

KUB

Bond Refinancing Opportunity

February 18, 2021



Resolution 1431

Refinancing Outstanding Bonds

Projected to Save KUB Customers ~ \$69M

- Proposed refinancing of \$415.2M in bonds sold from 2010 through 2014
- 17 outstanding series of bonds across all four systems being refinanced
- Represents 36% of total outstanding debt
- Largest single sale of bonds and largest refinancing in KUB's history

Refinancing Summary

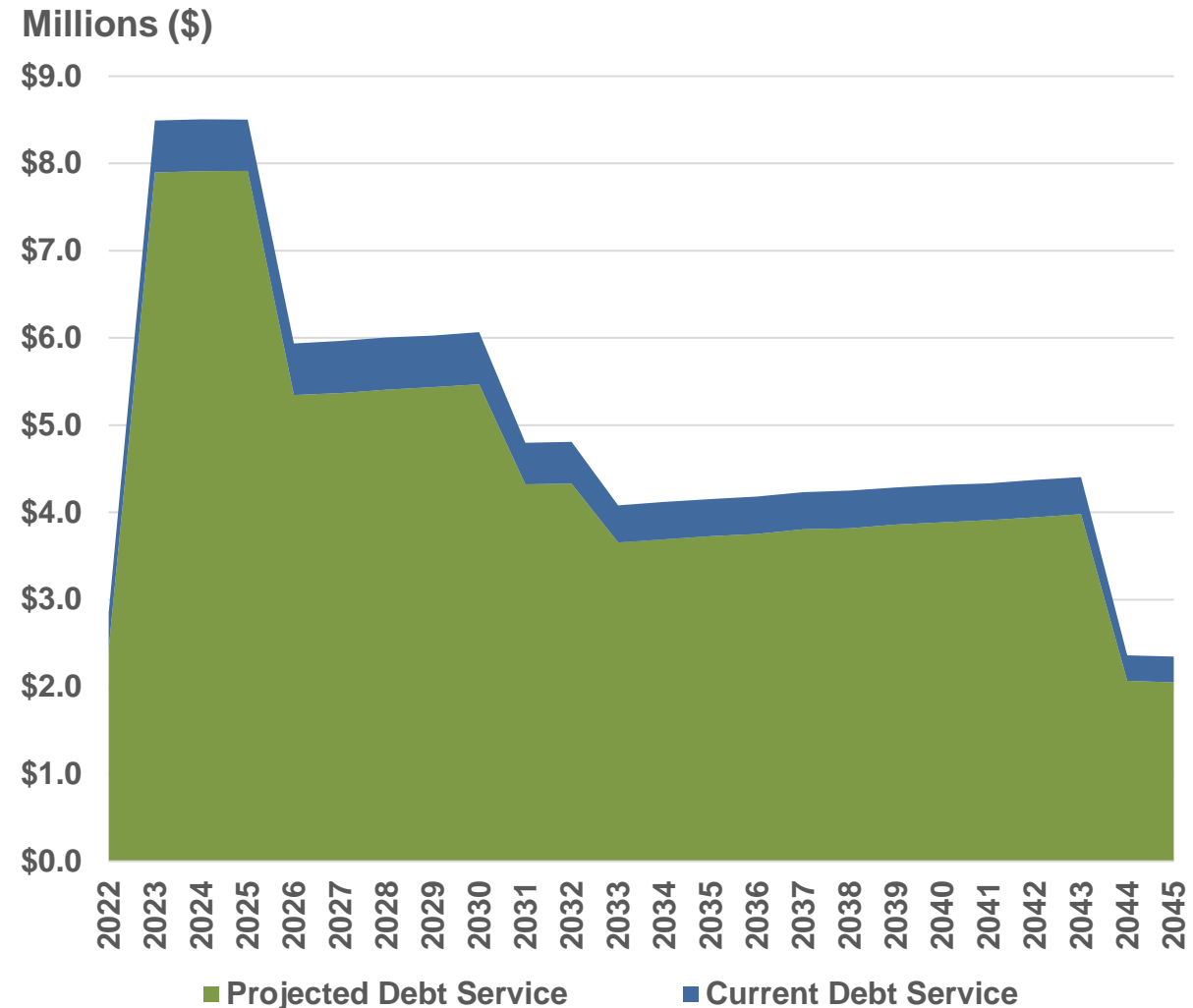
System	Proposed Bonds	Proposed Bonds Avg. Rate *	Current Bonds Avg. Rate	Debt Service Savings	Issuance Cost
Electric	\$ 87.5M	2.12%	3.46%	\$ 11.4M	\$ 293K
Gas	\$ 49.5M	1.61%	3.82%	\$ 7.4M	\$ 220K
Water	\$ 41.5M	2.10%	4.21%	\$ 9.9M	\$ 213K
Wastewater	\$ 241.0M	2.11%	3.54%	\$ 40.6M	\$ 395K
Total	\$ 419.5M			\$ 69.3M	\$1.12M

