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BRINGING BROADBAND TO THE DESERT:
RURAL NEW MEXICO, FIBEROPTIC CABLE, AND
ELECTRIC UTILITY COOPERATIVES

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ABSTRACT

Fiber optic cables used to provide commercial telecommunications services are increasingly run through the existing utility easements of electric cooperatives, but such use may exceed the easement’s limitations. The Eighth circuit recently held in Barfield v. Sho-Me Power Elec. Coop., 852 F.3d 795 (8th Cir. 2017) that commercial telecommunication use of an electric utility’s easement was impermissible. New Mexico should not follow the Eighth Circuit in its determination that commercial fiber use in electrical easements is not permissible. New Mexican communities could greatly benefit from fiber accessibility. However, there are several natural disincentives that exist in the state that could make it unattractive to commercial telecommunications companies. Allowing commercial telecommunications to deliver broadband internet through electric utility easements could combat these disincentives.

Barfield is the ideal case to use for comparison because the controlling New Mexico law, while not identical, is comparable to the Missouri law at question. New Mexican electric cooperatives are poised to allow commercial telecommunications use of their easements in a manner similar to the use condemned in Barfield. The New Mexican courts would likely have to reach the same conclusion as the Eighth Circuit based on the similarity of the laws in question. This could be prevented by creation of legislation that would make fiberoptic use of electric utility easements a non-burden by statute. Taking this action would benefit New Mexico because of the state’s geographical and social situation. Additionally, the policies the New Mexico legislature has supported in regards to fiber optics connectivity would be advanced by allowing commercial telecommunications in utility easements.

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easements. The need for fiber optic connectivity is distinct from the situation in Barfield, compelling New Mexico to create a preemptive legislative answer.

INTRODUCTION

In Missouri, a rural electric distribution cooperative (co-op) made the decision to diversify its operations into the telecommunications field. The co-op began using fiberoptic cable in its existing easements to provide commercial broadband services. In response, the land owners whose property rights were affected sued the power company for trespass and unjust enrichment.1 Should the co-op’s rights within their existing easements extend to use for commercial telecommunications? By entering into the field of commercial telecommunications, is an electric utility entity overstepping the bounds of its easements?

The United States Court of Appeals for the Eighth Circuit found that under Missouri law, an electric utility was not within its rights to use pre-existing easements for commercial telecommunications.2 The commercial use did not fall within the limitations of the existing easements, and so was a trespass.3 This ruling applied to: easements that mentioned only the electric transmission line and its necessary attachments, easements that did specifically mention telecommunications equipment associated with electric utility business, and easements condemned for the electric utility.4 The court said that the land owners were entitled to pursue trespass damages because of the fiber use of the easements.5

New Mexico should not follow the Eighth Circuit in this decision. Instead, the state should implement legislation that would allow the use of fiberoptic cable for commercial telecommunications within existing electric utility easements. Such legislation would promote the proliferation of broadband in rural New Mexico and preempt possible legal challenges that could come from existing easement usage.

Rural electric co-ops in New Mexico are poised to involve themselves with the commercial telecommunications business by allowing telecommunications use of their easements. This may involve either selling the right to use existing fiber to third parties,6 or allowing third parties to install new fiber in utility easements.7 Some utilities may even be able to provide broadband service themselves.8 Using existing

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2. Id. at 802.
3. Id. at 801–802.
4. Id. at 798.
5. Id. at 805.
6. PNM’s Fiber Optic Network Pilot Program, Case No. 05-00443-UT, (eResolution Aug. 21, 2007), http://164.64.85.108/index.asp.
8. E.g., Kit Carson Internet, KIT CARSON ELEC. COOP. https://kitcarson.com/internet (last visited Mar. 30, 2019) (serving customers “who reside in areas where broadband was not available or service was limited”).
easements is attractive to the commercial telecommunications market because it eliminates the necessity of acquiring new land dedications. Programs such as these could greatly benefit New Mexico by providing internet access to underserviced rural communities. But in cases where existing easements are used but no additional rights are granted, there is also a risk of trampling the rights of individual land owners. This strain between land owner rights and benefits broadband access to underserviced communities provides exposes a division between New Mexico law and New Mexico policy. A legislative solution could bring certainty to this area while promoting policy and providing benefits to land owners.

Part I of the article will explore the background of easement law in New Mexico and how that law interacts with utilities. It will discuss how easements are defined in the state and what specific restrictions have been placed on the utilities with respect to easements and eminent domain. It will also review past analogous situations involving existing easements and the new technologies that sought to make use of them.

Part II will contain a brief overview of the mechanics and nature of fiberoptic cables that will assist the reader in understanding their importance and the legal issues caused by their use. Additionally, it will give a description of the rural electric service providers in the state of New Mexico and consider how those entities and fiberoptic cables can beneficially interact.

