

Build Kansas Fund | Fiscal Year 2025 Application Package | Memo



To: Representative Troy Waymaster, Chair, Build Kansas Advisory Committee
Chardae Caine, Kansas Legislative Research Department
Shauna Wake, Office of the Kansas State Treasurer

From: Matthew A. Volz, PE, Executive Director, Kansas Infrastructure Hub

RE: Build Kansas Fund Application #2025-097-MARC

Date: March 14, 2025

Attached, please find an application made to the Build Kansas Fund by the Leavenworth Waterworks. The application packet includes the following items:

- Coversheet – provides a high-level overview of the application including a unique identification number, page 1 of 9 of the Build Kansas Fund Application Package.
- Build Kansas Fund Application – includes information submitted with the Build Kansas Fund Application, pages 2-5. Page 6 provides the table of funding sources and zip codes served by the project.
- Attachments – executive summary, pages 7-9.

Project Overview

The Leavenworth Waterworks seeks funding from the U.S. Department of Homeland Security for funding available through the Building Resilient Infrastructure and Communities (BRIC) program for their Leavenworth Waterworks Board South Treatment Plant Resiliency Project. The project which includes adding a full second treatment train to Leavenworth Waterworks' South Treatment Plant.

This opportunity is a discretionary BIL program with a local match requirement of 25% of the total project cost. The entity is requesting \$11,328,750.00 from the Build Kansas Fund, and is providing a local match of \$596,250.00. This request has the potential to unlock \$35,755,000.00 in federal funds, for a total project cost of \$47,700,000.00.

The deadline is April 1, 2025 and this Build Kansas Fund application was received on February 24, 2025.

Build Kansas Fund Steering Committee Recommendation

The Build Kansas Fund Steering Committee reviewed this application on March 12, 2025 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 2025 Application Package | Coversheet



Build Kansas Fund Application Number	2025-097-MARC
Applicant Name	Leavenworth Waterworks Board
Application Date Received	2/24/2025
Project Name	Leavenworth Waterworks Board South Treatment Plant Resiliency Project.
Project Description	Project to add a full second treatment train to Leavenworth Waterworks' South Treatment Plant.
Entity Type	Local Government
Economic Development District (EDD) Planning Commission	MARC
Infrastructure Sector(s)	Water
BIL Program	Building Resilient Infrastructure and Communities (BRIC)
BIL Program Type	Discretionary
Application Type	Implementation
BIL Application Deadline	April 1, 2025
Build Kansas Fund Request	\$11,328,750.00
Technical Assistance Received	General Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	BIL Application Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Build Kansas Fund Application Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Other (Brief Description): Provided BKF Application Support.
Application Notes	Build Kansas Fund contribution of \$11,328,750.00 will unlock \$35,775,000.00 in federal BIL funding, with a local cash contribution of \$596,250.00 for a total project cost of \$47,700,000.00
Steering Committee Funding Recommendation	3/12/2025 Recommend <input checked="" type="checkbox"/> Declined <input type="checkbox"/>
Advisory Committee Funding Recommendation	3/18/2025 Recommend <input type="checkbox"/> Declined <input type="checkbox"/>

Title	Leavenworth Waterworks Board by Brett Waggoner in Build Kansas Fund Application PO Box 187 Lawrence, Kansas 66044 United States 7857602148 brett@govassistsvcs.com	02/24/2025 id. 49755024
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Original Submission 03/05/2025

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 Bipartisan Infrastructure Law (BIL) funding opportunity for which your entity is eligible:	Yes
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
The Build Kansas Fund is intended to support Kansas-based infrastructure projects. Please provide a list of all the zip codes this project will be located in, along with an estimated percent [%] of the project located in that zip code. For example, if seeking funding for road infrastructure, provide a rough 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:	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 federal application due date for this Bipartisan Infrastructure Law (BIL) funding opportunity?	4/1/2025
Application Type:	Implementation
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:	\$35,775,000.00
Enter the total project cost:	\$47,700,000.00
Enter the required non-federal match percentage:	25%
Part 4: Build Kansas Fund - Match Application Information Beginning in July 2024 and moving forward, eligible applicants are expected to contribute a portion of the non-Federal match requirement. This contribution can be in the form of cash and/or in-kind contributions. The goal is to demonstrate the applicant's commitment to the project. The contribution should be significant enough relative to the Build Kansas Fund request. For a local public entity, 5% of the non-federal match is a good guideline, but not a requirement. See Build Kansas Fund Program Guidance for exceptions and more information.	
Enter the non-federal cash match amount being requested from the Build Kansas Fund:	\$11,328,750.00
Enter the non-federal cash match amount being provided by the eligible applicant, if applicable:	\$596,250.00
Enter the estimated value of the non-federal in-kind match amount being provided by the eligible applicant, if applicable:	\$0

