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 # 2024-001-NWKPDC

Date: October 16, 2023

Attached, please find an application made to the Build Kansas Fund by the City of Russell.

The application packet includes the following items:

- Coversheet provides a high-level overview of the application including a unique identification number for the application and tracking information for the application review and advice process. (Page 1, upper LEFT corner page number reference)
- Build Kansas Fund Application includes information the applicant submitted with the Build Kansas Fund Application. Please note this applicant provided their complete Bipartisan Infrastructure Law (BIL) grant application. (Page 2-9, upper LEFT corner page number reference)
- Attachments provided as part of the Build Kansas Application submission but called out here
 for reference and special notes. Additional attachment references are made in the BIL grant
 submission which are not accessible. (Page 10-29, upper LEFT corner page number reference)

Project Overview

Following a winter storm in 2021, with sustained winds of 100 miles per hour and the electric distribution system was extensively damaged. This resulted in lengthy power outages and required mutual aid assistance from other municipal utilities to restore power. The city seeks to avoid future electric disruption due to weather-related events and provide a sustainable electric grid to customers. A study of the system has been completed with recommendation of project staging to replace the current system.

The city has submitted a BIL grant application to the Federal Emergency Management Agency (FEMA) for the Building Resilient Infrastructure and Communities (BRIC) program. The city seeks Build Kansas Funds to supplement their planned local match.

BRIC applications were due in January 2023 with a rolling award schedule. This submission has been recognized by FEMA as a potential project for funding. Although the BRIC application has been

Build Kansas Fund | Fiscal Year 2024 Application Package | Application Data

officially submitted, the Kansas Infrastructure Hub and Build Kansas Steering Committee recommended the city submit a Build Kansas Fund Application as no Federal Award has been made for this project.

Build Kansas Fund Steering Committee Recommendation

The Build Kansas Fund Steering Committee reviewed this application on October 2, 2023 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

Date Of Completeness Check:

Date Forwarded to Steering Committee: 10/2/2023



Build Kansas Fund Application Number	2024-001-NWKPDC
Project Name	City of Russell, North Residential 1 & 2 Electrical Distribution Rehabilitation
Entity Type	Local Government
Economic Development District (EDD) Planning Commission	Northwest EDD Northwest Kansas Planning & Development Commission
Infrastructure Sector(s)	Energy
BIL Program	97.047, FEMA Building Resilient Infrastructure and Communities (BRIC)
BIL Program Type	Discretionary
BIL Application Deadline	Rolling, First Deadline: 1/27/2023
Build Kansas Fund Request	\$339,941.61
Technical Assistance Received	General No BIL Application No Build Kansas Fund Application Yes Other (Brief Description):
Application Notes	Build Kansas Fund Contribution of \$339,941.61 may unlock an additional \$339,941.61 in local funding and \$2,039,649.66 in federal BIL funding
Build Kansas Fund Deadline	11/15/2022
Bulla Kansas Fund Deadline	11/15/2023
Steering Committee Funding Recommendation	10/4/2023 Recommend
Advisory Committee Target Review	10/26/2023
Advisory Committee Funding Advice	DATE Recommend or Deny
Completeness Review Data	

9/27/2023

Title City of Russell

09/26/2023

by Shayla Peck in Build Kansas Fund Fiscal Year 2024 Application

id. 44193266

133 W. 8th Russell, Kansas 67665 United States 7854836311 treasurer@russellcity.org

Original Submission

09/26/2023

Gg	
	Part 1: Applicant Information
The name of the entity applying for the Build Kansas Fund:	City of Russell
Project Name:	North Residential 1 & 2 Electrical Distribution Rehabilitation
Entity type:	Local Government
Applicant Contact Name:	Shayla Peck
Applicant Contact Position/Title:	City Treasurer
Applicant Contact Telephone Number:	+17854836311
Applicant Contact Email Address:	treasurer@russellcity.org
Applicant Contact Address:	PO Box 112
Applicant Contact Address Line 2 (optional):	133 W. 8th
Applicant Contact City:	Russell
Applicant Contact State:	Kansas
Applicant Contact Zip Code:	67665

Is the Project
Contact the same as the Applicant
Contact?

Yes

Part 2	Ruild	Kansas	Fund -	Eligibility	Criteria
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Certify that you are pursuing a viable 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 nonfederal match component:

Yes

What is the primary county that the project will occur in?

Russell 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 federal funding agency for this Bipartisan Infrastructure Law (BIL) funding opportunity?

Federal Emergency Management Agency (FEMA)

What is the 97.047 Assistance Listing Number (ALN) for this Bipartisan Infrastructure Law (BIL) funding opportunity?

What is the application due date for this Bipartisan Infrastructure Law (BIL) funding opportunity?

1/27/2023

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:

2719532.88

Part 4: Build Kansas Fund - Match Application Information

Enter the match amount requested from the Build Kansas Fund:

339941.61

Is the project able to Yes move forward with a lesser match amount than requested?

