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<https://www.youtube.com/c/CityofFranklinWIGov>

CITY OF FRANKLIN
COMMITTEE OF THE WHOLE MEETING
FRANKLIN CITY HALL – COMMON COUNCIL CHAMBERS
9229 WEST LOOMIS ROAD, FRANKLIN, WISCONSIN
AGENDA*


MONDAY, MARCH 4, 2024 AT 6:30 P.M.

- A. Call to Order and Roll Call.
- B. Using Excess American Rescue Plan Act Funds for a Watermain Project along S. Lovers Lane from W. St. Martins Road to 8120 S. Lovers Lane.
- C. Using Excess American Rescue Plan Act Funds for Utility Projects in the Vicinity of S. 80th Street, S. 76th Street, and W. Ryan Road.
- D. Contract with Johnson Controls for a Comprehensive Efficiency Program to Benefit our Municipal Buildings and Create Cost Savings Efficiencies.
- E. Adjournment.

*Supporting documentation and details of these agenda items are available at City Hall during normal business hours

[Note Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services For additional information, contact the City Clerk’s office at (414) 425-7500]

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APPROVAL 	COMMITTEE OF THE WHOLE DISCUSSION	MTG. DATE March 4, 2024
REPORTS & RECOMMENDATIONS	Using Excess American Rescue Plan Act Funds for A Watermain Project along S. Lovers Lane from W. St. Martins Road to 8120 S. Lovers Lane	ITEM NO. Ald Dist. 2 B.

BACKGROUND

There were many American Rescue Plan Act (ARPA) eligible funding projects that had connection to COVID-19. Among eligible infrastructure projects are “water, sewer, and broadband.” Franklin received \$3,748,285.61 in ARPA funding in 2021 for eligible projects. In 2022, there was allocated funding for the fiber optic cable project. The construction of the fiber network is almost complete with an estimated total cost of approximately \$1.7 million. Funds were anticipated to be used in the funding of the S. Lovers Lane Water Tower, but were not directly applied to that project due to the unpredictability of the timeline on the project at the time of discussion. ARPA funds have a strict deadline. Funds need to be encumbered by December 31, 2024 and spent by December 31, 2026. Funds were borrowed for the Water Tower Project with deadlines as well as Impact Fee allocations and cash on hand being used.

On January 23, 2024, the Finance Committee discussed various utility projects and gave direction to staff that the Lovers Lane watermain project as described below should also be considered.

ANALYSIS

The S. Lovers Lane Water Tower and Watermain projects were bid and received on December 12, 2022. The bids included watermain from the tower site to the north and also from the tower site to the south. There were nine bids received and the north section ranged from \$660,590 to \$818,522. The portions of the bids for the southern section ranged from \$1,064,790 to \$1,282,516.

For a variety of reasons, including costs higher than anticipated, the bids for the tower and watermain sections were rejected. Both contracts were rebid in 2023 and Staff reluctantly removed the southern section of the watermain to fit the budget, only the watermain for the north section was bid. Six bids were received ranging from \$840,366 to \$1,105,450. Comparing the low bids for from the 2022 bid to the 2023 bid increased (north section only) increased by 27%. The increase is mostly attributed to the moving some of the pipe across the tower site from the south section to the north section (increase length by 24%), and changing the pipe materials from PVC to ductile iron for additional dependability considering the single feed to the tower.

Staff would emphasize **that redundant feeds to the Water Tower is critical.** Ductile iron is generally believed to be more dependable than PVC, but ductile iron still has failures. Any pipe damage to the lone feed to the tower makes the tower inoperable. An inoperable Lovers Lane tower would greatly restrict water service to the western water zone and could be catastrophic in the case of a structure fire. It should be noted that fire flows are sometimes the critical events that cause breaks in a watermain so redundant paths for water to travel is critical.

Using ARPA funds is a great opportunity to afford the needed redundant pipe network for the tower service.

A 2024 bid southern pipe project would be 1,865 feet at an assumed bid price of \$522.98 / LF = \$975,351. Assume needed ARPA funding of \$1.0 million.

The process of authorizing the rebidding of the north section involved an ordinance that granted indefinite deferment for properties that did not wish to connect. This adopted code can be revisited to allow the same opportunity for the properties affected by the southern section. However, placing assessments on parcels would restrict the ARPA funding that could be used. Staff could do a detailed analysis on assessing all or half of a hypothetical 8-inch watermain and reduce that from the ARPA funding.

OPTIONS

1. Complete this project in 2024 with \$1.0 million of remaining ARPA funds (no assessments to property owners)
2. Complete this project in 2024 with less than \$1.0 million of remaining ARPA funds (partial and deferred assessments to property owners)
3. Other direction to Staff.

FISCAL NOTE


The remaining ARPA funds of roughly \$2 million needs to be encumbered by December 31, 2024 and spent by December 31, 2026. If not, any remaining funds will have to be paid back to the US Treasury. Future budget amendments may be needed based on the outcome of spending.

Deferments, if any, would need to be funded by water impact fees until such a time that they are repaid, if ever.

RECOMMENDATION

Direct Staff to return to Common Council on March 19, 2024 with a contract to proceed with the design, permitting and solicitation of bids of this project for construction in 2024 pursuant to the ARPA deadlines and direct Staff to return with an ordinance to allow for indefinite deferment of properties.

Engineering - GEM

APPROVAL 	COMMITTEE OF THE WHOLE DISCUSSION	MTG. DATE March 4, 2024
REPORTS & RECOMMENDATIONS	Using Excess American Rescue Plan Act Funds for Utility Projects in the Vicinity of S. 80th Street, S. 76th Street, and W. Ryan Road	ITEM NO. Ald Dist. 1 C.

BACKGROUND

There were many American Rescue Plan Act (ARPA) eligible funding projects that had connection to COVID-19. Among eligible infrastructure projects are “water, sewer, and broadband.” Franklin received \$3,748,285.61 in ARPA funding in 2021 for eligible projects. In 2022, there was allocated funding for the fiber optic cable project. The construction of the fiber network is almost complete with an estimated total cost of approximately \$1.7 million. Funds were anticipated to be used in the funding of the S. Lovers Lane Water Tower, but were not directly applied to that project due to the unpredictability of the timeline on the project at the time of discussion. ARPA funds have a strict deadline. Funds need to be encumbered by December 31, 2024 and spent by December 31, 2026. Funds were borrowed for the Water Tower Project with deadlines as well as Impact Fee allocations and cash on hand being used.

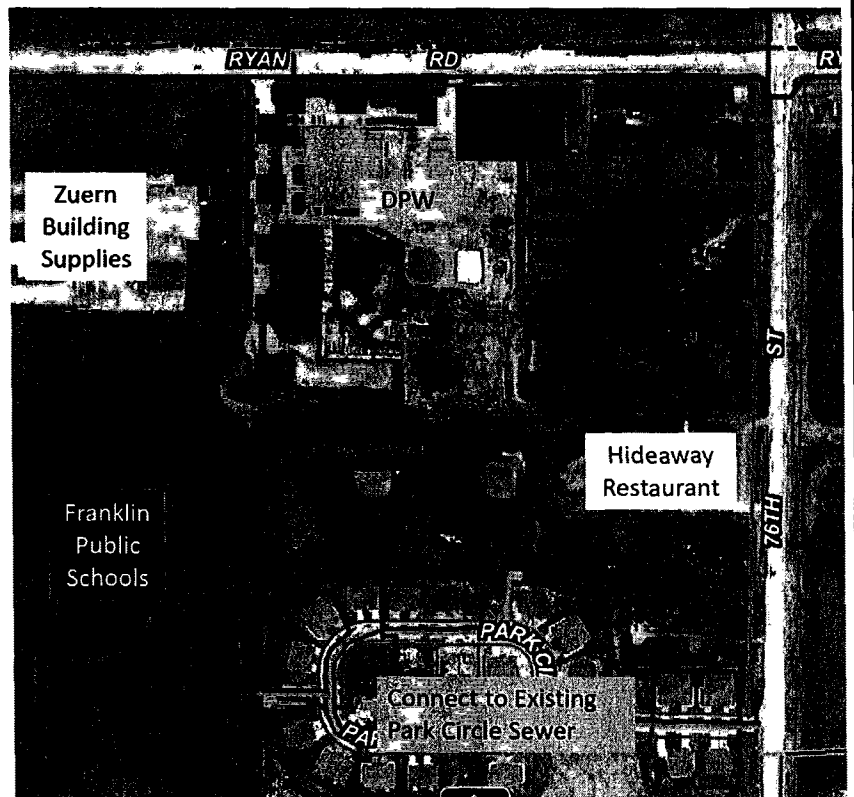
The below project was discussed at the Finance Committee on January 23, 2024.

ANALYSIS

It appears that Franklin will have approximately \$2 million in excess funds from the initial ARPA award. Staff suggests that there is a worthy sewer and water project needed on S. 80th Street, south of W. Ryan Road.

The Department of Public Works (DPW) facility (7979 W. Ryan Road) does not have a sanitary sewer connection but uses a holding tank that appears to be allowing groundwater to infiltrate. Inspections indicate that the holding tank is not repairable. A septic hauling service is used at least once a week and sometimes three times a week to pump the accumulated sewer and groundwater. The cost of pumping the tank is currently \$180 each time. The DPW budget is anticipating at least \$10,000 expense for septic pumping each year. Staff understands that Zuern Building Supplies (9545 S. 80th Street) also has a similar predicament.

Staff is proposing a gravity sewer project to abandon the DPW septic holding tank, provide future connection for a potential fire station, and flow westerly to S. 80th Street, then south along S. 80th Street past Zuern and the Franklin Public School property to a gravity sewer in Park Circle.



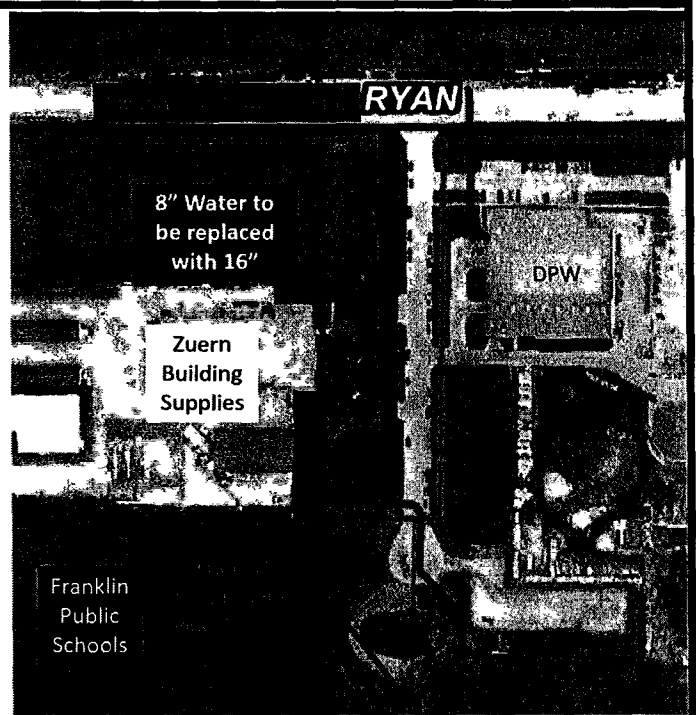
Another portion of the Park Circle sewer can also be extended to accommodate some properties along S. 76th Street- including the Hideaway Restaurant (9643 S. 76th Street) that has had many historical issues with their on-site septic disposal system. This sewer was designed for the previously planned DPW storage building.

For the water system, the development of Park Circle and Ryan Creek subdivisions provided a 16" diameter watermain to serve the south areas. The connection was an 8-inch watermain along S. 80th Street and this constriction needs replaced with a 16-inch main.

The estimate for the sanitary sewer segments is \$683,000 and the estimate for the water relay project is \$246,000. The total for all projects is \$929,000.

In a traditionally funded project, adjacent properties could be assessed for the sanitary sewer. The ARPA monies would be sufficient to cover the entirety of the project, however, the adjacent properties could be assessed proportionally if the Council deems appropriate.

There are no benefited properties for the replacement of the 8-inch watermain to 16-inch diameter so none of the affected properties could be assessed.



JANUARY 23, 2024 FINANCE COMMITTEE AND FOLLOW-UP STATUS

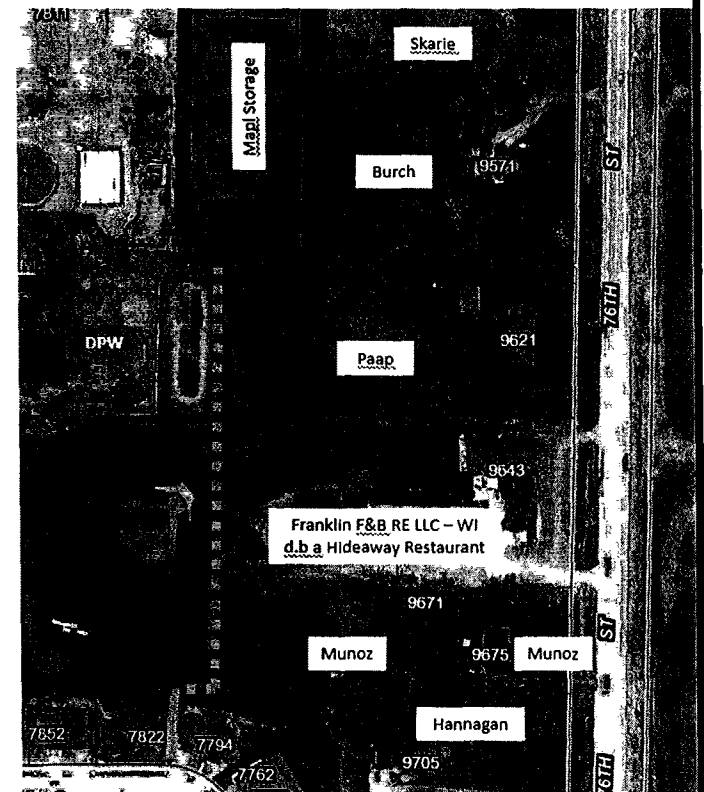
The Finance Committee considered the above information and acknowledged that these projects are beneficial to the City of Franklin, especially the elimination of \$180/tank pumping for the DPW budget and removal of the water constriction to the water system.

The concern of the Finance Committee was that the adjacent property owners would be getting something for free that others are required to pay. So, the recommendation to Common Council was to proceed with these projects but have some level of sanitary sewer special assessment for the affected properties.

The Finance Committee also indicated that some credit should be applied to the Franklin Public School Parcel for donation of the needed right-of-way to the Park Circle connection. However, the credit for the land (about an acre) should be less than the appraised value since such land would be donated as part of any school development. The Franklin Public Schools is reported to have paid \$17,838 per acre for the land.

Staff has since talked to the affected property owners: GEN3 Ventures LLC d.b.a. Zuern Building Supplies (9545 S. 80th Street), Franklin Public Schools, Franklin Food & Beverage, LLC d.b.a Hideaway Restaurant (9643 S. 76th Street), Munoz family (9671 and 9675 S. 76th Street), Paap family (9621 S. 76th Street), and Mapl Storage Site (7761 W. Ryan Road). Generally, Staff discussed 50% assessment rates for the affected property owners.

