Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Universal Service Reform	)	WT Docket No. 10-208
	)	
Mobility Fund	)	
	)	

COMMENTS OF
PCIA—THE WIRELESS INFRASTRUCTURE ASSOCIATION

I. INTRODUCTION

PCIA—The Wireless Infrastructure Association ("PCIA") hereby submits these comments in response to the above captioned Federal Communications Commission ("FCC" or "Commission") *Notice of Proposed Rulemaking* regarding the creation of a Mobility Fund to support wireless infrastructure deployments to provide 3G service to unserved areas.[1] The Commission's goal of taking one step toward "solving persistent gaps in mobile services" is laudable. Establishing a program to reduce the capital costs of wireless deployment is key to this goal.

Consistent with the Commission's goal of reducing capital costs for 3G deployments in unserved areas, PCIA urges the Commission to encourage the collocation of wireless antennas on existing infrastructure when possible. Further, to spur competitive entry in unserved markets, the Commission should require collocation opportunities on wireless support structures constructed with Mobility Fund support where feasible for the given deployment. However, the Commission should avoid unnecessarily burdening wireless infrastructure deployments by

[1] *In re* Universal Service Reform; Mobility Fund, *Notice of Proposed Rulemaking*, FCC 10-182 (rel. Oct. 14, 2010) ("Mobility Fund NPRM").

requiring a set number of collocations on a new support structure constructed with Mobility Fund support or set terms and conditions for collocations on support structures constructed with Mobility Fund support. The Commission should also encourage the rapid deployment of wireless infrastructure through the Mobility fund and should take steps to reduce the barriers to wireless infrastructure deployment imposed by local regulations.

II. THE COMMISSION SHOULD ENCOURAGE COLLOCATION THROUGH THE MOBILITY FUND AS AN EFFECTIVE METHOD OF INCREASING WIRELESS COVERAGE, CAPACITY, AND COMPETITION

Collocating wireless antennas on existing infrastructure is an efficient means of deploying wireless services, including the 3G services that the Mobility Fund aims to make ubiquitous across the county. Collocation also can help achieve the key aim of the proposed Mobility Fund, namely "to help overcome cost barriers to expanding mobile wireless services."[2] The effective use of existing infrastructure reduces the cost of deploying wireless infrastructure for both Mobility Fund supported deployments and future deployments on new support structures constructed with Mobility Fund support.

Areas that may be deemed "unserved" for Mobility Fund purposes may have existing wireless support structures supporting other non-3G wireless services or broadcasting services. Existing infrastructure can therefore play an important role in the deployment of 3G wireless services to Mobility Fund targeted areas precisely because of the cost and possible time savings of collocating wireless infrastructure over constructing a new wireless support structure. As the 14th Mobile Wireless Competition Report aptly observed:

> Co-locating base station equipment on an existing structure is often the most efficient and economical solution for existing and new wireless service providers that need new cell sites. . . . Due to the high cost to construct new towers, and the often considerable delay to obtain approvals from state and local authorities,

[2] Mobility Fund NPRM at ¶ 8.

> wireless service providers will typically look first for existing towers or other suitable structures for new cell sites.[3]

In order to maximize the use of existing infrastructure and the efficient, cost-effective use of Mobility Fund support, the Commission should encourage collocation on existing infrastructure for deployments supported by the Mobility Fund. At the same time, however, it is likely that unserved areas for the purposes of the Mobility Fund may not have any existing infrastructure on which to collocate wireless antennas or may not have existing support structures in the areas necessary to best provide service in the unserved areas. For new wireless support structures built with Mobility Fund support, we encourage the Commission to require collocation to the extent feasible for the given structure.

By requiring collocation on wireless support structures built with Mobility Fund support, the Commission can reduce barriers to deployment for all wireless service providers. Though the costs associated with deploying infrastructure can vary dramatically based upon individual factors such as the cost of land, local zoning processes, and the design of the structure to be built, PCIA members estimate that an average new build costs approximately $250,000-$300,000 whereas an average collocation costs $25,000-$30,000 to deploy. The cost advantage of collocation is essential in reducing capital expenditures thereby facilitating deployments necessary to increase a provider's coverage and capacity.

Collocation also improves speed to market. The time and regulatory processes for collocations are generally reduced as compared to new infrastructure builds. This allows carriers to bring new services to an area in an expedited fashion, facilitating market entry and enabling further competition in the wireless industry.

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[3] *In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, WT Docket No. 09-66, *Fourteenth Report*, FCC 10-81 ¶ 288 (rel. May 20, 2010) ("14th Mobile Wireless Competition Report").

It is feasible that with new collocation opportunities in unserved areas, there is a stronger economic case for competitive entry from non-Mobility Fund supported deployments. With competitor's quick entry facilitated by collocation opportunities on wireless support structures constructed with Mobility Fund support, consumers gain more choice, not only among 3G service providers, but pricing options and devices as well.