If you are awarded less match than the amount requested, at what amount would your project NOT be able to move forward?

0.0

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.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 Yes available American Rescue Plan Act (ARPA) or Coronavirus State & Local Fiscal Recovery Fund monies that could be used for this match:

Confirm that you have explored other readily available funding sources (federal or nonfederal) to be used for this match:

Yes

Briefly describe your efforts to find other available funding sources for this project:

The City of Russell continually seeks alternative methods of funding to alleviate the financial burden of the utility on its customers. As a Public Power Entity, the City of Russell strives to provide sustainable service at an affordable rate. Staff continues to research funding opportunities to best serve our customers and to meet the needs of our municipality.

Part 6: Additional Information

Please upload a copy of the Bipartisan Infrastructure Law (BIL) program application associated with this request OR a 2-page executive summary providing an overview of the project:

BRIC_Application_Narrative.pdf

Provide anv about this project (optional):

After the storm in on December 15, 2021, with 100mph sustained additional information winds, it was determined that our electrical distribution system was not sufficient to withstand these types of winds. The electric distribution system was damaged extensively, resulting in lengthy power outages, and required help from four other municipal utilities through mutual aid to help restore power to the community. The electric distribution department performs regular maintenance on our distribution system that covers fifty square miles and serves many rural customers, during which severe weather events often delay or cause additional repair work. A recent report from Climate Central, a non-profit research group, revealed that from 2000 to 2021, 84% of all reported power outages were caused by a weather-related event. The North American Electric Reliability Corporation researcher found more than 1,500 cases of extreme weather-related power outages since 2000, including those caused by high wind; heavy rain and thunderstorms; winter weather, including snow, ice and freezing rain; and wildfires. The system we have now was not built in a time and climate we are experience now. We need to rebuild the system to create a more resilient and reliable electric distribution system. This project will strengthen the existing electrical system to help mitigate exposure to future storms. A study of our entire electrical system has been completed with recommendations of multiple stages to replace the current system to help prevent future loss. The requested matching funds will help alleviate our fund to help further our rebuild into the next phases. The cost of this project has went from \$1.5 million to now \$2.7 million. The unforeseen cost increases have slowed our progress in building a sustainable electrical grid to our customers.

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.	Shayla Peck

Part 7: Terms and Conditions

Position/Title: **Treasurer** Kayla Additional: Schneider Position/Title: **Assistant City Manager** Additional: Jon Quinday Position/Title: **City Manager** Additional: **Ashley** Mai **City Clerk** Position/Title:

Internal Form

ED District: Northwest

Project Primary Zip

Code:

67665.0

Sector: Energy

Application Overview n/a

and

Recommendation:

Zip Code	% of project in zip code	State
67665	100	Kansas
	100	

Amount
2039650
339941.6
339941.6
2719533

Subapplicant information

Name of federal agency

FEMA

Type of submission

Application

KANSAS ADJUTANT GENERAL DEPARTMENT

2800 SW TOPEKA BLVD TOPEKA, KS 66611 United States

State

DUNS#

EIN#

KS

142992028

481124839

Subapplicant type

Local Government

Is the subapplicant subject to review by Executive Order 12372 Process?

No - Not covered

Is the subapplicant delinquent on any federal debt?

No

Contact information

Subrecipient Authorized Representative (SAR)

Katrina Woelk

Primary phone

7854836311

Work

Mailing address

treasurer@russellcity.org

Point(s) of contact

Katrina Woelk

Finance Director

Primary phone

7854836311 Work

Fax

Additional phones

7854836311

Work

Mailing address

PO Box 112

Russell KS 67665

treasurer@russellcity.org

Community

Please provide the following information. If the Congressional district number for your community does not display correctly, please contact your State NFIP coordinator.

Add Communities

Please find the community(ies) that will benefit from this mitigation activity by clicking on the Find communities button. If needed, modify the Congressional District number for each community by entering the updated number under the U.S. Congressional District column for that community. When finished, click the Continue button. NOTE: You should also notify your State NFIP coordinator so that the updated U.S. Congressional District number can be updated in the Community Information System (CIS) database.

Community name	County code	CID number	CRS community	CRS rating	U.S. Congressional District
RUSSELL, CITY OF	167	200315	N		1,2

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Map Russell KS.pdf	12/21/2022	treasurer@russellcity.org	Community Attachments	Map of Russell KS	

Mitigation plan

Please provide your plan information below.

Is the entity that will benefit from the proposed activity covered by the current FEMA approved multi-hazard mitigation plan in compliance with 44 CFR Part 201?

Please provide plan detail

Plan name			
Emergency	Operations	Plan -	Russe

County

Plan type Local Multijurisdictional Multi-Hazard Mitigation Plan

Plan approval date 02/04/2021

Proposed activity description

Please provide any additional comments below (optional).

