



August 12, 2016

**Letter to the Editor, New York Times, in response to How to Give Rural America Broadband? Look to the Early 1900s, by Cecilia Kang August 7, 2016.**

In developing her story regarding expansion of needed broadband service in rural areas of America (*How to Give Rural America Broadband? Look to the Early 1900s*), the author overlooked an even more critical component of broadband expansion: the rural telecom industry. She needn't have gone back as far as the early 1900s, when all she had to do was start from 1949, the year that rural telephone companies were made part of the country's Rural Electrification Act ("REA"). Starting from then, the rural telcos have vastly expanded basic telephone service across the underserved landscape in every state, many of whom using the electric cooperatives' utility poles to expedite delivery of service.

More recently, those same rural telcos have added broadband service to the homes, schools, clinics and businesses within their service territories, reaching some of the smallest communities of America. They have succeeded in delivering broadband to their rural customers to a greater degree in most cases than the larger, national telecom carriers have been able to do in their respective rural service areas. By what we have witnessed recently, the rural electric cooperatives that have ventured into broadband have done so in the rural areas served by the larger national carriers and not in rural telco service areas where broadband is far more accessible. Congratulations are certainly in order to the rural electric cooperatives who have stepped up to build broadband infrastructures in those unserved or underserved rural areas, but let's give credit where credit is due: to the rural telcos.

This brings us to the key point made in this article: neither the Federal Communications Commission ("FCC") nor Congress need establish a new model, or look for a new solution, for greater expansion of broadband in rural America. The model for basic service development in the most remote rural areas stemmed from the United States Department of Agriculture's REA funding support for rural telcos and the FCC's policies and procedures that enabled many rural telcos to expand service in their own territories and to acquire unserved and underserved rural customers from the larger carriers. Those larger carriers were more than willing to pass on their service obligations in those unaffordable rural areas to the smaller rural carriers. Pieces of that model have been broken in the last decade, making it difficult and financially harmful for the smaller rural telcos to consider accepting more debt to expand service and acquiring even more service territory from the larger carriers.

Additionally, the question of competitiveness between a rural telco and a rural electric cooperative for the grant of an FCC broadband program is made murky by the question of who owns the utility poles. In a recent FCC decision, electric companies' pole attachment rates, except for rural electric cooperatives, were capped for fiber optical cable so as to encourage broadband investment. The proven experts in delivering broadband service to rural areas – the small rural telcos – have been placed at a competitive disadvantage in attempting to attach fiber cable to a local electric company's poles. Therefore, the most affordable solution to deliver broadband to some rural areas could hinge on the regulation of a pole attachment. However, there are no villains in this story. The FCC is diligently looking for quick and grand solutions to a serious problem in the U.S. that affects academic standing, rural economies, and quality of life. The rural electric coops offer one solution, technological advancements point in the direction of another, but the rural telcos offer the most obvious solutions—if policies were restored to support them.

Sincerely,

A handwritten signature in black ink, appearing to read "James J. Kail", is written over a light blue circular watermark that contains the text "Small Company Coalition".

James J. Kail  
Executive Committee Member  
Small Company Coalition

# How to Give Rural America Broadband? Look to the Early 1900s

By CECILIA KANG AUG. 7, 2016

ZENA, Okla. — From the sofa in his living room, Clinton Creason can see the electric pole outside that his father staked 70 years ago to bring power to this remote area of hilly cattle pastures.

Electricity came late here but transformed life on the farm. It provided bright light to study by and freed families from the tedium of washing clothes by hand and cutting wood for the cook stove.

Last December, Mr. Creason saw a new addition to the utility pole erected by his father that may be just as transformational — a subsidiary of his local electric cooperative, Northeast Oklahoma Electric Cooperative, hung a fiber optic cable on it. That enabled Mr. Creason and the 120 residents of Zena, Okla., to pump high-speed internet service into their homes for the first time.

“The cooperative is doing it again, but now the light bulb is the internet,” said Mr. Creason, 82.

Mr. Creason’s experience with the electric co-op puts him at the leading edge of a trend unfolding in hard-to-reach rural spots nationwide. For years, such communities have largely been left out of the digital revolution because they had only intermittent internet access, often through a patchwork of satellite, dial-up or wireless service. Telecom and cable companies shunned the



areas because it was too expensive to bring equipment and service over long distances to so few people.

Now high-speed internet is finally reaching these remote places, but not through the telecom and cable companies that have wired most of urban America. Instead, local power companies are more often the broadband suppliers — and to bring the service, they are borrowing techniques and infrastructure used to electrify the United States nearly a century ago. In some cases, rural municipalities are also using electrification laws from the early 1900s to obtain funds and regulatory permissions reserved for utilities, in order to offer broadband.

