

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Universal Service Reform – Mobility Fund)	WT Docket No. 10-208
)	
T-Mobile USA, Inc. Request of for Waiver and)	
Extension of Time of Mobility Fund Phase I)	
Construction Deadline for One Census Tract)	

**T-MOBILE USA, INC. REQUEST FOR WAIVER AND EXTENSION OF
TIME OF MOBILITY FUND PHASE I CONSTRUCTION DEADLINE
FOR ONE CENSUS TRACT**

EMERGENCY REQUEST FOR EXPEDITED TREATMENT

Pursuant to Section 1.3 of the rules of the Federal Communications Commission (“Commission” or “FCC”),¹ T-Mobile USA, Inc., on behalf of its wholly-owned subsidiary T-Mobile Northeast LLC (collectively, “T-Mobile”), requests a waiver of Section 54.1006(a) of the FCC’s rules and extension, for one census tract, of the June 25, 2015 deadline by which it must complete construction of a mobile wireless network under Mobility Fund Phase I.² Specifically, T-Mobile requests up to a one-year extension until June 25, 2016 to complete additional construction for *one* of the seventeen Census Tracts for which it was the winning bidder (Census Tract 42103950201 in Pike, Pennsylvania (the “PA Census Tract”)). T-Mobile also seeks a waiver and extension of time of Section 54.1006(f) of the rules so that it is not required to repay

¹ 47 C.F.R. § 1.3.

² *Id.* § 54.1006(a).

the Mobility Fund Phase I support it has already received in connection with the PA Census Tract, or to pay an additional performance default payment, prior to the extended deadline.³

As further explained below, T-Mobile has finished its construction of its mobile network in sixteen of the Census Tracts for which it was a winning bidder. It also has completed construction of a mobile network in the PA Census Tract, but the special and challenging nature of the local terrain in that area has resulted in drive test results showing less coverage than required by the Commission's construction milestone (i.e., less than 75 percent of the road miles covered). This shortfall has resulted despite T-Mobile's thorough planning and use of propagation studies to design the network. While T-Mobile has taken steps to improve and optimize the level of coverage in the PA Census Tract, the company has been unable to produce results that meet the Commission's requirements.

T-Mobile is committed to meeting the requirements and has determined that a new site will need to be built in order to meet the minimum coverage thresholds established by the Mobility Fund Phase I rules. The extension will grant T-Mobile sufficient time to construct this new site and meet its original build commitment. Strict adherence to the construction deadline in this case would be senselessly punitive and inconsistent with the public interest, particularly given the substantial progress T-Mobile has made and the special, unforeseen circumstances here. Moreover, the extension of time will ensure faster deployment of mobile broadband service to this unserved rural area than if the funds are reclaimed and redirected for other universal service purposes. Accordingly, good cause exists for the requested waiver and extension of time.

³ *Id.* 54.1006(f).

I. BACKGROUND

T-Mobile was designated a winning bidder in Auction No. 901 and authorized to receive Mobility Fund Phase I support for almost 11,000 unserved road miles in seventeen Census Tracts, including 74.93 road miles in the PA Census Tract, on June 25, 2013.⁴ The Census Tracts are located in various rural areas in Kentucky, Mississippi, Pennsylvania, Virginia, New Mexico, Texas, and Washington. In exchange for Mobility Fund Phase I support, T-Mobile committed to constructing mobile networks in the Census Tracts that would provide third generation (“3G”) service within two years of its authorization – i.e., by June 25, 2015. Pursuant to the Mobility Fund rules, T-Mobile also is required by that date to submit data to the Commission and the Universal Service Administrative Company from drive tests demonstrating mobile transmissions supporting minimum data throughputs to and from the network covering 75 percent of the road miles in the Census Tracts that the Commission had deemed uncovered.⁵ The two-year build requirement for 3G service must support outdoor minimum data transmission rates of 50 kbps uplink and 200 kbps downlink at vehicle speeds appropriate for the roads covered, and transmission latency low enough to enable the use of real time applications such as voice-over-Internet-protocol (“VoIP”).⁶

⁴ *Mobility Fund Phase I Support Authorized For 42 Winning Bids*, Public Notice, DA 13-1429 (rel. June 24, 2013).

⁵ 47 C.F.R. § 54.1006(a).

