Before the
Federal Communications Commission
Washington, DC 20554

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

To: The Commission

COMMENTS OF MOBILE FUTURE

Mobile Future[1] provides these comments in support of the Commission's proposal to create a Mobility Fund to support the construction of next generation wireless networks in unserved areas.[2] Mobile Future applauds the Commission for recognizing the importance of universal access to mobile broadband. While third generation ("3G") wireless technology is available to almost the entire United States' population, millions still lack mobile access to the Internet due to the economics of constructing networks in areas with challenging terrain and low population densities. While providers continue to expand their footprints, universal service funds can be productively utilized to expand and expedite the buildout of mobile broadband networks that Americans increasingly demand even in the remotest parts of the country.

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[1] Mobile Future is a broad-based coalition of businesses, non-profit organizations and individuals interested in and dedicated to advocating for an environment in which innovations in wireless technology and services are enabled and encouraged. Our mission is to educate the public and key decision makers on innovations in the wireless industry that have transformed the way Americans work and play and to advocate continued investment in wireless technologies.

[2] Universal Service Reform, Mobility Fund, WT Docket No. 10-208, *Notice of Proposed Rulemaking*, FCC 10-182 (rel. Oct. 14, 2010) ("*Mobility Fund NPRM*").

The National Broadband Plan correctly concluded that "broadband and access to mobility" are essential needs for Americans.[3] As President Barack Obama has recognized "[f]ew technological developments hold as much potential to enhance America's economic competitiveness, create jobs, and improve the quality of our lives as wireless high-speed access to the Internet."[4] The Commission should create a Mobility Fund to subsidize the deployment of 3G, or better, mobile networks in high-cost unserved areas where these services are not currently available; "without existing modern wireless infrastructure, [these areas] are at risk of much-delayed access to the coming generations of high-speed wireless services."[5]

The advent of mobile wireless communications is among the most astounding achievements of the last quarter century. Driven by competition, innovation and investment under a "light-touch" regulatory regime, mobile wireless has quickly evolved from a clunky, one-trick luxury item to an essential multi-faceted component of our every day lives. Today, we are connected by handheld devices with vast computing power, providing access to limitless applications and services, delivered over faster and faster networks – instantly and from anywhere. And the future remains bright as the wireless ecosystem continues to expand, innovate, and deploy next generation technologies.

Mobile Future agrees with the President that we are on the path of a "wireless broadband revolution."[6] Virtually everyone living in the United States has access to

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[3] FCC, *Connecting America: The National Broadband Plan*, 146 (rel. Mar. 16, 2010) ("NBP"), http://www.broadband.gov/plan/.

[4] The White House, Presidential Memorandum: Unleashing the Wireless Broadband Revolution (June 28, 2010) ("Presidential Memorandum"), http://www.whitehouse.gov/the-press-office/presidential-memorandum-unleashing-wireless-broadband-revolution.

[5] *Mobility Fund NPRM* ¶ 2.

[6] Presidential Memorandum.

digital mobile wireless service, and 98.5 percent of the U.S. population lives in areas covered by 3G wireless networks "that can offer maximum data transfer speeds of 2 Mbps from a fixed location, 384 kbps at pedestrian speeds, and 144 kbps at traveling speeds of 100 kilometers per hour."[7] And carriers, driven by competition and skyrocketing consumer demand for data, continue to invest and deploy next generation networks that provide even faster and more robust data transfer speeds for accessing the Internet.

- Clearwire, which has wholesale relationships with Sprint, Comcast, and Time Warner Cable, has aggressively built out its fourth generation ("4G") WiMAX network during the past year, which now covers 68 markets across the U.S. and provides average speeds of 3-6 Mbps with burst rates of up to 10 Mbps.[8]
- MetroPCS became the first carrier to launch a 4G Long Term Evolution ("LTE") service with deployments in six metropolitan areas and plans to expand service to at least eight other cities in the upcoming year; users are expected to receive download speeds of 6-8 mbps.[9]
- T-Mobile has now upgraded its 3G network with HSPA+ in 75 metropolitan markets, providing users with "typical download speeds that are on par with or faster than competing 4G technologies."[10]
- AT&T has aggressively upgraded 80 percent of its network to HSPA+ with expectations to cover 250 million pops by year-end.[11] In addition, AT&T plans to roll out its LTE network to 70-75 million pops by the end of 2011.[12]

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[7] Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, *Fourteenth Report*, WT Docket No. 09-66, 25 FCC Rcd 11407, 11485-486, 11638 ¶¶ 117-18, Appendix B n.4 (2010); *Mobility Fund NPRM* ¶ 30.

[8] Press Release, Clearwire, CLEAR 4G Breezes Into South Florida On Cyber Monday (Nov. 29, 2010), http://newsroom.clearwire.com/phoenix.zhtml?c=214419&p=irol-newsArticle&ID=1500496&highlight=.