Part III will compare the legal situation in New Mexico with the facts of Barfield v Sho-Me Power Elec. Coop. This will be a comparison of the applicable state laws demonstrating how the two legal frameworks, while different, are similar enough for analogy. This section is included for purposes of demonstrating the possible result if the issue of fiber optic cable uses in existing easements were to come to court in New Mexico.

Part IV will discuss the potential impediments to broadband availability in New Mexico and the beneficial social effects that could result from greater broadband access. The impediments include mountainous terrain, high concentration of sovereign tribal land, and a diffuse rural population. The social effects include the high poverty and low education rates in New Mexico. These factors will reveal both the great difficulty and the great importance of installing broadband services in New Mexico.

Part V will then discuss the policies of the New Mexico legislature and how these policies reveal a desire for further broadband availability. This section will also make a legislative suggestion intended to install a regime that both provides incentives for fiberoptic insulation and provides certainty to affected property owners.

The issue of fiber optics in existing utility easements is important, most obviously to the utilities who are or may engage in this practice, but also to the fiber optics companies and affected land owners. However, this issue is also relevant to many rural New Mexicans and the interest of the state as a whole. This article will suggest a legislative compromise that will provide benefit to all of these interested parties.

I. EASEMENTS IN NEW MEXICO

A. The Definition of Easements and Their Remedies.

Generally, an easement is a property right defined as “interest in land owned by another person, consisting in the right to use or control the land . . . for a specific limited purpose.” 10 This right can be created in a multitude of ways, but generally the methods of creation can be placed into two categories: by written conveyance or by operation of law. 11 The first category includes creation via express grant or reservation, mortgage, or plat and condominium declarations. 12 The second category, operation of law, includes creation by implied grants or reservations, necessity, prescription, estoppel, and condemnation. 13 Of particular interest to utilities are easements created by written conveyance and easements created by condemnation.

New Mexico case law has defined easements broadly as a “liberty, privilege, right, or advantage which one has in the land of another.” 14 Where an easement was created by express written agreement, the boundaries of the easement are determined by the parties’ intent. 15 Intent is primarily determined by what is written in the agreement. 16 Therefore, an easement owner must stay within the agreed boundaries of use for that easement. A person “who has an easement to enter on land for a particular purpose, and who [enters] for another purpose, becomes a trespasser while carrying out such other purpose.” 17

Public utilities may have acquired easements by condemnation where they needed to use private property, for instance, to run electric lines through the property. 18 Condemnation is when property is legally assigned to public use, subject to just compensation to original landowner. 19 If just compensation is not paid there would be a constitutional violation under the Takings Clause of the Fifth Amendment. 20 Generally, “a condemning authority enjoys broad discretion in determining” the location it will use. 21 Most courts will only interfere with the right if there was “[an] abuse of discretion, arbitrariness, or other unreasonable conduct”

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12. Id. at 821–822.
13. Id. at 822–828.
15. Id. (citing Skeen v. Boyles, 2009-NMCA-080, ¶ 18, 213 P.3d 531).
20. U.S. Const. amend. V.
by the power company. In most cases violation of the bounds of an easement is considered a trespass action.

Trespass is “a direct infringement of another’s right of possession” where there is physical invasion of property. Remedies for trespass on an easement in New Mexico include rent, unjust enrichment, and punitive damages. However, not all damages will be awarded in all cases. Rent is a remedy available by statute. Punitive damages, in contrast, are only available in cases of conduct “maliciously intentional, fraudulent, oppressive, or committed recklessly or with a wanton disregard of the plaintiff’s rights.” Unjust enrichment is only available if the gains the trespasser acquired were from the land itself and not from the product of their own business enterprise.

Electric utilities have special statutory authority and limitations relating to easements. Such entities are authorized to enter “any property belonging to the state or to persons, firms or corporations” and to “appropriate so much of such property, not exceeding a strip one hundred feet wide in any one place, as such may be necessary for their purpose.” The right to access is limited to the construction, placement, and repair of “lines, pipes, poles, cables,” and other like structures. Where the utility cannot reach an agreement for a right-of-way easement, it may condemn.

If a landowner is accusing a utility of breaching the bounds of its easement, different remedies will apply than if the violator were a private actor. Where an easement owner has violated the limitations of its easement for reasons of public use, the proper remedy is inverse condemnation instead of trespass. Inverse condemnation is “[an] action brought by a property owner for compensation from a governmental entity that has taken the owner’s property without bringing formal condemnation proceedings.” If inverse condemnation is the proper remedy, an owner is entitled to just compensation.

22. Id. at §3.
25. Id. (citing Wilson v. Interlake Steel Co., 649 P.2d 922 (Cal. 1982)).
27. Id. ¶ 4.
28. N.M. STAT. ANN. § 42-4-9 (1907).
30. Id. ¶ 13.
32. Id.
33. Id.
35. Id.
B. The Historical Co-Use of Easements

The issue of commercial use of fiberoptic cables in utility easements is relatively new, as fiberoptic cable is a young technology. However, this is not the first time one industry has tried to embed itself in the existing easement of another industry.

