Build Kansas Fund | Fiscal Year 2024 Application Package | Memo



To: Senator Ty Masterson, Chair, Build Kansas Advisory Committee Murl Riedel, Kansas Legislative Research Department Shauna Wake, Office of the Kansas State Treasurer

From: Vanessa Lamoreaux, Kansas Department of Transportation

RE: Build Kansas Fund Application # 2024-017-MARC

Date: February 19, 2024

Attached, please find an application made to the Build Kansas Fund by the Leavenworth Waterworks Board.

The application packet includes the following items:

- Coversheet provides a high-level overview of the application including a unique identification number, page 1 of 8 of the Build Kansas Fund Application Package.
- Build Kansas Fund Application includes information submitted with the Build Kansas Fund Application, pages 2-6. Page 6 provides the table of funding sources.
- Attachments An Executive Summary, pages 7-8.

Project Overview

The Leavenworth Waterworks Board (LWB) seeks funding from the US Department of Homeland Security, Federal Emergency Management Agency (FEMA) for funding available through the Building Resilient Infrastructure and Communities (BRIC) program. The LWB project will increase reliability and resiliency through redundancy and modernization for approximately 55,000 customers including the City of Leavenworth, City of Lansing, and several rural water districts in northern Leavenworth County and northeastern Jefferson County and other important customers include the US Penitentiary-Leavenworth, Eisenhower VA Hospital, and the Lansing Correctional Facility. Construction will increase capacity that will eliminate dependency on water from the Missouri River.

This opportunity is a discretionary BIL program that has a local match requirement of 10%. LWB is requesting \$10,000,000 from the Build Kansas Fund. This request has the potential to unlock \$30,000,000 in federal funds.

The deadline for BRIC applications is February 29, 2024. The Build Kansas Fund application was received on February 12, 2024.

Build Kansas Fund Steering Committee Recommendation

The Build Kansas Fund Steering Committee reviewed this application on February 15, 2024, following a successful completeness check. The Steering Committee **RECOMMENDS APPROVAL** of Build Kansas Funding to the Build Kansas Advisory Committee for final advice.

Build Kansas Fund | Fiscal Year 2024 Application Package | Coversheet



| Build Kansas Fund Application Number | 2024-017-MARC | | | |
|--------------------------------------|--|--|--|--|
| Project Name | Leavenworth Waterworks Board South Treatment Plant Resiliency Project | | | |
| Entity Type | Other – Local unit of government operating the water utility for the citizens of Leavenworth | | | |
| Economic Development District (EDD) | MARC | | | |
| Planning Commission | Mid-America Regional Council | | | |
| Infrastructure Sector(s) | Water | | | |
| BIL Program | Building Resilient Infrastructure and Communities (BRIC) | | | |
| BIL Program Type | Discretionary | | | |
| BIL Application Deadline | 2/29/2024 | | | |
| Build Kansas Fund Request | \$10,000,000 | | | |
| | General No | | | |
| | BIL Application No | | | |
| | Build Kansas Fund Application Yes | | | |
| Technical Assistance Received | Other (Brief Description): | | | |
| | Application and approval process support | | | |
| | | | | |
| Application Notes | Build Kansas Fund contribution of \$10,000,000 will | | | |
| Application Notes | unlock \$30,000,000 in federal BIL funding. | | | |
| | | | | |

Steering Committee Funding Recommendation

February 15, 2024 | Recommend

Advisory Committee Target Review D

DATE

Advisory Committee Funding Recommendation

DATE | Approve or Deny

Completeness Review Data

Date Build Kansas Application Received: Date Of Completeness Check: Date Forwarded to Steering Committee:

| 2/12/2024 | 1 |
|-----------|---|
| 2/12/2024 | |
| 2/12/2024 | |

Title

Leavenworth Waterworks Board

by Brett Waggoner in Build Kansas Fund Fiscal Year 2024 Application

02/12/2024

id. 45542395

PO Box 187 Lawrence, Kansas 66044 United States 7857602148 brett@govassistsvcs.com

