

WHITE RIVER VALLEY ELECTRIC COOPERATIVE BROADBAND FEASIBILITY EXECUTIVE SUMMARY

PREPARED BY: NRTC BROADBAND SOLUTIONS

OCTOBER 18, 2021



**White River Valley
Electric Cooperative**
A Touchstone Energy® Cooperative 



nrtc

Member driven. Technology focused.

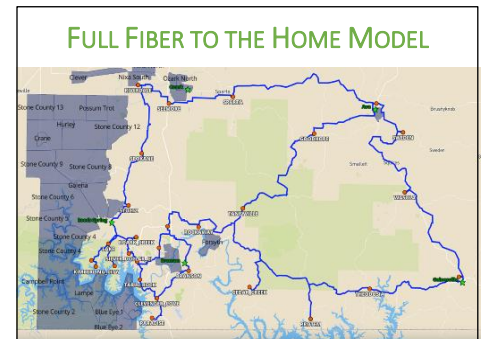
Executive Summary

White River Valley Electric Cooperative (WRVEC) has taken the initiative to evaluate the lack of broadband availability and study the cost and benefits of providing broadband service to its members. After thorough discussions, WRVEC engaged NRTC Broadband to conduct a feasibility study analyzing a broadband communications project. NRTC is a cooperative just like WRVEC and as such has a mission of helping its members, including WRVEC, make technology and business choices that are right for them, their circumstances, and their member's members. Through embarking on this study, we have realized that if not for our cooperative, there are parts of the service area that may never receive reliable and robust broadband internet services needed to economic prosperity.

The America Rescue Plan Act (ARPA), and other ongoing government support outlined later, is significantly focused on solving the broadband and digital divide in our country. WRVEC's service area is a modern-day example of haves and have-nots when it comes to broadband. NRTC and WRVEC worked together to build business models for three scenarios:

- 1) Full Fiber to the Home (FTTH) electric coop service area. This is the only course for delivering broadband as Fixed Wireless Access (FWA) will not provide adequate speeds or service in WRVEC's terrain.
- 2) Pilot Projects in the five counties serviced by WRVEC. Evaluate scope and pursue city, county, state, and federal funding opportunities.
- 3) Fiber Backbone project supporting Smart Grid and other electric plant enhancements.

Ultimately, the board wants to be diligent and responsible in determining economic feasibility of these various broadband project scenarios to provide value for the membership.



Financial Summary

WRVEC worked with NRTC to create a 20-year financial feasibility model that exhaustively captures the costs and revenue of building and operating a broadband network.

Highlights of that model are included in the table on the right. These results do not include any support from the American Rescue Plan Act (ARPA).

WRVEC is considering three broadband packages outlined in this pricing table below. WRVEC anticipates that 42.9% of homes passed would subscribe to one of these packages in the Full FTTH model.

Executive Summary Table	Full FTTH Project	Smart Grid and Backbone Project	5 County Pilot Project (TBD)
Backbone & Distribution Fiber Miles	3779 miles	308 miles	TBD
Backbone & Distribution Infrastructure Capital Expense	234.7M	\$22.2M	TBD
Project Length	5 Years	24 months	TBD
Homes Passed	33,800	n/a	TBD
Take Rate	42.90%	n/a	TBD
Subscribers	17,955	n/a	TBD
Revenue (Year 5)	\$19.39M	n/a	TBD
Total Expenses (year 5)	\$8.53M	n/a	TBD
EBITDA (Year 5)	\$10.86M	n/a	TBD
EBITA Positive	Year 2	n/a	TBD
Per house covered	\$6,943	n/a	TBD
Cumulative Break Even	20 years+	n/a	TBD
Positive Net Income	Year 8	n/a	TBD
Cash on hand (year 10)	\$1.93M	n/a	TBD

Fiber Offering	Pricing
Speed	
100/100Mbps	\$69.99
500/500 Mbps	\$79.99
1Gbps/1Gbps	\$99.99

This study revealed to the leadership team that WRVEC has two disparate broadband environments. The Branson and Ozark municipal areas have adequate to good broadband choices, but the Western and Eastern service area are definitively unserved and underserved at best. ARPA and further congressional focus on spending for critical infrastructure (including broadband) offers a unique window to provide a Fiber to the Home solution for all WRVEC's membership that is financially feasible.

