Applicant: Mayfield Electric and Water Systems
Contact: Marty Ivy (270-247-4661)
Project title: Mayfield Electric and Water Systems FTTP and Middle Mile Fiber Optic Network

Executive Summary

Mayfield Electric and Water System (MEWS) applauds the passage of the American Reinvestment and Recovery Act of 2009 (ARRA), and the allocation of $7.2 billion for broadband development in rural, unserved, and underserved America. MEWS also congratulates the NTIA for being selected to administer the majority of the broadband development funds.

As Section 3 of the ARRA ("Purposes and Principles") states, the purposes of the ARRA include preserving and creating jobs, and investing in infrastructure that will provide long-term economic benefits. For 67 years, MEWS has been creating jobs and investing in infrastructure in and around the town of Mayfield, Kentucky. As a municipally owned, not-for-profit utility service, MEWS has a simple mission: to provide all of the 10,349 people of Mayfield with the best possible electric, water, and broadband services, at an affordable price.

While Mayfield enjoys universal, affordable water and electric service, [redacted] of the town's residents lack access to any broadband, and another [redacted] are underserved. Existing broadband offerings from a local cable company and a local ILEC are unavailable to some of Mayfield's residents. [redacted]

The lack of affordable, universal broadband in Mayfield is due to two factors: the lack of an access network that reaches every structure in the town, and the lack of competitively priced backhaul bandwidth.

In an attempt to address the lack of Internet Access, MEWS in 2005 built an unlicensed- spectrum wireless-broadband service that currently serves 600 customers. Since 2005, MEWS has acquired invaluable expertise in building and maintaining a broadband infrastructure, and supporting broadband customers. [redacted]

A fiber-optic access network is the answer to bringing universal broadband to Mayfield. With its [redacted] and nearly limitless capacity, fiber-optic is a tried-and-true technology that will satisfy the bandwidth demands of Mayfield, now and tomorrow. [redacted] and thus has designed an

aerial fiber-optic access-network that would reach every single residence, business, and institution in Mayfield. Building such an access-network will cost approximately [redacted]. The FTTP access network is one part of this application.

Affordable broadband requires affordable backhaul prices. Mayfield, located in very rural western Kentucky, currently must pay [redacted] per Mbps per month for backhaul, approximately [redacted] times the national average. [redacted] Internet point-of-presence (POP) is [redacted] near [redacted], a [redacted] facility. In exchange [redacted], the [redacted] will run a 37-mile fiber-optic cable from [redacted] to [redacted], and grant MEWS a 20-year [redacted] MEWS already has a fiber-optic connection to Murray. The [redacted] backhaul-link will lower MEWS' monthly cost per Mbps from [redacted] to a price near the national [redacted]. The long haul fiber optic link, [redacted], is the second part of this application.

The combination of the access-network and backhaul-link projects will provide all the people of Mayfield with bandwidth they need at prices they can afford, as well as the quality-of- service they deserve, now and for the foreseeable future.

[redacted]

Therefore, an NTIA BTOP grant represents Mayfield's best, and perhaps only chance to build a universal, affordable broadband network capable of delivering speeds in excess of 100Mbps. Thus, MEWS respectfully submits this application to the NTIA's BTOP program requesting a $13 million grant to (i) construct an FTTP access-network that will reach every single residence, business, and institution in Mayfield, Kentucky and (ii) construct a backhaul link that will reduce the amount the town of Mayfield pays backhaul connectivity by 90%.

The FTTP access-network will take [redacted] to build once started; the backhaul link will take about [redacted] and can be prosecuted in parallel with the access network. The combined project is ready to break ground, today. All engineering studies have been done, [redacted] are in-hand, all potential vendors identified and ready to perform. When complete, the network will offer customers not only affordable, multi-megabit broadband, but also [redacted].

Building the FTTP access-network will employ over 20 workers in Mayfield for at

least one year. Furthermore, MEWS will add six (6) full-time positions, including field technicians, customer support representatives, and IP/Data technicians. Beyond these immediate economic benefits, the long-term impact of this project on Mayfield Kentucky will be profound. At the end of [redacted], Mayfield will possess [redacted]: a municipally owned broadband network that can deliver in excess of 100Mbps to every single structure in the community. Such a network will greatly improve the quality of life for Mayfield's residents, and transform Mayfield's attractiveness as both a place to live and a place to work.

We believe that achieving such an outcome is exactly what the ARRA was meant to do. As such, we respectfully submit our application, and thank you for your time and consideration.