The Munoz family discussion concerning their two parcels centered on a land combination of the two parcels so that some effort on their part would result in elimination of assessment for the 100-foot minimum. The proposed assessment table below assumes that the property owner proceeds with the land combination process, otherwise the smaller parcel would be assessed for the minimum of 100



feet. The parcel is actually 120-feet wide (north-south), but has no physical connection to the proposed sewer. The Owner would like to expand the use of his parcels to also serve as vehicular storage for his business.

Staff contacted the Hideaway Restaurant and talked to a manager, but has not received a follow up call from the owner. Staff understands that the restaurant also has a tank that is pumped at least once per week. The manager was unaware of the extent of charges for this pumping service.

During these discussions, Staff noted that the Mapl Storage Site (7761 W. Ryan Road) should also be assessed for the minimum of 100-feet as the manhole would be extended to their property. Staff contacted the owner and understands that she also has a holding tank that is pumped about once per month. The adjacent home, on a different parcel, has a traditional on-site septic disposal system. The front building with the sewer facilities is just beyond the City's 400-foot requirement [§190-22.B.(1)] requires connection. The Owner is unsure that the assessment would add equivalent value to her property and is also unlikely that it would be cost effective to connect since her annual pumping charges are less than \$2,000.

Staff has contacted the Paap residence. It functions solely as a home residence even though it is zoned M-1. The Paaps are acceptable to the proposed assessment that would be deferred until such a time that the sewer connection occurs, whether it be for need to abandon the onsite system, or expansion of the buildings.

Owner	Address	Approximate Assessable Frontage	Typical 100% Assessment	Proposed 50% Assessment
Zuern Building Products	8035 W. Ryan Road	200 feet	\$36,016.00	\$18,008.00
Zuern Building Products	9545 W. Ryan Road	400 feet	\$72,032.00	\$36,016.00
Franklin Public Schools Franklin Schools- credit	S. 80 th Street S. 80 th Street	993 feet -	\$178,819.44 -	\$89,409.72 (\$10,000)
Munoz- combined Munoz property	9675 S. 76 th Street 9671 S. 76 th Street	0 feet 162 feet	\$ - \$29,172.96	\$ - \$14,586.48
Hideaway Restaurant	9643 S. 76 th Street	266 feet	\$47,901.28	\$23,950.64
Paap property	9621 S. 76 th Street	235 feet	\$42,318.80	\$21,159.40
Mapl Storage	7761 W. Ryan Road	100 feet	\$18,008.00	\$9,004.00
Totals			\$424,268.48	\$207,134.24

Therefore, the expense funded by ARPA would be:

	Cost	50% Assessments	Net ARPA Funds
Sewer	\$683,000	\$207,134.24	\$475,865.76
Water	\$246,000	N/A	\$246,000.00
Total	\$929,000	\$207,134.24	\$721,865.76

There is merit in discussion of installing the western section of sanitary sewer to serve DPW and Zuern, but not installing the eastern section to serve the Hideaway and the residences. The expense funded by ARPA might look like this:

	Cost	50% Assessments	Net ARPA Funds
Sewer	\$530,000	\$138,433.72	\$391,566.28
Water	\$246,000	N/A	\$246,000.00
Total	\$929,000	\$207,134.24	\$637,566.28

For the most part, the properties along S. 76th Street are not enthusiastic about being required to connect to the sewer or being assessed for the sewer. All properties in the City of Franklin served with on-site septic disposal systems must have their systems inspected and pumped every three years to certify to Inspection Services that the system is satisfactory. Common Council may consider that the municipal code §207-27 "Southwest Sanitary Sewer Service Area sanitary sewer service extension connection policy and fees" be modified to allow avoidance of connection of

these properties until the on-site disposal system be deemed deficient and also indefinite deferment for properties that do not connect at the present time. If and when an onsite system for these eastern properties should need replacement or repairs, connection would be required at that time and the 50% assessment shall be levied for payment, either in-full or with the 12-year @ 6% payment option. This option does not affect the ARPA funding but does affect the City's cashflow projections.

The remaining parcels in this area with no access to sanitary sewer would be the Hannagan property (9705 S. 76th Street), the Burch property (9571 S. 76th Street), and the Skarie property (7623 W. Ryan Road).

Finally, it should be noted that absent a project using ARPA funds, it is entirely conceivable that a future project(s) could be mandated for environmental reasons and the neighbors would be assessed 100% of the costs per the municipal code and the City would be required to reallocate budgets to pay for the project(s)

OPTIONS

1. Complete this project in 2024 with 50% assessment philosophy and allocate approximately \$722,000 of remaining ARPA funds to the Sanitary Sewer and Water Relay Projects proposed in this action sheet and recommend the remaining roughly \$1.2 million ARPA funds be allocated to other projects.
 - a. Option to allow indefinite deferments for the eastern properties until such a time that the property is expanded, or the on-site system needs repairs or replacement.
2. Complete only the western part of this project (80th Street Corridor) in 2024 with 50% assessment philosophy and allocate approximately \$640,000 of remaining ARPA funds to the Sanitary Sewer and Water Relay Projects proposed in this action sheet and recommend the remaining roughly \$1.3 million ARPA funds be allocated to other projects.
3. Complete this project in 2024 with 0% assessment philosophy and allocate approximately \$929,000 of remaining ARPA funds to the Sanitary Sewer and Water Relay Projects proposed in this action sheet and recommend the remaining roughly \$1.0 million ARPA funds be allocated to other projects.
4. Allocate all remaining ARPA funds of roughly \$2 million to other projects and no ARPA funds to the proposed project in this action sheet.
5. Other direction to Staff.

FISCAL NOTE

The remaining ARPA funds of roughly \$2 million need to be encumbered by December 31, 2024 and spent by December 31, 2026. If not, any remaining funds will have to be paid back to the US Treasury. Future budget amendments may be needed based on the outcome of spending.

Assuming a 50% assessment strategy with deferment options for the eastern properties, deferments less than \$70,000 would have to be funded by the sewer impact fee until such a time they are repaid, if ever. The western properties are likely to make payment in full upon request.

RECOMMENDATION

Direct Staff to return to Common Council on March 19, 2024 with a contract to proceed with the design, permitting and solicitation of bids of this project for construction in 2024 pursuant to the ARPA deadlines and direct Staff to return with an ordinance to allow for indefinite deferment of properties on the eastern sanitary sewer section.

Engineering - GEM

<p style="text-align: center;">APPROVAL</p> <p style="text-align: center;"><i>SK</i></p>	<p style="text-align: center;">COMMITTEE OF THE WHOLE</p>	<p style="text-align: center;">MEETING DATE</p> <p style="text-align: center;">3/4/2024</p>
<p style="text-align: center;">REPORTS & RECOMMENDATIONS</p>	<p style="text-align: center;">Director of Administration to Contract with Johnson Controls for a Comprehensive Efficiency Program to Benefit our Aging Municipal Buildings and Create Cost Savings Efficiencies.</p>	<p style="text-align: center;">ITEM NUMBER</p> <p style="text-align: center;">D.</p>

BACKGROUND

The City of Franklin seeks a partner to develop and implement a full range of sustainability and energy efficiency services throughout the City. Johnson Controls has the breadth of experience, resources, and innovation required to develop a holistic solution for the City collaboratively. They specialize in creating efficient buildings and integrating other smart city infrastructure, including renewable energy, security, IT solutions, water metering systems, and transportation technologies – innovations that will benefit the entire community. Additionally, Johnson Controls has the experience and experts to guide the City through various funding and procurement options, grants, rebates, and potentially funding a project with capital improvement funds, if desired. Key reasons to select Johnson Controls include:

Local Wisconsin company

Most experience with Performance Contracts

History of successful performance-based services for cities of similar size

Multiple project funding alternatives

Comprehensive innovation aligned with the City's Mission

OPTIONS

1. Authorize the Director of Administration to contract with Johnson Controls for a Comprehensive Efficiency Program to benefit our aging municipal buildings and create cost savings efficiencies. Additionally, allocate unallocated ARPA funds to offset the project's expense, particularly for security (lighting and cameras) and healthy facilities (windows), as suggested by Johnson Controls.
2. Review and evaluate additional proposed projects within the City.
3. Seek further clarification or information from Johnson Controls.
4. Additionally, allocate unallocated ARPA funds to offset the project's expense, particularly for security (lighting and cameras) and healthy facilities (windows), as suggested by Johnson Controls.
5. As the Council deems appropriate.

FISCAL NOTE

The proposed contract with Johnson Controls will involve financial considerations outlined in their response to the RFQ. The fiscal impact will depend on the agreed-upon terms and scope of services. Allocating unallocated ARPA funds for specific project components, such as security and healthy facilities improvements, can help offset expenses not covered by generated savings.

RECOMMENDATION

Based on Johnson Controls' executive summary response and their demonstrated expertise in delivering efficiency programs, it is recommended to approve contracting with Johnson Controls to provide the City of Franklin with a comprehensive efficiency program as outlined in their RFQ response and preliminary results. Furthermore, the Council is encouraged to allocate unallocated ARPA funds to offset the project's expenses, particularly for security and healthy facility improvements, as suggested by Johnson Controls during discussions.

COUNCIL ACTION REQUESTED (March 5, 2024 Common Council Meeting)

(Option 1 and Option 4) Motion to Authorize the Director of Administration to contract with Johnson Controls for a Comprehensive Efficiency Program to benefit our aging municipal buildings and create cost savings efficiencies. Additionally, allocate unallocated ARPA funds to offset the project's expense, particularly for security (lighting and cameras) and healthy facilities (windows), as suggested by Johnson Controls.



City of Franklin

9229 West Loomis Road
Franklin, Wisconsin 53132
(414) 858-1100
franklinwi.gov

COMPREHENSIVE EFFICIENCY PROGRAM THROUGH PERFORMANCE CONTRACTING

REQUEST FOR QUALIFICATIONS

OVERVIEW

The City of Franklin, WI (the "City") issues this Request for Qualifications (RFQ) for prospective Proposers to submit their Statement of Qualifications (the "proposal") for the City's consideration in achieving the required scope of services and requirements outlined herein. The scope of services includes designing, constructing, administering, and potentially managing Performance Contracts for efficiency initiatives to advance sustainable assets and infrastructure for the City. These initiatives encompass Renewable Energy, Energy Efficiency, Transportation, Water/Wastewater Infrastructure, Metering Technology, and other City Infrastructure Improvements collectively called "the Project."

GOALS AND COLLABORATION

Over the next four (4) years, with optional renewals, the awarded Proposer will collaborate with the City to prioritize projects aimed at achieving the following goals:

- Enhancing infrastructure and facility operations for improved efficiency.
- Investing in construction and renovation projects.
- Supporting teaching and learning initiatives.
- Stimulating local job growth and boosting the economy.
- Adhering to budget constraints.

SUBMISSION DETAILS

Qualifications must be submitted by **Thursday, February 22, 2024** - preferably via emailed PDF - to:

Kelly Hersh, Director of Administration
9229 W. Loomis Road, Franklin, WI 53132
Email: khersh@franklinwi.gov; (414) 427-7504

PROPOSAL REQUIREMENTS

Proposals should detail the history of designing, implementing, and operating performance-based cities or similar large operations. Additionally, they should outline how the Proposer will demonstrate their ability to recover investments orderly through cost savings related to energy efficiency, alternative fuels, labor efficiency, and reduced system maintenance.



City of Franklin

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Franklin, Wisconsin 53132
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franklinwi.gov

SPECIFIC REQUIREMENTS

1. **Contractor's License:** Proposers must hold a current State Contractor's license in Wisconsin for at least five (5) years from the RFQ issuance date.
2. **NAESCO Membership:** Proposers must provide evidence of being an accredited National Association of Energy Services Companies (NAESCO) member for at least five (5) years from the RFQ issuance date. Partnerships must comply with this requirement.
3. **Technical Expertise:** Proposers must provide engineering and technical support staff with training and experience in utility cost reduction, building operations, and sustainable practices.
4. **Smart City Solutions:** Proposers must have experience in designing, installing, and maintaining Smart City solutions and applications.
5. **HVAC Systems:** Proposers must have experience in designing, installing, and maintaining automated control and HVAC systems.
6. **Water Technology:** Proposers must have experience in water metering technology, water treatment, and pumping processes and technology.
7. **Street Lighting:** Proposers must have experience in urban street lighting technology design and installation.
8. **Renewable Energy:** Proposers must have experience designing and installing Renewable Energy technology.
9. **Fire, Security, and Life Safety:** Proposers must have capabilities in fire, security, and life safety to address City inquiries regarding code, safety, and compliance.
10. **Research and Innovation:** Proposers must demonstrate knowledge of upcoming technologies and equipment innovations.
11. **Service Availability:** Proposers must provide 24-hour service and emergency response for critical systems within two (2) hours.
12. **Data Management:** Proposers must provide a data aggregation system for Energy Management, Energy Tracking, and Predictive Maintenance.
13. **Monthly Reporting:** Proposers must submit monthly utility data reports with analysis and suggestions.
14. **Training:** Proposers must have factory-trained technicians and provide in-house training for City staff.
15. **Communication:** Proposers must maintain regular communication and attend City meetings.
16. **Project Strategies:** Proposers must propose specific strategies and recommendations for achieving energy and building efficiency goals.
17. **Past Performance:** Proposers must provide references and evidence of past performance with detailed information, including no less than five (5) and no more than ten (10) projects.
18. **Organizational Chart:** Proposals shall include an organizational chart of all personnel and consultants, their roles, and qualifications.



City of Franklin

9229 West Loomis Road
Franklin, Wisconsin 53132
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franklinwi.gov

SELECTION PROCESS TIMELINE

Release of RFQ:	February 8, 2024
Proposals due and acknowledged at 11:00 AM:	February 22, 2024
Proposals evaluated by the selection committee:	February 29, 2024
Receives council approval:	March 5, 2024

Note: Dates after receipt of proposals are subject to change if necessary.

EVALUATION CRITERIA

- 40% Experience and knowledge with design, implementation, and integration of listed efficiency solutions
- 30% Company financial stability, performance guarantees, and project funding options
- 20% Local team and technical experience
- 10% Corporate presence/commitment, including experience working with local SBE/WBE/DBE

February 22, 2024

Kelly Hersh, Director of Administration
9229 W Loomis Road
Franklin, WI 53132

RE Request for Qualifications for Comprehensive Efficiency Program Through Performance Contracting

Dear Kelly Hersh,

The City of Franklin seeks a partner to develop and implement a full range of sustainability and energy efficiency services throughout the City. Johnson Controls has the breadth of experience, resources and innovation required to collaboratively develop a holistic solution for the City. We specialize not only in creating efficient buildings, but also in integrating other smart city infrastructure, including renewable energy, security, IT solutions, water metering systems, and transportation technologies – innovation that will benefit the entire community. Additionally, Johnson Controls has the experience and experts to guide the City through the various funding and procurement options, grants, rebates, as well as potentially funding a project if desired.

Our local Wisconsin team of service, engineering and operational professionals manage the entire design, construction, commissioning, training, and measurement & verification processes. We will also work with local contractors who you know and trust.

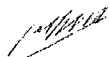
Key reasons to select Johnson Controls include

- **Local Wisconsin company:** We have been based in WI for over 135 years, have a strong group of company service employees in the Franklin area and have solid partnerships with many local contractors.
- **Most experience with Performance Based Contracts:** We have implemented over 3,500 energy savings projects and co-authored the enabling Wisconsin Performance Contracting legislation, Statute 66.0133.
- **A history of successful performance-based services** for cities of similar size.
- **Multiple project funding alternatives:** The City can choose between a variety of funding programs including our own unique Contingent Payment Program.
- **Comprehensive innovation aligned with Your Mission:** We have a unique breadth of solution offerings with internal experts in renewable energy, energy efficiency, space planning and smart city applications.

