

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

In the Matter of	)	
	)	
Implementation of Section 6002(b) of	)	
the Omnibus Budget Reconciliation	)	
Act of 1993	)	WT Docket No. 09-66
	)	
Annual Report and Analysis of	)	
Competitive Market Conditions With	)	
Respect to Commercial Mobile Services	)	

**COMMENTS OF CTIA-THE WIRELESS ASSOCIATION®**

Michael Altschul  
Senior Vice President and General Counsel

Christopher Guttman-McCabe  
Vice President, Regulatory Affairs

Robert F. Roche, Ph.D.  
Vice President, Research

David J. Redl  
Counsel, Regulatory Affairs

**CTIA-THE WIRELESS ASSOCIATION®**  
1400 Sixteenth Street, N.W.  
Suite 600  
Washington, D.C. 20036  
(202) 785-0081

Dated: June 15, 2009

## SUMMARY

Competition is flourishing among facilities-based CMRS carriers and through intermodal competition with other providers. In the remarkably competitive wireless market, carriers differentiate themselves through network reliability and coverage as well as through new service offerings, pricing plans and enhanced handset options. The American economy in general, and customers specifically, are enjoying the benefits of this environment. Prices continue to drop. As CTIA described in a recent filing, the price per minute in the United States is the lowest of the 26 OECD countries measured. Further, the Herfindahl-Hirschman Index measurement for the U.S. wireless industry is also the lowest of the 26 countries. Output and investment remain strong even in the face of an economic downturn and high subscriber penetration. Players in the wireless industry strive to attract new customers while keeping current subscribers satisfied by offering quality service at affordable prices as well as meeting consumer demand for advanced wireless services. In short, all segments of the wireless industry – carriers, manufacturers and application developers – are aggressively competitive.

Thanks to intense competition and a relatively light-handed regulatory environment, wireless carriers in the U.S. are free to market services in increasingly large bundles and through other attractive and innovative service offerings. CTIA suggests the FCC can do more to further Congress' directive to ensure competition continues to thrive. As CTIA remarked in its comments in the preceding *CMRS Competition* dockets, "Commission action, or at times inaction, is needed on a number of issues in order to continue to promote the benefits of the competitive wireless industry for consumers and the U.S. economy." Driving "certainty" in these uncertain economic times will help to

unleash pent up capital investment that will fuel a sector of the economy well positioned to pull the U.S. out of this recession.

It is not hyperbole to say that the wireless industry will drive multiple segments of the U.S. economy going forward. The innovation that turned the mobile phone from a five-pound brick just ten years ago to the device that today is our phone, broadband access, camera, video camera, calendar, music player, game console, health monitor and more will drive this revolution. Whether through increased productivity that mobility brings to employers and employees, or the intersection of wireless with the environmental sector (in terms of smart grids), the transportation sector (through traffic management and fleet control), the health care sector (through telemedicine and mHealth), the homeland security sector (through mobile detection systems), the farming sector (through crop and irrigation management), or the telecommunications sector (through the 268,000 people employed directly and the 2.4 million people employed indirectly building and managing networks, developing phones or applications, or serving customers), all of these benefits flow because the industry members compete vigorously not only carrier to carrier, but also manufacturer to manufacturer, and application developer to developer.

Specifically, to foster continued growth and innovation the wireless industry is asking the Commission to dismiss the pending Skype Petition seeking imposition of Carterfone-type regulations on CMRS providers; to decline to impose net neutrality regulations with respect to content, application, or device access obligations on wireless broadband providers or to adopt a new non-discrimination principle; to ensure that the mobile wireless industry has access to additional licensed spectrum in order to facilitate

further deployment of bandwidth-intensive next generation voice, data, and video services; to establish reasonable time periods for resolution of tower siting applications before local zoning authorities; to renew the delegation of authority to the Chief of the Wireless Telecommunications Bureau to address applications referred to the Commission for review pursuant to the National Environmental Policy Act (“NEPA”); and to recognize the benefits that the U.S. wireless industry now brings to wireless consumers specifically, and to the American economy in general.