Original Submission

02/12/2024

| Score | n/a |
|---|---|
| | Part 1: Applicant Information |
| The name of the entity applying for the Build Kansas Fund: | Leavenworth Waterworks Board |
| Project Name: | Leavenworth Waterworks Board South Treatment Plant Resiliency Project |
| Entity type: | Other |
| If you selected "other," please describe your organization: | The Leavenworth Waterworks Board (LWB) is a local unit of government operating the water utility for the citizens of Leavenworth, Kansas under KSA 13-2414 to 13-2429 since 1937. LWB is independent of the local municipality and the governance arrangement is unique in the State. |
| Applicant Contact Name: | Joel Mahnken |
| Applicant Contact Position/Title: | General Manager |
| Applicant Contact Telephone Number: | +19136821513 |
| Applicant Contact Email Address: | JMahnken@lvnwater.org |
| Applicant Contact Address: | 601 Cherokee |
| Applicant Contact Address Line 2 (optional): | |
| Applicant Contact City: | Leavenworth |
| Applicant Contact State: | Kansas |
| Applicant Contact Zip Code: | 66048 |
| Is the Project Contact the same as the Applicant Contact? | No |
| Project Contact Name: | Brett Waggoner |
| Project Contact Position/Title: | Grant Specialist |
| Project Contact Telephone Number: | +17857602148 |
| Project Contact Email Address: | brett@govassistsvcs.com |
| Project Contact Address: | PO Box 187 |
| Project Contact Address Line 2 (optional): | |
| Project Contact City: | Lawrence |
| | |

| Project Contact State: | Kansas |
|--|---|
| Project Contact Zip Code: | 66044 |
| | Part 2: Build Kansas Fund - Eligibility Criteria |
| Certify that you are pursuing a viable Bipartisan Infrastructure Law (BIL) funding opportunity for which your entity is eligible: | |
| Certify that the Bipartisan Infrastructure Law (BIL) funding opportunity you are pursuing has a required non-federal match component: | Yes |
| What is the primary county that the project will occur in? | Leavenworth County |
| be located in, along with an infrastructure, provide a rou | tended to support Kansas-based infrastructure projects. Please provide a list of all the zip codes this project will estimated percent [%] of the project located in that zip code. For example, if seeking funding for road gh percent of the roads expected in each zip code: |
| Zip Code Percentage.xlsx | |
| | Part 3: Bipartisan Infrastructure Law (BIL) - Grant Application Information Please Note: This information is related to the federal Bipartisan Infrastructure Law (BIL) funding opportunity to which you will apply. This is NOT information for the Build Kansas Match Fund. |
| Please enter the Bipartisan Infrastructure Law (BIL) funding opportunity title that the entity is applying for: | Fiscal Year 2024 Building Resilient Infrastructure and Communities (BRIC) |
| What is the funding agency for this Bipartisan Infrastructure Law (BIL) funding opportunity? | U.S. Department of Homeland Security |
| What is the Assistance Listing Number (ALN) for this Bipartisan Infrastructure Law (BIL) funding opportunity? | 97.047 |
| What is the application due date for this Bipartisan Infrastructure Law (BIL) funding opportunity? | 2/16/2024 |
| What is the federal fiscal year for this Bipartisan Infrastructure Law (BIL) funding opportunity? | 2024 |
| Enter the amount of funding being applied for, from the Bipartisan Infrastructure Law (BIL) funding opportunity: | \$30,000,000.00 |
| Enter the required non- federal match percentage: | 25.0 |
| | Part 4: Build Kansas Fund - Match Application Information |
| Enter the non-federal match amount being requested from the Build Kansas Fund: | \$10,000,000.00 |
| Is the project able to move forward with a lesser match amount than requested? | |
| | |

Expected breakdown of funding sources to support the project: Enter the funding source and projected amount from each source to support this project:

Kansas+DOT+table.xlsx

| | Part 5: Build Kansas Fund - Means Test |
|--|--|
| Confirm that there are no available funding sources currently planned to go unused by your entity that could be leveraged for this project: | Yes |
| Confirm there are no available American Rescue Plan Act (ARPA) or Coronavirus State & Local Fiscal Recovery Fund monies that could be used for this match: | Yes |
| Confirm that you have explored other readily available funding sources (federal or non-federal) to be used for this match: | Yes |
| Briefly describe your efforts to find other available funding sources for this project: | For the past 5+ years, LWB staff and area elected officials have been monitoring funding opportunities to alleviate the cost of this project. This was done with the help of local and state regulatory agencies and utility advocacy groups. While several potential sources were identified and explored over the years, it was determined that the board could not move forward unless a significant grant component was identified. The board's general manager has worked with multiple regulatory agencies and engineers to develop a potential plan while monitoring the funds available. The general manager alerted the board to the FEMA BRIC and Build KS funding opportunity and moved to pursue the grant combination in November 2023. |
| | Part 6: Additional Information |
| summary providing an overv | Bipartisan Infrastructure Law (BIL) program application associated with this request OR a 2-page executive view of the project: EAVENWORTH_WATERWORKS_SOUTH_PLANT_PROJECT_BUILD_KANSAS_FUND_APPLICATIONdocx |
| Provide any additional information about this project (optional): | LWB was working towards a 2/29 application deadline but was just informed that the state has a pre-application deadline of 2/16. We are working to complete the application and will be able to accomplish that task. We are asking for a funding commitment letter that can be uploaded by the end of the day on 2/15. Contact Brett Waggoner 785-760-2148 or brett@govassistsvcs.com directly for further information or clarifications. We appreciate your consideration and assistance. |
| | Part 7: Terms and Conditions |
| Understanding of Fund Release Requirements: | checked |
| Understanding of Use of Funds: | checked |
| Understanding of Reporting Requirements: | checked |
| Authority to Make Grant Application: | checked |
| Persons and Titles: The following persons are responsible for making this Build Kansas Fund application. | Brett Waggoner |
| Position/Title: | Grant Writer |
| Additional: | |
| | Page 4 of 8 |

| Position/Title: | |
|-----------------|--|
| Additional: | |
| Position/Title: | |
| Additional: | |
| Position/Title: | |

Internal Form

| Score | n/a |
|--|-------------------------|
| | Pre-Award Information: |
| Eligible for Build Kansas Fund? | |
| ED District: | MARC |
| Project Primary Zip Code: | |
| Sector: | Water |
| Application ID: | 2024-017-MARC |
| Application Overview and Recommendation: | |
| | Post-Award Information: |
| Awarded BIL Grant? | |
| Total Awarded Federal Funding: | |
| Total Build Kansas Match Fund Award: | |
| Build Kansas Match Fund Award Deobligation: | |
| | |

| Source | | Amount | | Zip Code | % of project in zip code |
|---|----|---------------|--|----------|--------------------------|
| BIL Federal Funds (applied for) | \$ | 30,000,000.00 | | 66048 | 100% |
| Build Kansas Funds (non-federal match) | \$ | 10,000,000.00 | | | in Kansas |
| Additional Project Contribution (if applicable) | \$ | - | | | |
| | | | | | |
| | | | | | |
| TOTAL PROJECT COST | \$ | 40,000,000.00 | | | |

EXECUTIVE SUMMARY LEAVENWORTH WATERWORKS SOUTH PLANT RESILIENCY PROJECT BUILD KANSAS FUND APPLICATION

PROJECT DESCRIPTION

Leavenworth Waterworks Board (LWB) is a water utility located in Leavenworth, Kansas which serves approximately 55,000 customers including the City of Leavenworth, City of Lansing, and several rural water districts in northern Leavenworth County and northeastern Jefferson County. Other important customers include the US Penitentiary-Leavenworth, Eisenhower VA Hospital, and the Lansing Correctional Facility, all of which demand reliable water service. Since the mid-1970's LWB has operated two 6 million gallon per day water treatment plants (North TP and South TP) in concert to enhance the reliability and availability of the retail water supply for their customers. This project focuses all capital investment into South Plant with the goal of phasing out North Plant operation in the next 5 years.

NEED ADDRESSED

In 2022, LWB engaged Black & Veatch Engineering to perform a Planning and Value Engineering study of its water treatment facilities. The study included a review of operations as well as the physical plant. Necessary repair & replacement items were identified for continued efficient operations. The major issues for reliability of each Plant were established and, through the value engineering process, the best capital improvement projects to resolve those issues were recommended to LWB.

