

SECRETARY'S RECORD, NEBRASKA PUBLIC SERVICE COMMISSION

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska) Application No. NUSF-92
Public Service Commission, on) Progression Order No. 9
its Own Motion, to Administer)
the Nebraska Universal) ORDER MODIFYING CRITERIA IN
Service Fund Broadband) PART AND OPENING APPLICATION
Program.) WINDOW
)
) Entered: November 5, 2019

BY THE COMMISSION:

O P I N I O N A N D F I N D I N G S

The Commission initiated the above-captioned Progression Order to consider modifications to its wireless infrastructure grant program. In its May 7, 2019 Order, the Commission posed a series of questions designed to modernize the wireless infrastructure grant program and to consider changes in the manner in which data is submitted to the Commission for review. Restated and summarized, the Commission sought comment on the following:

1. Whether to modify the current rural threshold and if so what the appropriate threshold should be.
2. Whether tower proximity according to specific technology remained relevant.
3. Whether the Commission should re-examine how coverage areas are determined.
4. How the Commission should deal with equipment that may pose as a security threat.
5. Whether to continue to use vehicle traffic metrics.
6. Whether to use other sources of information to rank projects.
7. Whether the Commission should re-impose a matching requirement.

Comments responsive to those questions were filed by CTIA, NE Colorado Cellular, Inc., d/b/a Viaero Wireless (Viaero), and United States Cellular Corporation (US Cellular). A public workshop was held in the Commission Hearing Room, Lincoln, Nebraska on July 30, 2019. Further comments were filed by CTIA, Viaero, and US Cellular on September 9, 2019.

Application No. NUSF-92
Progression Order No. 8

Page 2

A. Rural Threshold

Nearly all commenters supported change to the rural threshold. Viaero stated that it had analyzed over 20 sites for the last round of grants and several of these sites had densities of over the 4.5 household per square mile threshold. Viaero stated that a value closer to 10 households per square mile would allow inclusion of households which would otherwise be excluded due to proximity to a small town or village.¹ CTIA also suggested a change to the rural threshold but did not give a specific suggestion. CTIA argued the Commission should use population density rather than household density.² US Cellular supported adjusting the rural threshold. US Cellular also argued the Commission should use population per square mile rather than households stated that it may be appropriate to use household counts for a wireline determination but in wireless a household is likely to have several wireless devices.³ US Cellular recommended the Commission establish a population threshold of 50 people per square mile.⁴

After considering the recommendations, the Commission is of the opinion and finds the rural threshold should be modified. The 4.5 household per square mile threshold was based upon the rural universal service support definition for wireline carriers. In order to be consistent with that definition, the Commission applied it to the determination of rural for wireless tower support as well. However, we are aware of a number of situations where carriers have proposed towers which may meet a need but do not meet the Commission's rural density threshold. We find that this threshold should be adjusted on a more regular basis. However, for the next grant

¹ See Comments of NE Colorado Cellular, Inc., d/b/a Viaero Wireless (June 21, 2019) at 2 ("Viaero Comments"). See also Additional Comments of NE Colorado Cellular, Inc. d/b/a Viaero Wireless (September 9, 2019) at 1 ("Viaero Reply Comments").

² See Comments of CTIA in Response to the Order Seeking Comment (June 20, 2019) at 7 ("CTIA Comments").

³ See Comments of United States Cellular Corporation (June 20, 2019) at 2 ("US Cellular Comments"); see also Reply Comments of United States Cellular Corporation (September 9, 2019) at 2 ("US Cellular Reply Comments").

⁴ See *id.* at 4.

Application No. NUSF-92
Progression Order No. 8

Page 3

cycle, we find that the rural threshold should be modified to include as eligible areas where there may be up to 10 households per square mile. We decline to adopt the recommendation to use population density at this time. Household density is a readily known factor to the Commission. Its continued use will make it easier for the Commission to administer.