* Based on current market rates

\$87.5M Electric Refunding Bonds

Current Debt Service	\$117,935,000
Projected Debt Service	\$106,528,000
Savings	\$11,407,000

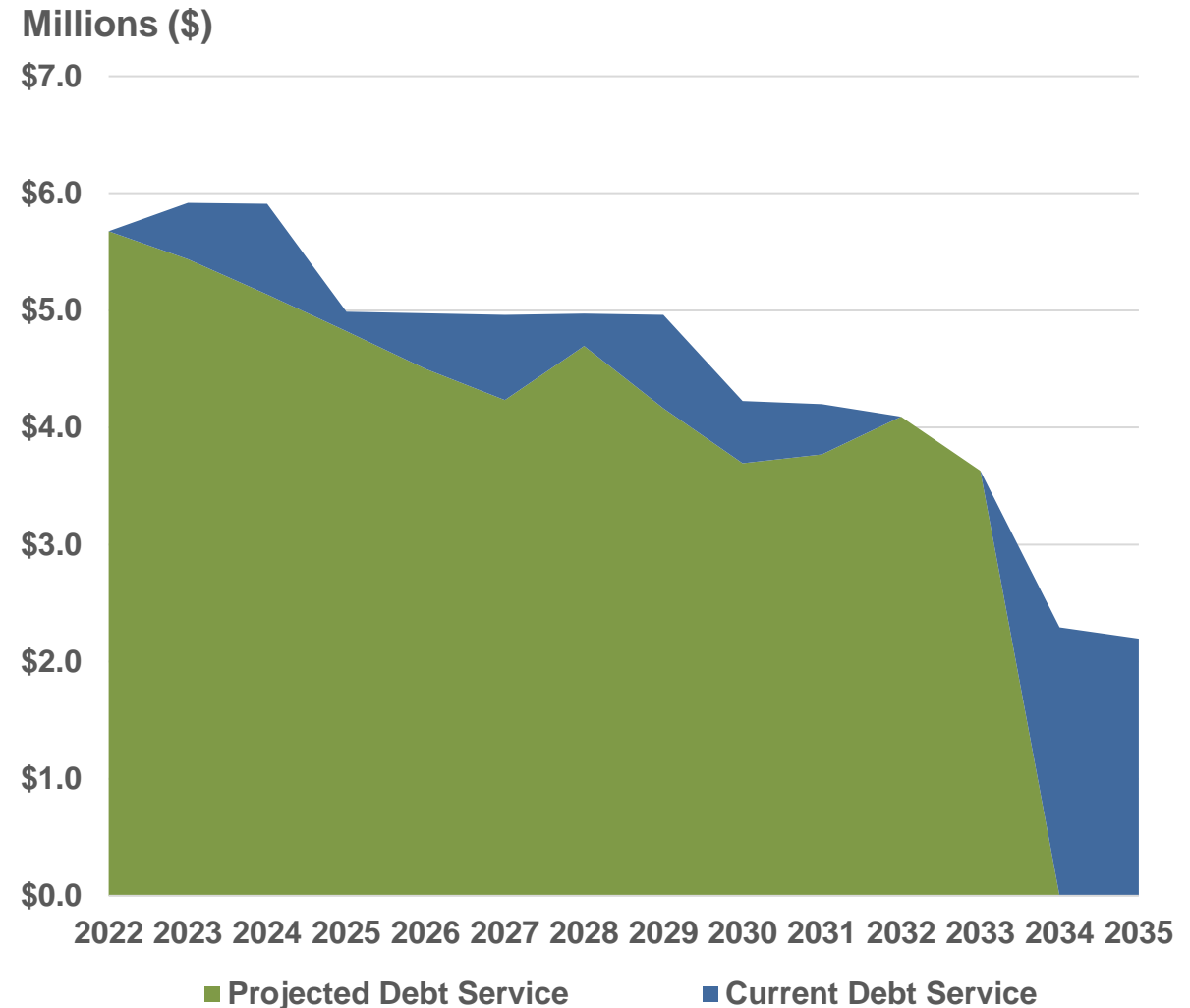
- Bonds fully mature in July 2045
- Weighted average life of bonds reduced from 11 years to 10.6 years