[9] Press Release, MetroPCS, MetroPCS Launches 4G LTE Network in San Francisco Metropolitan Area," (Dec. 1, 2010), http://www.metropcs.com/presscenter/articles/mpcs-news-20101201.aspx; Assoc. Press, *MetroPCS Launches First Faster Data-Access Network*, localtechwire.com (Sept. 22, 2010), http://localtechwire.com/business/local_tech_wire/news/blogpost/8324045/.

[10] Press Release, T-Mobile, *T-Mobile 4G Service Now Available in More Markets and on New Devices*, (Nov. 2, 2010), http://press.t-mobile.com/articles/americas-largest-4g-network.

[11] See Karl Bode, *AT&T Says 80% Of Network Now HSPA+*, DSLReports.com (Nov. 17, 2010), http://www.dslreports.com/shownews/ATT-Says-80-Of-Network-Now-HSPA-111417; *see also* Sam Churchill, *Verizon Launching LTE Dec 5*, dailywireless.org (Dec. 1, 2010), http://www.dailywireless.org/.

[12] Dan Meyer, *@ 4G World: MetroPCS expands LTE to Detroit*, RCR Wireless (Oct. 20, 2010), http://www.rcrwireless.com/ARTICLE/20101020/CARRIERS/101029993/-4g-world-metropcs-expands-lte-to-detroit.

- Verizon Wireless also just recently launched its LTE service with downlink speeds of 5-12 Mbps and 2- 5 Mbps on the uplink to more than 100 million potential customers in 38 markets and plans to cover nearly all of its legacy network coverage with LTE by 2013.[13]

4G wireless broadband technology should quickly become available to a majority of Americans over the next few years thanks to the efforts undertaken by wireless operators.[14] However, these vast carrier commitments of capital will not change the core economics of deployment in the most rural parts of America. For these areas, the Mobility Fund can provide a critical bridge to expedite mobile broadband connectivity.

The proliferation of ever-faster networks has, and will continue to, unleash a new wave of innovation in devices and applications leading to even greater adoption by consumers. Already, U.S. subscribers use almost twice as many Minutes of Use ("MOUs") as users in any other country, averaging 824 MOUs per month, and continue to use services at a rate nearly *five times* the figure for the Organization for Economic Co-Operation and Development countries in Europe.[15] Mobile data usage has also exploded in the United States. One analyst estimates that the "U.S. data traffic has grown at a ~120% annual rate over the past two years."[16] Six out of ten Americans are going online

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[13] Press Release, Verizon Wireless, Blazingly Fast: Verizon Wireless Launches The World's Largest 4G LTE Wireless Network On Sunday, Dec. 5 (Dec. 4, 2010), http://news.vzw.com/news/2010/12/pr2010-12-03.html; Dan Meyer, *Verizon Wireless set to alter Mobile Landscape with LTE Launch***,** RCR Wireless (Nov. 23, 2010), http://www.rcrwireless.com/ARTICLE/20101123/CARRIERS/101129986/verizon-wireless-set-to-alter-mobile-landscape-with-lte-launch.

[14] *See, e.g.*, ROBERT C. ATKINSON AND IVY SCHULTZ, BROADBAND IN AMERICA 8 (Nov. 11, 2010) ("A number of wireless broadband service providers expect to deploy Long Term Evolution (LTE) and WiMAX technologies (so-called "4G" wireless services) between 2010 and 2013 and, if successful, bring multi-megabits speeds to a majority of U.S. homes and population."); ABI RESEARCH, 4G AND LTE TECHNOLOGY SET TO TAKE OFF (Nov. 30, 2010) (predicting that over sixty percent of the world's population will have access to 4G wireless broadband technology in the next four years), http://www.wirelessindustrynews.org/news-nov-2010/2244-113010-win-news.html.

[15] *See* GLEN CAMPBELL, BANK OF AMERICA MERRILL LYNCH, GLOBAL WIRELESS MATRIX 1Q10: A MODEST RECOVERY, ASIA IN THE LEAD 2 tbl. 1 (Apr. 13, 2010) ("GLOBAL WIRELESS MATRIX 1Q10").

[16] *See* AB BERNSTEIN RESEARCH, U.S. TELECOMMUNICATIONS AND GLOBAL TELECOM EQUIPMENT: THE WIRELESS DATA EXAFLOOD 1 (June 14, 2010).

using a mobile device according to a recent study with African Americans and Latinos leading the way in their use of data applications on handheld devices.[17] And "[t]he number of mobile broadband users in the United States is expected to increase by 75 percent from 2009 to 2013."[18] Americans in very rural areas must be afforded access to these new broadband mobile options in order to enjoy the benefits of economic growth, job creation, and investment that flow from being connected.

