

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska Public)	Application No. NUSF-92
Service Commission, on its Own Motion,)	Progression Order No. 8
To Administer the Nebraska Universal)	
Service Fund Broadband Program.)	

COMMENTS OF UNITED STATES CELLULAR CORPORATION

United States Cellular Corporation (“U.S. Cellular”) hereby files these comments for the Nebraska Public Service Commission’s (“Commission”) consideration in the above-captioned docket, NUSF-92, P.O. 8. These comments are being filed pursuant to the Commission Order entered in this matter on May 7, 2019.

U.S. Cellular thanks the Commission for offering wireless providers the opportunity to be a recipient of Nebraska Universal Service Funds (“NUSF”) and for seeking comments whether modifications to improve the wireless Nebraska Broadband Program (“NEBP”) should be made. There is no doubt the Commission’s wireless program has brought improved wireless broadband service to rural locations in the state, that would otherwise not be receiving these valuable and much desired services. The wireless program has improved access to public safety and has benefited rural businesses and agricultural operations. U.S. Cellular has been a recipient of NEBP wireless funds, as well as the wireless funds previously distributed through Docket NUSF-69. In addition, U.S. Cellular’s customers contribute to the NUSF through the payment of monthly surcharges. Therefore, the development of sound processes and procedures regarding the future of the NEBP is important to U.S. Cellular and its customers. U.S. Cellular offers the following comments for the Commission’s consideration and looks forward to participating at the workshop that is scheduled in this docket in July.

U.S. Cellular Supports Adjusting the Rural Threshold

U.S. Cellular supports changing the current population density threshold of 4.5 households per square mile. U.S. Cellular suggests the Commission instead look at using population per square mile for eligibility purposes. A household metric may be appropriate for a wireline determination where a household generally equates to one wireline customer. However, in wireless, a household is likely to have several wireless devices. As such, U.S. Cellular believes utilizing a density test based on population would be a more accurate assessment to identify potential customers.

As far as selecting the appropriate population number, U.S. Cellular asks the Commission to adopt a figure that continues to focus on rural areas, but is not so low that it excludes rural sites that are also uneconomic to serve. Presently, 4.5 households per square mile prevents many worthy rural areas that need better wireless service from even being considered. Increasing the population number to include areas which are still uneconomic to serve would also provide the Commission with a better return on the investment it makes with NUSF support because more members of the public would benefit by the coverage provided than under the current metric. It should be a policy goal of the Commission to provide as much coverage to as many citizens as the limited available funding will provide.

The Federal Communications Commission ("FCC") Mobile Wireless Competition Report defined rural as an area with a population density of 100 people per square mile or less.¹ The USDA's ReConnect broadband program recently made support available for any area that is not located in a city, town, or incorporated area that has a population of greater than 20,000 inhabitants or an urbanized area contiguous and

¹ Communications Marketplace Report; FCC 18-181, rel., Dec. 26, 2018 at Para. 43.

adjacent to a city or town that has a population of greater than 50,000 inhabitants.”² In NUSF-108, P.O. 3, this Commission found NUSF support is appropriate for out-of-town areas saying there is no reason to depart from our historic practice of targeting support to areas where costs are expected to exceed the revenues carriers are able to generate from retail offerings.³

The Commission noted in NUSF-108, P.O. 3 that the FCC has identified the existence of a rural-rural divide, noting some parts of rural America are connected to state-of-the art broadband, while other parts of rural America have no broadband access.⁴ Such is occurring in Nebraska with wireline service. The current threshold of 4.5 households per square mile excludes many rural areas that are uneconomic to serve from being eligible for NEBP funding. The Commission recognized in NUSF-108, P.O. 3 that NUSF support is appropriate where retail revenues do not recover the costs necessary to bring wireline broadband service to customers.⁵ U.S. Cellular recommends that a similar recognition be made in the wireless program.

It is important to remember for a wireless network to function optimally, linkage of a new tower’s coverage to nearby existing tower(s) is required. A daisy-chain of sites must occur from an engineering standpoint, meaning there is intentionally a small amount of overlap of coverage circles to prevent calls from being dropped and to prevent dead zones. Therefore, to bring service to a presently unserved, rural area, some overlap to a nearby tower must occur. U.S. Cellular has found in its experience with the NEBP this

² Federal Register/Vol. 83, No. 240, Dec. 14, 2018 at pg. 64316

³ *In the Matter of the Nebraska Public Service Commission, on its own Motion, to make adjustments to its high-cost distribution mechanism and make revisions to its reporting requirements*; Application NUSF-108, P.O. 3 Order entered Nov. 19, 2018, pgs. 36-37.

⁴ *Id.* at 35.

⁵ *Id.*

engineering requirement removes worthy locations from consideration because a small level of overlap will occur with a nearby small town or village. The rural area is uneconomic to serve from a business standpoint, yet it does not qualify for NEPB support due to the overlapping population of the nearby town. This has created an unserved wireless gap between the profitable urban areas and the least populated rural areas able that are able to receive NEBP funding.