\$49.5M Gas Refunding Bonds

Current Debt Service	\$61,280,000
Projected Debt Service	\$53,853,000
Savings	\$7,427,000

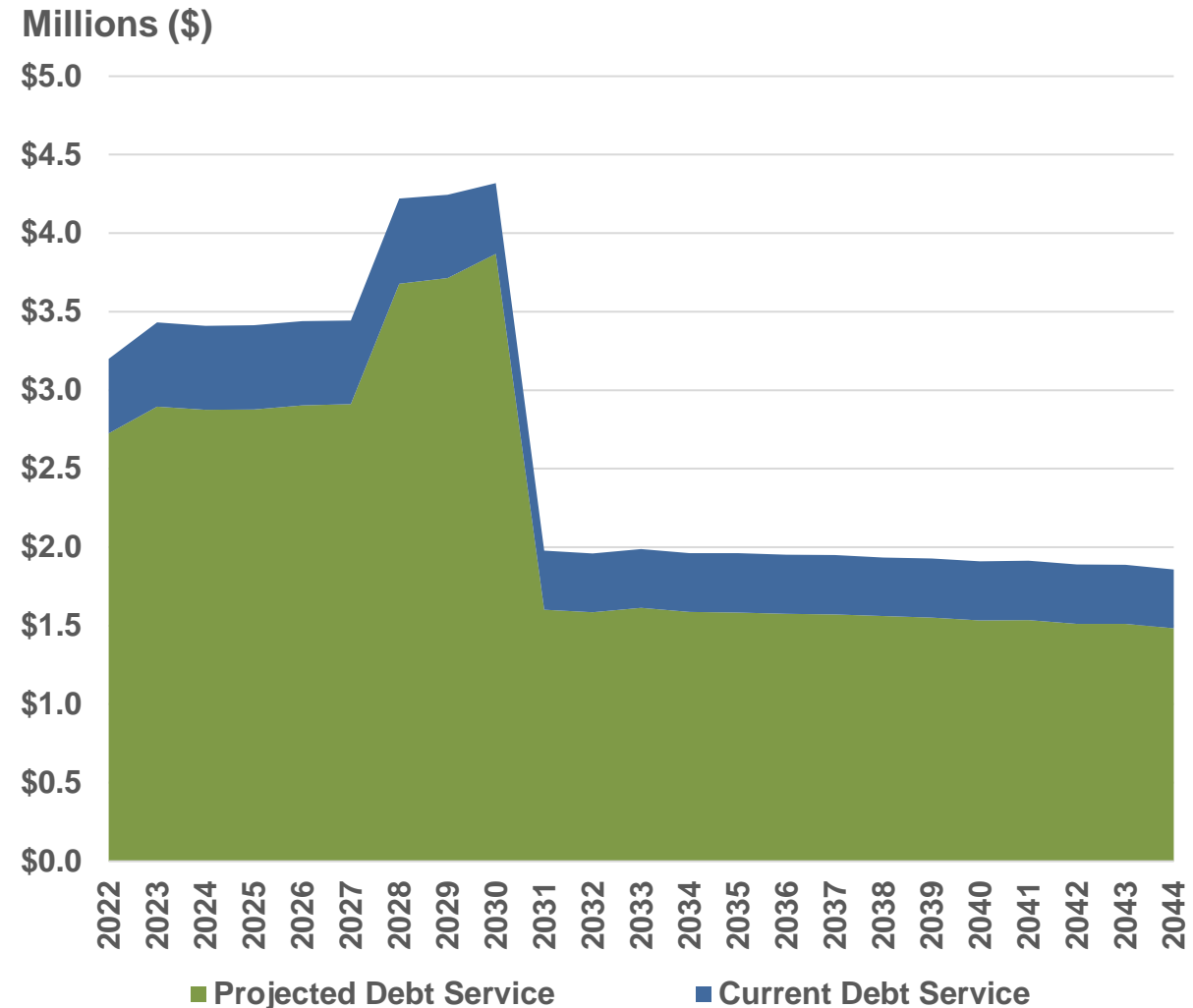
- Bonds fully mature in March 2033
- Weighted average life of bonds reduced from 6.6 years to 6.0 years



