

Coventry Public Schools

Subsystem/Department Goals Achievements for the 2016-2017 School Year

By: **William Trudelle – Physical Plant and Facilities**

1. **Continue to pursue outside funding sources to support district initiatives in an effort to reduce the overall funding necessary in the district budget to implement or continue district priorities and initiatives.**
 - Continue work with Eversource to convert lighting to LED, reducing the energy consumption of the district.
 - Test lighting was installed in CNH 8th grade corridors to ensure lighting is adequate for the area. A future goal includes the replacement of 67 fixtures with new LED energy efficient lights. Eversource reimbursement includes up to 40% of the cost of each fixture as well as the cost of the school's in-house electrician for the installation. The estimated total fixture cost is \$8,678.51. Eversource reimbursement of up to \$3,471.40 would make the total cost to the district of \$5,207.11. The reimbursement amount for electrical work is pending at this time. Pending approval, the expectation of completion would be the summer of 2017.
 - Work with the business department to secure state and federal grants to offset the cost of projects or new equipment such as the Electric Vehicle (EV) and charging station for same.
 - We are working with Eversource on programs to upgrade to LED lighting through a reimbursement program that will reduce the district energy consumption. Converting to LED would save 69 watts per fixture.
 - This conversion in CHN alone estimates a savings of \$757.62 per a school year. This is based on the 67 hallway lights, each running 10 hours a day for 183 school days. This savings does not account for afterschool, summer, and weekend use. The estimated the additional savings would be \$1,019.37 for a calendar year.
 - Inventory equipment district wide in order to evaluate expected life vs. end of life, utilizing Maintenance Direct and Preventative Maintenance Direct on our School Dude suite of products.
 - We are continuing our work on refining the preventive maintenance program in an effort to reduce equipment repair costs by identifying issues early to avoid costly maintenance. In addition, determining when a piece of equipment has reached end of life vs. expected life, requiring replacement, will improve.
 - All of the HVAC equipment is on an annual or semi-annual preventive schedule that includes cleaning, filter change, inspection, greasing, and running the unit to check for potential problems. The program revisions allowed reductions in the need for contracted services and emergency calls, ultimately reducing costs and downtime.

- Track maintenance records and safety inspections to improve coordination with contracted services to reduce spending as well as extending equipment life.
 - Through the Maintenance Direct module, analyzing workflow, costs, recurring problems, and time to address the district priorities will continue. The reduction in the contracted services line item is due to ongoing monitoring of the cost effectiveness to do repairs in-house or use contracted services.
 - The department is utilizing Preventive Maintenance to track safety records that are readily accessible to staff and agencies. This ensures the district is in compliance with OSHA and NFPA standards.
 - Develop an internal process to identify key facility items that require placement on the Capital Improvement Plan to avoid impacting operating budget.
 - We are presently utilizing supporting data obtained through the School Dude suite to refine the district's Capital Improvement Plan. Continued use of the Maintenance and Preventive Maintenance Direct helps to analyze the labor, material and contracted services costs. This data is then used to explain to the district the cost over the life of the equipment, as support for the possible replacement.
 - Continue working with the Building Committee on the CNG project and energy upgrades to ensure that the District's needs are met.
 - I attended Building Committee meetings to design an energy upgrade plan for the district along with natural gas conversion.
 - The Building Committee presentation included their recommendation to the Town Council at the April 17th meeting, with a total of \$4,594,274.70 in upgrades district wide. The upgrades included HVAC, entry ways, generator connections, lightning protection, and electricity monitoring.
 - Work with MJ Daly continues ensuring minimal impact on the schools as well as monitoring schedule of boiler replacement. Presently boilers installation has begun. MJ Daly is scheduled to have gas flowing by mid-May with a completion date of June 15th.
 - We have been working with MJ Daly to design a plan for conversion of remaining equipment that relies on oil and propane. As part of the first step they will be converting the CHS and CNH water heater to natural gas, eliminating the need for oil and oil tanks at both locations.
2. **Work with district personnel, town agencies, and safety experts to continue the development of a plan to redesign site entryways to further address best practices related to student safety.**
- Continue work on upgrading and installing new cameras district wide, entryway, and public

access.