The City of Russell is covered under the Russell County's Emergency Operations and mitigation plan. Mitigation actions for ESF-12-Energy and Utilities in the mitigation plan states that the City shall participate in a hazard identification process and identify and correct vulnerabilities and promote community preparedness. As part of this plan council approved a development of a multi-year plan to upgrade the electric distribution system, within the city proper. This plan will strengthen the existing electrical system to help mitigate exposure to future storms, protecting citizens form hours and days of electrical interruptions. The regional mitigation plan lists the utility/electrical structure failure as a moderate risk. This mitigation project is to help move that risk ot a low risk. The City of Russell is also included in the Regional Mitigation Plan which is attached below. The replacement of electrical lines is mentioned for Russell County in the regional mitigation plan.

Filename 12	Date uploaded	Uploaded by	Label	Description	Action
Region B Hazard Mitigation Plan 11.12.2020.pdf	01/05/2023	stephanie.goodman@ks.gov	Mitigation Plan Attachments	No description given.	
City of Russell.pdf	01/05/2023	stephanie.goodman@ks.gov	Mitigation Plan Attachments	No description given.	
Region B Kansas Apvl Ltr (Jun20).pdf	01/05/2023	stephanie.goodman@ks.gov	Mitigation Plan Attachments	No description given,	
Russell County EOP 20221220,pdf	12/20/2022	treasurer@russellcity.org	Mitigation Plan Attachments	Russell CO Emergency Operations Plan and multi-hazard mitigation plan	

Scope of work

The project Scope of Work (SOW) identifies the eligible activity, describes what will be accomplished and explains how the mitigation activity will be implemented. The mitigation activity must be described in sufficient detail to verify the cost estimate. All activities for which funding is requested must be identified in the SOW prior to the close of the application period. FEMA has different requirements for project, planning and management cost SOWs.

Subapplication title (include type of activity and location)

North Residential 1 & 2 Reconstruction

Activities

Primary activity type

Mitigation reconstruction

Secondary activity type (Optional)

Utility and infrastructure protection

Secondary sub-activity type

Electrical/power

Tertiary activity type (Optional)

Geographic areas description

The City of Russell is in North Central Kansas on I-70 approximately 25 miles east of the City of Hays and approximately 60 miles west of the City of Salina. Russell has interstate access to Highway 40, US Highway 281 I-70 and rail service provided by UPRR. The project is in North Russell City limits from St. John Street to Culp and 9th Street to 1900 block of North Main. The area of the project is between the following Longitude and Latitude points: -98.86841190 to -98.84965229W and 38.90677025 to 38.89377063 N.

Community lifelines

Primary community lifeline

Energy

Primary sub-community lifeline

Power grid

Secondary community lifeline (optional)

Safety and security

Secondary sub-community lifeline

Community safety

Provide detailed description of population impacted

Hazard sources

Primary hazard source
Secondary hazard source (optional)
Tertiary hazard source (optional)
Fire

Is this a phased project?
Are you doing construction in this project?
Percentage of population impacted
Severe storm

Tornado

Fire

20

Provide a clear and detailed description of your proposed activity

This project is the 2nd phase in a complete city wide upgrade to the entire distribution system. The City worked with KMEA-Mid-States and RMA Engineering to develop a multi-year plan that prioritized each section of town into phases. As currently built, the City's electric distribution system can potentially trip the entire City offline, impacting community shelters, hospitals, long-term care facilities, and the 911 Communications center. The hospital and 911 Communications Center have backup generators; however, an extended outage can result in these entities running out of fuel. The reconstruction for the City's electric distribution system will segment the circuits so that if there is a fault in one circuit, it does not cause a cascading effect and bring the entire system down. The separation of the circuits is key in our mitigation and resiliency efforts. The City's water treatment plants have backup generators, which are limited in the time they can operate based on fuel availability. The lift stations for the Citys sanitary sewer system do not have backup generators, which could fail the system during a long-term outage. The majority of this project will impact residential customers. A few businesses, a school and a few churches will also be impacted by this project. The school serves the entire population of the City of Russell and surrounding communities from preschool to 1st grade. This project also serves the only radio station in town, which is a vital part of updating storm information as

the storm occurs to the citizens of Russell.

This project, which is the second phase of the mitigation project, will rebuild the entire distribution system from North Russell city limits from St. John Street to Culp and 9th Street to 1900 block of North Main. It will replace 51,440 feet of the current copper conductors with a more robust conductor made from aluminum. It will also replace 418 poles and 185 transformers. The project will make sure protective devices coordinate (realys, reclosers, and fuses) and add more to isolate damages into smaller areas lessoning the residential outages to only a few sections instead of the whole section. The new line will be built to current National Electrical Safety Code (NESC) Standards for clearences about grade and from structures. Also the lines will be built to the standard called out in the Table 242-1 of the NESC. Rebuilding the entire distribution system is a priority for the community and governing body as we are impacted by severe weather, which frequently takes the system down. The City's electric utility has a depreciaiton fund for capital projects. Transferring funds to the depreciation fund depends on sales and operating costs. Phase one, East Residential 1 and East Residential 2 Circuits, has already begun. The design for phase was has been completed and materials have been ordered. Due to supply chain issues, there is a 52 week delivery time. The design for Phase 2, the proposed project, has been completed.