\$41.5M Water Refunding Bonds

Current Debt Service	\$60,207,000
Projected Debt Service	\$50,268,000
Savings	\$9,939,000

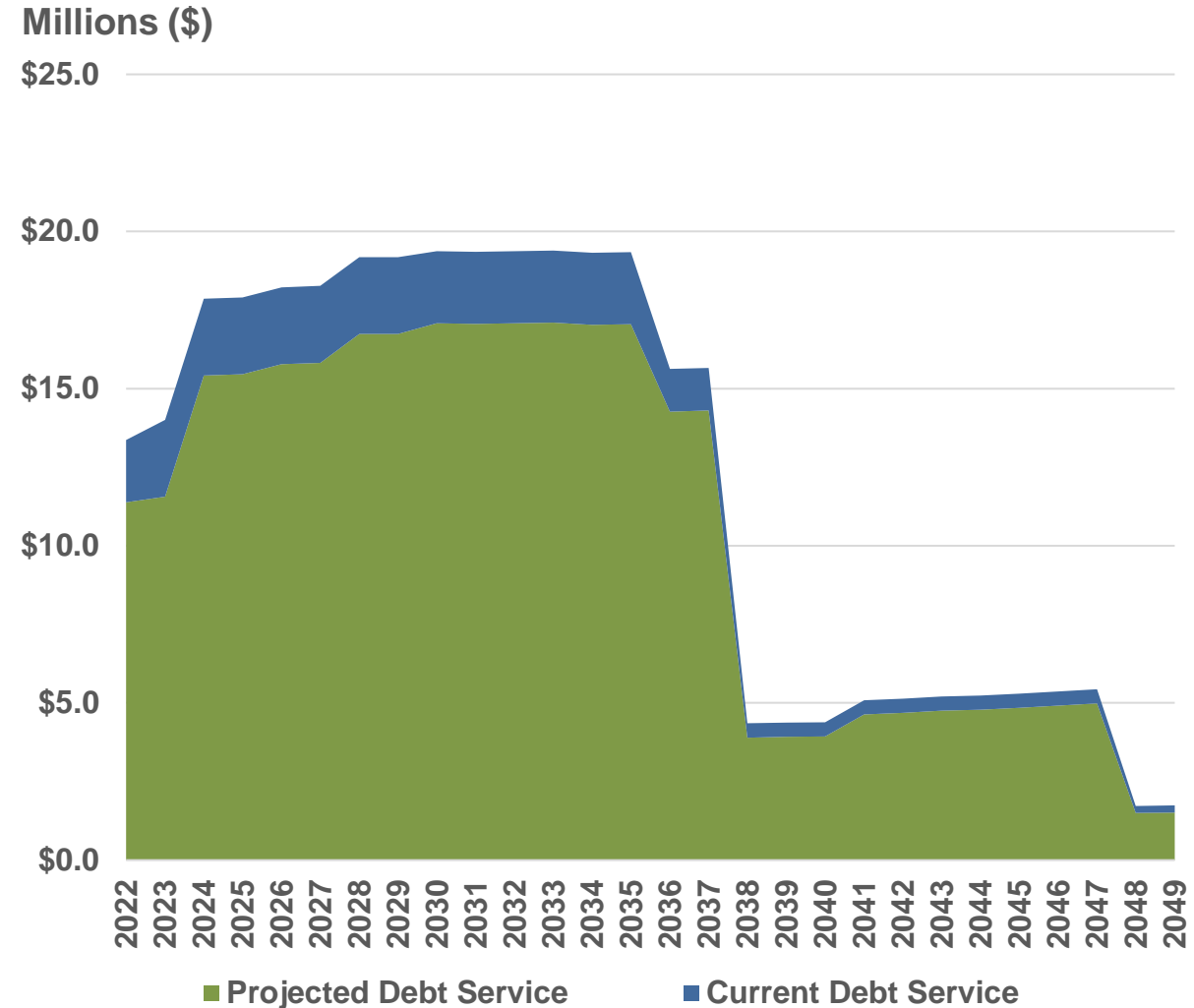
- Bonds fully mature in March 2044
- Weighted average life of bonds reduced from 11 years to 10.3 years