The following Statement of Qualifications further details how Johnson Controls is the best fit for the City, the right partner to help Franklin make your efficiency strategy a reality.

Thank you for your consideration. We look forward to the opportunity to work with you to create a custom solution for the City.

Sincerely,



Jeff Van Ess
Account Executive, Sustainable Infrastructure™
(262) 505-0842
jeff.vaness@jci.com

Enhancing
Comfort + Efficiency + Reliability

City of Franklin

RFQ

Comprehensive Efficiency Program Through Performance Contracting

Response submitted by Johnson Controls, Inc.



February 22, 2024

Submitted by:
Jeff Van Ess
Account Executive, Sustainable Infrastructure
Johnson Controls, Inc.
262-505-0842, jeff.vaness@jci.com

Submitted to:
Kelly Hersh
City Administrator
City of Franklin, WI
khersh@franklinwi.gov



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Executive Summary

Johnson Controls supports the City's plan to upgrade the health, safety, security, and beauty of its buildings and infrastructure. Achieving these goals will be no small task, especially while under typical budget and resource constraints of a city. Success will require the City to take an alternative and aggressive approach to make larger additional investments in City infrastructure. A proven process and alternative funding method will be required to get to the desired level.

The right partner can help you achieve these results. Johnson Controls is your partner of choice, experienced in multiple disciplines and ready to facilitate one unified efficiency and technology investment in Franklin. We will work with City department leaders to create a holistic view of City solutions across departments. Together, we will design and integrate efficient and sustainable solutions across the City.

The solutions will bring significant benefits to the City:

- Support achievement of efficiency and cost saving goals
- Reduce energy and water use across City departments
- Increase the use of energy from renewable sources
- Reduce levels of greenhouse gas emissions
- Simplify and streamline reporting of energy and environmental data
- Promote local economic development
- Support the attraction and retention of a diverse workforce and businesses
- Create local jobs

Johnson Controls is uniquely qualified to be your partner in this advancement. Johnson Controls is:

- Your neighbor in Wisconsin since 1885 – we work, live and play here
- Your provider of unique funding programs
- Your experienced, most qualified performance-based project provider – for more than 35 years
- Your innovative solution provider, capable of providing a suite of comprehensive energy services
- Your financially stable provider, able to guarantee results, transferring risk from the City

In addition to smart buildings technology, Johnson Controls has significant experience implementing innovative connected solutions within the community such as utility infrastructure upgrades, smart water metering, connected street lighting and other Smart City solutions. Our alternative funding programs provide the means to get these projects done.

When you have limited resources it's important that you get results and that you're only paying for success [The Performance Contract] with Johnson Controls allows us to meet that objective and without us having to put up the capital "

– Steve Rowland,
Chief Financial Officer, Louisville Metro Government

Company Overview

Johnson Controls, Inc. (NYSE: JCI) has a corporate commitment to leadership in building technologies, security and network development, water and wastewater solutions and Smart City integration, and the financial strength to ensure the success of our projects.

Our company is a \$25+ billion corporation, with our North American headquarters in Milwaukee, WI which includes over 100,000 employees worldwide across all businesses. Johnson Controls has been in continuous operation since 1885. Johnson Controls merged with Tyco in 2016 to further our experience in being a global leader in building systems and energy storage and we are ranked 150 on the Fortune Global 500.

Comprehensive Energy Service Experience

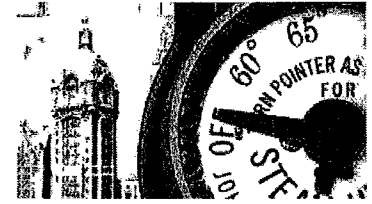
Our approach to Performance Based Contracts provides a consultative approach with a rigorous and comprehensive process to accomplish the design, installation, commissioning, and on-going service phases of a project. Johnson Controls is experienced in providing an unmatched breadth of innovation including building efficiency equipment and controls, security, renewable energy, smart city solutions, water metering technology, water treatment and pumping process, and urban street lighting. It is rare and unique for one company to possess this span of knowledge and experience and have the ability to provide these solutions in a performance contract. Johnson Controls is able to provide these services and guarantee results.

Building Efficiency

Johnson Controls brings the most extensive experience in the smart building industry. We are experts in heating and cooling systems, building envelope, energy management and control, lighting systems and water efficiency. We can implement our own products and systems or implement other brands that may be preferred by the City. Building efficiency improvements in all municipal buildings would be thoroughly investigated in this program.

Renewable Energy

We have the capability and experience to implement renewable energy sources in Franklin. Johnson Controls has been involved in more than 500 renewable energy projects to date. We will work with you and other partners to create the best solution for the City. We also recommend the investigation of an energy storage system to compliment the renewable energy source and provide additional utility cost savings and energy resiliency.



Comfort-Reliability

Our founder, Warren S. Johnson, a professor at the State Normal School in Whitewater, Wisconsin, developed his electric tele-thermoscope in classrooms to keep students more comfortable—and end hourly interruptions from the janitor checking the rooms' temperature. We've continued to find ways to ensure facilities maximize facility performance.



Enhancing

Comfort + Efficiency + Reliability

Smart City

We are able to help the City in the development of a Smart City plan by bringing department stakeholders together to share ideas, prioritize projects and create a comprehensive solution that will benefit the entire community. Johnson Controls has the expertise, resources, and partnerships to implement these technologies in Franklin - Innovation that improves city-wide efficiency, improves communication, provides economic development, attracting new residents and businesses

Smart Street Lighting

Johnson Controls has the expertise to collaborate with the City to create an intelligent, adaptable, energy efficiency LED street lighting solution in the City. We are one of the largest lighting design/implementation contractors in North America. Smart street lighting would enhance the quality of life in Franklin to improve where citizens live, work and play.

Water & Wastewater Experience

Johnson Controls has on-going projects in multiple wastewater treatment plants across the United States which have reduced energy consumption, increased energy production, and recovered waste heat. The scope of these projects include diffuser replacement; aeration blower upgrade; aeration controls; digester gas to energy; SCADA upgrades, upgrades to the HVAC system; building management; IT Infrastructure and/or specialty systems. The Johnson Controls team is extremely familiar with the range of wastewater treatment technology.

Partnering with the City of Franklin

Johnson Controls strongly desires to be the City's partner for this project. To demonstrate that Johnson Controls is the most qualified provider and best fit for the City, following is a table that connects your Evaluation Criteria with our corresponding response that follows. Johnson Controls is the right partner for you based on our project experience and knowledge of innovation, our company financial stability, our local team and technical experience and our corporate presence and commitment to Wisconsin and the City of Franklin.

Evaluation Criteria

1. Experience and knowledge

Performance Contract experience	Johnson Controls has implemented more than 3,500 performance contracts. We are currently managing 440 active contracts with total outstanding guarantees exceeding \$7.2 billion. See Reference section for project examples.
Comprehensive city-wide Solutions	Johnson Controls has a significant breadth of local, national and world-wide client projects with diverse technology solutions. Our projects include not only standard facility improvement, but also include significant innovation, including solutions that connect smart buildings to the community: water and wastewater utility infrastructure, smart water metering, renewable energy, energy storage, connected street lighting and other Smart City technologies; a combination that only we can provide. See Experience section for comprehensive list of innovation.
Knowledge of local team	Johnson Controls has a proven process and an experienced local team of individuals, experts in facilities, water infrastructure and renewable energy, who take responsibility to get the project completed successfully.

2. Company financial stability, guarantees and funding

Financial soundness and stability of ESCO	Johnson Controls has been part of the state and this community for well over 135 years and has been implementing performance contracts for more than 35 years.
Guaranteed savings Monitoring, measurement and verification services	Johnson Controls guarantees project results. We have an experienced team dedicated to monitoring, measurement, verification and reporting on projects. See Reporting section.
Project funding alternatives	Supporting our customers in finding the right funding is unmatched in the industry. The Johnson Controls Contingent Payment Program is one unique alternative. See Project Strategies section for additional information about options.
Incentives, Rebates and Grants	Johnson Controls has a team dedicated to identifying and providing support in securing all available rebates and incentives. Locally, we work closely with Focus on Energy and are also aware of additional state and federal incentive opportunities.

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3. Local team and technical experience

Local experience	We have an experienced team of employees in Franklin who have been serving schools and businesses in the City for decades. See reference information.
Internal local expertise	Headquartered in Southeastern Wisconsin, Johnson Controls has unmatched expertise in bringing innovation to life. We don't just talk about it, we implement it and support it. We have local team members who are expert in each innovative solution identified. When we do not manufacture a technology, we have national partnerships with vendors who do.

4. Corporate presence/commitment

Corporate presence	Johnson Controls has a strong contingent of service employees in the Franklin area. Additionally, we have thousands of employees in the state, including engineering, project management, training and commissioning support. Therefore, we have a vested interest in the success of the project
Local partnerships	We also work with other local contractors and firms that the City knows and trusts for lighting, mechanical, electrical and other services.
Committed to Sustainability and to Franklin	Johnson Controls is committed to efficiency. We also practice what we promote. Sustainable and efficient technology is implemented in our own Johnson Controls facilities We support Franklin's efficiency goals and are eager to implement initiatives that will transform the City into a showcase. Community infrastructure improvements not only save money, they also enhance economic development by attracting businesses, employees and new residents. As a neighbor, Johnson Controls would like to partner with you to make this happen.

Your Local Project Team

One of the key reasons why organizations throughout Wisconsin choose to partner with Johnson Controls is because we bring not only the largest team of local professionals but an unmatched vested interest in your success, both in this project and over the long term. We have over 3,500 employees based throughout Wisconsin with experts who are local to the City of Franklin and want to see the city succeed in its energy sustainability goals.

Johnson Controls Project Team

Jeff Van Ess

Office: Milwaukee, WI

Account Manager

32 Years of Experience

- Jeff will serve as your main point of contact for the project. He will act as a liaison between our team and yours, providing close coordination to make sure your objectives are continually met.
- Manages the coordination of resources, procurement, the analysis of financing, grants and rebates, schedule development and ongoing support through the life of the project.
- Jeff has a BS, Mechanical Engineering, Milwaukee School of Engineering and is active in the League of WI Municipalities, Wisconsin Counties Association, and other industry-related organizations.

Amir Haghghat, LEED AP

Office: Arlington Heights, IL

Engineering Manager

15 Years of Experience

- An accomplished engineer who has worked in the industry since 2009.
- Understanding of the needs and challenges of public sector clients, coupled with his experience developing similar projects for numerous comparable clients across the state means you can rely on him to develop a project that will meet your objectives.
- Amir leads the engineering design tasks and works with clients to ensure the final suite of upgrades addresses their goals and achieves their vision for the project.

Jim Bieser

Office: Milwaukee, WI

Operations Manager

33 Years of Experience

- Oversees the installation of all equipment and upgrades. He will work with the City and the sub consultants to coordinate schedules so your operations are not disrupted and the project is completed on time.
- Jim serves as the primary point of contact throughout the installation period, working with the client, our team, and subcontractors to coordinate all construction activities to minimize disruptions to daily operations
- Jim's education includes a BS in Mechanical Engineering at Marquette University, and he is a ASHRAE member.

Jim Wolf

Office: Arlington Heights, IL

Performance Engineer

23 Years of Experience

- Supervises guarantee savings contracts, manages and coordinates the delivery of M&V services, energy reports and billing, and acts as a representative to owners to ensure customer satisfaction.
- Jim leads the measurement and verification tasks for the projects, working with clients over the course of the performance period to ensure that the improvements delivered the guaranteed savings.
- Jim has a BA, Management from Aurora University

Bob Ricobene

Office: Arlington Heights, IL

Area General Manager

32 Years of Experience

- Directs and provides support to the local account management team. He contributes to the development of training and educational programs for clients and will provide oversight to make sure your project proceeds as you envision.
- Bob has helped deliver similar projects for public sector clients across Wisconsin, Illinois, and Iowa.
- Manages the process of designing the conceptual solution with a Program Management Approach and prepares the business case analysis to outline the benefits of the proposed solution.

Specific Requirements

Following are responses to the RFQ Specific Requirements.

1 Contractor's license: *Proposers must hold a current State Contractor's license and have been a contractor in Wisconsin for at least five (5) years from the RFQ issuance date*

Johnson Controls has had a current WI state contractor's license for well over the required five year minimum.

2. NAESCO Membership: *Proposers must provide evidence of being an accredited National Association of Energy Services Companies (NAESCO) member for at least five (5) years from the RFQ issuance date. Partnerships must comply with this requirement.*

There is no better validation of our ethical transparent operations than having a third party review our processes and independently judge for themselves. The National Association of Energy Service Companies (NAESCO) certifies energy efficiency companies to protect buyers and provide them with reassurance that the company they choose to partner with on a project will comply with their obligations both ethically and contractually. NAESCO is a national trade association that has been promoting the benefits of the widespread use of energy efficiency for more than 20 years.



To provide organizations with reassurance that their project will be completed, their guarantees will be met and their risk will be mitigated, the NAESCO-accredited status is only issued to a company after a committee of industry experts, who are unaffiliated with any particular ESCO or any other company under consideration for accreditation, perform a rigorous examination of the company's core

competencies and business practices. The committee carefully reviews the detailed documentation submitted and consults with selected customer references.

Johnson Controls has earned the highest accreditation of the National Association of Energy Services Companies (NAESCO), which is Energy Service Provider (ESP). Johnson Controls is one of only 10 companies in North America to hold the highest level of accreditation as a NAESCO Certified Energy Service Provider.

3. Technical Expertise: *Proposers must provide engineering and technical support staff with training and experience utility cost reduction, building operations, and sustainable practices*

The Johnson Controls engineering and technical support team has experience in all of the Comprehensive Energy Services that would be incorporated in the City. This group will be directly engaged in the project throughout its phases and will be responsible for the entire project.

To maintain a high standard of quality, we follow a formal quality assurance process. Our responsibilities for a successful project include: auditing, engineering, design, project management, site coordination, schedule management, and coordination. This means that we are with you from the day you say, "go," through the design, construction phase, and the life of this project

To ensure the successful delivery of your finalized scope of work, one of the first and most valuable services we offer the City are project planning workshops. In the workshop process, we will hear your concerns, preferences, and desired outcomes for this project. We believe it is essential for the success of the process to have all parties of the project clearly communicating early in the development cycle. For this reason, we established the workshop concept and have made it a part of every project we implement.