However, even with the success of the wireless industry, market forces will not always ensure that every person has access to the most up-to-date technology in a timely manner. The cost of deploying next generation infrastructure is high, and even more so where the terrain is challenging and the population density does not support the economic deployment of advanced networks. While most people enjoy basic digital wireless service, still more than 4.5 million people in the United States do not reside in areas where 3G service is available.[19] The Mobility Fund will help to improve the business case for serving these areas that may otherwise wait years for service.

In assessing the scope and shape of the Mobility Fund, the Commission should reconsider whether the proposed level of funding is appropriate. In the *Mobility Fund NPRM*, the Commission proposes to allocate between $100 and $300 million for the

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[17] *See* AARON SMITH, MOBILE ACCESS 2010, PEW INTERNET & AMERICAN LIFE PROJECT 2-3 (July 7, 2010), http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx.

[18] *See* Lawrence H. Summers, Remarks at the New America Foundation on the President's Spectrum Initiative, *Technological Opportunities, Job Creation, and Economic Growth* (June 28, 2010), http://www.whitehouse.gov/administration/eop/nec/speeches/technological-opportunities-job-creation-economic-growth; *see also* Industry Analysis and Technology Division, Wireline Competition Bureau, FCC, Internet Access Services: Status as of December 31, 2009, Tables 1-2 (rel. Dec. 8, 2010) (showing that mobile wireless subscribership of connections over 200 kbps (in at least one direction) grew more than 100% in 2009 compared to just over a 6% growth in wireline subscribers).

[19] *See, e.g.*, *Mobility Fund NPRM* ¶ 31 (stating that 98.5% of the population resides "in areas with access to 3G services"); U.S. Census, http://www.census.gov/ (stating that the U.S. population is 310,916,462 as of Dec. 15, 2010).

Mobility Fund.[20] This amount of support is significantly less than the $1 billion in annual funding recommended for the Mobility Fund by the Federal-State Joint Board ("Joint Board") on Universal Service.[21] While the Joint Board did envision that funding would be used not only for constructing networks in unserved areas but also for providing continued operations,[22] the amount of funding proposed may well be insufficient to achieve the Commission's goal of expanding 3G (or better) network coverage to "close the mobility gap" for the "[m]illions of Americans that live in communities where current-generation mobile service is unavailable" and for the "millions more [that] work in or travel through such areas."[23] One expert estimated in 2008 that the ubiquitous deployment of mobile broadband-capable infrastructure would cost $22 billion, which would seem to exceed the capital investment plans of carriers and the $100-$300 million in proposed support.[24] Additional funding would thus likely be necessary to ensure the expeditious deployment of advanced wireless networks to all Americans.

In addition, the Commission should not limit eligibility to participate in a Mobility Fund auction to only those wireless operators that have already been designated as Eligible Telecommunications Carriers ("ETCs") in the relevant geographic unserved

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[20] *See Mobility Fund NPRM* ¶ 13.

[21] *See* Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, *Recommended Decision*, In the Matter of High-Cost Universal Service Support, FCC07J-4, ¶ 28 (Fed.-State Jt. Bd., rel. Nov. 20, 2007) ("*Recommended Decision*") (attached to High Cost Universal Support; Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, *Notice of Proposed Rulemaking*, 23 FCC Rcd 1531 (2008)).

[22] *Id*. ¶ 16 (stating that the "secondary purpose of the Mobility Fund would be to provide continuing operating subsidies to carriers serving areas where service is essential but where usage is so slight that a plausible economic case cannot be made to support construction and ongoing operations, even with a substantial construction subsidy").

[23] *Mobility Fund NPRM* ¶ 1.

[24] *See* COSTQUEST ASSOCIATES, INC., U.S. UBIQUITOUS MOBILITY STUDY 4 (Apr. 17, 2008) (attached to Comments of CTIA-The Wireless Assoc., WC Docket No. 05-337, CC Docket No. 96-45 (filed Apr. 17, 2008)).

area.[25] If an area remains unserved even after an existing ETC has been receiving support to provide wireless services in that area, then the public interest favors broadening the pool of applicants to allow new entrants an opportunity to more quickly and more efficiently deploy advanced wireless service. The added competition will also drive bids towards cost and maximize the efficient use of support funding. The Commission should therefore allow all entities that have been designated, or have applied for ETC designation in the relevant area, to participate in a Mobility Fund auction.

Lastly, the Commission should expeditiously conclude this proceeding, create the proposed Mobility Fund, and hold an auction to put funds in the hands of wireless operators for the buildout of 3G and 4G networks in high-cost unserved areas as soon as practicable. Every day that goes by, more advanced networks are being deployed across the country and those in highly rural and remote areas fall further behind. Wireless technologies will change our lives in ways unimaginable today, and it is important that all Americans have the opportunity to take part in the wireless broadband revolution.

Respectfully submitted,

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[25] *Mobility Fund NPRM* ¶ 47.