\$241M Wastewater Refunding Bonds

Current Debt Service	\$338,559,000
Projected Debt Service	\$298,012,000
Savings	\$40,547,000

- Bonds fully mature in April 2049
- Weighted average life of bonds reduced from 11.9 years to 11.4 years



Estimated Issuance Costs

Cost	Professional Firm	Fee
Financial Advisor	Cumberland Securities	\$350,000
Bond Counsel	Bass, Berry & Sims	\$225,000
Rating Agency	Moody's	\$287,000
Rating Agency	Standard & Poor's	\$203,000
Paying Agent	Regions Bank	\$3,000
		<hr/> \$1,064,000
Other Costs (POS, OS, Advertising, Misc.)		\$54,000
		<hr/> \$1,122,000

Resolution 1431

- Requests City Council authorize the issuance of up to \$419.5M in revenue refunding bonds
- Bonds secured by issuing system's revenues
- Bonds issued on parity with outstanding debt
- Authorize use of refunding escrow agreement for electric bonds

KUB

Electric Vehicle Charging Power Rate

February 18, 2021



Resolution 1432

Recent Electric Vehicle Announcements

10NEWS News Weather Sports Connect Watch Live United Healthcare 1-800-441-8709

LIVE AT FIVE @4 RECIPES NOTICIAS WBIR CONTESTS LIVE A LITTLE AS

TVA, state to partner on network of electric vehicle charging stations along major TN roadways

TVA chief Jeff Lyash said the plan is to put an electric charging station every 50 miles along major Tennessee roadways.

CNBC MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV WATCHLIST PRO

AUTOS

General Motors plans to exclusively offer electric vehicles by 2035

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SHARE f t in e

CNBC Auto industry wants more government support for electric vehicles

For example, Biden has promised \$400 billion in public investment in clean energy, including battery technologies and electric vehicles. Part of Biden's climate plan includes dedicating government spending to support electric vehicles, with 500,000 new electric vehicle charging outlets by the end of 2030. (The U.S. currently has less than 29,000 public EV chargers, according to the U.S. Department of Energy.)

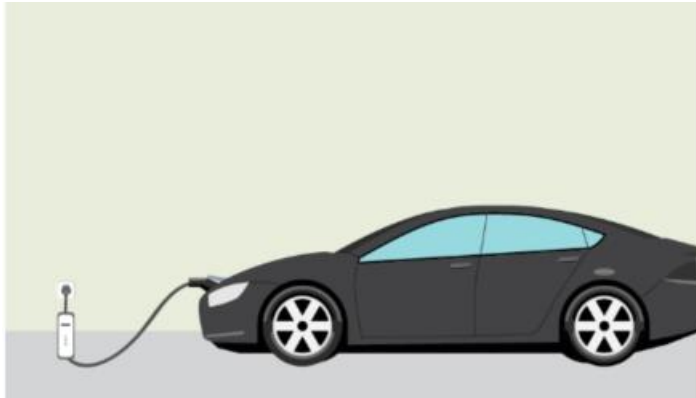
Biden administration promises an EV era, new world for the auto industry

President Joe Biden calls for sweeping changes to bolster the US auto industry, usher in EVs and transform transportation. We lay it all out.