Half a century ago, the New Mexico Supreme Court ruled in *Garry v. Atchison, T. & S.F. Ry. Co.* that a covenant limiting land use to railroad purposes was not breached by the lease of a warehouse to a beer dealer and other commercial lessors. Although the property interest in this case was a fee simple determinable with possibility of reverter, not an easement, the interests are comparable. This is because, like an easement, the property interest limited land use by placing conditions and the challenge arose out of alleged violations of those conditions. The conveyance limited use to that which was “for purposes and business of a railroad character or for the [company’s] convenience in handling its freight or other business or upon which to erect or permit erected such warehouses and yards as may be needed by its shippers.” The plaintiffs, heirs to the possibility of reverter, argued that the conveyance intended the warehouses to be available for the general shipping public to use and were not to be leased to private entities. If the condition was violated as the plaintiffs claimed, the land interest would have reverted back to the plaintiffs. The court held that because the beer dealer and other lessors likely desired the location for easy access to the railroad, leasing the warehouses to the private companies fell within the meaning of the conveyance. This case displays that, although the courts may attempt to read in favor of the property interest holder, it must do so within the language of the conveyance.

The use of highway easements offers another comparison. In *Hall v. Lea Cty. Elec. Co-op.*, an electric utility placed a transmission line in a highway easement. Plaintiffs argued that the transmission line constituted an additional burden. The court held that it did not. It was of some influence on the court that county commissioners were authorized by statute to sanction the construction of transmission lines and similar structures along public highways.

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39. *Id.* ¶ 5.
40. *Id.* ¶ 1.
41. *Id.* ¶ 15.
42. *Id.* ¶ 6.
43. *Id.* ¶ 16.
45. *Id.* ¶ 21.
46. *Id.* ¶ 22.
47. *Id.* ¶ 5; *see also Amerada Hess Corp. v. Adec*, 1987-NMCA-117, ¶ 13, 744 P.2d 550.
II. THE NATURE OF FIBER AND ITS POTENTIAL USE BY RURAL ELECTRIC CO-OPS IN NEW MEXICO

A. A Brief Explanation of Fiberoptic Cables

Fiberoptic cables, the technology that attracts commercial telecommunication entities to electric utilities’ easements, deserve some clarification. Fiberoptic cables are created by bunching optical fibers. Optical fiber is “extremely pure glass or plastic fiber” comparable in size to a human hair, down which light is sent as a medium of communication. A key type of communication that fiberoptic cables can convey is broadband internet.

Electric utilities may install fiber optic cable on their transmission system to provide communications capability within their own systems. Sometimes utilities will install excess capacity to comply with existing system designs, because the cost of installing more fiber is nominal, or to prevent the amount of data from outgrowing the amount of available fiber. The excess fiber that is not yet operational or connective is called Dark Fiber. This is one of the possible options that would allow commercial telecommunications to take advantage of utilities’ easements.

B. Utilities and Fiberoptic Cable in New Mexico

An electric distribution co-op is a nonprofit membership corporation that exists to supply electric power and energy to rural areas. New Mexico has sixteen electric distribution co-ops which serve over 211,000 families and business. These co-ops largely serve rural areas of the state. Their existing infrastructure, along with their proven ability to maintain that infrastructure in rural areas, makes co-ops an attractive potential provider of broadband internet. In fact, some rural co-ops are

55. Ali, supra note 53.
already working to provide internet services by placing fiberoptic cables in their existing easements. New Mexico courts have not yet decided if the installation of fiber in a utility’s easement for commercial purposes will always necessitate the grant of an additional easement or if this use is permissible under existing easements because it does not constitute an additional burden. The state may even decide that the meaning of each easement must be individually determined based on its wording.

III. COMPARISON OF BARFIELD WITH NEW MEXICO LAW

A. The Facts of Barfield v. Sho-Me Power Electric Cooperative

Sho-Me Power Cooperative is a rural electric co-op which owned easements in which it was permitted to create and operate transmission lines. The easements had been acquired by written conveyance, some of the conveyances mentioned communications equipment while others did not. Still others were acquired by condemnation. The utility installed fiberoptic cables along with these lines for use in internal communications. The Dark Fiber in these cables were assigned to a subsidiary company, Sho-Me Technologies, which began operating as a commercial telecommunications business. Four affected land owners filed a class action lawsuit and alleged that Sho-Me’s use of fiberoptic cables for telecommunications were not authorized by their easements. The 8th Circuit held that Sho-Me’s easements did not allow it to use fiberoptic cables for commercial telecommunications purposes.

The Eighth Circuit based its reasoning on Missouri’s easement and trespass laws. Easements under Missouri law are defined as a right to land for “particular purpose” or “particular uses.” The Barfield Court also looked to historic caselaw for guidance on interpreting what qualifies as an additional burden on the easement.