B. Technology Specific Review

The Commission currently considers the technology of the wireless service deployed when considering whether there are any competing towers near the location of a proposed tower. Historic technology differences between carriers made it necessary to review the type of technology deployed as the two technologies did not. However, for some time carriers have been transitioning networks to the Long Term Evolution (LTE) technology. Viaero stated that given the industry-wide push towards LTE and VoLTE, as well as the adoption of 5G standards, the historic technology differences should not be a basis for funding new towers within close proximity to each other.⁵ US Cellular stated at the present time, it is premature to consider the technologies as synchronized for end users.⁶ US Cellular continued that the Commission should continue to fund both technologies as it has done historically.⁷

After considering the comments, the Commission finds that it should continue to review coverage for both technologies as it has done historically. However, it will continue to evaluate this issue going forward so that we do not expend wireless fund resources unnecessarily. We encourage carriers to work together and to find collocation opportunities where feasible.

⁵ See Viaero Comments at 3.

⁶ See US Cellular Comments at 4.

⁷ See *id.* at 4-5.

Application No. NUSF-92
Progression Order No. 8

Page 4

Coverage Areas

Viaero stated the Commission should request more detail in how coverage areas are determined.⁸ However, how the ultimate coverage footprint is determined should be left to the applicant carrier since the carrier has the tools, resources and knowledge of its own networks and to complete a design which should be disclosed to the Commission in the application.⁹ However, the Commission may standardize the specifications which could utilize the following: carrier loading, terrain database resolution, minimum uplink and downlink speeds as specified by the Commission, and report of no coverage below a -105 dBm Reference Signal Received Power (RSRP) within a 5 MHz bandwidth.¹⁰ Viaero stated this would harmonize with the US Senate's pending Broadband DATA act.¹¹

US Cellular recommended the Commission develop a standardized metric regarding census block coverage. Without a designated metric it is possible that different coverage levels are being presented to the Commission for consideration in applications.¹² To address this, US Cellular recommended the Commission set a minimum census block service coverage level of 10 percent in order for it to be included in the application.¹³

The Commission finds that it should make adjustments to the requirements to standardize how coverage areas are submitted. As discussed in the workshop, rather than filing a list of census blocks, the Commission will require carriers to file polygon shapefiles to depict coverage areas, including, but not limited to, the area within which a customer could reasonably expect to complete a voice call, the area within which a customer could reasonably expect to realize download and upload speeds of 10 Mbps and 1 Mbps, respectively, and the area within which a customer could reasonably expect to

⁸ See Viaero Comments at 3.

⁹ See *id.*

¹⁰ See *id.* at 4.

¹¹ See *id.*

¹² US Cellular Comments at 5.

¹³ See *id.*

Application No. NUSF-92
Progression Order No. 8

Page 5

realize download and upload speeds of 25 Mbps and 3 Mbps, respectively.

Equipment

The Commission asked what to do about equipment that may pose a national security threat. Because of our increasing reliance on the communications network to support critical infrastructure, this has received significant attention. In 2018, the FCC opened a Notice of Proposed Rulemaking (NPRM) in order to address this concern.¹⁴ The FCC's proceeding is still ongoing.

Viaero commented that the Commission should continue to follow the laws, rules, regulations and requirements set by the federal government and the FCC.¹⁵ US Cellular stated the Commission should follow the FCC's lead regarding security issues.¹⁶

The Commission agrees that it should follow the lead of the FCC along with congressional actions and executive orders even if such actions do not specifically limit the use of state funding. Even further, we find it prudent to take a more cautious approach when it comes to the use of NUSF support. Therefore, we will approve projects containing equipment and facilities the Commission believes will be permissible going forward. Project applications should include a list of equipment that will be utilized on the tower.

Vehicle Traffic and Other Data

The Commission sought comment on whether to continue to look at vehicle traffic information. Currently, the Commission uses the information released by the Nebraska Department of Transportation. It appears to be reliable source for indicating traffic volume. While it is not specifically

¹⁴ See *Protecting Against National Security Threats to the Communications Supply Chain Through FCC Programs*, WC Docket 18-89, Notice of Proposed Rulemaking, FCC 18-42 (rel. Apr. 17, 2018) (*Supply Chain NPRM*).

¹⁵ See Viaero Comments at 5.

¹⁶ See US Cellular Comments at 5.

Application No. NUSF-92
Progression Order No. 8

Page 6

weighted, it may be used by an applicant to argue in favor of a project where household density may indicate the need for a tower is lacking.

