



Weber School District Energy Savings Infrastructure Renewal Project

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Provided by:

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Executive Summary

Johnson Controls was selected by the Administration to collaborate with the District Staff and propose a solution that would benefit the District’s physical learning environment by improving the reading light levels, classroom comfort levels, and maintenance staff response time to HVAC/comfort concerns through a \$22,600,160.00 Self-Funded Guaranteed program. The program highlights are; the elimination of obsolete control technology that challenges Maintenance staff to properly ensure classroom temperatures, improves the energy efficiency of the District by 24.2% (compared to 2019 baseline), producing \$1,037,618.00 in first year energy and water savings with another \$924,774.00 in construction savings during the two years construction with another anticipated \$ 666,055.00 in local utility incentives and rebates that funds this program, addressing many deferred maintenance items allowing the staff to have a manageable work load. Together we have been on a mission to identify four different critical issues facing the District.

- The first and most important issue was to identify the best approach to replace the old and obsolete INET controllers that controls the heating and ventilation at your school sites.
- Help Identify any other facility infrastructure improvements that could help the District be more efficient.
- Provide self-funding program complete with financing and other options that would be able to pay for the recommended facility improvements.
- Improving the learning environment in the most efficient manner.

We are pleased to share with you that we believe that we have been able to address all four of the concerns noted above in our proposal. This would include the following Facility Improvement Measures in our self-funded project:

- Lighting Retrofits Interior / Exterior LED
- Replace / Upgrade Building Automation Systems
- Building Envelope Weatherization Upgrades
- Water Conservation
- Utility Bill Correction
- Replace/Upgrade Building Transformers

As you can see, Johnson Controls has provided a pathway to help the District address over \$22M dollars of needed capital improvements through guaranteed savings. This will allow the District to use future precious and limited capital dollars for other needed facility improvements across the District.

Project Financials

| Self-Funded Project 20-Year Term | |
|---|-------------------------------|
| Total Project Cost | \$22,600,160.00 |
| Customer Contingency | \$500,000.00 |
| Project Rebates | \$666,055.00 (Not guaranteed) |
| Project Term Savings | \$29,390,117.00 |
| Positive Cash Flow Over Finance Term | \$523,831.00 |



WEBER SCHOOL DISTRICT + JOHNSON CONTROLS
 Creating Safe, Healthy, Comfortable and Efficient Learning Environments

Johnson Controls Example Cash Flow
 for
Weber SD, UT

| | | | |
|-----------------------------------|-----------------|---|--------------|
| Total Project Cost: | \$23,100,160.00 | Non-Guaranteed Construction Period Savings | \$924,774.00 |
| Rate of Financing: | 2.21% | Installation Months | 20 |
| Term of Financing (Years): | 20 | Termination Premium | 3.0% |
| Net Positive Cash Flow: | \$523,830.55 | | |