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62. Id. at 798.
63. Id.
64. Id.
65. Id.
66. Id.
67. Id. at 801–802.
68. Id. at 800. Barfield also analyzed the landowners’ claim for unjust enrichment, but ultimately decided that action was not available against a trespasser with eminent domain powers. Id. at 804. Unjust enrichment is similarly unavailable as a remedy in cases where an additional line is strung through an easement in New Mexico. Martin v. Comcast Cablevision Corp. of California, LLC, 2014-NMCA-114, ¶ 13, 680 P.2d 603. Therefor this note will not address Barfield’s unjust enrichment arguments.
69. Id. at 799 (quoting St. Charles Cty. v. Laclede Gas Co., 356 S.W.3d 137, 139 (Mo. 2011); Farmers Drainage Dist. of Ray Cty. v. Sinclair Ref. Co., 255 S.W.2d 745, 748 (Mo. 1953)).
70. Id. at 801.
It found that grants had not traditionally been read to allow for uses that were not expressly discussed in the conveyance.\textsuperscript{71}

Additionally, the Court looked at how Missouri had further narrowed utilities’ ability to use easements by statute.\textsuperscript{72} Section 523.283 of Vernon’s Annotated Missouri Statutes specifically acted to limit any expanded use the easements of utilities.\textsuperscript{73} Although this statute did not apply to \textit{Barfield}, as it had not been enacted at the time the \textit{Barfield} easements were made, the court analyzed it as a codification of the common law rule.\textsuperscript{74} The statute required “consideration or damages” if there was “a different type of use” or a use “presenting an unreasonably burdensome impact.”\textsuperscript{75} This statute has been interpreted to prohibit any non-electricity usage.\textsuperscript{76}

The Court found that the additional burden on the easements was a trespass.\textsuperscript{77} Missouri defined trespass as “a ‘direct physical interference’” with property.\textsuperscript{78} Missouri common law specifies that an easement holder who exceeds his rights is a trespasser during the unauthorized use.\textsuperscript{79} In \textit{Barfield}, the physical invasion was the fiber optic cable, which was on the property and was being used for an unauthorized purpose.\textsuperscript{80}

\textbf{B. The Comparable Law in Missouri and New Mexico}

The law in Missouri and the current law in New Mexico are similar enough that the holding in \textit{Barfield} that limited fiber optic use in easements, would likely be identical if a comparable case was brought before New Mexico courts today. Missouri defines an easement as a right with a limited “particular purpose.”\textsuperscript{81} New Mexico says an easement is a right with limits determined by the parties.\textsuperscript{82} Both have determined that the proper action, in most cases, for breach of an easement is trespass.\textsuperscript{83} In Missouri, trespass requires a direct physical interference with property
rights. In New Mexico, trespass requires a direct physical infringement of the property rights. The laws are therefore substantially similar.

Under the plain letter of the law, a Barfield type case should, therefore, have the same result in New Mexico. The court would review the easement and find that it was limited by the wording in the conveyance. The court would then determine the proper cause of action is trespass when an easement holder steps outside the bounds of said easement. It would lastly determine that the use of fiberoptic cables for commercial telecommunications services was outside the bounds of an easement made for an electric utility. The use would therefore be a trespass because the fiberoptic cable would be the physical object that interfered with the land owner’s property rights.

There are some additional factors of New Mexico law that would be relevant to this hypothetical case. Firstly, New Mexico also places special limits on the easements of electric utilities under NMSA 1978, Section 62-1-4 (1909). Missouri’s statute on this subject is very restrictive, penalizing any “different type of use.” The result of the Missouri statute’s language is a prohibition of any use outside of providing electric power. Section 62-1-4 limits the use of easement to that which is “necessary for [the utility’s] purpose.” Unlike the Missouri laws, which were not applicable because they were relatively recently enacted, the New Mexico laws would be applicable because the wording of “necessary” and “purpose” has existed since 1909.

84. Barfield, 852 F.3d at 803 (quoting Hansen v. Gary Naugle Constr. Co., 801 S.W.2d 71, 74 (Mo. 1990)).
86. As mentioned above, New Mexico prefers inverse condemnation over trespass where public use is implicated. North v. Pub. Serv. Co. of New Mexico, 1983-NMCA-124, ¶ 10, 680 P.2d 603. However, utilities are limited in their ability to create easements, even by condemnation, to those uses which are “necessary” for their “purpose.” N.M. STAT. ANN. § 62–1–4 (A) (1909). Since commercial telecommunications are likely not within the purpose of electric utilities, inverse condemnation would likely not be the proper action when suing the utility for trespass. The court might still find inverse condemnation is the proper action against the entity providing commercial telecommunications provider, if it is a separate entity. From here the court would have to come to a decision as to whether providing internet connectivity falls under the umbrella of public use. Whether internet is analogous enough to utilities for land uses involving it to qualify as a public use is a contentious political issue implicated in net neutrality regulations. See K. Sabeeel Rahman, The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept, 39 Cardozo L. Rev. 1621 (2018). Ultimately this decision would only implicate damages, not whether it is lawful for the utilities to use their easements for commercial telecommunications purposes. While the damages would certainly be an important factor to the parties involved such a discussion goes beyond the scope of this note.
88. MO. ANN. STAT. § 523.283.1–2(2) (West, Westlaw through 2018 2d Reg. Sess.).
89. Barfield, 852 F.3d at 801-02 (citing Carroll Elec. Coop. v. Lambert, 403 S.W.3d 637 (Mo. Ct. App. 2012)).
90. N.M. STAT. ANN. § 62–1–4 (A) (1909).
92. Barfield, 852 F.3d at 800.
93. N.M. STAT. ANN. 1909 Ch. 141 § 4.
Providing commercial telecommunications services is therefore unlikely to fall within the limits placed by Section 62-1-4. This would reinforce the finding on the letter of the law that utilities cannot use their existing easements for commercial telecommunications purposes.