Collocation on Mobility Fund supported wireless support structures goes a long way toward "improv[ing] the business case for investment in the rollout of 4G in harder to serve areas" by reducing cost of deployment and entry into the market.[4] By encouraging collocation on existing infrastructure and requiring collocation on new support structures constructed with Mobility Fund support where feasible for a given deployment, the Commission can encourage both the efficient use of Mobility Fund support and future competitive entry into currently unserved areas. Nonetheless, we urge the Commission not to require a set number of collocations on a wireless support structure constructed with Mobility Fund support, as such a requirement will unnecessarily burden wireless infrastructure deployments.

III. THE COMMISSION SHOULD NOT MANDATE A SET NUMBER OF COLLOCATIONS ON TOWERS CONSTRUCTED WITH MOBILITY FUND SUPPORT, AND SHOULD STREAMLINE THE SITING PROCESS FOR INFRASTRUCTURE DEPLOYED WITH MOBILITY FUND SUPPORT

Collocation of wireless infrastructure on existing support structures is vital part to the efficient deployment of wireless infrastructure and wireless services. As explained, the Commission should encourage collocation and require collocation on new structures constructed with Mobility Fund support if feasible for a given deployment. However, the proposal to require a minimum number of spaces for collocation on support structures constructed with Mobility

[4] Federal Communications Commission, *Connecting America: The National Broadband Plan* 145 (2010) ("NBP").

Fund support will impose an arbitrary constraint on wireless siting decisions, to the detriment of the goals of the Mobility Fund. Due to the myriad of factors that wireless service and infrastructure providers must consider when siting and building new support structures – including local land use restrictions and technical and engineering requirements and limitations – the Commission should afford flexibility in order to facilitate deployments that maximize 3G coverage in unserved areas.

Wireless infrastructure siting decisions are a complex interplay between the technical and engineering requirements of the provider, and the state, local, and federal regulations governing wireless infrastructure siting. As the Commission recognized in the 14th Mobile Wireless Competition Report, "obtaining the necessary regulatory and zoning approvals from state and local authorities" is a "significant constraint[]" to wireless infrastructure deployment.[5]

Starting with the goal of achieving the optimal coverage or capacity needed for a deployment, service and infrastructure providers must find a parcel of land within a limited area that meets their coverage or capacity goals and negotiate a lease or the sale of the land. Service and infrastructure providers then must examine local or state regulations governing wireless facility siting to ensure that the jurisdiction permits wireless facilities in the selected area. Then, service and infrastructure providers must ensure that the proposed facility meets height restrictions, is the allowable type of structure (monopole, lattice, guyed, concealed), meets requirements governing set back distances from abutting parcels or rights of way, and meets mandated separation distances from other wireless facilities in the jurisdiction. The provider may then have to demonstrate that it "needs" the facility, and then may go through a subjective application review process in which local officials can second guess the business or technical

[5] 14th Mobile Wireless Competition Report at 172-73, ¶ 287-89.

case for the deployment. This process is complex, burdensome, and should not be further complicated by an additional rigid collocation requirement imposed by the FCC.

If the Commission mandated a fixed number of collocation spots on any new structure constructed with Mobility Fund support, the requirement will act as another constraint on wireless facility deployment. For example, consider a situation where the Commission requires three collocation spots (for a total of four antenna platforms on the structure) where the optimal deployment location is in a commercial zone. Commercial zones are often prime areas to site wireless facilities because of their proximity to population centers, and in many cases are as close as wireless facilities are permitted to residential zones. Due to their proximity to population centers, these zones are likely effective locations for Mobility Fund supported deployments.

If the hypothetical locality imposes a low height restriction in commercial zones – say 100 feet – the Mobility Fund supported provider may not be able to meet the Commission's collocation requirement because subsequent collocators may not be able to attach at a height that allows the provider to meet its coverage or capacity needs. The provider, then, and will have to move to a less-optimal site, which in the case of sparsely populated areas is to the detriment of Mobility Fund goals. This situation will be further frustrated if the locality requires a particular antenna attachment technique such as flush-mounting or requires wireless facilities in commercial zones to be camouflaged.[6]

[6] Local jurisdictions are increasingly requiring "camouflaged" designs for new tower builds that requires the structure to be designed in a way that camouflages it with its surroundings. Examples include "mono-pines," "mono-palms," and flagpoles. Each of these design features has an increased associated cost for design and implementation. Further, the nature of these "stealth" facilities limits the number of collocations available and therefore increases the amount of overall infrastructure needed in a community as well as the capital expense necessary to supply them.

Imposing a fixed number of collocations on Mobility Fund support structures is likely to adversely impact the placement of wireless facilities and ultimately coverage and capacity in unserved areas by limiting the flexibility in tower design and height that carriers must maintain in order to place towers where they are most needed. In short, the Commission may unnecessarily impose arbitrary constraints on engineering and siting decisions, such as location, height and type of tower, with any rigid number requirement for collocation. Instead, the Commission should examine ways that it can accelerate deployment of Mobility Fund sites by streamlining local tower siting process.