⁶ *Id.* Mobility Fund winning bidders who had committed to providing fourth generation (“4G”) service have three (instead of two) years to construct their networks and submit data from drive tests demonstrating mobile transmissions supporting voice and data to and from the network covering 75 percent of the area for which support was received. *Id.* § 54.1006(b). The 4G service must support outdoor minimum data transmission rates of 200 kbps uplink and 768 kbps downlink at vehicle speeds appropriate for the roads covered, and transmission latency low enough to enable the use of real time applications such as VoIP. *Id.*

T-Mobile is a well-established, national facilities-based wireless service provider and has significant experience in planning and constructing mobile wireless networks. It has successfully constructed networks in sixteen of its Mobility Fund Phase I Census Tracts and will timely file by June 25, 2015 the appropriate construction notifications for those areas. The company also designed a network that, by its calculations, should have covered the vast majority of the 74.93 unserved road miles of the PA Census Tract, which is located in Pike County, Pennsylvania, a rural area on the border with New York.⁷ The network built to serve the PA Census Tract comprises three newly constructed sites, brought into service between December 30, 2014 and February 23, 2015.

Consistent with industry practice and standards, T-Mobile used computer simulated propagation studies to estimate the amount of coverage that the network would provide to the PA Census Tract. Indeed, prior to construction, such propagation studies are the only way a carrier can design its network. T-Mobile uses one of the most advanced propagation models available (e.g., the Myriad model) and the company also uses current data sets of both terrain and clutter (e.g., trees, open fields, water, buildings) to ensure the highest possible accuracy of predictions. T-Mobile has had great success with its propagation studies – in the sixteen other Census Tracts for which was designated the winning bidder in Mobility Fund Phase I, its studies closely matched the coverage data collected via drive tests.

Upon completing construction of the network in the PA Census Tract, however, drive tests indicated coverage in that area, unlike the other sixteen, was less than the propagation studies had estimated, and less than the 75 percent minimum coverage threshold set forth in the

⁷ T-Mobile is authorized to receive up to approximately \$1.772 million in Mobility Fund Phase I support for building a 3G mobile broadband network that meets the Commission's construction milestones in the PA Census Tract.

Commission's rules. T-Mobile took additional steps to try to improve and optimize coverage of the PA Census Tract, but the level of coverage did not markedly improve. Upon investigation by T-Mobile's engineering teams, the company concluded that the geography of the PA Census Tract – which is characterized by a significant number of hills and heavily forested areas – reduced the network's signal levels at road level in places where the geography was more extreme (e.g., a road running through a steep valley). The unexpected difference between the propagation studies and road test data for the PA Census Tract is an anomaly that could not have been reasonably anticipated when T-Mobile was planning the construction of the network.

T-Mobile's engineering teams have determined that an additional site will have to be constructed to improve coverage in the PA Census Tract. They estimate that locating, acquiring property for, and finalizing a new site, and deploying new facilities, as well as completing new drive tests, could take up to one year. T-Mobile also plans on deploying LTE at the new site, as it has at its other sites in the PA Census Tract. Accordingly, T-Mobile requests a one year extension of the construction deadline for the PA Census Tract.

II. THERE IS GOOD CAUSE TO GRANT THE REQUESTED WAIVER AND EXTENSION

The Commission may waive any provision of its rules upon a showing of good cause.⁸ A rule may be waived where the particular facts make strict compliance inconsistent with the public interest.⁹ Moreover, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.¹⁰ A waiver

⁸ 47 C.F.R. § 1.3.

⁹ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (“*Northeast Cellular*”).

¹⁰ *WAIT Radio v. FCC*, 418 F.2d 1153, 1159, (D.C. Cir. 1969), *aff'd* 459 F.2d 1203, (D.C. Cir. 1972); *Northeast Cellular*, 897 F.2d at 1166.

also is appropriate if special circumstances warrant a deviation from the general rule, and such deviation would better serve the public interest than strict adherence to the general rule.¹¹ As discussed herein, good cause exists for the requested waiver and extension of time in this case.

T-Mobile, upon its designation as the Mobility Fund Phase I winning bidder for its award areas, proceeded in good faith with the timely construction of mobile wireless networks in the award areas, including the rural, unserved area of the PA Census Tract. Consistent with industry practices and standards, it based its network design in part on propagation studies – a typically reliable method – that projected a system that would cover the vast majority of the unserved road miles in the PA Census Tract. While it is well known that terrain and other factors can effect signal quality of a network at any given time, T-Mobile could not, and did not, foresee the magnitude of the impact that the unique geography and vegetation throughout the PA Census Tract would have in this case. After determining that the coverage of the PA Census Tract was significantly lower than projected, the company took steps to try to improve and optimize coverage, including antenna tilt and power adjustments. Despite these efforts, T-Mobile has determined that it will be able to improve coverage in the PA Census Tract only by building a new site, although it cannot do so before the June 25, 2015 construction deadline.