Missouri law and New Mexico law do differ in at least one area which could change the outcome of a potential easement use case. The historic case in Missouri, *Eureka Real Estate & Inv. Co. v. S. Real Estate & Fin. Co.*, is consistent with a strict reading of conveyances. *Eureka* involved an easement that was originally condemned for a railway.94 In the case, a power company had built poles and lines that did not strictly service the railway.95 The conveyance allowed for “necessary . . . poles [and] wires” to be installed for railway purposes.96 The court did not interpret this conveyance to allow the power company’s use, saying that the lines had “no connection whatever with . . . purposes of the street railway.”97

Comparable New Mexico cases have been more favorable to co-use of easements. In *Garry*, a conveyance specified that any warehouses erected must be used for the purposes of a railroad’s shippers.98 The New Mexico court interpreted this conveyance to allow the railroad to lease their warehouses to private companies.99 The court reasoned that because the private companies likely desired the location for its easy access to the railroad, renting to them fell within the scope of railroad purposes.100 Similarly, the *Hall* Court found that a transmission line placed within the easement of a highway was not an additional burden.101

This difference in interpretation could indicate that New Mexico courts would be inclined to interpret the restrictions on easements more liberally. For some easements that make mention of telecommunications equipment, but not specifically for the purpose of delivering commercial broadband, a more liberal interpretation might be helpful. However, some conveyances are likely to be so strictly worded that no interpretation could allow for commercial telecommunications use. The limitations of Section 62-1-4 would also confine any easements acquired by eminent domain. The wording or manner of conveyance of many easements which could potentially be used for commercial telecommunications purposes may therefore make their use for such a purpose questionably legal in New Mexico. These situations are the potential cases that this note is most concerned with, as such a strictly worded easements could prevent a whole line from being useful for the purposes of providing broadband. For this reason, it would benefit New Mexico to settle the issue by legislative action, statutorily allowing commercial telecommunications use within electrical utilities’ easements without it being considered an additional burden.

95. *Id.* at 330.
96. *Id.*
97. *Id.* at 332.
99. *Id.* at ¶ 16.
100. *Id.*
IV. THE DISINCENTIVIZING FACTORS IN NEW MEXICO THAT MAKE OPERATING A COMMERCIAL TELECOMMUNICATIONS COMPANY UNATTRACTIVE AND THE REASONS NEW MEXICO WOULD GREATLY BENEFIT FROM INCREASED BROADBAND ACCESS

Access to broadband internet services can improve access to health, educational, commercial, and informational services.\textsuperscript{102} Expanded access can also improve economic outcomes for a rural area.\textsuperscript{103} Partnerships with existing electric co-ops is one way to encourage commercial telecommunications entities to provide service to rural areas that are otherwise not economically attractive.\textsuperscript{104} The decreased cost associated with using existing easements, poles, and wires is one mitigating factor that makes partnership with rural co-ops a viable option to telecommunications entities.\textsuperscript{105}

While Missouri may have found that its conditions and policy favored not allowing commercial telecommunications use of electric utility easements, New Mexico’s situation is different. New Mexico would benefit from allowing what the Eighth Circuit denied in \textit{Barfield}. The social conditions, geographic realities, and policy aims of New Mexico separate it from Missouri, making the benefits of allowing commercial telecommunications use of electricity easements greater. Some of those same factors limit other possible ways of delivering broadband to rural areas. Due to these potential benefits and limits, the legislature should act to prevent a \textit{Barfield}-type outcome.