Council approved a Master Services Agreement (MSA) with Kansas Municipal Energy Agency/Mid-States to work with the city o this project. The first project task, completed in December 2021, was a complete inventory of all

Describe how the project is technically feasible and will be effective in reducing the risk by reducing or eliminating damage to property and/or loss of life in the project area. Please include engineering design parameters and references to the following: preliminary schematic or engineering drawings/design; applicable building codes; engineering practices and/or best practices; level of protection (e.g., life safety, 100-yr flood protection with freeboard, 100-yr wind design, etc.):

Who will manage and complete the mitigation activity?

Will the project address the hazards identified and what risks will remain from all hazards after project implementation (residual risk)?

The prevention section in the county mitigation plan talks about strengthening interoperable and operable communication capable.

Does the mitigation activity incorporate nature-based solutions?

When will the mitigation activity take place?

Explain why this project is the best alternative. What alternatives were considered to address the risk and why was the proposed activity considered the best alternative?

distribution system asstes, to better aid in the engineer's design and eventual staking of circuits. From this informatioin, staff worked with KMEA/MID-States and RMA Engineering to developa multi-year plan and priorities. For this proposed project from the multi-year plan, the City will purchase the materials. The City of Russell will go out for bid and hire a contractor to rebuild the distribution system and retire the current system. The project will take approximately 6 months to complete.

The project will rebuild the current circuits and will make sure the protective devices coordinate (relays, reclosers, and fuses) and add more to isolate damages into smaller areas lessoning the residential outages to only a few customers instead of a whole section and lead to faster troubleshooting. It will improve the strength of the current line. The existing line is very old and badly in need of an upgrade, the line is copper and has been stretched and damaged over the past 50 plus years and is way beyond its useful life. Replacing the copper with aluminum wil mitigate the damages from future storms. The poles are also way beyond their useful life. Steel polse will be placed at certain locations which will strengthen the span of power pole, reducing the likelihood of a broken pole causing damage to property or a broken power line which could result in loss of life. Currently when we have a down pole or power line, a police officer or fire truck responds to keep the area clear until the repair is made. Strengthening the system will reduce the reliance of public safety, allowing them to perform other necessary duties. By making improvements to the protective devices, outages will be smaller in size which will lead to faster troubleshooting when problems arise. It will also replace existing poles with newer stornger poles. The new line will be built to current National Electrical Safety Code (NESC) standards, for clearances about grade and from structures. Also the lines will be built to the standard called out in Table 242-1 of the NESC.

The project will be managed as a joint effort between the City and the Kansas Municipal Energy Agency (KMEA). KMEA will have a person dedicated to supervising this project.

The prevention section in the county mitigation plan talks about strengthening interoperable and operable communication capabilities. Having resiliency in our electric distribution system will ensure that local communications are kept functioning. The public works section of the mitigation plan states that utilities should take steps to promote the continued operation of community operation of community water, power and other distribution systems and talks about utilities must perform priority restoration of electric, water, and communications. This project will help continued operation of electric and make it easier to identify the issue and have it resolved in a shorter time frame. There will still be a risk of lines being blown down from strong winds and tornados after implementation, however this project should help eliminate huge wait times to have electric restored by add more protective devices to isolate the issues. Replacing copper lines with a more robust aluminum line will help protect the lines from wind damage.

No

The material will be ordered after award announcement and the labor will go out to bid the 4th quarter of 2023. It is expected that the project will start at the begining of 2024 and take approximately 6 months to complete.

This project is the best alternative, first becasue it is the most cost effective and second because it is easier to maintain than the alternative. The alternative considered was underground lines. While underground lines may not be exposed of the elements, the down side of an underground system is the cost associated with it and it is more difficult to maintain if something goes wrong with the lines. The reason it is more difficult to maintain is because the lines are underground, therefore it is difficult to assess the issue when something goes wrong. After considering cost and maintenance it was determined that replacing the poles and copper wire with aluminium wire was the best alternative.

Please identify the entity that will perform any long-term maintenance and provide a male enance, schedule and cost information. The subapplicant or owner of the area to be mitigated is responsible for maintenance (including costs of long-term care) after the project is completed?

The City of Russell Electrical Distribution crew will perform long-term maintenance on the new rebuilt distribution system. The electric distbution team spends appoximately \$1.16M on the entire system each year in maintenance. This project would equate to approximately 20% of all maintenance expenditures. The line crew maintains the system throughout the year, including trimming trees out of the lines so no damage is done.