For nearly 50 years, the two treatment plants have operated in tandem since the water demand of the system can exceed the capacity of a single plant for anywhere from 30 days to 180 days of the year. The NTP receives raw water from a surface water intake located on the western bank of the Missouri River, originally constructed in 1938. Over the last 15 to 20 years, the riverbed has degraded approximately 10 feet in elevation, with an additional 7 feet of degradation projected. In times of climate change induced drought, the USACOE manages the river by reducing the discharge of water from the upstream lakes to minimal levels, usually in the winter. This frequently causes the level of the river to be at an elevation below that of the lowest intake sluice gate opening. To counteract this, and icing of the inlet, LWB has installed exterior "lift pumps" to inject water into the intake wetwell and then re-pump the water to the plant. The exterior pumps are limited to 2 MGD and a river elevation no more than two feet below the inlet.

The most promising solution to this problem is completely reconstruct the intake structure with an inlet elevation as low as possible at an estimated cost of \$17.51 million (2023 dollars). However, permitting for the structure is estimated to delay construction by five to seven years, increasing the cost by 5 percent per year to approximately \$23.47 million. In addition, the cost of obtaining the permits could increase this figure by \$1 million.

The South Treatment Plant also has a reliability issue in that the plant was constructed with a single treatment train to save money. The intent was to add the second train at a later date, as demand warranted. This singular process train forces the plant to completely shut down production if a breakdown occurs. If the NTP is unavailable, the supply of water to the distribution system is dependent on the volume of water in storage, with shortages occurring unless the breakdown is repaired immediately. As the footprint of the plant included space for the second train in the original design and no special permitting will be required, this project could be initiated immediately upon obtaining funding. The estimated cost for engineering and construction is \$39.04 million, plus administrative, and other costs that bring the project total to \$40 million.

Given the two projects presented to enhance the reliability of the system as a whole, the LWB selected adding a full second treatment train to the STP to combat the drought conditions imposed on the

EXECUTIVE SUMMARY LEAVENWORTH WATERWORKS SOUTH PLANT RESILIENCY PROJECT BUILD KANSAS FUND APPLICATION

Missouri River. With the second train in place, the utility would have the flexibility to reduce the NTP to a seasonally operated facility, saving an estimated \$500,000 each year of the expected 40-year life cycle of the project. LWB would also be able to limit the recommended NTP Repair/Replacement projects, saving as much as \$16,271,000. Should future conditions warrant it, the NTP could also be decommissioned with additional savings.

In addition, the STP raw water source, a wellfield, was recently upgraded with the addition of a horizontal collector well capable of producing 10 MGD. When coupled with the existing vertical wells capable of producing 7.5 MGD, there is sufficient capacity to operate the STP up to 12 MGD. All of the wells are under the influence of the River and draw from the alluvial aquifer below the riverbed elevation. In addition to being operational under drought conditions, the wells have been constructed to withstand damage from a 100-year plus flood condition. LWB also has contracted for the land needed to construct an additional HCW, should it ever be necessary.

PROJECT COLLABORATORS

Collaborators on this project currently include the Leavenworth Waterworks Board as applicant, Black & Veatch as engineering advisors and plant design professionals, KDEM and FEMA as potential funding sources, and Governmental Assistance Services as grant writers, grant administrators, and labor compliance and procurement advisors. The LWB has been diligently working with the team members for the past 5+ years to identify the potential improvements and secure funding to alleviate the costs that will be passed on to current customers.

PROJECT GOALS

LWB has taken an innovative approach to drought hazard mitigation by applying the principles of value engineering and using a holistic approach to management of the entire system. The project will help LWB reach two primary goals. First, the proposed improvements will make the system more resilient by eliminating a water source that is prone to drastic seasonal fluctuations brought on by drought and flooding. Second, the construction of this project will increase system efficiency by reducing staffing levels and eliminating maintenance costs for North Plant.

BUDGET

Through the VE study, LWB was able to secure an opinion of probable cost for the project. KMEA's Black & Veatch put together a budget of \$40,000,000. Included in the budget is construction and engineering costs of \$39,040,000, planning and value engineering study for \$248,690, solids handling equipment for \$500,000 and grant administration for \$211,310. The project budget is in line with requirements of the federal program.

EXPECTED OUTCOMES

The construction of this project will result in two major outcomes – increased reliability and resiliency through redundancy and modernization and increased capacity that will eliminate dependency on water from the Missouri River. Additional benefits to long-term infrastructure planning include eliminating costs for infrastructure projects, staffing, and O&M at North Plant.