A. Disincentivizing Geographical Conditions in New Mexico

The geographical factors of New Mexico make it more difficult and less attractive for commercial telecommunications to install their lines in rural areas of the state. Construction in mountainous areas is difficult, which makes it more expensive, which in turn makes it less attractive to for-profit companies.\textsuperscript{106} One major issue of construction in mountainous areas is access.\textsuperscript{107} Mountains in rural areas often have no access roads, or the existing roads are not suitable for large scale construction.\textsuperscript{108} For heavy construction, the construction company may be required to build or expand roads.\textsuperscript{109} In certain situations materials may even have to be

\begin{itemize}
  \item \textsuperscript{103} Brian Whitacre et al., \textit{Broadband’s Contribution to Economic Health in Rural Areas}, RESEARCH & POLICY BRIEF SERIES (Feb. 2015), https://cardi.cals.cornell.edu/publications/research-policy-briefs/broadband’s-contribution-economic-health-rural-areas/.
  \item \textsuperscript{104} \textit{Cooperatives Connect Rural America, Community Networks}, https://muninetworks.org/content/rural-cooperatives-page (last visited Mar. 18, 2019).
  \item \textsuperscript{105} \textit{Broadband supra note 7}, at 21.
  \item \textsuperscript{107} \textit{Id. at 7}.
  \item \textsuperscript{108} \textit{Id}.
  \item \textsuperscript{109} \textit{Id.}.
\end{itemize}
brought in by helicopter.110 This causes its own problems, as helicopter use in
mountainous areas can be limited by the seasons and weather conditions.111
Additionally, certain areas may contain wildlife which cannot be disturbed by
construction efforts.112

New Mexico contains “some of the most rugged mountains in the
country.”113 Most notably, the state includes the Rocky Mountains in the north.114 In
addition, the area southwest of the Rockies, the Basin and Range Province, also
contains multiple mountain ranges.115 Finally, the northwest section of the state is
part of the Colorado Plateau and also has short mountain ranges and volcanic
formations.116 The average elevation ranges from 5,000 to 8,000 feet in the more
mountainous northwestern part of the state, which is an average change of 3,000
feet.117

In contrast, Missouri is broken up into areas of “gently rolling hills [and]
fertile plains,” areas that are “rough and hilly, with some deep, narrow valleys,” and
parts of the Ozark Mountain range.118 There is an average elevation between 1,000
to 1,400 feet, which is an average change of 400 feet.119 However, some areas have
elevation as low as 800 feet.120

Building new infrastructure across any mountainous state could be
prohibitively difficult and expensive. Even smaller mountains like Missouri’s might
cause some telecommunications providers to back away if they had to build new
infrastructure, because they could not get grants easements where infrastructure
already exists. New Mexico’s ranges would certainly be intimidating to companies
given their prevalence and altitude. If companies can use existing easements and
infrastructure, their construction costs will be much lower. If local co-ops already
experienced in accessing difficult areas provide the service, their costs will be lower
still.

B. Disincentivizing Political Boundaries in New Mexico

In addition to the natural geography that divides New Mexico, there are
specific political features that divide the state. Most important to the issue of
easements are the tribal reservations in existence throughout the state. This is an issue

110. See The Challenges of Replacing Power Poles on a Mountain, INSIDE TOWERS,
https://insidetowers.com/cell-tower-news-challenges-of-replacing-power-poles/ (last visited Mar. 18,
2019).
111. Id.
112. Id.
113. Gregory Lewis McNamee & Warren A. Beck, New Mexico, ENCYCLOPÆDIA BRITANNICA
114. Id.
115. Id.
116. Id.
117. Id.
118. Edwin J. Westermann & Milton D. Rafferty, Missouri, ENCYCLOPÆDIA BRITANNICA
119. Id.
120. Id.
because easements cannot be condemned across land owned by any tribe.\textsuperscript{121} Therefore, if a deal cannot be struck with a tribal entity, a commercial or utility group trying to lay down lines would have to either navigate its way around the reservation lands or find a new route to the destination that avoids the area. These added difficulties could lead the commercial group to abandon the project entirely.

New Mexico has twenty-three federally recognized reservations, eleven off-reservation trust lands, and two joint use areas.\textsuperscript{122} These reservations are largely located in the northern half of the state, but some are located farther south.\textsuperscript{123} These reservations correspond with the twenty-three tribes located in New Mexico.\textsuperscript{124} Each of these tribal entities is sovereign, and has its own government and laws which must be negotiated with when trying to create a right-of-way agreement.\textsuperscript{125} Missouri, in contrast, has no reservation land or other American Indian Areas.\textsuperscript{126}

A commercial telecommunication company, therefore, faces greater difficulty if forced to create a new easement in New Mexico. In Missouri, if negotiations fail, condemnation may still be an option. There are places in New Mexico, reservation land and other American Indian Areas, where condemnation does not exist as a last resort. Thus, holdouts will have more power and commercial telecommunications will be disincentivized because they in turn will have less bargaining power.

These geographical and political factors make building new infrastructure in New Mexico less attractive to commercial telecommunications companies. Allowing commercial telecommunication use of electric utility easements would mitigate these complications. There is already infrastructure in the existing easements that would eliminate, or greatly reduce, the cost associated with creating infrastructure in difficult terrain. Additionally, preexisting easements are established through tribal land, thus eliminating the need to renegotiate with those uncondemnable entities. These mitigations only exist if commercial telecommunication use is allowed in utility easements.