Additional comments (optional)

North Residential 1 & 2 will impact around 483 customers which include 9 businesses (Developmental Services, KRSL, Great Bend Co-op, Russell Contractors, Russell Housing Authority, Trinity Methodist Thrift Store, USD 407 Simpson Elementary School and Kansas Gas. This project will impact all four school attendance centers, the local hospital, EMS, Law enforcement, the local radio station, three long-term care facilities, and all homes and businesses within the city limits. The local radio station KRSL does not have a backup generator, and public safety loses a key method of getting information out to the public when power is lost. The local radio is the community's primary method to monitor severe weather. The second most comon method of getting timely public safety messages to the public is through social media and the City's Notify Me program - both reliant on the internet. While the local internet provider has a backup generator for their facility, the homes and businesses that rely on the internet cannot access it when the power is out. This distribution rebuild will minimize the size of are impacted during an outage, allowing more community members and visitors to follow the local radio station, social media or the City's notification system.

Attachments

Filename Date uploaded Uploaded by Label Description Action

Schedule

Specify the work schedule for the mitigation activities.

Add tasks to the schedule

Please include all tasks necessary to implement this mitigation activity; include descriptions and estimated time frames.

Start Month Task Duration (in Months) Task Name 7 months 6 Material **Task Description** Order of Material Task Duration (in Months) Start Month Task Name 6 months 1 Labor **Task Description** Rebuild the entire distribution line.

Estimate the total duration of your proposed activities (in months).

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Proposed project start and end dates

Start Date 2023-06-01

Introduction

Project location

Provide a detailed description of the proposed project's location.

The project is in North Russell City limits from St. John Street to Culp and 9th Street to 1900 block of North Main. The area of the project is between the following Longitude and Latitude points: -98.86841190 to -98.84965229W and 38.90677025 to 38.89377063 N.

Latitude

38.898875

Longitude

-098.859651

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
NR1,jpg	12/20/2022	treasurer@russellcity.org	Project Location Attachments	Map of the North Residential 1 area to be replaced	
<u>NR2.jpg</u>	12/20/2022	treasurer@russellcity.org	Project Location Attachments	Map of the North Residential 2 area to be replaced	

Project benefiting area

Provide a detailed description of the proposed project's benefiting area.

The phase of the project that is proposed for this grant benefits the North section of the City limits. This section includes 483 customers with 9 businesses (Developmental Services, KRSI, Great Bend Co-OP, Russell Contractors, Russell Housing Authority, Trinity Methodist Thrift Shop, USD 407 Simpson Elementary School and Kansas Gas. This project will benefit 20% of the population of the City of Russell.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
North Residential 1 & 2,pdf	12/28/2022	treasurer@russellcity.org	Location project benefiting area Attachments	Map of benefiting area	
<u>City Proper Map.pdf</u>	01/20/2023	treasurer@russellcity.org	Location project benefiting area Attachments	Map of City Proper	

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The North section, phase two and proposed project, of the City limits incude an elementary school, radio station, a few businesses and 2 churches. The elementary school houses preschool to 1st grade students for the entire school district, which includes the Gorham and Bunker Hill Area. The radio station is the only radio station in town and also provides coverage during the storm. This project will impact 70 to 80 percent of the entire population of Russell and touch citizens from Gorham and Bunker Hill residents along with residents in the rural area due to the elementary school being a part of the project. The entire project benefiting area is the city proper which includes 4,400 residents and hundreds of travelers daily. commercial businesses such as grocery stores, pharmacies, doctor offices, fuel stations, hotels, and longterm care facilities are more impacted than others during an outage. Many businesses must close during a power outage as they cannot serve the customers. Ong-term care providers have limited oxygen available, which can quickly be used up during a power outage. According to the hazard mitigation plan, the county 4-H building is the designated shelter. This building can hold one hundered people in time of need, which can increase for short-term sheltering.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Map Russell KS.pdf	12/28/2022	treasurer@russellcity.org	Location project impact area Attachments	Map of Russell Kansas	
<u>City Proper Map.pdf</u>	01/20/2023	treasurer@russellcity.org	Location project impact area Attachments	Map of the City Proper	

Project site inventory

Does this project subapplication propose to mitigate a property/structure(s)? (Yes Examples: residential home, commercial building, bridge, fire station, levee, pumping station, wastewater treatment plant, telephone pole, electric line, etc.)

Please describe how the propert(ies) will be selected upon subgrant approval. (Example: Saferoom Lottery Project, Fix the Bricks Project)

Please download the excel template, and then fill out the template with building or infrastructure data.

Enter the location of the property/structure.

List of location(s) (567 locations)

Status	Location ID	Address	Inventory type	Structure type	Mitigation action
•	68166	, Russell, KS, Russell, 67665	Infrastructure/Utility/other	Energy	Wind retrofit, Snow/Ice retrofit
•	<u>68167</u>	, Russell, KS, Russell, 67665	Infrastructure/Utility/other	Energy	Wind retrofit, Snow/Ice retrofit
•	68168	, Russell, KS, Russell, 67665	Infrastructure/Utility/other	Energy	Wind retrofit, Snow/Ice retrofit
•	68169	, Russell, KS, Russell, 67665	Infrastructure/Utility/other	Energy	Wind retrofit, Snow/Ice retrofit
•	<u>68170</u>	, Russell, KS, Russell, 67665	Infrastructure/Utility/other	Energy	Wind retrofit, Snow/Ice retrofit

Status Location ID Address Inventory type Structure type Mitigation action 18

68732

Infrastructure/Utility/other

Energy

Wind retrofit, Snow/Ice retrofit

Budget

Budget cost estimate should directly link to your scope of work and work schedule. You must add at least one item(s) greater than 0 for your cost estimate. As necessary, please adjust your federal/non-federal cost shares, and add the non-federal funding source(s) you are planning to use this project. Once you have completed this section, please click the Continue button at the bottom of this page to navigate to the next section.

