities

- Provide growth in the student body and programming of spaces
- Preserving, upgrading, and re-programming buildings and spaces
- Move toward sustainable energy sources and eliminate fossil fuels
- Work to provide equity for all learners experiences



Questions/Concerns/Comments/ Rumors/Good Jokes

Many thanks for your time and caring for all our learners and community