\section*{C. Disincentivizing Social Conditions in New Mexico.}

New Mexico has a significant rural population.\textsuperscript{127} It is not the most rural state, however, as compared to Missouri a lower percent of New Mexico’s population is rural.\textsuperscript{128} However, New Mexico has a large amount of rural territory

\textsuperscript{121} Pub. Serv. Co. of New Mexico v. Barboan, 857 F.3d 1101,1104 (10th Cir. 2017).
\textsuperscript{125} Id.
\textsuperscript{128} Id.
throughout the state.\textsuperscript{129} Therefore the population density of New Mexico’s rural areas is very low, at only 3.9 percent.\textsuperscript{130} For comparison, Missouri’s rural population density is 26.6 percent.\textsuperscript{131} Since the rural population is less concentrated in New Mexico there are fewer potential customers and greater distance between them. This disincentivizes commercial telecommunications from coming to rural New Mexico because there are fewer potential paying customers and more fiberoptic cable would be needed to get services to those customers. If existing infrastructure could be used, it would mitigate the cost disincentives to bring service to these rural areas. If co-ops themselves provided the broadband services, they would not need to be concerned with the revenue in the same way that a commercial operation would be, and could instead focus on providing service the same way that they currently do for electricity.

D. How New Mexico Would Benefit from Increased Rural Broadband Access

There is a substantial poverty problem in New Mexico.\textsuperscript{132} In a survey of the fifty states (which also included Washington D.C. and Puerto Rico), which ranked states by the lowest percent of population below poverty level, New Mexico is ranked fiftieth.\textsuperscript{133} This high poverty level effects many outcomes, including education. Of New Mexicans in poverty, 33.1 percent have no high school education and 19 percent have only a high school education.\textsuperscript{134} Missouri, in contrast, is ranked as thirtieth in the poverty scale, twenty spots above New Mexico.\textsuperscript{135} Only 26.1 percent of Missouri’s population in poverty has less than a high school education and a mere 12.8 percent has only a high school education.\textsuperscript{136}

Economic and educational outcomes can both be improved by increased access to broadband internet.\textsuperscript{137} Economically, a larger increase in household income is correlated with adoption of broadband in a rural area.\textsuperscript{138} This pairs with a slower increase in unemployment rates.\textsuperscript{139} From an educational standpoint, access to broadband internet can increase: opportunities to learn, access to educational materials, education retention due to personalized learning, and quality of collaboration.\textsuperscript{140} Importantly to New Mexico, there is also reduced cost associated with education when the expense of bringing the student and teacher to the same location can be eliminated.\textsuperscript{141} Because of its high rural poverty and low education levels amongst its population living in poverty, New Mexico has more to gain from

\textsuperscript{129} Id.
\textsuperscript{130} Id.
\textsuperscript{131} Id.
\textsuperscript{133} Id.
\textsuperscript{134} Id.
\textsuperscript{135} Id.
\textsuperscript{136} Id.
\textsuperscript{137} Whitacre, supra note 103; Bauer, supra note 102, at 6.
\textsuperscript{138} Whitacre, supra note 103.
\textsuperscript{139} Id.
\textsuperscript{140} Bauer, supra note 102, at 15.
\textsuperscript{141} Id.
increased access to broadband than Missouri did when Barfield came before its courts. These conditions show how New Mexico’s people could benefit if commercial telecommunications were allowed to use electric utilities easements, especially in the case of rural electric cooperatives.

V. A LEGISLATIVE PROVISION WOULD ALLOW COMMERCIAL TELECOMMUNICATION USE OF ELECTRIC UTILITIES’ EASEMENTS IN EXCHANGE FOR ALLOWING LANDOWNER’S ACCESS TO SERVICES OR PAYMENT OF A PRE-DECIDED FEE.

Actions of the New Mexico legislature make it clear that the government is invested in providing broadband throughout the state. In 2017 House Bill 60 was passed and signed by the governor. This bill amended the Local Economic Development Act to provide for broadband infrastructure development. This allows localities to establish public-private partnerships relating to broadband infrastructure for purposes of economic development. A larger act on the part of the legislature was House Bill 113. This bill, also enacted in 2017, directed the state chief information officer to create a plan for implementing a statewide broadband network. The amendment allows the state chief information officer to work with public institutions and broadband service providers, apply for funding, and assess charges for service. Per the amendment, Indian nations, tribes, and pueblos are allowed to connect with the network in exchange for right-of-way.

It is worth noting that the federal government has also taken action that promotes nationwide telecommunications access. From a legislative perspective, the Telecommunications Act of 1996 included a section that specifically promotes accessibility in rural areas “reasonably comparable to those services provided in urban areas.” On a more funding based-level, there are programs like Broadband USA, part of the National Telecommunications and Information Administration, that has given approximately $4 billion grants to broadband deployment programs throughout the United States. Although this note focuses on a state based solution, the federal support highlights the importance of the issue.

These legislative actions demonstrate that New Mexico is interested in state-wide broadband access. This is in addition to the federal goal of nationwide broadband access. These goals would be furthered by assuring rural electrical co-ops that they can allow commercial telecommunications use in their existing easements.