Viaero stated that utilizing traffic as a metric could be useful when reviewing criteria for viable applications.¹⁷ US Cellular commented that if 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 wireless service, then the Commission should use this information.¹⁸

The Commission agrees with the commenters that this information may be useful in providing additional support for a tower site where there may be a need for wireless service but where there is little or no household density to prioritize support for that tower. Accordingly, we will continue to utilize this data where appropriate.

Matching Requirement

The Commission sought comment on whether to re-impose a 25 percent match requirement for the wireless fund program. On the one hand, a 25 percent match would demonstrate the commitment on the part of the applicant and would enable NUSF dollars to go further. On the other hand, requiring a match may cause fewer towers to be built in the very rural areas where there is no business case to be made.

Viaero supported the match requirement. Viaero stated a match shows the financial commitment and stability of a company to invest in rural areas.¹⁹ US Cellular and CTIA were opposed to the match. US Cellular stated it would hinder the vitality of the program.²⁰ US Cellular further stated there would have been several towers it would not have built. The towers awarded funding from the 2018 application are being built due to the full assistance offered in the NUSF.²¹ CTIA

¹⁷ See Viaero Comments at 5.

¹⁸ See US Cellular Comments at 6.

¹⁹ See Viaero Comments at 6; see also Viaero Reply Comments at 3.

²⁰ See US Cellular Comments at 6; see also US Cellular Reply Comments at 3-5.

²¹ See US Cellular Comments at 7.

Application No. NUSF-92
Progression Order No. 8

Page 7

stated that the Commission declined to impose a matching requirement on wireless applicants in 2016 in response to concerns about whether a matching requirement would make valuable projects unviable.²² Further, CTIA stated there is no evidence that circumstances have changed since the Commission's prior determination.²³

After considering the comments, the Commission is of the opinion and finds that it should not adopt a match as a bright line requirement. We agree that a match may make some projects inviable. The purpose of the NUSF support is to incentivize carriers to build towers in areas that are not economically feasible. An additional match requirement may be a disincentive to that goal.

However, the Commission recognizes that when a carrier provides capital to offset the overall costs of tower construction, NUSF support may be maximized to enable more households to be served. Accordingly, the Commission will utilize a grant dollars per household metric for each project that will be a factor in evaluating which projects to fund.

Model Information

The Commission will continue to utilize a model to analyze applications and to make determinations on support. However, in light of comments submitted, the following factors will be utilized in analyzing projects: Number of households within the footprint of the project, Average Daily Traffic for the busiest, measured road that falls within the footprint of the project, the distance from the closest tower utilizing the same technology, and grant dollars per household if support were paid out at the requested amount.

The Commission will first analyze whether each project meets the density criteria, then analyze each of the factors listed above. The four factors will be weighted so that the number of households and the distance from the nearest tower will be the primary factors, but road traffic and grant dollars per household will also be contributing factors.

²² See CTIA Comments at 6; see also Further Comments of CTIA (September 9, 2019) at 2 ("CTIA Reply Comments").

²³ See CTIA Comments at 6.

Application No. NUSF-92
Progression Order No. 8

Page 8

Application Window

We find that the amount made available for the 2019 grant application cycle should be increased to \$5.2 million. That is a \$2 million increase from last year. The application window for the next round of grants should be open between **November 12, 2019, through December 27, 2019**. Grant applications should follow the guidelines previously in place with the exception of any changes adopted herein. Applicants must file one (1) original and five (5) paper copies of their application. In addition to the paper applications, applicants must file electronic copies of their application and the detailed budget in an electronic excel format. If the application contains confidential information, each applicant must also file one (1) paper and one (1) electronic redacted copy of the application. All electronic submissions should be directed to psc.nusf-filings@nebraska.gov.

O R D E R

IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that the opinions and findings made herein be, and they are hereby, adopted.

IT IS FURTHER ORDERED that the grant application window shall open on **November 12, 2019**, and shall close at 5:00 p.m., central time on **December 27, 2019**. All grant applications shall be filed in the manner specified above.

ENTERED AND MADE EFFECTIVE at Lincoln, Nebraska this 5th day of November, 2019.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:

Mary Ridd

Chair

ATTEST:

Miss Hall

Executive Director

Cynthia Kunkles
Red Allen
Scott Thompson
Tim Schram