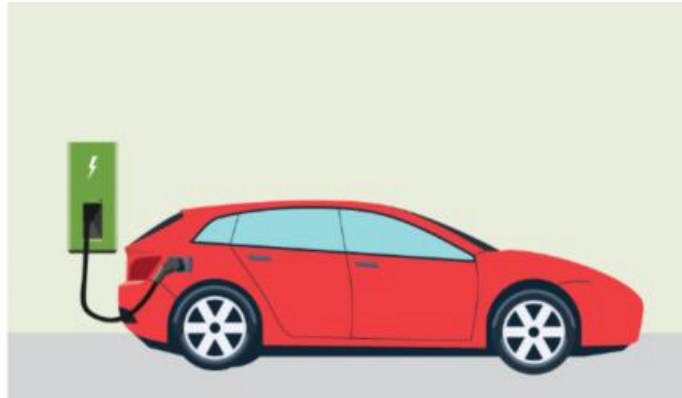
Sean Szymkowski Jan. 20, 2021 9:00 a.m. PT

▶ LISTEN · 06:00

EV Charging Station Types



Level 1



Level 2



Fast Charge

	Level 1	Level 2	Fast Charge
Voltage	120 V	208 V or 240 V	208 V or 480 V
Charge Time	12-40 hours 2-5 RPH*	2-4 hours 10-30 RPH*	15-45 minutes 100-200 RPH*
Primary Use	Residential	Residential, commercial, public	Commercial, public

**RPH = miles of range per hour of charging*

Electric Vehicle Charging Recap

- Public fast chargers address range anxiety
- TVA announced EV supportive policies
- Electric Vehicle Charging Power (EVC) Wholesale Rate developed for low-use, high-demand EV Charging Stations

KUB EVC Retail Rate

- Companion retail rate to TVA wholesale rate
- Applies to separately metered EV charging stations, greater than 50 kW
- Consumption based (kWh)



Resolution 1432

- Authorizes creation of EVC Rate Schedule to be effective April 1, 2021
- Requires two readings

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Water Supply Master Plan Update

February 18, 2021



Water Supply Master Plan Goals

- Replicate 38 million gallons per day (MGD) of capacity at Mark B. Whitaker Water Treatment Plant (MBW)
- Eliminate single points of failure
- Improve resiliency and operational flexibility
- Develop and implement capital projects plan



Water Plant Resiliency Projects

Phase I: Complete 2015–2018

Phase II: Underway 2019–2024

Phase III: Planning 2025–2031

- Parallel High Service Main
- Electric Upgrades - Phase I
- Engineering Report
- Intake Improvements

- Emergency Generators
- Six New Filters
- Backwash Storage Tank
- Intermediate Pump Station
- Backwash Equalization Basin

- Raw Water Main/distribution box
- Electric Upgrades – Phase II
- High Service Pump Station/
4 MG Clearwell
- Source Water Resiliency

Proposed Site Map



Phase II Projects

Phase II: Underway 2019–2024

- Emergency Generators
- Six New Filters
- Backwash Storage Tank
- Intermediate Pump Station
- Backwash Equalization Basin

- Emergency Generators
 - Provides power to produce 52MGD capacity
 - Scheduled completion Spring 2021
- MBW Filter project
 - Provides resiliency for multiple treatment processes
 - Located on General Shale property
 - KUB's largest water project ever at \$50M

MBW Filters Project

- Project includes
 - Six new mixed media filters
 - Intermediate pump station
 - Backwash storage tank
 - Backwash equalization basin
- Advertise summer 2021
- Construct 2022 - 2024