Add budget cost types and item(s)

First, click the Add cost type button below to add cost type cost estimate and then click the Add item(s) button to add the item(s) for the cost estimate.

Grand total: \$2,719,532.88

Budget type: Construction

Cost type: Cost estimate

, Russell, KS, Russell, 67665

\$2,719,532.88

Cost estimate is the line item(s) budget to support the scope of work for the execution and completion of the project. Be sure to include the cost associated with revisions/formal adoption. To add a line item, Please click on the Add an item button. Click anywhere within each row or the arrow to edit or delete the line item(s)

Cost Items

•	Item: Construction Labor	\$1,407,000.00
•	Item: Poles	\$214,291.88
F	Item: Transformers	\$522,832.20
•	Item: Line Material	\$425,408.80
•	Item: Engineering Labor	\$150,000.00

Program income (optional)

Cost share

Cost share or matching means the portion of project costs not paid by federal funds.

Proposed federal vs. non-federal funding shares

Hazard mitigation assistance (HMA) funds may be used to pay up to 75% federal share of the eligible activity costs. Building Resilient Infrastructure and Communities (SRIC) and small impoverished communities may be eligible for up to 90% federal share. Flood Mitigation Assistance (FMA) and severe repetitive loss (SRL) properties may be eligible for up to 90% federal share.

		% Percentage	\$ Dollar amount
Is this an Economically Disadvantaged Rural Community?	Proposed federal share	75.00	2039649.66
This determines your federal/non-federal share ratio.	Proposed non-federal share	25.00	679883.22
No			Based on total budget cost: \$2,719,532.88

Non-federal funding sources here

That portion of the total costs of the program provided by the non-federal entity in the form of in-kind donations or cash match received from third parties or contributed by the agency. In-kind contributions must be provided and cash expended during the project period along with federal funds to satisfy the matching requirements.

Funding source	Funding amount	% Non-federal share by source
Funding source: City of Russell Electric Depreciation Fund	100.00%	\$679,883.22

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Funding Statement, pdf	12/22/2022	treasurer@russellcity.org	Budget Attachments	Funding Statement	

Cost-effectiveness

How was cost-effectiveness determined for this project?

✓ BCA completed in FEMA's BCA toolkit

Subapplicant must attach supporting documentation.

Pre-calculated benefits Substantial damage in special flood hazard area Other BCA methodology approved by FEMA in writing Not applicable

Not applicable

What are the total project benefits? (\$)

What are the total project cost? (\$)

What is the benefit-cost ratio (BCR) for the entire project?

Was sea level rise incorporated into the flood elevations in the BCA?

Were environmental benefits added to the project benefits?

No

20

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
fema bca toolkit-6.0 (3).xlsx	12/29/2022	treasurer@russellcity.org	Cost Effectiveness Attachments	FEMA BCA Toolkit	

No

Environmental/Historic Preservation (EHP) Review Information

Introduction

An environmental/historic preservation review is required for all activities for which FEMA funds are being requested. FEMA will complete this review with the assistance of both the state or tribal government and the local applicant. It is important that you provide accurate information. If you are having problems completing this section, please contact your application point of contact.

A. National Historic Preservation Act - Historic Buildings and Structures

1. Does your project affect or is it in close proximity to any buildings or structures 50 years or more in age?

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please attach the required documents below.)

No

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To help FEMA evaluate the impact of the project, please indicate below any other information you are providing, (optional)

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Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Please provide an explanation and any information about this project that could assist FEMA in its review.

Attachments

B. National Historic Preservation Act - Archeological Resources

Does your project involve disturbance of ground?

Yes

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please attach the required documents below.)

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To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

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Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

The vast majority of the poles will be replaced in the same hole as the existing poles. Each hole will be about 12 cubic feet. There are a little over 400 poles, potentially approximately 4,800 cubic feet (180 yards) of dirt could be disturbed. The City had a cultural resources survey completed by an archeologist that complied with the standards of ground disturbance of the Osage Indian Nation.

Please provide an explanation and any information about this project that could assist FEMA in its review.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Russell Cultural June 2020 Reduced.pdf	12/22/2022	treasurer@russellcity.org	involve Disturbance Of Ground. attachment Ids	Cultural Resources Survey	
North Residential 1 & 2 Ground <u>Disturbance_pdf</u>	12/29/2022	treasurer@russellcity.org	involve Disturbance Of Ground. attachment Ids	Ground Disturbance Map	

C. Endangered Species Act and Fish and Wildlife Coordination Act

1. Are federally listed threatened or endangered species or their critical habitat present in the area affected by the project?