Funding Summary

The WRVEC board has asked the leadership team to evaluate pilot projects in Stone, Taney, Christian, Douglas, and Ozark counties. Part of each pilot projects action plan is applying for funding from the counties and the state of Missouri. WRVEC and NRTC is in the process of defining pilot projects, developing feasible financial models, and determine funding requirements for each county. A synopsis of current and future funding programs is provided below:

America Rescue Plan Act

The President signed the \$1.9 trillion American Rescue Plan Act on March 11th. Missouri was allocated \$2.66B and the Governor has focused \$400M on plans to improve broadband in Missouri. Additionally, funding was driven down to the county level where another \$1.19B of relief from the impacts of Covid-19. These funds can be used for multiple purposes including broadband infrastructure.

GOVERNOR PARSON ANNOUNCES \$400 MILLION PLAN TO IMPROVE BROADBAND INFRASTRUCTURE IN MISSOURI

AUGUST 19, 2021

JEFFERSON CITY Today, during a press conference at the Missouri State Fair hosted by the Missouri Farm Bureau, Governor Mike Parson announced plans to deploy more than \$400 million in American Rescue Plan Act (ARPA) funds to increase broadband internet access, adoption, and assistance statewide.

"Investing in our broadband infrastructure is critical to unlocking our full economic potential in this state and will serve Missourians for generations to come," Governor Parson said. "We expect this investment to increase broadband internet connectivity and access in every corner of the state for hundreds of thousands of Missourians. Quality internet supports learning, health care, business, and agriculture in today's economy, and we are excited to capitalize on this opportunity to truly make a difference and improve lives."

The plan was developed through a multi-agency effort designed to address a diverse range of broadband connectivity challenges and is expected to impact hundreds of thousands of Missouri families. The plan will be presented to the Missouri General Assembly in January for appropriation.

In addition to the \$400 million plan, the Department of Economic Development also submitted an application to the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) Broadband Infrastructure Program requesting an additional \$56 million for broadband deployment. If approved by NTIA, this funding could support up to 19 projects, connecting more than 17,000 households, businesses, and other institutions.

"In combination, these investments would be a game changer for broadband in Missouri," said **Tim Arbeiter, Director of Broadband Development for the Department of Economic Development**. "This unprecedented level of funding could unlock incredible new potential as we shape the strategy for broadband development in our state."

According to the Federal Communications Commission, more than 147,000 households or almost 400,000 Missourians don't have access to high-speed Internet.

Capital Projects Fund (CPF)

The Coronavirus Capital Projects Fund (CPF) is another \$10B program specifically aimed at bridging the digital divide and Missouri has been allocated \$196.7M

nrtc FUNDING ALERT!

Professional Assistance for Today's Unprecedented Funding Opportunities

Program Name
Coronavirus Capital Projects Fund (CPF)

Background

Administrator: U.S. Department of Treasury ("Treasury")
Authorizing Legislation: American Rescue Plan Act of 2021
Total Fund Size: \$10 billion
Allocation Approach: Funds are directly allocated to states, territories and Tribal governments ["Applicants" or "Recipients"]

Coronavirus Capital Projects Fund (CPF)
\$10 billion

Infrastructure Investments and Jobs Act

Congress is currently negotiating the 2021 \$1.2T Infrastructure Investment and Jobs Act. This includes an additional \$65B for broadband infrastructure and subject to significant change as this has not received bipartisan support.

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Congress / Bills / H.R. 3684 (117th) / Text

H.R. 3684: Infrastructure Investment and Jobs Act

Overview Summary Cosponsors Details **Text** Study Guide

The text of the bill below is as of **Aug 19, 2021** (Preprint (Rule)). [Download PDF](#)

In the Senate of the United States,
August 10, 2021.