Experience

4. – 9 Experience: *Proposers must have experience in designing, installing, and maintaining the following solutions and systems:*

- *Smart City solutions*
- *HVAC systems*
- *Water Technology*
- *Street Lighting*
- *Renewable Energy*
- *Fire, Security, and Life Safety*

Smart City

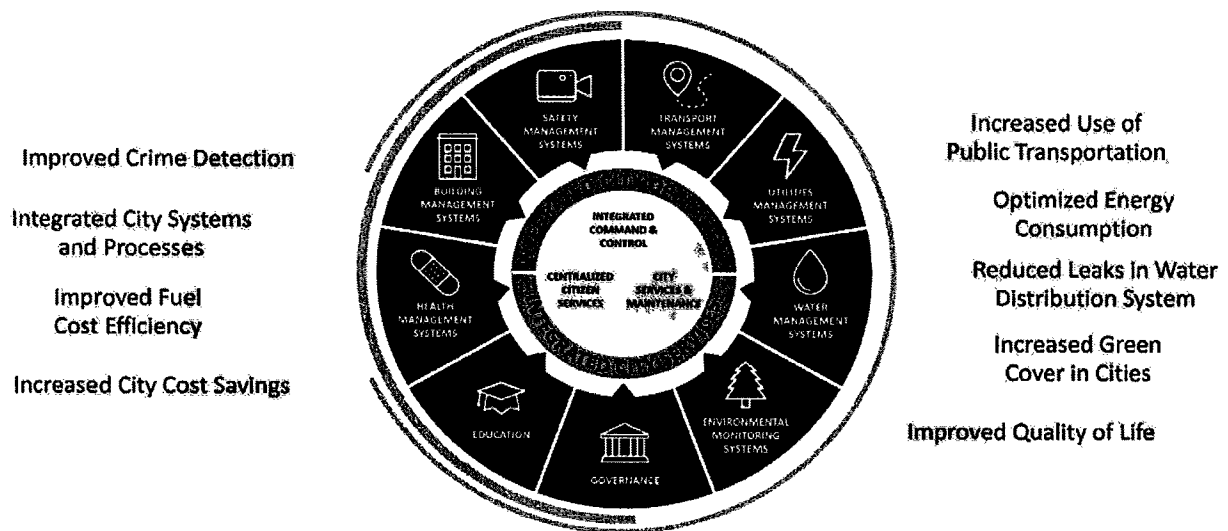
As part of the Comprehensive Energy Services support, Johnson Controls is skilled to help the City build and implement a Smart City roadmap, customized for Franklin. "Smart City" development has been defined as "[identifying] opportunities to improve people's lives both by modernizing key infrastructures (such as for energy, water, or transportation) and by using information technology (often with open data) to enhance city operations and services." (Technology and The Future of Cities – President's Council of Advisors on Science and Technology).

Enhancing Comfort + Efficiency + Reliability

In the face of shrinking budgets and a more complex regulatory environment, local government leaders looking to achieve this vision of a smart city are often challenged to think outside the box. They need to find innovative ways to fund solutions that make this vision a reality—things like networked LED street lights, citywide leak detection, closed-circuit monitors, emergency signaling and smart irrigation, to name just a few of the technology-based solutions that make cities smarter, sustainable and more efficient and its people comfortable and secure

Johnson Controls utilizes a unique and proven process, the Smart City Solution Navigator, to bring City departments together to identify, prioritize and build an integrated program for the entire City. It's not enough to assess, prioritize and select your technology investments. Building out a comprehensive smart city program means making informed, data-driven decisions early in the process. And testing the interoperability of various systems is imperative for creating the connected environment that meets your energy, technology and operational objectives, now and well into the future. As a technology neutral partner, Johnson Controls ensures the systems we provide, and those of our partners, work flawlessly on Day One — lowering the risk and complexity of the integrations and leading to lower installation and operating costs going forward.

The City will Benefit from Our Smart City Offerings



Enhancing

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HVAC Systems

Johnson Controls brings the most extensive expertise in the industry, with focused experience in all types of municipal facilities. The following table highlights many of the services we can implement.

Heating Systems

- Central heating plant improvement
- Heating system redesign and optimization
- Boiler replacement
- Electric boiler to gas fired boiler
- Steam to hot water system conversion
- High efficient modular boilers
- Low load boiler
- Burner replacement
- Dual fuel burners
- Oil atomizing burners
- Boiler stack heat reclaim
- Perimeter radiation
- High efficient domestic water heaters
- Gas line turbulators
- Steam trap retrofits
- Steam pressure control
- Temperature reset control
- Electric heating to gas
- Piping insulation
- Boiler stack reclaim
- Boiler system de-centralization
- Aerator replacement with O₂ scavenger
- Condensate recovery
- Reduce steam pressure - e.g. time of use

- Central cooling plant
- Chiller plant redesign
- Chiller replacements
- Gas fire centrifugal chillers
- Low load chiller
- CFC containment conversions
- Tower free cooling
- Commercial refrigeration
- Cooling tower upgrade
- Two speed fan motors
- Variable pitch blade cooling tower fan
- Reclaim A.C. heat rejection
- Chiller plant optimization
- Variable flow system upgrade
- Chilled water temperature reset
- Humidity control
- Absorption chiller
- Gas-fired chiller
- Condenser auto-cleaning
- Conversion to primary secondary, including VSD on SCHW pumps
- De-centralization/centralization

HVAC Systems

- Inefficient air handling unit replacement
- HVAC system redesign
- Variable frequency drives
- Heat recovery systems
- Low leakage air dampers
- Variable air volume systems
- Demand control ventilation
- Exhaust fans
- Fan coil units
- Motor replacement
- Unit heaters/ventilators
- Computer room unit optimization
- Four-pipe system to two-pipe system
- Variable volume system upgrades
- System recommissioning
- Variable refrigerant flow systems

Building Envelope

- Window glazing and film
- Energy efficient windows
- Insulate walls, roof, floor, soffit
- Caulk pipe penetrations

Enhancing

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- Window and door weather stripping
- Revolving doors and automatic door closers
- Air curtains
- Roofing
- Seal ceiling to roof gap
- Solar radiation reduction
- Reflective coating to roof
- Weatherproofing

- Facility management systems
- Direct digital controls
- Pneumatic control conversion
- Manual valves to automatic valves
- Multi-system integration
- Staging/lead-lag
- Optimum start/stop
- Air compressors

Lighting systems

- Lighting controls
- Lighting system redesign and optimization
- Daylight harvesting
- Delamp and install reflectors
- Occupancy sensors
- Incandescents to fluorescent
- LED exit signs
- Metal halide fixtures
- Emergency lighting
- Ambient light control
- Traffic lighting control
- Exterior/Street lighting
- LED interior lighting
- Induction lighting

Water Efficiency

- Retrofit fixtures
- Cooling tower retrofits
- Ice machine upgrades
- High efficiency domestic water heaters
- Waste heat recovery
- Plumbing systems
- Domestic water
- Rain water harvesting
- Water metering system
- Water control systems

Technology

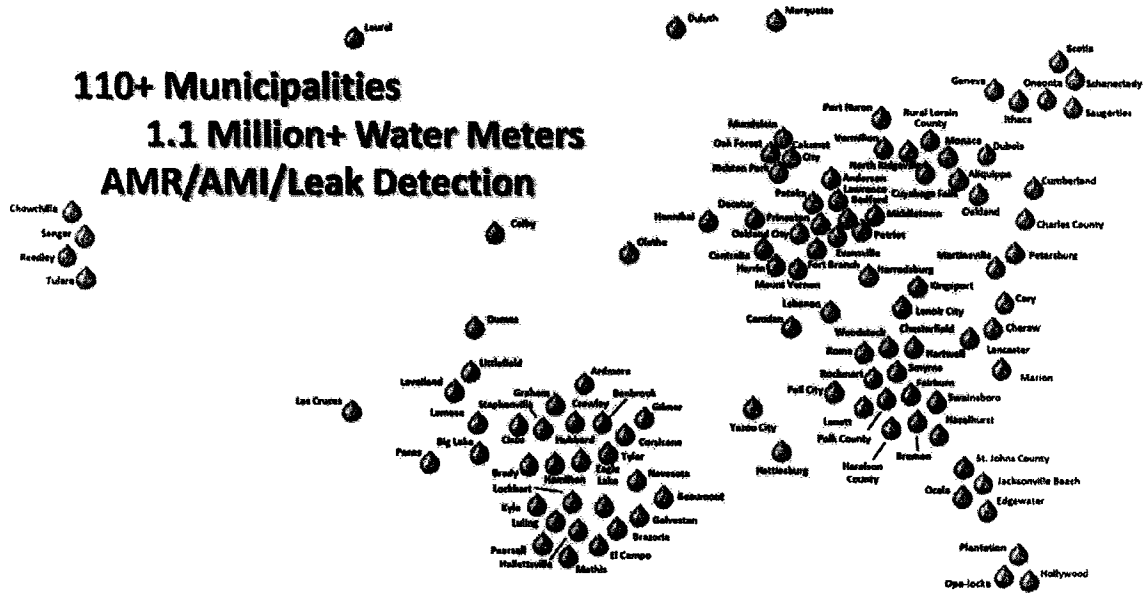
- IT enhancements
- Wireless
- Fire and security systems
- Perimeter security
- Telecommunications upgrades
- Voice over IP (VoIP)



Water Technology Experience

One of the key strengths of Johnson Controls is our unique Municipal Utility Solutions team. With an average of more than 20 years of specialized experience, they have worked with more than 110 water utilities across the country to upgrade equipment and improve the efficiency of their operations. These efforts have involved major citywide water meter replacements, leak detection systems and deploying automated meter reading and advanced metering infrastructure systems. We bring more water utility experience than any other energy services company and would work collaboratively with your team to develop improvements in line with your goals and expectations.

Municipalities that Have Partnered with Johnson Controls for Similar Utility Projects



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Street Lighting

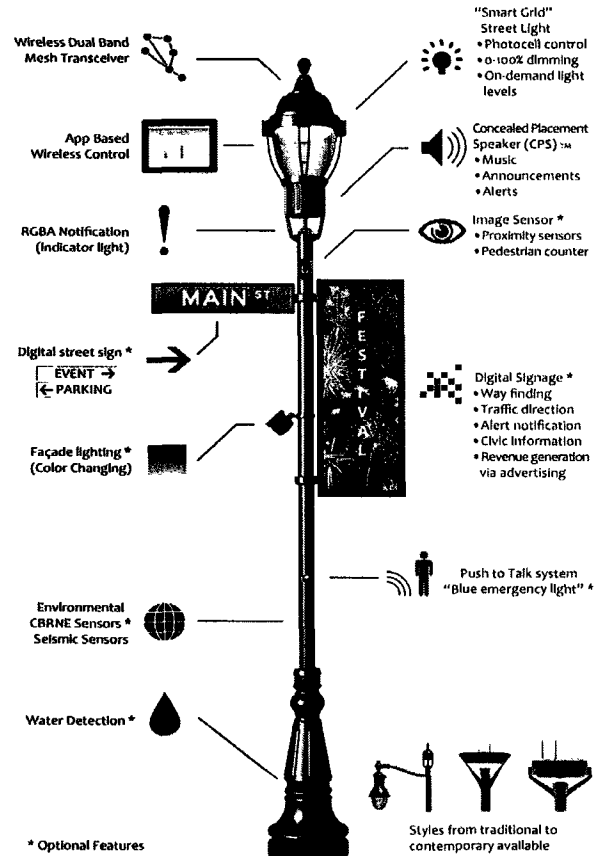
A Johnson Controls intelligent, adaptable, energy efficient lighting solution offers innovative interoperability among devices and systems. Municipalities can take advantage of remote management and control to improve communication between systems and to access more real-time data. And you'll reduce maintenance and operating costs. Energy usage monitoring, lighting level adjustments and pinpointing outages can be handled remotely using wired or wireless communications. We can also add smart applications to LED street lighting (shown in the graphic on the right) to provide numerous benefits:

1. Better overall visibility is a crime deterrence and roadway objects are more easily seen.
2. Traffic analytics mean better traffic flow.
3. Digital signage for alerts, civic information and revenue generation via advertising.
4. Parking management to spotlight available parking
5. Gunshot detection so authorities are notified immediately
6. Concealed speaker placement for music, announcements and alerts.
7. Water detection for information on street flooding.
8. Climate detection to monitor air quality levels

Can Today's Vertical Assets Become Tomorrow's Revenue Stream?

Municipalities around the world are beginning to understand that their street lighting poles have the potential to be a significant source of revenue. Many are content to exchange their "vertical assets" for a free LED upgrade. However, they may be underestimating the true value of the data generated by the sensors, cameras and other technology attached to those poles. **What if each pole could generate \$5,000, \$10,000 or even \$20,000 per year in revenue for the City?** We will help the City identify those revenue sources to fund the project *without relinquishing the City's rights to the data.*

Our team could help the City create an intelligent, adaptable, energy efficient solution that offers innovative interoperability among devices and systems. The City can take advantage of remote management and control to improve communication between systems and to access



Vertical Assets

Light poles provide superb infrastructure for various quality of life applications

Citizen Services
Tools and applications to improve where people live, work and play

Sustainability & Savings
Less energy consumed, reduced carbon footprint and lower operating costs

Revenue Generation
Monetizing system assets and data

Safety & Security
Improve visual acuity and crime deterrence.

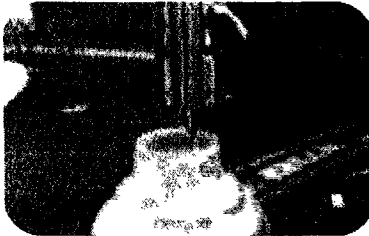
Enhancing Comfort + Efficiency + Reliability

more real-time data. And you'll reduce maintenance and operating costs. Energy usage monitoring, lighting level adjustments and pinpointing outages can be handled remotely. We can also add smart applications to LED street lighting to provide numerous additional benefits.

Where We've Implemented Similar Street Lighting Retrofit Projects

With a project as complex and critical to your operations as this program, there is no substitute for experience. We have worked with numerous municipalities across the country on similar street lighting inventory, design and technology selection projects, with executed contracts totaling more than 70,000 LED street lights. We are one of the largest lighting design/retrofit/ installation contractors in North America that specializes in energy efficiency programs and have a full team of in-house national lighting experts to draw from. We also bring a vendor neutral approach and experience with all lighting manufacturers.

Street Lighting Projects



City of Racine, Wisconsin Street Lighting Program

Johnson Controls retrofitted all of the City's downtown decorative street lights. We tested nine different products in the streets, accounted for pole spacing and measured the features of the selected product in a certified lab. We even negotiated an extended product warranty on behalf of the City that doubled the time period.



City of Salina, Kansas Street Lighting Program

The City of Salina was looking to upgrade the street lights in their downtown district. The poles and fixtures were getting older, and costing more and more to operate and maintain, but the City could not simply write a check to upgrade them. They partnered with Johnson Controls to modernize the lights and obtain the much needed funds to implement the project. We were able to put together a project that was one-third less than the City's estimated cost.



Borough of West Chester, Pennsylvania Street Lighting Program

West Chester is currently working with Johnson Controls to upgrade their regular street lights and ornamental street lights to LEDs. The project, which also includes a wireless control system, will save the Borough nearly \$60,000 annually.

Renewable Energy Solutions

Whereas renewable energy may be a new focus for some companies, Johnson Controls is a renewable solutions leader with a senior team of experts helping to design and implement solar, geothermal, biomass and other fossil fuel alternatives. In fact, we have been involved in more than 500 renewable energy projects to date. Rest assured that our team will fully explore all feasible renewable energy opportunities at your facilities

Solar PV

Johnson Controls is a full-service PV solar power system provider for cities. Our portfolio of projects includes small, demonstration size PV projects on public buildings, as well as some of the largest PV solar projects in the country. In deploying our solar arrays on our corporate headquarters and designing and installing projects for our clients, we have developed numerous best practices that enable our team to effectively anticipate challenges to make sure systems are implemented successfully.



Johnson Controls headquarters in Glendale, WI has earned a LEED Platinum rating from the U.S. Green Building Council on four buildings making it the largest concentration of buildings on one campus to ever receive the rating in the world.