In order to counteract the disincentives for building commercial telecommunications infrastructure, the legislature should enact a law that statutorily deems commercial use or installation of telecommunications not an additional

143. Id.; N.M. STAT. ANN. § 5-10-3 (B), (E) (2017).
144. H.B. 60 53d Sess. (N.M. 2017); N.M. STAT. ANN. § 5-10-10 (2013).
146. Id.
burden in electric utility easements. The statute may provide that electric utilities require approval from the Public Regulation Commission before engaging in telecommunications services. To be equitable to the land owners, and to avoid a Fifth Amendment Takings Clause challenge, the law should require that the commercial telecommunications entity provide discounted services to land owners whose property they cross as a result of using the existing easements. Alternatively, the law may specify a fee to be paid to the land owners in place of the discounted services. Telecommunications entities should retain the option to acquire new easements by negotiating with individual land owners, if they do not wish to provide the discounted services or pay the fee.

These provisions are similar to laws relating to other subjects that already exist in New Mexico. New Mexico authorizes “conduit[s], wires or cables” to be placed in highway easements pursuant to commission authority. As a result of this statute, such infrastructure is considered a permissible use, and thus not an additional burden. Section 9-27-26 allows specific entities (Indian nations) to connect to the statewide broadband network in exchange for a right-of-way agreement. Another Act allows wireless facilities to be placed on utility poles for a payment not to exceed twenty dollars per year. Similarly, the city of Santa Fe Code of Ordinances Section 27-2.4 subjects telecommunication franchises who build in public a right-of-way to a two percent maintenance fee.

Therefore, none of these suggestions would be radical. The Public Regulation Commission, as the preexisting entity that regulates utilities, would have authority to authorize the leasing or placement of fiber in easements to assure that any use is in the public’s best interest. The Commission already has similar authority with respect to lines to be placed in highway easements. Affected land owners would be able to get access to the broadband services at a discount, similar to how Indian nations can have access to the statewide broadband network in exchange for a right-of-way. Alternatively, the commercial telecommunications entities can pay a statutorily selected fee. This would be similar to how wireless entities currently pay a statutorily selected fee for use electric utilities’ poles, or telecommunications franchises in Santa Fe pay a maintenance fee to use street right of ways.

Such a law would mitigate the disincentives for building fiberoptic cable that are natural to New Mexico and thus encourage commercial telecommunications entities to provide services. This broadband availability would be a great benefit to New Mexicans. The law would also increase judicial efficiency by preventing a Barfield type case from ever having to come before the court.

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155. The latter ordinance has faced court challenges under 47 U.S.C.A. § 253 (2017), saying that “No . . . local legal requirement[ ] may prohibit . . . the ability of any entity to provide any interstate or intrastate telecommunications service.” 47 U.S.C. §253(a) (2017). However, the 10th Circuit dismissed this claim saying that there was no private right of action under § 253. Quest Corp. v. City of Santa Fe, 380 F.3d 1258, 1265 (10 Cir. 2004). This finding was recently reaffirmed in CNSP, Inc. v. City of Santa Fe. No. 18-2041, 2019 WL 181506, at *3 (10th Cir. Jan. 14, 2019).
CONCLUSION

Sho-Me Power Electric Co-op’s attempts to use its easements for commercial telecommunications purposes is instructive to any other rural co-op that might wish to provide broadband services to the rural populations they service. It highlights that there are legal risks to co-ops operating in states that have laws similar to Missouri’s. New Mexico is one such state. The comparable laws strongly indicate that if a rural co-op in New Mexico attempted to similarly use its easements for commercial telecommunications it would be susceptible to a trespass suit. This fact stands in addition to the geographical disincentives that exist in the state, such as rugged mountains, tribal land ownership, and low rural population density.

However, rural New Mexicans would greatly benefit from increased access to broadband services. It could help improve the poverty rate in New Mexico, which are some of the worst in the nation. It might boost educational outcomes for impoverished rural New Mexicans. The state government is aware of this and has made previous legislative attempts to improve broadband access to outlying areas. A policy such as the one proposed in this note would be in line with its previous attempts to improve broadband access throughout the state.

This note proposes as legislative solution that will allow rural electric co-ops to use their easements for commercial telecommunications purposes without risking a trespass. The legislature should statutorily deem commercial use of telecommunications as not an additional burden in electric utility easements. To assure the public interest of the co-op’s actions, the statute can require commission approval before leasing easements to commercial telecommunications entities or starting telecommunications services. The law should require that commercial telecommunications entities provide discounted services or pay a prespecified fee to land owners whose property they cross as a result of using the existing easements.

The legislative solution proposed is not radical, and uses tools already approved in other signed and chaptered legislative materials. It would combat the existing disincentives in New Mexico and would provide compensation to land owners whose property is going to be used by the broadband providers. Providing broadband access to rural areas of the state is an important goal to the legislature, and one way for commercial telecommunications providers to fulfill that goal is by using existing electric utility easements.