- o Thirteen additional cameras were installed district-wide to cover areas of concern by school administration. Local police department was given access in the dispatch, as well in their cruisers.
- o BL Company submitted plans in December for new entry ways to the building committee. The committee identified issues regarding the design and requested that they be reviewed with Administration.
- o In January, the CHS Administration team met to review the plans and make changes that would better meet the needs of the school. The changes to the plans were reviewed and approved by the Building Committee in February.
- o With the help from the IT department, thirteen new access points were added, eliminating the need to issue keys to outside groups, giving the district more control of building access.
- Implement a district wide contractor policy to insure district staff is informed when and why contractors are in district.
 - o Development of a district facilities calendar for scheduled and emergency maintenance will allow for notification of different locations to ensure building administration is aware when a contractor will be onsite, including their purpose. The calendar will be shared when it is complete and will be updated regularly.
- Work with HEEC staff through the NAEYC accreditation process.
 - o Weekly and daily cleaning schedules were reviewed with HEEC staff, along with ensuring that the safety requirements for NAEYC are met.
 - o A new design for the playground that would allow open and structured play was created with our department's assistance.
 - o Different areas in classrooms were reconfigured to meet height and safety requirements, such as whiteboards, safety outlets, and shelving.
 - o Health District requirements for water, lead, and asbestos testing were met.
- Work with CHS Administration on any recommendation from the NEASC report.
 - o After reviewing the NEASC recommendations for a weight room, a cleaning schedule was implemented. Aging equipment was also removed and/or replaced.
 - o Noncompliance issues were reviewed with Dr. Wood from the Connecticut State Department of Education. Discussions also included the needs in the science labs and possible corrections.
 - o A student workstation was remodeled in January to meet the needs of disabled

students. This involved lowering one of the work stations to meet the 34" height requirement and designing the toe kick. The work to the station was completed in February.

- o To meet the requirement for the height of a fume hood master start switch, it was relocated from the right side to the left side and placed at the required height.
- o The existing ADA sink for the student lab workstation did not have the knee clearance to meet the ADA code. To meet the clearance the sink skirt was removed and trimmed to allow the knee clearance.
- o The existing fountains was modified by increasing the eyewash height from 21" to 27" by redirecting the drain lines. The existing eyewash fountains all have 21" clearance from the supply to the floor and 27" is required.

3. **Recruit, retain and develop high quality staff at every level.**

- Provide additional training to keep the staff informed on any changes to safety standards and any new products.
 - o In August of the 2016-2017 school year, staff training covered:
 - o Asbestos: staff was informed of the location of and how to handle an accidental disturbance.
 - o Hazardous Communication: updating the staff of federal changes from MSDS to SDS, how to read and understand the new paperwork, as well as proper labeling and storage of chemicals.
 - o Blood borne pathogens: discussed the proper handling of bodily fluids and the best practice of cleaning up fluids.
 - o Mandated reporting: this was new this year after working with the PSS office we want to make sure that the custodial and maintenance staff understood when and how to file a report.
 - o Harassment training: explained that harassment of any kind will not be tolerated in the workplace.
 - o Ways to reduce waste with the assistance of Inventory Direct to monitor the school's use and ordering of supplies was an area of focus for staff. We are currently reviewing the data to determine if it would be cost effective to install hand dryers to replace paper towels in student bathrooms, with the help from the high school head custodian. These discussions include taking into account not only the cost of the paper towels vs. hand dryers, but also the known maintenance cost to the dispenser and improper disposal of the paper towels.
- Expand the use of our Preventative Maintenance Direct and Maintenance Direct modules to allow for greater efficiencies by streamlining work flow to the Maintenance and Custodial departments.
 - o Meetings with staff monthly are currently happening to discuss various ideas regarding streamlining workflow and reduce cost. This includes scheduling maintenance staff to one location for their shift allowing for more focus on tasks, limiting the travel and setup

time, saving fuel and increasing productivity.

- o Additional training occurred regarding the proper process for the submission of work orders. The custodial staff more consistently submits their own work orders, improving the building maintenance in a more productive fashion as well as allowing the tracking of recurring problems.
- Develop structures and procedures to properly document inspections, maintenance and repairs to allow staff to readily evaluate workflow and assist with prioritization of work orders and projects.
 - o Monthly inspections have been added to the Preventative Maintenance module, including eye wash stations, emergency lighting, defibrillator, fire pump, and fire extinguishers. This ensures that the inspections are completed, as well as if there are any issues that need attention.
 - o Additional readings were added to the Preventative Maintenance module to track oil, propane, and water usage to better identify possible problems.
 - o In working with the Head custodian at the high school, staff is assigned to specific buildings and areas to streamline work and put essential staff in critical areas. One such move included moving the head custodian at the high school from the office area to the complex to ensure that he is available to assist the general public and monitor the common areas.