Solar Thermal

A great renewable energy option for many cities and schools is a solar thermal pool heater. Pool water is pumped to the system on the roof using a small, low-flow pump. The system's solar collectors use heat from the sun to warm the water as it passes through them. The water is then pumped back to the pool, reducing or eliminating the need to use the boiler to heat water in summer months. In one instance, the pool heater we installed had a 3.5-year payback and will last 25 years.

Battery Power Energy Storage

This scalable system can provide hours of high-energy output within a proven modular design, drawing on our decades of experience in modular data centers and chiller plants. The result: an efficient, cost-effective solution that is integrated into the energy control system at the lowest total lifecycle cost. There are numerous areas within the City where this technology would reduce costs significantly.

Other Options

We have also helped communities implement wind turbines, cogeneration systems, biomass boilers, geothermal systems and more to offset their energy costs and reduce their carbon footprints. These systems, even small ones, are also great instructional tools for the City.

Fire, Security, and Life Safety

When optimizing a building's security and fire safety, you need solutions that protect people, secure assets, and lower operating costs — and that's what we deliver for businesses worldwide. We offer a full

suite of fire detection and alarm solutions, access control, intrusion detection, mass notification systems, intelligent network controller solutions, and video surveillance systems and integrations.

*10 **Research and Innovation:** Proposers must demonstrate knowledge of upcoming technologies and equipment innovations.*

Emerging Technologies

The City will tap into the latest building system technology with Johnson Controls given our continual investments in research and development capabilities, as well as a network of laboratories and academic partnerships. These help us develop future technology and stay ahead of evolving industry needs. We've invested in 30 laboratories dedicated to development and testing. We complement our in-house capabilities with a network of world's top scientists, engineers, professors and students.

1. **University of Wisconsin-Milwaukee.** A multi-million dollar investment in four joint laboratories at the College of Engineering and Applied Science that work on next generation lithium-ion batteries.
2. **University of Wisconsin-Madison Wisconsin Energy Institute.** A partnership to test, evaluate and optimize battery systems performance and interaction with the vehicles power train and electrical architecture and to develop future stationary energy applications.
3. **Milwaukee School of Engineering.** A partnership with the schools rapid prototyping lab, which enables us to quickly build and evaluate models of new battery parts.

The City will see cutting edge solutions when partnering with Johnson Controls due to the investment we have made in new technology. The technologies outlined on the following pages, illustrate some of our recent innovations that may benefit the City:

Connected Chillers

What if you could identify and address problems sooner? With our Connected Chiller offering, your chillers are connected to our Remote Operations Center (ROC) in Wisconsin where we monitor them 24/7/365 for alarms, faults and overall health. Currently, we have over 3,000 chillers connected to our ROC. ***This is changing the way our customers do maintenance – through the use of technology and data.***

Variable Refrigerant Flow

Variable refrigerant flow systems are capable of simultaneously heating and cooling different spaces. This is particularly attractive if there is a heat sink in the building, a warm room where heat is exhausted to the outside, or there are issues with limited space for ducting and mechanical equipment. In these instances, a VRF system may provide substantial benefits.

Enterprise Optimization

Our Enterprise Optimization offering will help organize building automation system data so you can more effectively optimize performance and efficiency across all the City buildings. We can aggregate data, analyze it based on standard and City-specific priorities, and then deliver it through easy-to-understand visuals. These tools give you an unprecedented view into facility performance, allowing you to ensure asset uptime, lower energy costs, increase productivity and report return on investment.

Ice Storage

Ice storage air conditioning is the process of using ice for thermal energy storage. This system provides efficient cooling during the day by circulating refrigerant through coils in its ice storage tank, eliminating the need to run an energy-intensive compressor during peak daytime hours. The system re-freezes ice each night when electricity generation is cleaner, more efficient, and less expensive.

11. Service Availability: *Proposers must provide 24-hour service and emergency response for critical systems within two (2) hours*

Johnson Controls service team provides emergency and/or call as needed service. Dispatched through our 24-hour operation center, professional tradesmen and technicians are available whenever and wherever needed. We guarantee answering emergency calls within two hours of the original call and next day service for routine service calls.

In addition to the service required, while our technicians are onsite, they will suggest ways to improve conditions, as well as alternate methods of operations. If needed, they will contact other specialists to assist with the issues at hand and provide the City with written documentation.

Contact Info: 866-862-0461

12. Data Management: *Proposers must provide a data aggregation system for Energy Management, Energy Tracking, and Predictive Maintenance*

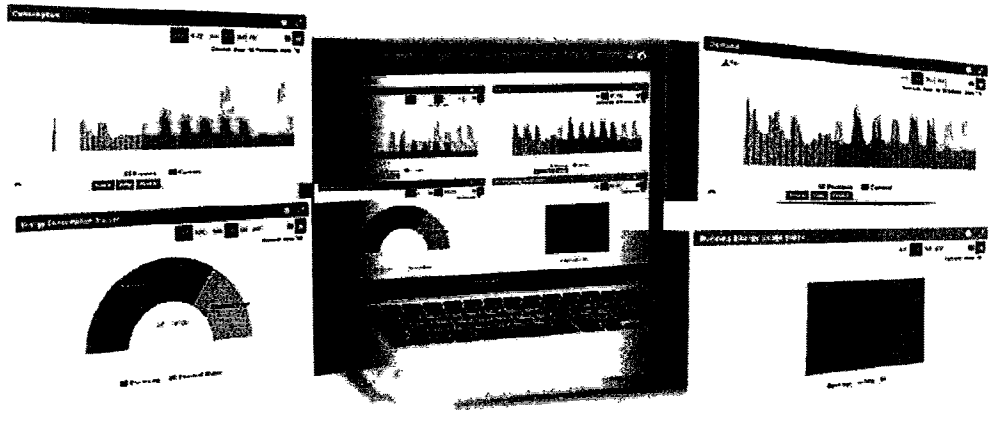
Energy Management Energy tracking Predictive Maintenance

The Johnson Controls OpenBlue Enterprise Manager offering is a comprehensive, analytical, cloud-based tool that proactively analyzes building data across an enterprise. It identifies issues, faults, opportunities for improved performance, operational savings, reduced energy consumption, and lower energy costs

OpenBlue automatically collects, analyzes, and displays information for all configured physical meters and virtual meters located in a facility's operation. Energy demand and consumption is aggregated and displayed using intuitive, customizable dashboards to enable proactive energy management, energy tracking and predictive maintenance.

This application enables the presentation of data through public-facing displays or enterprise dashboards for facility managers. OpenBlue has more than a dozen features, including carbon measurement, greenhouse gas measurement, charting and trending, 3D animation, videos, green tips and many more features that engage the public in understanding an organization's sustainability efforts.

Enhancing Comfort + Efficiency + Reliability



Powerful analytics root out energy and equipment related problems. These analytics run in the background and identify energy and equipment anomalies.

13 Monthly Reporting: *Proposers must submit monthly utility data reports with analysis and suggestions.*

Johnson Controls and the City will discuss a plan on how monthly reports will be created and distributed. Johnson Controls uses various software applications to generate these reports and the required format will be agreed upon between the City and Johnson Controls.

14. Training: *Proposers must have factory-trained technicians and provide in-house training for City staff*

By partnering with Johnson Controls, the City will have the ability to customize training to increase the self-sufficiency of your staff or to develop competencies in specific areas. Training, in conjunction with our service offering, maximizes the efficiency of your facility operations.

It is critical for training to occur at defined intervals throughout the course of any project. Facilitating proper communication between Johnson Controls and your staff regarding how buildings will operate throughout the installation period and the entire term of our agreement is highly important. Refresher seminars will be available from year-to-year, as requested, in order to maintain the degree of training necessary for staff to perform at a high level of efficiency. Each training session will review basic practices and introduce new technology and procedures as they become available.

As part of our performance contracting services, we will provide training to the City personnel on the proper operation of newly installed systems, which is crucial for maintaining their reliability and long-term integrity. This instruction is conducted during the final phase of project commissioning.

Training on new systems typically includes the following:

- Start-up and shutdown procedures, operation under all normal modes, and correct procedures under abnormal or emergency conditions
- A description of the system capabilities and limitations
- Procedures necessary for effective operational monitoring and alarming
- Inspection, service, and maintenance requirements for each system

- How to use all included Operations & Maintenance documentation

At the end of the process, every mode of systems operation, all systems equipment, components and zones, all backup systems, and every item in the control sequence description are proven operational under all normal modes (including part and full load), and under abnormal or emergency conditions.

15. Communications: *Proposers must maintain regular communications and attend City meetings*

Johnson Controls will work collaboratively with the City throughout all phases of the project, meeting and communicating regularly with City staff. For successful project design and management, Johnson Controls will conduct a weekly job meeting with the facility staff and subcontractors in order to:

- Conduct site / project safety briefings
- Coordinate site access
- Schedule work crews
- Identify and manage issues
- Facilitate communication to keep the project on schedule

An agenda is created prior to each job meeting to identify current issues and coordination tasks, which are discussed and resolved in the job meeting. Minutes of the meeting are then distributed to provide a record of the meeting discussions and to document action items needed to resolve challenges or mitigate risk and project scheduling issues.

16. Project Strategies: *Proposers must propose specific strategies and recommendations for achieving energy and building efficiency goals*

We are local government specialists and are committed to increasing the efficiency, safety, sustainability, and resiliency of public sector facilities and infrastructure. Our team brings to the City of Franklin industry-leading expertise in implementing major sustainability upgrades. Our local government experience includes installing upgrades in all types of municipal facilities and infrastructure, including city halls and office buildings, libraries, police and fire stations, water, and wastewater treatment plants, park and recreational facilities, aquatic centers, arenas, and convention centers, street lighting, transportation and more.

The Johnson Controls team has the subject matter expertise and experience to be the City of Franklin's implementation partner for Performance Contracting. We are expert in the process and implementation of solutions to provide energy and operations/maintenance savings, occupancy comfort, and improved indoor environmental quality. For decades, Johnson Controls has successfully completed numerous projects following the requirements of the Wisconsin Performance Contracting Statute 66.0133. Our local and national team is very experienced in analysis, design, and recommendations for energy conservation and facility improvement measures including all costs with saving guarantees as detailed in the state statute. We provide lighting, HVAC, process, controls, and other digital solutions to improve facilities, vehicles, and other City resources

As your comprehensive energy services partner, Johnson Controls would support the City in a holistic approach to sustainability and efficiency within the City. To maximize results, we will work to bring City departments stakeholders together to communicate individual department needs, prioritize projects and compile an overarching, integrated City-wide solution.

The following categories are opportunities for comprehensive efficiency solutions:

- Building Efficiency
- Renewable Energy and Energy Resiliency
- Space Planning and Optimization
- LED Street Lighting
- Public Safety
- Smart City
- Communication networks

The Franklin Solution: Based on City goals, previous reports, budgets and utility data, the following is a sample list of potential Energy Conservation Measures (ECMs) that could be thoroughly investigated. The list would be prioritized and refined in workshops with the City. Johnson Controls will work closely with the City team to prioritize ECMs and put together the final solution with the actual ECMs that will result in a favorable project cash flow and Return on Investment

ECM-1 – Replace and Upgrade HVAC equipment - Replace boilers, chillers, and controls that are inefficient and/or at or near the end of their useful life. Include space planning and make improvements as appropriate. Investigate electrification, heat pumps, and other more sustainable options.

Benefits:

- Replace aging equipment using a proactive approach, rather than waiting for expensive unplanned failures.
- Significant energy and O&M savings.
- Elimination of R22 refrigerant.
- Installation of direct digital controls enhances unit scheduling, troubleshooting, and diagnostics.
- Improved Indoor Air Quality with optimized ventilation, filtration, and controls.
- Improved visitor and employee comfort.

ECM-2 – OpenBlue Enterprise Manager (OBEM) – a comprehensive suite of digital application modules, such as Energy Management, Utility Bill Manager, Green Hub (kiosk), and Net Zero Advisor, to monitor and improve energy efficiency, asset performance, maintenance operations, space performance, and ultimately the comfort and well-being of occupants.

Benefits:

- Data is collected from various facility systems, renewable energy sources, and meters to be aggregated, analyzed, and reported for tracking toward goals and continuous improvement.

Enhancing Comfort + Efficiency + Reliability

- Utility bill information becomes more readily available for review, comparison, and reporting.
- Public-facing kiosks can be installed in city facilities for employees, visitors, and the public to enjoy. Kiosks serve as a valuable tool for project promotion and education.
- Ability to monitor and display GHG emissions.

ECM-3 – Lighting - This ECM proposes the elimination of fluorescent and other older technologies and will modernize internal and external lighting systems, including street lighting. Each space will be examined for new controls based on usage, tasks, and amount of natural daylighting

Benefits:

- The upgraded LED lamps, fixtures, and controls would save more than 50% in energy consumption.
- The LED technology sources would produce less heat, saving on HVAC costs.
- Allow instant on and off functionality when compared to its lighting counterparts.
- Zoning and controlled dimming of the lighting in large open areas when no occupancy is detected would provide additional energy savings while still illuminating the space to a comfortable level for safety and security.
- Minimize the City's lighting stock by standardizing all locations with the same lamp types. Fixture light or lumen output and color temperature would also become more uniform.
- Overall, all products specified would save energy, improve the quality of light, and reduce the maintenance currently associated with these fixtures.

ECM-4 – Renewable Energy / Resiliency - This ECM proposes the implementation of renewable energy and the investigation of energy storage at various facilities.

Benefits:

- Clean source of energy
- Reduction in energy cost
- Facility resiliency

Johnson Controls team-related experience: More than 90% of the 3,500 performance contracts we have implemented over the past 39 years have involved similar building upgrades. Following are a few examples of local and national clients that we partnered with to implement upgrades across large building portfolios:

- | | |
|----------------------------|--------------------------|
| ■ City of La Crosse, WI | ■ City of Ft. Worth, TX |
| ■ City of Milwaukee, WI | ■ City of Charleston, SC |
| ■ City of Marquette, MI | ■ City of El Paso, TX |
| ■ Milwaukee Public Schools | ■ Louisville Metro, KY |

Other Innovative Solutions

Marketing and Promotional Services

Consistent with the City's goals, the efficiency project at the City would be a truly inspiring and educational initiative that impacts the entire community. Johnson Controls could support the communication and promotion of its benefits with the **Green Kiosk**, which presents information about the sustainability and energy efficiency performance of an enterprise – from a single building to a collection of buildings to any connected meter, device or system.

The Green Kiosk is part of growing digital signage technologies designed to educate – and change behavior – regarding energy use of a building or portfolio. The Green Kiosk is a standard offering designed to be a public-facing digital signage solution or a simple portal-style interface to be used either for internal use or as an external web-based resource. The Green Kiosk is designed to make building occupants aware of energy consumption and other sustainability metrics, with the goal of encouraging energy reduction or making conscious changes to their sustainable lifestyle or work practices.

This Green Kiosk would work hand-in-hand with the solar PV by displaying how much energy has been generated and also saved by implementing this project. This would be seen from the public physically and virtually because our team can assist the City in placing a link to this information on the City's website. The Green Kiosk allows the City to inform and educate citizens, employees, and the community at large on the energy conservation and clean energy practices the City is implementing.

It is capable of.