No

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please provide the required documents either through attachment and/or comment box below.)

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Please provide an explanation and any information about this project that could assist FEMA in its review.

2. Does your project remove or affect vegetation?

No

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please provide the required documents either through attachment and/or comment box below.)

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Please provide an explanation and any information about this project that could assist FEMA in its review.

3. Is your project in, near (within 200 feet), or likely to affect any type of waterway or body of water?

Yes

If Yes, and project is not within an existing building, you must confirm that you have provided the following: (If you have not provided these documents in any other section of the application, please attach the required documents below.)

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Most of the poles are in Flood Zone X(unshaded) and a few poles are in Flood Zone A. A stream runs through the North Residential area where the project is to take place. There will be no disturbance to the body of water. This is strictly a replacement of current poles. Attached is a flood plain map of the City of Russell. Also attached is a flood plain map overlay of the project area to show the flood area in relation to the project.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
North Residential 1 & 2 Floodplain Map Overlay.pdf	12/29/2022	treasurer@russellcity.org	endangeredSpecies.attachmentIds	Flood Plain Map Overlay	
Flood Plain Map.pdf	12/29/2022	treasurer@russellcity.org	endangeredSpecies.attachmentIds	Flood Plain Map	

Filename 23	Date uploaded	Uploaded by	Label	Description	Action	
<u>Digital image of streams.pdf</u>	12/29/2022	treasurer@russellcity.org	endangeredSpecies.attachmentIds	Digital Image of streams		
D. Clean Water Act, Rivers and Har	bors Act, a	nd Executive Order	11990 (Protection of Wetla	nds)		
1. Will the project involve dredging or disposal of dredged material, excavation, adding fill material or result in any modification to water bodies or wetlands designated as 'waters of the U.S' as identified by the US Army Corps of Engineers or on the National Wetland Inventory?						
E. Executive Order 11988 (Floodplain Management)						

1. Does a Flood Insurance Rate Map (FIRM), Flood Hazard Boundary Map (FHBM), hydrologic study, or some other source indicate that the project is located in or will affect a 1% annual chance floodplain, a 0.2% annual chance floodplain, a regulatory floodway, or an area prone to flooding?

Not known

Please provide an explanation and any information about this project that could assist FEMA in its review.

The firm map was revised in September 5, 1975 and therefore it is difficult to overlay the project and tell if any poles will be in the flood area.

2. Does the project alter a watercourse, water flow patterns, or a drainage way, **No** regardless of its floodplain designation?

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Flood Plain Map.pdf	12/29/2022	treasurer@russellcity.org	affect To Percent Annual Chance Flood plain. attachment Ids	Flood Plain Map	

F. Coastal Zone Management Act

1. Is the project located in the state's designated coastal zone?

No

G. Farmland Protection Policy Act

1. Will the project convert more than 5 acres of prime or unique farmland outside city limits to a non-agricultural use?

No

H. Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (Hazardous and Toxic Materials)

1. Is there a reason to suspect there are contaminants from a current or past No use on the property associated with the proposed project?

2. Are there any studies, investigations, or enforcement actions related to the Property associated with the proposed project?

3. Does any project construction or operation activities involve the use of hazardous or toxic materials?

No

4. Do you know if any of the current or past land-uses of the property affected **No** by the proposed project or of the adjacent properties are associated with hazardous or toxic materials?

I. Executive Order 12898, Environmental Justice for Low Income and Minority Populations

1. Are there low income or minority populations in the project's area of effect No or adjacent to the project area?

J. Other Environmental/Historic Preservation Laws or Issues

1. Are there other environmental/historic preservation requirements associated with this project that you are aware of?

No

2. Are there controversial issues associated with this project?

No

3. Have you conducted any public meeting or solicited public input or comments on your specific proposed mitigation project?

Yes

If Yes, please indicate in the text box below a description of the requirements, issues or public involvement effort.

KMEA/Mid-States and RMA Engineering developed a multi-year plan with priorities. The plan was presented to council at an open meeting with public members present. Council approve the multi-phase plan.

Attachments

Filename Date uploaded Uploaded by Label Description Action

K. Summary and Cost of Potential Impacts

Having answered the questions in parts A. through J., have you identified any aspects of your proposed project that have the potential to impact environmental resources or historic properties?