“This is the new New Deal,” said Sheila Allgood, a manager of Bolt, the broadband subsidiary of the Northeast Oklahoma Electric Cooperative, referring to government efforts under President Franklin Delano Roosevelt that brought electricity and other infrastructure to rural America in the 1930s. “Now we’re doing what cable and telecom companies don’t want to do, just like we did for electricity when the big private power companies didn’t want to come here either.”

Today, about 40 electric cooperatives in towns like Kit Carson, N.M., Millboro, Va., and Cassopolis, Mich., offer or are in the process of building networks to provide high-speed internet service, compared with just one in 2010, according to the Institute for Local Self-Reliance, a nonprofit focused on community broadband networks. In the Berkshires of western Massachusetts, dozens of tiny towns are also using century-old electrification laws to get state funding and permission to provide broadband as a utility.

“Our electric cooperatives believe they have an obligation to economic development, so it was very natural for them to leverage the systems they have to also provide broadband,” said Martha A. Duggan, a senior principal for the National Rural Electric Cooperative Association, a trade group in Washington.

The parallels between bringing electricity and bringing broadband to rural

areas run deep. In the 1930s, about 90 percent of urban residents in the United States had access to power, compared to just 10 percent in rural areas, according to the New Deal Network research group. At the time, President Roosevelt warned that the electricity divide excluded farm families from economic benefits provided by power.

But private power companies said that it was too expensive to electrify rural areas and that even if they did, there was little profit to be made. So President Roosevelt established the Rural Electrification Administration in 1936, a centerpiece of the New Deal, which led to the creation of thousands of small electric cooperatives using federal funds. The co-ops are typically customer-owned and run like regular businesses, with annual dividends returned to members.

With high-speed internet, there are similar dynamics. Last year, the federal government declared that broadband should be treated like a utility, as essential as electricity or the phone. That spurred a new urgency to get fast internet service to remote areas, to help close the digital gap with cities. The Federal Communications Commission, which in 2014 began giving experimental broadband grants to alternative carriers like electric companies, recently proposed \$2 billion in such grants over the next decade to new broadband providers such as power cooperatives.

“We can see that we are on the cusp of the kind of opportunity brought by electricity, railroads and the telegraph,” Tom Wheeler, chairman of the F.C.C., said in an interview. “But we have to do something about the availability of broadband in rural areas, where there is a digital divide.”

The Northeast Oklahoma Electric Cooperative is typical of the electric co-ops now bringing broadband to places like this swath of northern Oklahoma. Known as the Grand Lake o’ the Cherokees, the rural region was transformed by the New Deal, which funded the nearby Grand River dam. Soon after, residents created the electric cooperative and the economy took on new life.



Since the 1980s, however, the rural economy has been slow and a decline in United States manufacturing has hit the area. BFGoodrich closed a factory in nearby Miami, Okla., in 1986. Another small town, Afton, Okla., is listed on a website of American ghost towns.

In 2013, the Northeast Oklahoma Electric Cooperative created its broadband subsidiary, Bolt, after local businesses and younger residents complained there was no future for them without modern infrastructure like high-speed internet. A year later, the co-op said it would provide fiber-based internet with speeds of up to 1 gigabit per second; the service began last year.

Bolt's efforts have gotten a federal boost. In June, it won \$4.3 million from the F.C.C. to connect about 6,000 homes in four northeast Oklahoma counties to faster internet service than what's available in most big cities. Bolt plans to bid on the proposed F.C.C. broadband funds that will be voted on later this year.

To provide broadband, Bolt has relied heavily on Northeast Oklahoma Electric Cooperative's roots as a power supplier. Miles of the co-op's utility poles now carry fiber cables, and Bolt's data center is powered by the co-op's electric substation. The electric and broadband cooperatives share customer service staff, repairmen and billing systems.

Bolt's head of engineering, Shane Burgess, who spent years on the electric side, has found himself negotiating with the same property owners, government officials and contractors over easements and rights of way for fiber optic cable that he did for electricity wiring.

"The technology is a little different but how we get broadband to homes is actually very similar to electric," he said.

Since broadband service has started, signs of economic vitality have appeared in the region.

Ferra Aerospace, an Austrian assembly company, opened a plant in Grove, Okla., this year and plans to hire about 100 workers by the end of 2016.

Developers are building a 120-room hotel and conference center nearby on Monkey Island, a project approved only after Bolt announced its broadband service.

“There is no way you can run a sophisticated business and back up the data we produce without these broadband speeds,” said Mike Tackett, Ferra’s plant manager in Grove.

In Zena, Mr. Creason’s granddaughter recently created a website for her wrecking company and his son ordered a tractor part online, saving himself a daylong trip to the nearest repair shop. His daughter also plans to retire and start an online educational service.

“They are as excited as we were when we first opened the refrigerator door and felt the cool air on our faces,” Mr. Creason said.

A version of this article appears in print on August 8, 2016, on page B1 of the New York edition with the headline: Rural America Joins the Web.

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