- Allowing easy updates and accessibility from any computer with internet access and a browser
- Educating viewers about the building's or campuses' hidden systems, and sustainable technologies and practices
- Providing real-time monitoring of systems and energy use
- Comparing live data with historical information to see energy efficiency
- Serving as a campus-wide sustainability education app
- Providing general building information for viewing
- Providing current weather information and forecasts
- Displaying important announcements and news alerts

Financing Solutions

There are a number of alternatives for financing your project, including entering into a municipal lease, using our unique contingent payment approach, the issuance of municipal securities or bonds, and/or obtaining financial support through available grants and incentives. Many of these alternatives could also be used together in a combined solution.

Each approach has unique aspects relating to cost, timing, approvals, and implicit rate, and there are also no established limits regarding funds available to Johnson Controls' clients. Our Structured Finance department is dedicated to identifying customized financing options for clients. We work regularly with several banks and capital firms to finance performance contracts, including:

Enhancing

Comfort + Efficiency + Reliability

- Old National Bank
- All American Investment Group (AAIG)
- Green Campus Partners
- SunTrust
- Citi Bank
- Bank of America
- GE Capital

We can provide general information relating to all available financing options to assist with your analysis of each financing option. Johnson Controls can also provide detailed and project specific factual information on contingent payment, municipal leases, and grants and incentives. Our Structured Finance team wants to match the right financing structure with what is best for the City and most appropriate for the project. Following are a few alternatives:

Contingent Payment Program

We offer a unique, alternative arrangement called the Johnson Controls Contingent Payment program. Rather than borrow money from a third-party, Johnson Controls funds the cost of the project. The City then pays Johnson Controls over time, but where the obligation to pay is “contingent” upon savings delivered. If Johnson Controls does not perform and deliver the savings as expected, the City is able to withhold payment up to the shortfall amount. The City only pays for the energy savings that it receives.

We have implemented the Contingent Payment program with several clients. They had strong credit ratings and could afford to traditionally finance the projects. However, they simply did not want to borrow money from a bank or bond issuance. Also, the clients wanted to make their savings payments to Johnson Controls out of their utility budget. From their perspective, they pay for energy savings the same way they pay for electricity, gas and water from the utilities.

Lease Financing

The most common form of financing for performance contract projects is a lease-purchase. In these arrangements, the City, as lessee, enters into a transaction with a financial institution, as lessor. A lease-purchase is popular because:

- It is not considered statutory debt.
- It does not require voter approval.
- The documentation and closing costs are relatively light.
- The time to close can be less than 30 days.

According to the Association for Government Leasing & Finance, one of the most valuable attributes of a lease-purchase is that it enables municipalities to finance projects without incurring a “debt” or an “indebtedness” that is subject to voter approval and debt limitations. For most government entities, laws dictate that transactions are considered “statutory debt” if the obligations exceed the revenues for the current fiscal period. They are therefore subject to voter approval and limitations. To address this, the lease-purchase contains certain covenants so that it is not considered debt.

Johnson Controls can work with lenders to design a payment schedule that corresponds to the construction period and savings generated from the project. The goal is to create a cash flow neutral transaction for the client. Johnson Controls can help to identify lenders that can offer lease-purchase terms that are as long as the law will allow. In most cases, this is 15 to 20 years. The longer amortization term enables a client to obtain more facility improvements with the same amount of savings. This reduces the amount of facility improvements that a client needs to purchase through its capital budget or other debt financing.

Bond Financing

Johnson Controls has worked on many projects in the past that were financed with various types of bonds. We have also worked on projects where referendums were needed for the public to approve the issuance. Johnson Controls has great relationships with municipal bond underwriters and will freely provide introductions for client. Johnson Controls cannot provide recommendations on a bond issuance. However, we can provide in-depth details on the project to enable the client and its underwriters/advisors to structure a bond issuance in a way that best serves the needs of the client.

Grants, Rebates, and Incentives

Our Grant Services Team, along with the Rebate and Incentives Team, have one shared goal: find money for you. These teams identify alternative sources of funding so you can make more improvements to your facilities, reduce total cash outlay, and realize greater savings.

Types of Financial Guarantees

Johnson Controls guarantees project efficiencies, transferring much of the project risk away from the City to Johnson Controls. In the event of a guaranteed savings shortfall, Johnson Controls offers three options for reconciliation whereby the selected option is mutually agreed upon.

1. We will implement additional energy conservation measures at NO COST to the City such that the energy shortfall has been made up.
2. We can provide NO COST services needed by the City that equal the shortfall amount.
3. We can write the City a check for the shortfall amount.

Methodology to Measure and Verify Savings

Johnson Controls provides financial guarantees in line with the International Performance Measurement and Verification Protocol (IPMVP) guidelines to transparently, reliably and consistently report your project's savings. The IPMVP standard presents a framework and four different measurement and verification (M&V) options:

Given the significance of M&V methodology, Johnson Controls will arrange workshop sessions with City staff at appropriate times during the design phase. These workshops allow us to collaborate in developing the M&V methodology specific to each ECM, and will help City staff gain a detailed understanding of various IPMVP options and their respective pros and cons. Several factors will be considered, including the amount of savings, any interactive effects, reliability of baseline data and technical assumptions, among other factors. This process will ascertain selection of the right M&V options by ECM from a risk and cost perspective. The following table summarizes our general approach to validate the resultant savings with regard to various types of ECMs:

Creating Baselines

To accurately assess performance in an ECM, we need to compare pre- and post-retrofit conditions of the facilities under similar conditions. The pre-retrofit baseline will be established by documenting conditions (in terms of unit energy consumption, energy efficiency or other performance parameters) over a defined period. The baseline will thus provide a yardstick for the pre-retrofit operation of the

facility in terms of hours of use on a daily/monthly/ yearly basis and the corresponding energy consumption performance for those hours of use. We may create a baseline from already established energy consumption information, or by using utility billing data for a utility type and measurements of the various end uses

Guarantee Reporting

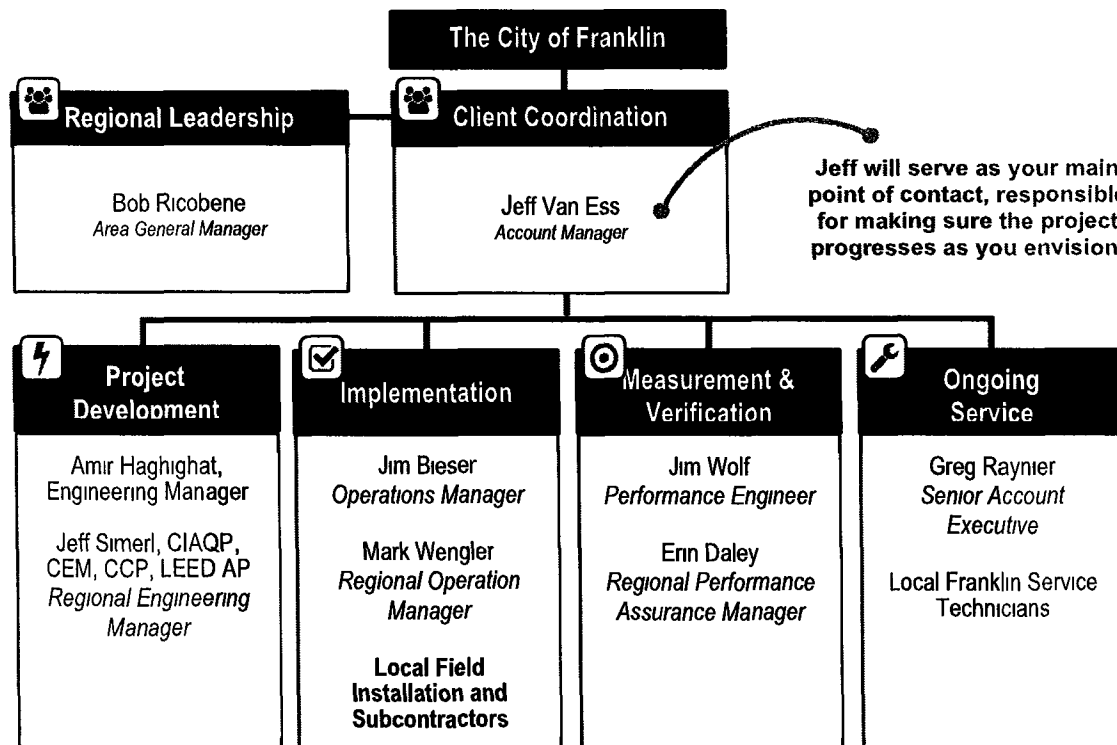
For many projects, savings may be verified with a minimum of measurement and at a minimum cost. Other projects, however, may call for a more rigorous approach to M&V. We will work with the City to jointly agree on the method that best meets the project's needs, discussing the risk and costs of each alternative before a decision is made.

In the end, we will present the results of all ECM calculations and the associated cost estimates for the individual ECMs. The savings, project cost and payback data will be shown on a single worksheet. These calculations will enable you to actually create a project set that best fits your functional and economic needs. We will work with the City in a workshop meeting to select the ECMs that meet your goals and expectations for the project.

17. Past Performance. *Proposals must provide references and evidence of past performance with detailed information, including no less than five (5) and no more than ten (10) projects.*

References provided on the following pages.

18. Organizational Chart: *Proposals shall include an organizational chart of all personnel and consultants, their roles, and qualifications*



References

CITY OF LA CROSSE*

LA CROSSE, WISCONSIN

Project Dollar Amount (installed project costs)	\$9 million												
Primary ECMs Installed													
<ul style="list-style-type: none"> • HVAC • Controls • LED lighting • Street lighting conversion to LED 	<ul style="list-style-type: none"> • 7 Solar Arrays (>0.5MW), 3 additional arrays in Phase 4 • OpenBlue (Utility Bill, kiosk, energy management, asset management) 												
Date Construction Started	Phase 1 June 2019 Phase 2 November 2019 Phase 3 July 2021 Phase 4 October 2023												
Date Constructed Completed	Phase 1 & 2 June 2020 Phase 3 August 2022 Phase 4 Ongoing												
Guarantee Period Start & End Dates	June 2020 - Present												
Dollar Value of Projected Annual Energy Savings	\$358,000												
Dollar Value of Guaranteed Annual Energy Savings	\$358,000												
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	\$72,000												
Method(s) of Savings M&V	Option A												
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel Information.	<table border="1"> <thead> <tr> <th>Name</th> <th>Responsibilities</th> <th>Included?</th> </tr> </thead> <tbody> <tr> <td>Jeff Van Ess</td> <td>Client Liaison</td> <td>Y</td> </tr> <tr> <td>Jim Bieser</td> <td>Implementation</td> <td>Y</td> </tr> <tr> <td>Jim Wolf</td> <td>M&V</td> <td>Y</td> </tr> </tbody> </table>	Name	Responsibilities	Included?	Jeff Van Ess	Client Liaison	Y	Jim Bieser	Implementation	Y	Jim Wolf	M&V	Y
	Name	Responsibilities	Included?										
	Jeff Van Ess	Client Liaison	Y										
	Jim Bieser	Implementation	Y										
Jim Wolf	M&V	Y											
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Lewis Kuhlman kuhlmanl@cityoflacrosse.org (608) 789-7361												

CITY OF MARQUETTE*

MARQUETTE, MICHIGAN

Project Dollar Amount (installed project costs)	\$28 million							
Primary ECMs Installed	<ul style="list-style-type: none"> • Lighting retrofits & occupancy sensors • Metasys controls upgrade • AHU replacement • Boiler replacements • Chiller upgrade/replacement • Cooling tower replacement • Cogeneration • Test pumps with generator • Electric meter reduction • Process/service pumps • Domestic water heater • Mechanical insulation • Building envelope improvements • Water conservation • Meter replacements & AMI system • Fire/security upgrades • Vending machine controllers • CCTV 							
Date Construction Started	10/2017							
Date Constructed Completed	8/2019							
Guarantee Period Start & End Dates	9/2019 - 8/2024							
Dollar Value of Projected Annual Energy Savings	\$2,842,699							
Dollar Value of Guaranteed Annual Energy Savings	\$2,842,699							
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	\$31,808 PSA							
Method(s) of Savings M&V	Options A & C							
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel Information.	<table border="1"> <thead> <tr> <th>Name</th> <th>Responsibilities</th> <th>Included?</th> </tr> </thead> <tbody> <tr> <td>Walt Novash</td> <td>Solar</td> <td>Y</td> </tr> </tbody> </table>		Name	Responsibilities	Included?	Walt Novash	Solar	Y
	Name	Responsibilities	Included?					
Walt Novash	Solar	Y						
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Eric Stemen Operations Director estemen@mqctcity.org (906) 225-8978							

MILWAUKEE PUBLIC LIBRARY*

MILWAUKEE, WISCONSIN

Project Dollar Amount (installed project costs)	\$2.4 million		
Primary ECMs Installed	<ul style="list-style-type: none"> Central Library replace and upgrade chilled water plant with mag-lev chiller Central Library convert existing AC-7 from CAV to DOAS Central Library interior lighting retrofits Central Library exterior lighting retrofits Central Library lighting control panel upgrades Bayview interior lighting retrofits Bayview exterior lighting retrofits Third party commissioning 		
Date Construction Started	3/2019		
Date Constructed Completed	2/2020		
Guarantee Period Start & End Dates	3/2020 – Present		
Dollar Value of Projected Annual Energy Savings	\$126,787		
Dollar Value of Guaranteed Annual Energy Savings	\$126,787		
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	\$35,564 PSA		
Method(s) of Savings M&V	Options A & C		
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel Information	Name	Responsibilities	Included?
	Jeff Van Ess	Client Liaison	Y
	Jim Bieser	Implementation	Y
	Walt Novash	Solar	Y
	Jim Wolf	M&V	Y
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Erick Shambarger Director of Environmental Sustainability eshamb@milwaukee.gov (414) 286-8556		

LOUISVILLE METRO*

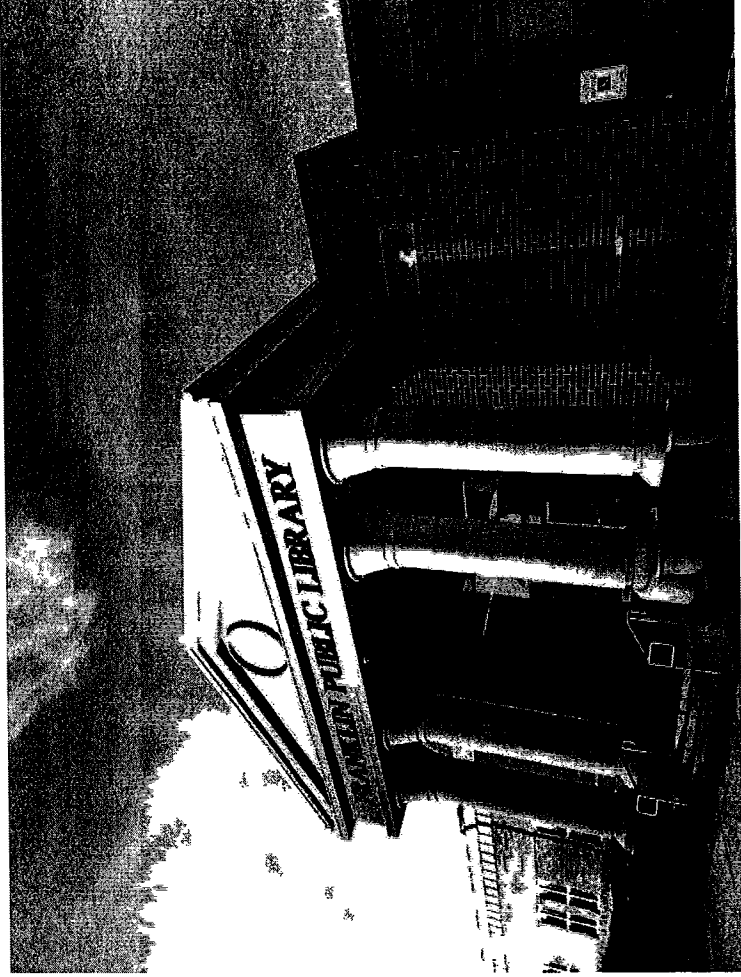
LOUISVILLE, KENTUCKY

Project Dollar Amount (installed project costs)	Phase 1 \$9,294,516, Phase 2 \$26,664,487
Primary ECMs Installed	
<ul style="list-style-type: none"> • Building envelope • HVAC controls • HVAC upgrades • Solar thermal system 	<ul style="list-style-type: none"> • Pool improvements • Lighting retrofits • Site PC management • Steam traps
	<ul style="list-style-type: none"> • Water conservation • Kitchen hoods • Laundry upgrades • Pipe insulation
Date Construction Started	Phase 1 November 2010 Phase 2 August 2013
Date Constructed Completed	Phase 1 October 2012 Phase 2 December 2014
Guarantee Period Start & End Dates	Phase 1 November 2012 - October 2018 Phase 2 January 2015 - December 2037
Dollar Value of Projected Annual Energy Savings	Phase 1 \$693,998 Phase 2 \$1,577,328
Dollar Value of Guaranteed Annual Energy Savings	Phase 1 \$693,998 Phase 2 \$1,800,905
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	\$101,937 PSA
Method(s) of Savings M&V	Options A & B
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel Information.	Not applicable
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Mark Zoeller Director, Office of Facilities and Fleet (502) 574-0104 mark.zoeller@louisvilleky.gov