Sample Business Case Analysis

| | Utility Savings | Operational Savings | Water Savings | Lamp and Ballast Material Savings | Rebate (Not Guaranteed) | Other Benefits | Gross Savings | M&V | Debt Service Payments | Total Annual Costs | Excess Cash Flow |
|----------------|-----------------|---------------------|---------------|-----------------------------------|-------------------------|----------------|---------------|-----------|-----------------------|--------------------|------------------|
| Install | | | | | | | | | | | |
| 1 | \$1,015,906 | \$25,000 | \$21,713 | \$9,200 | \$666,055 | \$0 | \$1,737,873 | \$49,785 | \$2,586,712 | \$2,636,497 | \$26,150 |
| 2 | \$1,046,383 | \$25,750 | \$22,364 | \$9,476 | \$0 | \$0 | \$1,103,973 | \$51,279 | \$1,026,544 | \$1,077,823 | \$26,150 |
| 3 | \$1,077,774 | \$26,523 | \$23,035 | \$9,760 | \$0 | \$0 | \$1,137,092 | \$52,817 | \$1,058,125 | \$1,110,942 | \$26,150 |
| 4 | \$1,110,107 | \$27,318 | \$23,726 | \$10,053 | \$0 | \$0 | \$1,171,205 | \$0 | \$1,145,055 | \$1,145,055 | \$26,150 |
| 5 | \$1,143,411 | \$28,138 | \$24,438 | \$10,355 | \$0 | \$0 | \$1,206,341 | \$0 | \$1,180,191 | \$1,180,191 | \$26,150 |
| 6 | \$1,177,713 | \$28,982 | \$25,171 | \$10,665 | \$0 | \$0 | \$1,242,531 | \$0 | \$1,216,381 | \$1,216,381 | \$26,150 |
| 7 | \$1,213,044 | \$29,851 | \$25,926 | \$10,985 | \$0 | \$0 | \$1,279,807 | \$0 | \$1,253,657 | \$1,253,657 | \$26,150 |
| 8 | \$1,249,436 | \$30,747 | \$26,704 | \$11,315 | \$0 | \$0 | \$1,318,201 | \$0 | \$1,292,051 | \$1,292,051 | \$26,150 |
| 9 | \$1,286,919 | \$31,669 | \$27,505 | \$11,654 | \$0 | \$0 | \$1,357,747 | \$0 | \$1,331,597 | \$1,331,597 | \$26,150 |
| 10 | \$1,325,526 | \$32,619 | \$28,330 | \$12,004 | \$0 | \$0 | \$1,398,480 | \$0 | \$1,372,330 | \$1,372,330 | \$26,150 |
| 11 | \$1,365,292 | \$33,598 | \$29,180 | \$12,364 | \$0 | \$0 | \$1,440,434 | \$0 | \$1,414,284 | \$1,414,284 | \$26,150 |
| 12 | \$1,406,251 | \$34,606 | \$30,055 | \$12,735 | \$0 | \$0 | \$1,483,647 | \$0 | \$1,457,497 | \$1,457,497 | \$26,150 |
| 13 | \$1,448,438 | \$35,644 | \$30,957 | \$13,117 | \$0 | \$0 | \$1,528,157 | \$0 | \$1,502,007 | \$1,502,007 | \$26,150 |
| 14 | \$1,491,892 | \$36,713 | \$31,886 | \$13,511 | \$0 | \$0 | \$1,574,001 | \$0 | \$1,547,851 | \$1,547,851 | \$26,150 |
| 15 | \$1,536,648 | \$37,815 | \$32,842 | \$13,916 | \$0 | \$0 | \$1,621,221 | \$0 | \$1,595,071 | \$1,595,071 | \$26,150 |
| 16 | \$1,582,748 | \$38,949 | \$33,828 | \$0 | \$0 | \$0 | \$1,655,525 | \$0 | \$1,629,375 | \$1,629,375 | \$26,150 |
| 17 | \$1,630,230 | \$40,118 | \$34,843 | \$0 | \$0 | \$0 | \$1,705,190 | \$0 | \$1,679,040 | \$1,679,040 | \$26,150 |
| 18 | \$1,679,137 | \$41,321 | \$35,888 | \$0 | \$0 | \$0 | \$1,756,346 | \$0 | \$1,730,196 | \$1,730,196 | \$26,150 |
| 19 | \$1,729,511 | \$42,561 | \$36,964 | \$0 | \$0 | \$0 | \$1,809,037 | \$0 | \$1,782,887 | \$1,782,887 | \$26,150 |
| 20 | \$1,781,397 | \$43,838 | \$38,073 | \$0 | \$0 | \$0 | \$1,863,308 | \$0 | \$1,836,327 | \$1,836,327 | \$26,981 |
| | \$27,297,764 | \$671,759 | \$583,429 | \$171,110 | \$666,055 | \$0 | \$29,390,117 | \$153,881 | \$29,637,179 | \$29,791,060 | \$523,831 |

Notes:



The power behind your mission