The present 4.5 household requirement can be correlated to approximately 2.5 people per household, a generally agreed upon ratio. This means the present threshold is roughly 12 people per square mile. This number is preventing many rural areas that are uneconomic to serve from being eligible for NEBP funding consideration. Therefore, U.S. Cellular believes it is reasonable for the Commission to establish a population threshold of 50 people per square mile, which is half the number the FCC has defined as rural for the Mobile Wireless Competition Report. Increasing the threshold to 50 people per square mile means the NEBP will be able to benefit more rural areas and more rural Nebraskans. Being able to deliver improved wireless broadband service to a greater number of rural consumers will provide a greater 'bang for the buck' for the program, while still maintaining the integrity of its rural focus and purpose.

**The Commission Should Operate the Fund Without Preference
to a Certain Technology**

The NEBP presently awards funds to carriers who utilize both GSM and CDMA technology, and such practice should continue. At some point in the future, the two technologies might converge and become more interchangeable. However, at this time, such is not the case and it is premature to consider the technologies as synchronized for end users. The Commission should therefore continue to fund both technologies as it has

done historically. Furthermore, as technology continues to evolve, much like it did from 3G to 4G to LTE and now on to 5G, the Commission should continue its practice that allows the filing of NEBP projects that propose to use funds to deploy the latest technology and bring the fastest speeds available to rural consumers.

A Standardized Metric Regarding Census Block Coverage Would Bring Clarity

The present NEBP application process does not specify which census blocks should be included as part of a tower's coverage, every census block or those that reach a certain threshold of the population. Without a designated metric, it is possible that different coverage levels are being presented to the Commission for consideration in applications. To address this, U.S. Cellular recommends the Commission set a minimum census block service coverage level of 10% in order for it to be included in an application. This will better align the applications that are presented for the Commission's consideration. A 10% figure shows new wireless service will be provided to people residing in the area, yet takes into account that some census blocks are quite large and improved wireless service will be provided to ranch and farm land and rural roadways.

The Commission Should Follow the FCC's Lead Regarding Security Issues

The topic of national security and the vulnerability of America's wireless communications network has taken center stage in recent months. Congress and the Federal Communications Commission are deeply invested in ensuring the safety and integrity of our nation's telecommunications infrastructure. People with considerable experience in manufacturing, engineering and international affairs are earnestly working on this subject. As such, it would be prudent for the Commission to closely monitor this

subject, but to follow the lead of the FCC for any changes, necessary to Nebraska's wireless program as a result of their investigatory work.

**Wireless Usage at Seasonal Areas, Recreational Areas
and Traffic Counts Provides Valuable Supportive Information**

If the Commission finds a project eligible for funding after determining the population density threshold has been met, supportive information regarding a proposed site such as the existence of a seasonal or recreational area and traffic counts should be considered. The presence of a state park, a summer recreational area, or a busy highway would result in a rural area having an increased need for improved wireless service. A higher volume of traffic, even if only seasonal, provides a 'bang for the buck' as was previously mentioned. Furthermore, this information shows an advanced public interest standard would be met by improving the ability for people visiting and traveling in the area to reach 911 public safety systems.

A 25% Match Should Not Be Mandatory

The towers constructed with NEBP funds are located in rural areas that lack economic justification. At current construction prices, a 25% match would likely exceed \$100,000, not a de minimus amount. This sum will never be recovered from the retail revenues that will be earned by that tower. This problem is magnified as wireless carriers do not receive any costs for ongoing maintenance and operations costs from the NUSF. Once built, the operating and maintenance expenses become the sole responsibility of the wireless provider. Funding for these expenses have been requested, but they have been historically denied by the Commission as a reimbursable item in the wireless application process.

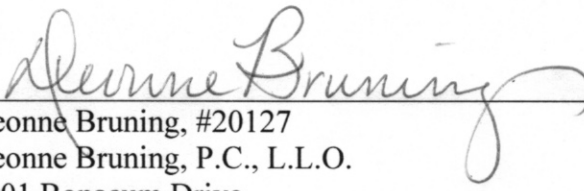
This is significant difference between the landline high-cost program and the wireless program. A wireless provider receives reimbursement of capital expenses following construction, but does not receive any additional funds thereafter, unlike the local exchange carriers. Operation and maintenance of the towers are substantial and will exceed the 25% match.

Requiring a 25% match will deeply hinder the vitality of the program and will certainly cause fewer towers to be filed for consideration. U.S. Cellular reviewed the towers contained in its 2018 NEBP Application and none would have been filed for consideration if a 25% match had been required. The towers awarded funding from the 2018 application are being built due to the full assistance offered in the NUSF. A 25% match on top of a company's obligation to pay for operation and maintenance will slow, if not halt the considerable progress that has been made through the wireless program.

In closing, U.S. Cellular reiterates its appreciation for the Commission's commitment to provide wireless carriers the opportunity to receive NUSF support. We look forward to further discussion of the items addressed herein at the upcoming workshop.

Respectfully submitted this 20th day of June, 2019.

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