CITY & COUNTY OF HONOLULU*

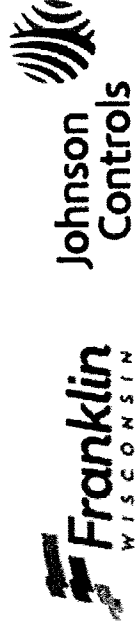
HONOLULU, HAWAII

Project Dollar Amount (installed project costs)	Phase 1 \$36.3 million Phase 2 \$24 million									
Primary ECMs Installed	Phase 1 Converted more than 53,000 street lights to energy efficient LED fixtures and installed an island-wide lighting controls network Phase 2 Johnson Controls implemented \$87 million of work involving 15 ECMs across 92 facilities and seven departments. The \$51 million in efficiency upgrades will generate \$73 million in guaranteed savings. The project involved 9.3MW of solar PV coupled with energy storage , as well as EVs and charging infrastructure. It enabled the Council to achieve six out of their 11 Climate Action goals									
Date Construction Started	Phase 1 August 2019 Phase 2 December 2020									
Date Constructed Completed	Phase 1 February 2020 Phase 2 December 2022									
Guarantee Period Start & End Dates	Phase 1 March 2020 - February 2030 Phase 2 January 2023 - December 2042									
Dollar Value of Projected Annual Energy Savings	Phase 1 \$4,766,088 Phase 2 \$2,113,693									
Dollar Value of Guaranteed Annual Energy Savings	Phase 1 \$4,733,802 Phase 2 \$1,978,328									
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	Not applicable									
Method(s) of Savings M&V	IPMVP Options A and B									
Provide the names of the primary personnel involved in this project and their specific roles and responsibilities. Please indicate if the primary personnel on this project are also included in Section 10, Personnel Information.	<table border="1"> <thead> <tr> <th>Name</th> <th>Responsibilities</th> <th>Included?</th> </tr> </thead> <tbody> <tr> <td>Jim Wolf</td> <td>M&V</td> <td>Y</td> </tr> <tr> <td>Walt Novash</td> <td>Solar</td> <td>Y</td> </tr> </tbody> </table>	Name	Responsibilities	Included?	Jim Wolf	M&V	Y	Walt Novash	Solar	Y
Name	Responsibilities	Included?								
Jim Wolf	M&V	Y								
Walt Novash	Solar	Y								
Provide current and accurate telephone and email addresses of The City of Milwaukee's representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	Allyn Lee Lead PM, Mechanical & Electrical Division Department of Design & Construction (808) 768-8428 alee2@honolulu.gov									



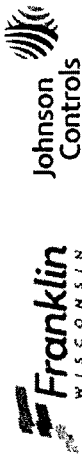
Comprehensive Efficiency Program Accelerated Implementation

Sustainable Infrastructure with Guaranteed Efficiencies



Today's Objective

1. Introduce Alternative Funding & Implementation Program
2. Recommendation of Projects
3. Financial and Other Benefits
4. Schedule of Events



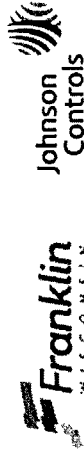
Infrastructure Modernization Program

Flexible Funding Sources:

- Create Efficiencies, Savings and Minimize Waste
- Stretch Capital budgets - Invest Savings into Major Facility Upgrades
- Add additional efficiency projects and free up O&M budget

Construction Process Efficiency and Risk Transfer:

- Turn-key implementation
- Technology Partner – Enterprise Life Cycle Development
- Guaranteed results



WI Legislation for Turn-key Construction and Project Funding

Eliminate waste, Reinvest that money into the City with Guaranteed Results

WI state statute 66.0133, Energy savings performance contracting is a legislation designed to:

1 Identify energy and operational inefficiencies. Quantify and eliminate them.

2 Redirect savings into renovations or provide flexibility to O&M budget for other required resources.

3 Have a qualified partner financially guarantee results of their estimated savings and improvements.

Preliminary Analysis

Scope of Assessment

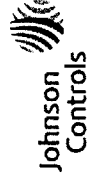
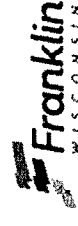
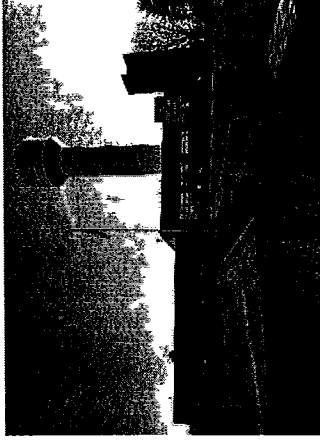
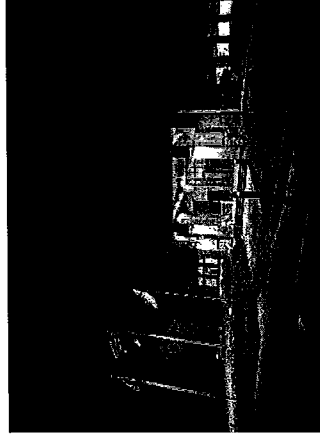
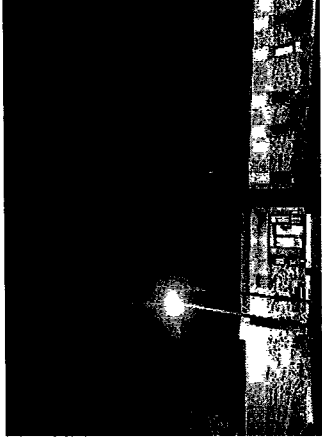
- Preliminary audit of mechanical, controls and lighting systems at following representative buildings:
 - Franklin Public Library
 - City Hall
 - Fire Station #1
 - Law Enforcement Center

Objective

- Investigate current state of facilities and potential energy and O&M savings opportunities
- Target systems for improvement and determine the potential benefit of implementing a performance contract
- Recommend Go/No-Go to next step

Results of Assessment

- Adequate savings opportunities exist to fund significant investments in facility upgrades and Renewable Energy
- Recommend Go to Project Development Agreement



Franklin Public Library

Initial Observations

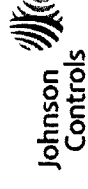
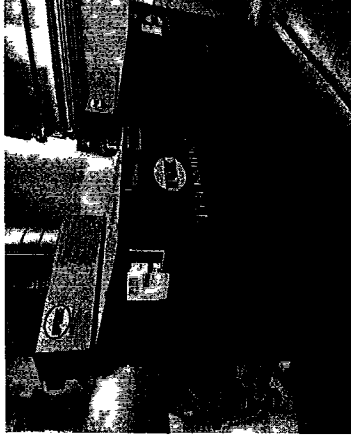
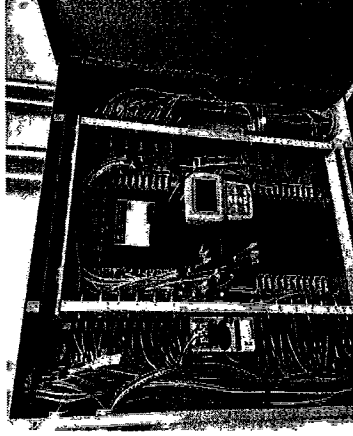
- Mechanical equipment at or near end of ASHRAE life
- Mixture of lighting technologies
- High Energy Consumption

Potential Opportunities

- Retrofit existing interior lighting to LED
- Replace existing chiller, boilers and domestic hot water
- Provide an envelope evaluation
- Upgrade security access
- OpenBlue digital solution
- Implement Solar Array on roof (requires roof evaluation)

Expected result

- Healthier and Safer Facility
- Energy and O&M savings
- Improved controllability and comfort in facility



Franklin City Hall

Initial Observations

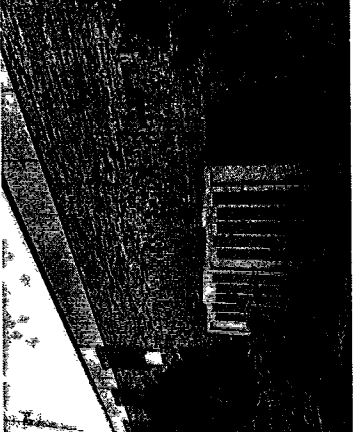
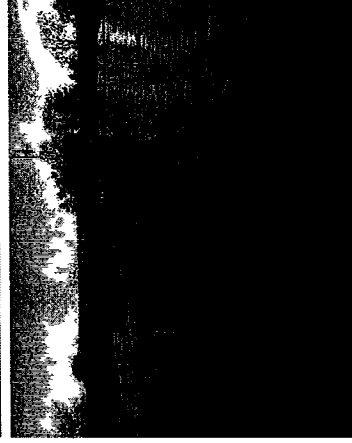
- Mixture of Mechanical equipment age/efficiency
- Mechanical equipment at or near end of ASHRAE life
- Mixture of lighting technologies
- High Energy Consumption

Potential Opportunities

- Retrofit existing interior lighting to LED
- Replace existing boilers and domestic hot water
- Upgrade security access
- Provide an envelope evaluation
- OpenBlue digital solution
- Implement Solar Array on roof

Expected result

- Healthier and Safer Facility
- Energy and O&M savings
- Improved controllability and comfort in facility



Fire Station #1

Initial Observations

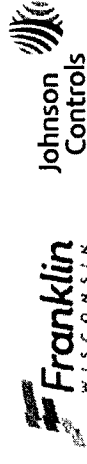
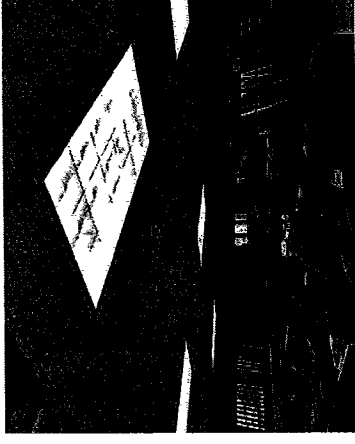
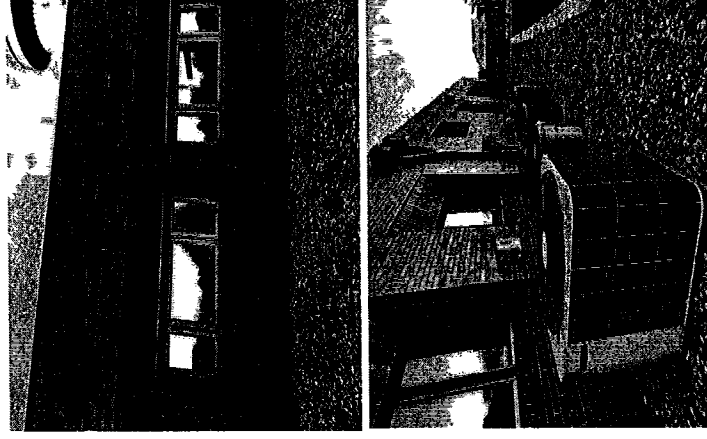
- Mechanical equipment at or near end of ASHRAE life
- Mixture of lighting technologies
- Deteriorated building envelope
- High Energy Consumption

Potential Opportunities

- Retrofit existing interior lighting to LED
- Replace existing furnaces at or near end of life
- Provide an envelope evaluation and replace windows
- Upgrade Security Access
- Implement Solar Array on roof (requires roof evaluation)

Expected result

- Healthier and Safer Facility
- Energy and O&M savings
- Improved controllability and comfort in facility



Law Enforcement Center

Initial Observations

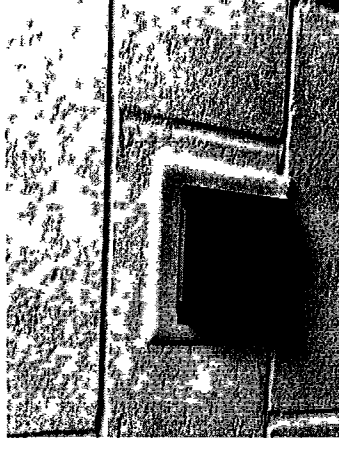
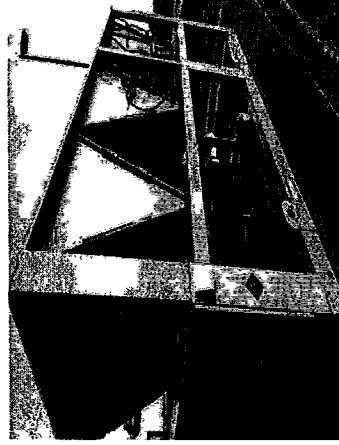
- Updated facility with newer mechanical equipment
- Some equipment at or near end of ASHRAE life
- Majority of lighting converted to LED

Potential Opportunities:

- Replace boiler plant
- OpenBlue digital solution
- Implement Solar Array on roof

Expected result

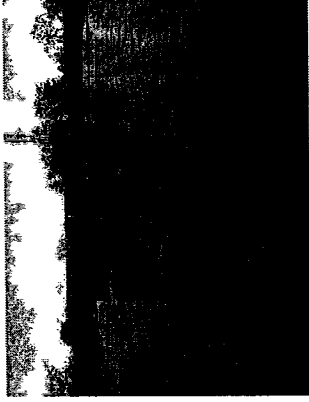
- Healthier and Safer Facility
- Significant energy and O&M savings
- Enhanced lighting and control



Solar Arrays

Evaluate multiple Solar Array sizes and configurations

- 50kW – 300 kW (DC) roof mount
- Approximately 10%-20% of facility energy
- Investment Tax Credit eligible (30% direct pay potential)
- Roof assessment required
- City-owned clean energy source
- Community education