While the Commission's Shot Clock *Declaratory Ruling* and *Order on Reconsideration* were useful steps in reducing frivolous delays at the local level in the wireless facility siting process,[7] onerous local and state zoning laws continue to impose significant barriers to wireless infrastructure deployment and ultimately the delivery of the services that wireless users demand. The FCC can take additional action now and establish the supremacy of federal goals with respect to sites constructed or collocated with Mobility Fund support. The Commission should utilize this *NPRM* to establish a streamlined siting and collocation process for facilities deployed with Mobility Fund support.

IV. THE COMMISSION SHOULD NOT MANDATE RATES AND TERMS FOR COLLOCATIONS

While encouraging collocation opportunities on Mobility Fund support structures will facilitate competition, the imposition of rates and terms for collocation will have an adverse

[7] *In re* Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, *Declaratory Ruling*, FCC 09-99 (rel. Nov. 18, 2009); *In re* Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, *Order on Reconsideration*, FCC 10-144 (rel. Aug. 4, 2010).

effect on the robust collocation market and the wireless infrastructure industry as a whole. The wireless infrastructure industry is extremely competitive, with literally thousands of market participants. Market participants include neutral-host providers (i.e., providers of wireless infrastructure unaffiliated with a wireless carrier) that consist of large tower companies that own over 20,000 towers, mid-size tower companies, owners of a single or small number of towers, and the wireless carriers themselves who continue to build their own infrastructure. Because there is no demonstrable failure in the wireless infrastructure market, and the reality that the wireless infrastructure industry promotes competition, the Commission should not mandate rates or terms for collocation on Mobility Fund supported wireless infrastructure.

The Commission has found that the wireless infrastructure industry is healthy and promotes competition.[8] There have been no demonstrated problems regarding the negotiation of agreements for collocations among carriers, neutral host providers, and other parties. The economics of the neutral host wireless infrastructure industry actually incentivizes neutral host wireless infrastructure providers to maximize collocations on wireless support structures. The Commission recognized this reality in its 14th Mobile Wireless Competition Report where it found that neutral host tower market "increase[s] efficiency in the industry, ease[s] entry, and enhance[s] wireless service competition."[9] Further, "tower companies independent of wireless service providers have an incentive to maximize revenues by leasing space to as many service providers as possible."[10] If the Commission were to dictate terms for collocation on Mobility Fund supported infrastructure, it would be imposing unnecessary and burdensome regulations on

[8] *See* 14th Mobile Wireless Competition Report ¶¶ 285-286; 290-291.

[9] *Id.* ¶ 291.

[10] *Id.*

a thriving industry that already has an economic incentive to set competitive rates and terms for collocation.

Currently unserved areas will benefit from the market rates and terms that have greatly contributed to the current availability of 3G services to 98.5 percent of the American population.[11] Carriers can negotiate within this established framework to affect quick, efficient deployment of 3G and next generation services.

V. THE COMMISSION SHOULD ADOPT AN EXPEDITIOUS DEPLOYMENT SCHEDULE, AND ACT WHEN NECESSARY TO REDUCE THE BARRIERS TO DEPLOYMENT

The delivery of 3G wireless services will have an immediate, beneficial economic and social effect on unserved areas. In addition to providing superior voice services, 3G wireless services will bring new methods of high-speed internet access to people who currently go without. The Mobility Fund's very nature – its one-time support and goal of filling in 3G coverage gaps across the country – lends itself to prompt buildout. An expeditious deployment schedule should be set to bring the benefits of 3G to all Americans. But in order to do so, the Commission must consider actions it can take to streamline the deployment process by reducing local barriers to wireless facility siting. The goals of the Mobility Fund should not be held hostage to overly restrictive and burdensome regulation governing wireless facility siting. The Commission should work to ensure that the goals of the Mobility Fund and the National Broadband Plan are shared by the communities targeted for support.

VI. CONCLUSION

For the foregoing reasons, we urge the Commission to encourage collocation through the

[11] Mobility Fund NPRM at ¶30 (citing Geolytics Nov. 2009 Population Estimates, American Roamer Advanced Services May 2010).

Mobility Fund in the effort to expand 3G coverage to currently unserved areas. To spur competitive entry in unserved markets, we also urge the Commission to require collocation opportunities on wireless support structures constructed with Mobility Fund support where feasible for the given deployment. To maximize flexibility and competition, the Commission should avoid mandating any minimum number of collocations and avoid setting terms or rates for collocations on wireless support structures constructed with Mobility Fund support. Finally, the Commission should set an expeditious schedule for the deployment of these needed services while also acting to streamline the deployment process by reducing local barriers to wireless facility siting.

Respectfully submitted,

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