Benefits of Filters Project

- Operational Flexibility
 - All filters normally in service
 - Allows necessary repairs to be completed
 - Extends life of equipment
- Additional benefits include
 - Control room for operators
 - Laboratory

1927 MBW Filter Gallery



Phase III Projects

Phase III: Planning 2025–2031

- Raw Water Main/distribution box
- Electric Upgrades – Phase II
- High Service Pump Station/
4 MG Clearwell
- Source Water Resiliency

- Evaluation team formed
 - Represented by operations, engineering and maintenance
 - Review all remaining processes
 - Use risk assessment to prioritize several potential options
- Recommend projects that balance risk and cost

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Project Help Update

February 18, 2021



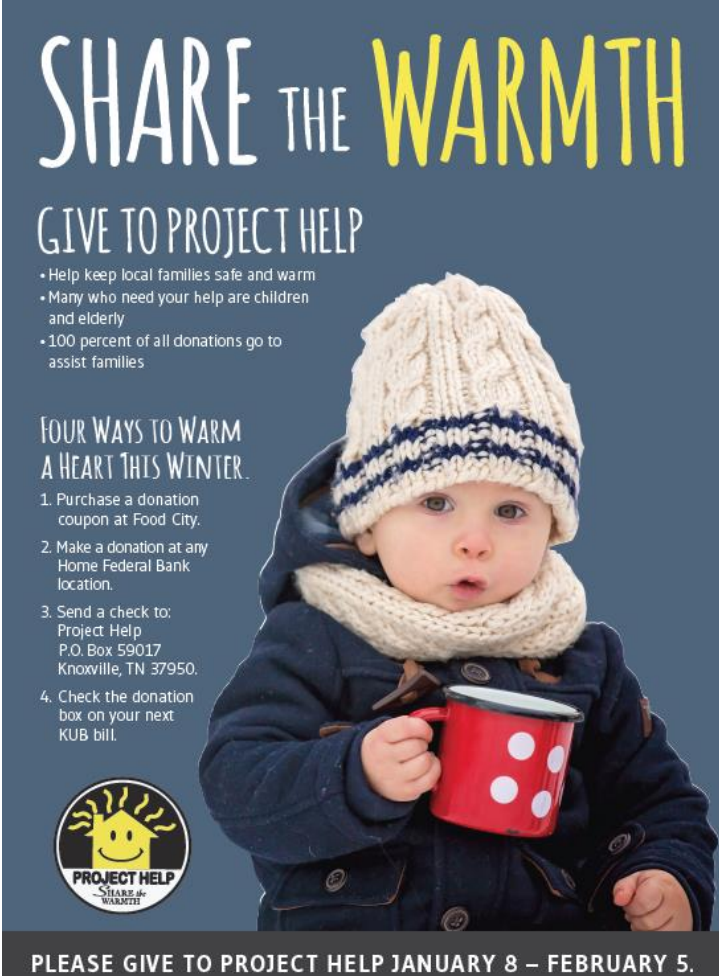
Helping KUB Customers Stay Warm

- Established in 1983 by KUB and CAC
- Provides emergency heating assistance for low-income customers
- Covers electricity, natural gas, propane, heating oil, wood, and coal



Many Ways to Contribute

- Annual campaign with local partners
- Recurring monthly pledge with bill payment
- One-time contributions
 - KUB.org
 - Special events
 - KUB Connections and bill stuffers



SHARE THE WARMTH

GIVE TO PROJECT HELP

- Help keep local families safe and warm
- Many who need your help are children and elderly
- 100 percent of all donations go to assist families

FOUR WAYS TO WARM A HEART THIS WINTER.