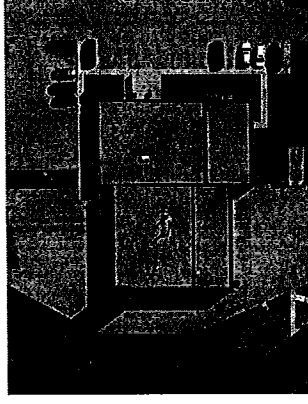
City Hall



Law Enforcement Center



Library



Fire Station #1

City of Franklin – example scenario

Infrastructure improvements

- Library, City Hall, Fire Station #1 and Law Enforcement Center
 - Healthy Facility improvements
 - Mechanical upgrades
 - Lighting and water upgrades
 - Building envelope improvements
 - Security Access Control
- Renewable Energy implementation

Result

- Estimated annual utility savings: >\$70,000, annual operating savings: >\$20,000
- Total savings: > \$2.5 million (over 20 years)
- Leverage Inflation Reduction Act and other grant funding
- Ongoing monitoring and reporting of results

Benefit of alternative funding programs - “pay for today’s facility upgrades with tomorrow’s energy savings—without tapping into capital budgets.” DOE, Office of Energy Efficiency & Renewable Energy



DRAFT - numbers for illustrative purpose

Total solution bundle (cash flow example)

Project Budget			\$	2,650,000			
Investment Tax Credits and other Grants			\$	370,000			
Capital Contribution			\$	650,000			
Financed Cost			\$	1,630,000			
Year	Energy Savings 3.50%	Operations & Maintenance Savings 3.00%	One-Time Rebate Incentive	Total Savings	Payment 4.50%	Net	
Construction	\$ 17,500		\$ 370,000	\$ 17,500	\$ 17,500	\$ 17,500	
Year 1	\$ 70,000	\$ 20,000		\$ 90,000	(\$125,308)	\$ (35,308)	
Year 2	\$ 72,450	\$ 20,600		\$ 93,050	(\$125,308)	\$ (32,258)	
Year 3	\$ 74,986	\$ 21,218		\$ 96,204	(\$125,308)	\$ (29,104)	
Year 4	\$ 77,610	\$ 21,855		\$ 99,465	(\$125,308)	\$ (25,843)	
Year 5	\$ 80,327	\$ 22,510		\$ 102,837	(\$125,308)	\$ (22,471)	
Year 6	\$ 83,138	\$ 23,185		\$ 106,324	(\$125,308)	\$ (18,985)	
Year 7	\$ 86,048	\$ 23,881		\$ 109,929	(\$125,308)	\$ (15,379)	
Year 8	\$ 89,060	\$ 24,597		\$ 113,657	(\$125,308)	\$ (11,651)	
Year 9	\$ 92,177	\$ 25,335		\$ 117,512	(\$125,308)	\$ (7,796)	
Year 10	\$ 95,403	\$ 26,095		\$ 121,498	(\$125,308)	\$ (3,810)	
Year 11	\$ 98,742	\$ 26,878		\$ 125,620	(\$125,308)	\$ 312	
Year 12	\$ 102,198	\$ 27,685		\$ 129,883	(\$125,308)	\$ 4,574	
Year 13	\$ 105,775	\$ 28,515		\$ 134,290	(\$125,308)	\$ 8,982	
Year 14	\$ 109,477	\$ 29,371		\$ 138,848	(\$125,308)	\$ 13,539	
Year 15	\$ 113,309	\$ 30,252		\$ 143,560	(\$125,308)	\$ 18,252	
Year 16	\$ 117,274	\$ 31,159		\$ 148,434	(\$125,308)	\$ 23,126	
Year 17	\$ 121,379	\$ 32,094		\$ 153,473	(\$125,308)	\$ 28,165	
Year 18	\$ 125,627	\$ 33,057		\$ 158,684	(\$125,308)	\$ 33,376	
Year 19	\$ 130,024	\$ 34,049		\$ 164,073	(\$125,308)	\$ 38,765	
Year 20	\$ 134,575	\$ 35,070	\$ -	\$ 169,645	(\$125,308)	\$ 44,337	
	\$ 1,979,578	\$ 537,407	\$ -	\$ 2,516,985	\$ (2,506,162)	\$ 10,823	



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Next Steps

1 Business Case Analysis
December 2023

2 Execute Project
Development Agreement
February 2024

3 Project Approval and
Agreement
May 2024

4 Performance
Contracting
Procurement
January 2024

5 Investment Grade
Audit (IGA)
February – April 2024

6 Project Mobilization
June 2024

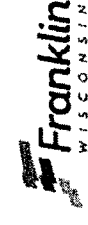
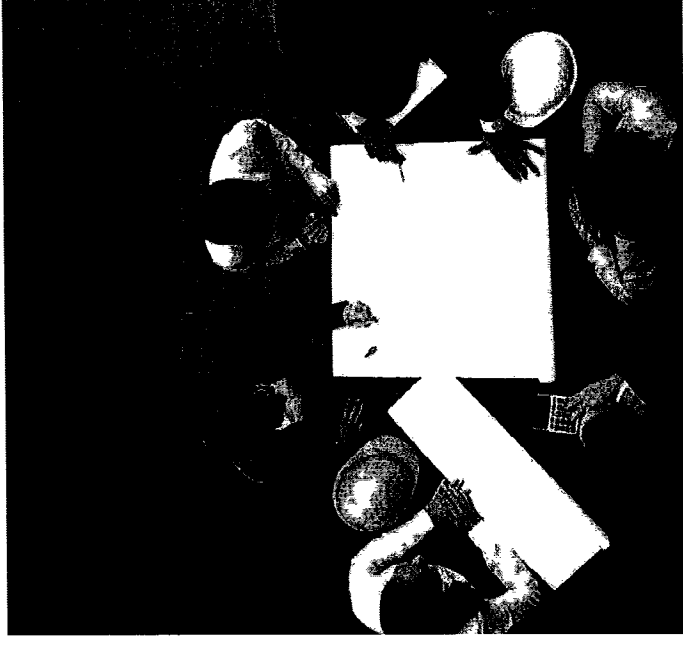


Project Development Agreement

Detailed Investment Grade Audit - engineering development

- Planning sessions with City facility staff
- Detailed inventory of existing system (loads, size, hours, useful life)
- Establish base year energy consumption (energy measurements)
- Pre-measurement of electrical equipment and requirements
- Estimate loading of each system and prioritize ECMs
- Create detailed Scope of Work, equipment sizing, schematics
- Johnson Controls conducts RFP's for equipment and install
- Create project cost breakdowns
- Calculate energy and operational savings and deferred maintenance
- Customer Solution Modeler tool to choose ECMs interactively
- Investigate and secure available incentives and grants – FOE, PSC
- Financial, legal and measurement & verification workshops

Engineering and design fee to be rolled into project costs



Contact:

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262-505-0842

jeff.vaness@jci.com

Thank You





American Rescue Plan Spending: Recommended Guiding Principles

Signed into law on March 11, 2021, **The American Rescue Plan Act of 2021** (“ARPA”) provides \$350 billion in additional funding for state and local governments. **Please click here for GFOA’s analysis of ARPA.** The state funding portion is approximately \$195 billion with \$25.5 billion distributed equally among the 50 states and the District of Columbia and the remaining amount distributed according to a formula based on unemployment.

The local funding portion is approximately \$130 billion, equally divided between cities and counties. Localities will receive the funds in two tranches—the first after the U.S. Treasury certifies the proceeds to each jurisdiction and the second one year later.

For cities, \$65 billion is divided between jurisdictions that are Community Development Block Grant (CDBG) entitlement jurisdictions and those that are not. \$45.5 billion of the \$65 billion will be allocated to metropolitan cities utilizing a modified CDBG formula, and the remaining amount for jurisdictions that are non-entitlement CDBG, will be allocated according to population. For the non-entitlement jurisdictions, the amount will not exceed seventy- five percent of their most recent budget as of January 27, 2020. Additionally, non-entitlement jurisdictions proceeds will be allocated through the state for redistribution to local governments.

For counties, the \$65 billion will be allocated based on the county’s population. Counties that are CDBG recipients will receive the larger of the population or CDBG-based formula.

Eligible uses of these funds include:

- Revenue replacement for the provision of government services to the extent of the reduction in revenue due to the COVID-19 public health emergency, relative to revenues collected in the most recent fiscal year prior to the emergency,
- COVID-19 expenditures or negative economic impacts of COVID-19, including assistance to small businesses, households, and hard-hit industries, and economic recovery,
- Premium pay for essential workers,
- Investments in water, sewer, and broadband infrastructure.

Restrictions on the uses of these funds include:

- Funds allocated to states cannot be used to directly or indirectly to offset tax reductions or delay a tax or tax increase;
- Funds cannot be deposited into any pension fund.

Funding must be spent by the end of calendar year 2024.

As with previous COVID-19 relief packages, implementation will be an extensive process as new or updated guidance and FAQs are developed and released by the U.S. Treasury. For example, the legislation requires each jurisdiction's executive to "certify" that the funds will be used for eligible purposes. That process is currently under development by the U.S. Treasury.

GFOA will provide regular updates as information becomes available. If you have specific questions or need clarification, GFOA has launched an online portal to gather member questions to help shape engagement and solicit answers from the Administration.

For many jurisdictions, the funding provided under ARPA is substantial and could be transformational for states and local governments in their pandemic rescue and recovery efforts. Elected leaders will need to decide how to best use the additional funding consistent with the ARPA requirements, which are very broad. Finance officers play a critical role in advising elected leaders on the prudent spending of moneys received under ARPA. *Finance*

officers are best positioned to help ensure the long-term value of investments and financial stability of its government using this one-time infusion of resources. When considering how to best advise elected officials and plan for the prudent use of ARPA funds, we offer the following outline of Guiding Principles for the use of ARPA funds:

GFOA American Rescue Plan Act Guiding Principles

Temporary Nature of ARPA Funds. ARPA funds are non-recurring so their use should be applied primarily to non-recurring expenditures.

- Care should be taken to avoid creating new programs or add-ons to existing programs that require an ongoing financial commitment.
- Replenishing reserves used to offset revenue declines during the pandemic should be given high priority to rebuild financial flexibility/stability and restore fiscal resiliency.
- Use of ARPA funds to cover operating deficits caused by COVID-19 should be considered temporary and additional budget restraint may be necessary to achieve/maintain structural balance in future budgets.
- Investment in critical infrastructure is particularly well suited use of ARPA funds because it is a non-recurring expenditure that can be targeted to strategically important long-term assets that provide benefits over many years. However, care should be taken to assess any on-going operating costs that may be associated with the project.

ARPA Scanning and Partnering Efforts. State and local jurisdictions should be aware of plans for ARPA funding throughout their communities.

- Local jurisdictions should be cognizant of state-level ARPA efforts, especially regarding infrastructure, potential enhancements of state funding resources, and existing or new state law requirements.
- Consider regional initiatives, including partnering with other ARPA recipients. It is possible there are many beneficiaries of ARPA funding within your community, such as

schools, transportation agencies and local economic development authorities. Be sure to understand what they are planning and augment their efforts; alternatively, creating cooperative spending plans to enhance the structural financial condition of your community.

Take Time and Careful Consideration. ARPA funds will be issued in two tranches to local governments. Throughout the years of outlays, and until the end of calendar year 2024, consider how the funds may be used to address rescue efforts and lead to recovery.

- Use other dedicated grants and programs first whenever possible and save ARPA funds for priorities not eligible for other federal and state assistance programs.
- Whenever possible, expenditures related to the ARPA funding should be spread over the qualifying period (through December 31, 2024) to enhance budgetary and financial stability.
- Adequate time should be taken to carefully consider all alternatives for the prudent use of ARPA funding prior to committing the resources to ensure the best use of the temporary funding.

The influx of funds will undoubtedly benefit state and local finances, and aid in the recovery from the budgetary, economic, and financial impacts of the pandemic. Rating agencies will evaluate a government's use of the ARPA funds in formulating its credit opinion and, importantly, will consider your government's level of reserves and structural budget balance, or efforts to return to structural balance, as part of their credit analysis. Finance officers will play a critical role in highlighting the need to use ARPA funds prudently with an eye towards long-term financial stability and sustainable operating performance. The funding provided under ARPA provides a unique opportunity for state and local governments to make strategic investments in long-lived assets, rebuild reserves to enhance financial stability, and cover temporary operating shortfalls until economic conditions and operations normalize.

American Rescue Plan Allocations
 State of Wisconsin
 Cities Receiving \$1 Million or More
 March 2021

<u>City</u>	<u>Amount in Millions</u>
Milwaukee	\$405.72
Madison	\$49.19
Racine	\$46.98
West Allis	\$32.29
Kenosha	\$27.80
Green Bay	\$25.23
Wauwatosa	\$25.18
Sheboygan	\$22.88
La Crosse	\$21.99
Oshkosh	\$20.97
Superior	\$17.70
Beloit	\$16.28
Wausau	\$15.75
Appleton	\$14.76
Fond Du Lac	\$14.22
Eau Claire	\$13.42
Janesville	\$12.14
Waukesha city	\$7.15
Neenah	\$5.44
New Berlin city	\$3.92
Brookfield city	\$3.87
Menomonee Falls village	\$3.76
Greenfield city	\$3.68
Oak Creek city	\$3.59
Franklin city	\$3.54
Sun Prairie city	\$3.43
Manitowoc city	\$3.22
West Bend city	\$3.12
Fitchburg city	\$3.04
Mount Pleasant village	\$2.68
Stevens Point city	\$2.56
Caledonia village	\$2.50
Muskego city	\$2.48
De Pere city	\$2.47
Mequon city	\$2.41
Grand Chute town	\$2.30
Pleasant Prairie village	\$2.08
South Milwaukee city	\$2.05
Howard village	\$1.99
Germantown village	\$1.99
Middleton city	\$1.98
Fox Crossing village	\$1.88
Onalaska city	\$1.87
Cudahy city	\$1.79

Wisconsin Rapids city	\$1.74
Marshfield city	\$1.74
Ashwaubenon village	\$1.70
Oconomowoc city	\$1.68
Menomonie city	\$1.64
Beaver Dam city	\$1.62
Kaukauna city	\$1.61
Bellevue village	\$1.58
Menasha city	\$1.55
Hartford city	\$1.53
Watertown city	\$1.51
Weston village	\$1.50
Salem Lakes village	\$1.47
Pewaukee city	\$1.45
Chippewa Falls city	\$1.42
Greendale village	\$1.40
Hudson city	\$1.39
Waunakee village	\$1.39
Allouez village	\$1.37
Whitefish Bay village	\$1.36
Verona city	\$1.31
Shorewood village	\$1.30
Stoughton city	\$1.30
Plover village	\$1.29
Suamico village	\$1.29
Glendale city	\$1.26
River Falls city	\$1.25
Fort Atkinson city	\$1.23
Greenville town	\$1.22
Harrison village	\$1.22
Baraboo city	\$1.20
Whitewater city	\$1.20
Platteville city	\$1.19
Little Chute village	\$1.19
Port Washington city	\$1.18
Richfield village	\$1.17
Brown Deer village	\$1.17
Grafton village	\$1.16
Cedarburg city	\$1.15
Two Rivers city	\$1.09
Sussex village	\$1.09
Burlington city	\$1.08
DeForest village	\$1.06
Lisbon town	\$1.05
Oregon village	\$1.04
Monroe city	\$1.04
Marinette city	\$1.04
Portage city	\$1.03
Hobart village	\$1.00

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