Granting this request is consistent with the Commission’s universal service policies and will promote deployment of high speed mobile broadband service in a highly rural area where no such coverage previously existed. The Commission reformed the universal service program “to ensure that robust, affordable voice and broadband service, both fixed and mobile, are available

¹¹ *NetworkIP, LLC v. FCC*, 548 F.3d 116, 127 (D.C. Cir. 2008); *Northeast Cellular*, 897 F.2d at 1166.

to Americans throughout the nation.”¹² The Commission rightly focused on supporting rural and high cost communities where there is no sound economic business case for building networks and the prospect of stand-alone action by the private sector is limited.¹³ As the Commission explained:

The goal of Mobility Fund Phase I is to extend the availability of mobile voice service on networks that provide 3G or better performance and to accelerate the deployment of 4G wireless networks in areas where it is cost effective to do so with one-time support. The purpose of the mechanism we choose is to identify those areas where additional investment can make as large a difference as possible in improving current-generation mobile wireless coverage.¹⁴

The PA Census Tract is precisely the type of community the Mobility Fund was designed to help. Located in Pike County, Pennsylvania on the northern border with New York, the Census Tract has a population of less than 1300 and approximately 75 designated unserved road miles. In light of the rural nature and low population of the area, it was unlikely that any provider would deploy mobile broadband service at a time when such access is critical for employment, public safety, educational, and health care opportunities.¹⁵

Granting the requested waiver and extension would provide for a far more effective implementation of the Commission’s universal service policies than strict adherence to the construction requirements in this case. The Commission’s efforts have already provided a “jump start” by accelerating the deployment of mobile broadband service to an area where it was not

¹² *Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17667 ¶ 1 (2011).

¹³ *Id.* at 17668 ¶ 5.

¹⁴ *Id.* at 17781 ¶ 322.

¹⁵ *Id.* at 17671, 17674, 17781 ¶¶ 14, 28, 324.

previously cost-effective to do so.¹⁶ T-Mobile has made great strides in building out service in its award areas, completing in only two years construction in sixteen Census Tracts and making substantial progress in the PA Census Tract despite the challenges presented by that area's local terrain. A relatively short extension would ensure that the vast majority of the PA Census Tract has access to robust mobile broadband services.

On the other hand, denying the request would disserve the public interest and be inequitable and senselessly punitive. The Mobility Fund support associated with the PA Census Tract is critical to the company's ability to complete its build out and lack of funding could significantly delay or halt further deployment, to the detriment of those living, working and traveling in the area. There also is no guarantee that the funds originally targeted for the PA Census Tract, once reclaimed, would remain with the area, and even if they did, when they might be put to use. The extension of time in this case will therefore ensure faster deployment of mobile broadband service to this unserved rural area than if the funds are reclaimed and repurposed.

Moreover, not only would T-Mobile be required to repay the funds already received and be ineligible for the remaining funds, it would be subject to an additional performance default payment. This would be an unnecessary hardship and an excessive penalty given T-Mobile's diligent efforts to build out the PA Census Tract within the short two-year time period. The purpose of the default rules is to ensure that support recipients do not abscond with Mobility Fund support without deploying facilities in the award areas. T-Mobile has diligently deployed extensive, expensive facilities throughout its award areas, including the PA Census Tract. Furthermore, the short extension in this case would not impose significant costs on the

¹⁶ *Id.* at 17781 ¶ 324.

Commission or higher support costs for the universal service fund. T-Mobile has every intention to complete construction of its network in the PA Census Tract as quickly as possible if the extension is granted. Punishing T-Mobile with the default penalty in this case would serve no purpose, and would undermine the very deployment objectives that underlie Mobility Fund Phase I.

III. CONCLUSION

Grant of this waiver and extension request will allow T-Mobile to finish constructing its wireless network in the PA Census Tract so that those living, working and traveling in the area have access to critical mobile broadband services that are necessary to be successful and thrive in society.

Respectfully submitted,

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