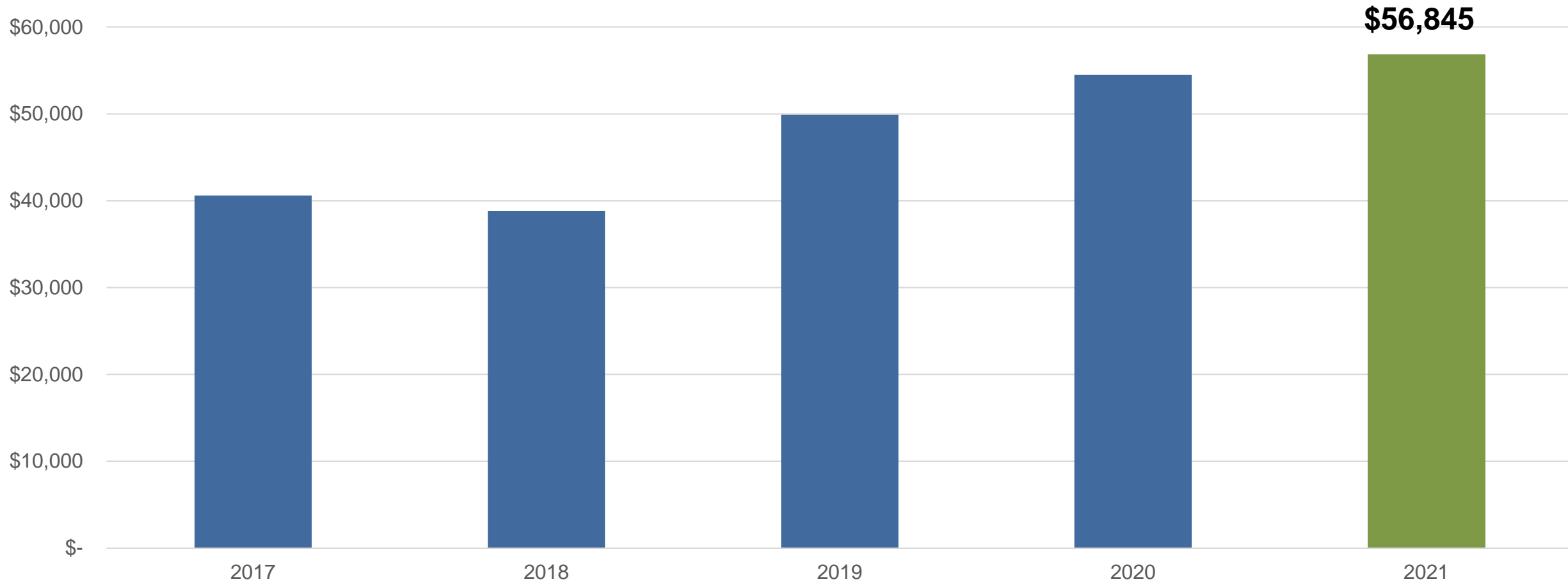
1. Purchase a donation coupon at Food City.
2. Make a donation at any Home Federal Bank location.
3. Send a check to:
Project Help
P.O. Box 59017
Knoxville, TN 37950.
4. Check the donation box on your next KUB bill.

PROJECT HELP
SHARE the WARMTH

PLEASE GIVE TO PROJECT HELP JANUARY 8 – FEBRUARY 5.

The poster features a baby wearing a white and blue knit hat and a dark blue jacket, holding a red mug with white polka dots. The background is dark blue with white and yellow text.

Partnerships Lead to Successful Campaigns



2,400+ Families Helped Since 2016

	2016	2017	2018	2019	2020
Families Assisted	667	382	504	383	476
Project Help Funds Provided	\$196,878	\$109,397	\$153,005	\$115,395	\$233,718
Average Per Household	\$295	\$287	\$304	\$301	\$491

Bridging the Gap During the Pandemic

- Increased budget anticipating greater community need
- Modified eligibility requirements
 - Income guidelines relaxed
 - Benefit amount increased
- More than \$125K used to assist in December 2020



Emergency Heating Assistance



KUB

CAC
Knoxville-Knox County
Community Action Committee

Project Help Makes a Difference!

“I humbly thank you for your consideration of Project Help. As a vet[eran], I know that any and all help can be useful in a time of need no matter how small or large.”

“Your help and assistance during our time of need makes a huge difference. We greatly appreciate this help.”

Project Help Recognized as Community Leader

- April 2021 Be More Award recipient
- Selects and features community service leaders



KUB