Evaluation

Is the applicant participating in the Community Rating System (CRS)? No Is the applicant a Cooperating Technical Partner (CTP)? Was this application generated from a previous FEMA HMA Advance Assistance No or Project Scoping award or any other federal grant award, or the subapplicant is a past recipient of Building Resilient Infrastructure and Communities (BRIC) non-financial Direct Technical Assistance? Has the applicant adopted building codes consistent with the international Yes codes? 2018 Year of building code International Buidling Code Please provide the building code. Have the applicant's building codes been assessed on the Building Code No Effectiveness Grading Schedule (BCEGS)? Council approved a Master Services Agreement (MSA) with Kansas Municipal Describe involvement of partners to enhance the mitigation activity outcome. Energy Agency/Mid-States to work with the city on a multi-year plan to upgrade the electric distribtuion system with in the city proper to help mitigate against future storms. Mitigation actions for ESF-12-Energy and Utilities in the mitigation plan state Discuss how anticipated future conditions are addressed by this project. that the City shall participate in a hazard identification process and identify and correct vulnerabilities and promote community preparedness. The project will rebuild the current circuits and make sure the protective devices coordinate (relays, reclosers, and fuses) by adding more to isolate damages into smaller areas lessoning the residential outages to only a few instead of the whole section. The project will replace exsiting poles that are at the end of their life and also replace coper wire for a more robust aluminum wire in order to stand up better against storms. The city was graded through the insurance Services Office (ISO) in October of Additional comments (optional) 22 with a score of 5 in residential property and a 4 in commercial property.

Attachments

Filename Date uploaded Uploaded by Label Description Action

Comments & attachments

Cost-effectiveness

▶ Community	0 comment, 1 attachments
► Mitigation plan	1 comment, 4 attachments
▶ Scope of work	1 comment, 0 attachments
▶ Budget	0 comment, 1 attachments

0 comment, 1 attachments

▶ Evaluation

Environmental/Historic Preservation (EHP)

1 comment, 0 attachments

0 comment, 6 attachments

0 comment, 6 attachments

Location

Assurances and certifications

OMB number: 4040-0009, Expiration date: 02/28/2025 View burden statement

SF-424D: Assurances - Construction Programs

Content:

OMB Number: 4040-0009 Expiration Date: 02/28/2025

Certain of these assurances may not be applicable to your project or program. If you have any questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

- 1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
- 2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- 3. Will not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure nondiscrimination during the useful life of the project.
- 4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
- 5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.
- 6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- 7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
- 8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- 9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
- 10. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C.§96101-6107), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C.§96101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
- 11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property
 Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired

- as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes radiation and property acquired for project purposes radiations are sufficiently acquired for project purposes.
- 12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
- 13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C.§874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
- 14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
- 16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- 17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §\$469a--1 et seq.).
- 18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
- 19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
- 20. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

Certifications regarding lobbying

OMB Number: 4040-0013 Expiration Date: 02/28/2025

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- 3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, ''Disclosure of Lobbying Activities,'' in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this

Russell Electric Distribution System Rehabilitation

The City's electric service area includes the City proper and approximately fifty (50) square miles of rural service area primarily located south of the City. City crews regularly perform maintenance and upgrades on the City's electric distribution system to increase system reliability. Mitigation actions for ESF-12 – Energy and Utilities in the mitigation plan states that the City shall participate in a hazard identification process and identify and correct vulnerabilities and promote community preparedness. As part of this plan council approved a development of a multi-year plan to upgrade the electric distribution system, within the city proper. This plan will strengthen the existing electrical system to help mitigate exposure to future storms, protecting citizens from hours and days of electrical interruptions.

The upgrade, completed in phases, is expected to take ten years to allow for adequate planning, design, and funding. Council approved a Master Services Agreement (MSA) with Kansas Municipal Energy Agency / Mid-States to work with the city on this project. The first project task, completed in December 2021, was a complete inventory of all distribution system assets, to better aid in the engineer's design and eventual staking of circuits. From this information, staff worked with KMEA/Mid-States and RMA Engineering to develop the multi-year plan and priorities.

The East Residential 1 and East Residential 2 circuits have been identified as the major priority project. This project will rebuild the entire distribution system from 9th Street to Wichita Avenue and US 281 to Copeland Street. It will replace the current copper conductors with a more robust conductor made from aluminum. The project will rebuild the current circuits into smaller circuits to isolate damages into smaller areas lessoning the residential outages to only a few instead of the whole section. In addition to improving the strength of the lines and reconfiguring the layout of the two circuits, improvements will be made to the protective devices so that they better coordinate. By making improvements to the protective devices, outages will be smaller in size which will lead to faster troubleshooting when problems arise. It will also replace existing poles with newer stronger poles. This project is estimated to cost \$2,080,568.

Over time copper wires stretch making them more susceptible to wind. This causes major outages during storms. Replacing the copper with aluminum will mitigate the damages from future storms. The regional mitigation plan lists the utility/electrical structure failure as a moderate risk. This mitigation project is to help move that risk to a low risk.

The Prevention section in the mitigation plan talks about strengthening interoperable and operable communication capabilities. Having resiliency in our electric distribution system will ensure that local communications are kept functioning. The public works section of the mitigation plan states that utilities should take steps to promote the continued operation of community operation of community water, power and other distribution systems and talks about utilities must perform priority restoration of electric, water, and communications. This project will help continued operation of electric and make it easier to identify the issue and have it resolved in a shorter time frame.

Below are pictures from the windstorm on December 15, 2022. This project will help mitigate the issues brought about in that storm and provide a stronger more resilient system in the future.