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_V2.xlsx](#)

Part 5: Build Kansas Fund - Means Test and Eligible Applicant Match

What other available funding sources that are currently planned to go unused by your entity will be leveraged for this project?	N/A
Will any American Rescue Plan Act (ARPA) or Coronavirus State & Local Fiscal Recovery Fund monies will be used for the non-federal match?	N/A
What other sources of in-kind match will be leveraged for this project? Please list and include the actual or estimated value of each.	N/A
What other funding sources (local, federal, or non-federal) will be used for this match?	Our 5% of the total match required will come from our capital improvement fund.
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. The BRIC application submitted last year, in conjunction with Build KS, was denied. In order to improve this year's application, the GM and grant writer facilitated a feedback appointment with FEMA staff. The changes and clarifications suggested are incorporated into this year's application. In addition to those changes, the cost estimates were updated. The board also pursued congressionally-directed spending with the aid of Senator Moran's staff, but that opportunity was also denied. The board is exploring the possibility of other federal programs, including Bureau of Reclamation and FEMA.

Part 6: Additional Information

Please upload a draft or final version of the Bipartisan Infrastructure Law (BIL) program grant application associated with this request OR an executive summary providing an overview of the project:

[FY_24_BRIC_Grant_Budget.pdf](#)

[EXECUTIVE_SUMMARY_LEAVENWORTH_WATERWORKS_SOUTH_PLANT_PROJECT_BUILD_KANSAS_FUND_APPLICATION_REVISED.docx](#)

Provide any additional information about this project not covered in previous sections of this application (optional):	Our pre-application for for the state's review is due electronically on 3/10. We understand that we can't have a formal letter of approval by then, but we would welcome an email or other similar tentative approval as was supplied last year. We appreciate your consideration and assistance.
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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:	
Position/Title:	
Additional:	

Position/Title:

Additional:

Position/Title:

Source	Amount	% of project
Build Kansas Funds (non-federal match)	\$ 11,328,750.00	24%
Eligible Applicant Cash Match	\$ 596,250.00	1%
Eligible Applicant In-Kind Match (estimated value)	\$ -	0%
BIL Federal Funds (applied for)	\$ 35,775,000.00	75%
Additional Project Contribution (if applicable)	\$ -	0%
TOTAL PROJECT COST	\$ 47,700,000.00	100%

Zip Code	% of project in zip code
66048	100%
	100% in Kansas

EXECUTIVE SUMMARY
LEAVENWORTH WATERWORKS SOUTH PLANT RESILIENCY PROJECT
2025 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 extreme 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 wet well 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 \$43.6 million, plus administrative, and other costs that bring the project total to \$47.7 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 Missouri River. With the second train in place, the utility would have the flexibility to reduce the NTP to

EXECUTIVE SUMMARY
LEAVENWORTH WATERWORKS SOUTH PLANT RESILIENCY PROJECT
2025 BUILD KANSAS FUND APPLICATION

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 DHS 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 \$47,700,000. Included in the budget is construction and engineering, solids handling equipment, and grant administration. 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. LWB staff and their grant writers facilitated a feedback appointment with BRIC staff following last year's application denial. The feedback received has been incorporated into this year's application and cost estimates were updated. The board is committed to amending the project's conformance with application criteria to align with the new administration's program priorities and initiatives.

South Treatment Plant - Capacity Improvements

15-Jan-25

Construction Costs - Phase 1

Aerator	\$	412,409
Primary Basin		2,568,939
Rapid Mix		839,013
Sedimentation		4,523,105
Miscellaneous		1,582,507
Subtotal	\$	9,925,973
GC, profit, OH, Mobil, etc		3,402,185
Subtotal	\$	13,328,158
Contingency (30%)		3,998,448
Total Construction - Phase 1	\$	17,326,606

Construction Costs - Phase 2

Filter Bldg (3 x 3MGD)	\$	8,500,871
New HSP (3) Bldg & Electrical		3,081,785
Chlorine Contact Basin Expansion		731,261
Add Backwash Pump		261,318
New Control System		582,080
Civil, Site, and Piping		100,000
Subtotal	\$	13,257,315
GC, profit, OH, Mobil, etc		4,772,195
Subtotal	\$	18,029,510
Contingency (30%)		5,408,863
Total Construction - Phase 2	\$	23,438,373

Total Construction Cost	\$	40,764,979
Engineering Design (7%)		2,853,549
Contract Admin & Inspection (8%)		3,261,198
Grant Administration (~2%)		820,274

Grand Total - Project **\$ 47,700,000**