**TABLE OF CONTENTS**

**I. THE STRUCTURE OF THE U.S. WIRELESS INDUSTRY CONTINUES TO PROVIDE FOR VIBRANT COMPETITION WITH MINIMAL REGULATION..... 5**

**II. THE COMMISSION MUST NOT DEPART FROM ITS ACCEPTED MEASURE OF COMPETITION..... 8**

**III. THE WIRELESS INDUSTRY COMPETES VIGOROUSLY AT EVERY LEVEL FOR CUSTOMERS..... 11**

**A. INVESTMENT AND BUILD-OUT ..... 12**

**B. GROWTH OF MOBILE BROADBAND.....14**

**C. CALLING PLAN INNOVATIONS ..... 24**

**D. CONSUMER FRIENDLY PRACTICES.....29**

**E. HANDSET INNOVATIONS & CHOICE ..... 31**

**F. SOURCES OF CONSUMER INFORMATION ..... 35**

**G. APPLICATION DEVELOPMENT ..... 37**

**IV. CONSUMERS HAVE BENEFITED FROM THE PERFORMANCE OF THE WIRELESS INDUSTRY ..... 41**

**A. CONSUMPTION AND OUTPUT ..... 41**

**B. SOURCES OF DEMOGRAPHIC INFORMATION ..... 44**

**C. BROADBAND AVAILABILITY AND ADOPTION ..... 46**

**V. INTERNATIONAL COMPARISONS – THE U.S. WIRELESS MARKETPLACE LEADS THE WORLD IN EFFICIENCY, COMPETITION, AND VALUE FOR CONSUMERS..... 50**

**VI. CONCLUSION..... 55**

**ATTACHMENT A: CTIA *Ex Parte Communication*, The United States and World Wireless Markets (May 12, 2009)**

**ATTACHMENT B: CTIA *Ex Parte Communication*, Major Accomplishments of the U.S. Wireless Industry (January 23, 2008)**

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

In the Matter of	)	
	)	
Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993	)	WT Docket No. 09-66
	)	
Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services	)	

**COMMENTS OF CTIA-THE WIRELESS ASSOCIATION®**

CTIA – The Wireless Association® (“CTIA”)<sup>1</sup> hereby submits the following comments in response to the Federal Communications Commission’s (“Commission” or “FCC”) May 14, 2009 *Public Notice* requesting data and information regarding the state of competition in the Commercial Mobile Radio Service (“CMRS”) industry.<sup>2</sup> The Commission has long recognized that there is effective competition in the United States wireless marketplace.<sup>3</sup> Competition is flourishing among facilities-based CMRS carriers

---

<sup>1</sup> CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers Commercial Mobile Radio Service (“CMRS”) providers and manufacturers, including cellular, Advanced Wireless Service, broadband PCS, ESMR and 700 MHz licensees, as well as providers and manufacturers of wireless data services and products.

<sup>2</sup> WTB Seeks Comment on CMRS Market Competition, *Public Notice*, WT Docket No. 09-66, DA 09-1070 (May 14, 2009) (hereinafter, “Notice”).

<sup>3</sup> As CTIA detailed in its reply comments for the 13<sup>th</sup> Annual Report, it is unnecessary for the Commission to develop a novel method for defining effective competition in the wireless industry. The Commission’s methodology for evaluating the competitiveness of communications markets in other contexts provides ample evidence that the U.S. CMRS industry is indeed competitive by standards historically used by the Commission. *See* Reply Comments of CTIA – The Wireless Association, WT Docket No. 08-27 (filed Apr. 10, 2008); *see also* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market

and through intermodal competition with other providers. In the remarkably competitive wireless market, carriers differentiate themselves through network reliability and coverage as well as through new service offerings, pricing plans and enhanced handset options. The American economy in general, and customers specifically, are enjoying the benefits of this environment. Prices continue to drop. As CTIA described in a recent filing, the price per minute in the United States is the lowest of the 26 OECD countries measured. Further, the Herfindahl-Hirschman Index (“HHI”) measurement is also the lowest of the 26 countries. Output and investment remain strong even in the face of an economic downturn and high subscriber penetration. Players in the wireless industry strive to attract new customers while keeping current subscribers satisfied by offering quality service at affordable prices as well as meeting consumer demand for advanced wireless services. In short, all segments of the wireless industry – carriers, manufacturers and application developers – compete aggressively:

- As of December 31, 2008, there were more than 270.3 million wireless subscribers in the U.S.
- There are more than 150 separate wireless licensees, and 43 Mobile Virtual Network Operators (“MVNOs”).<sup>4</sup>

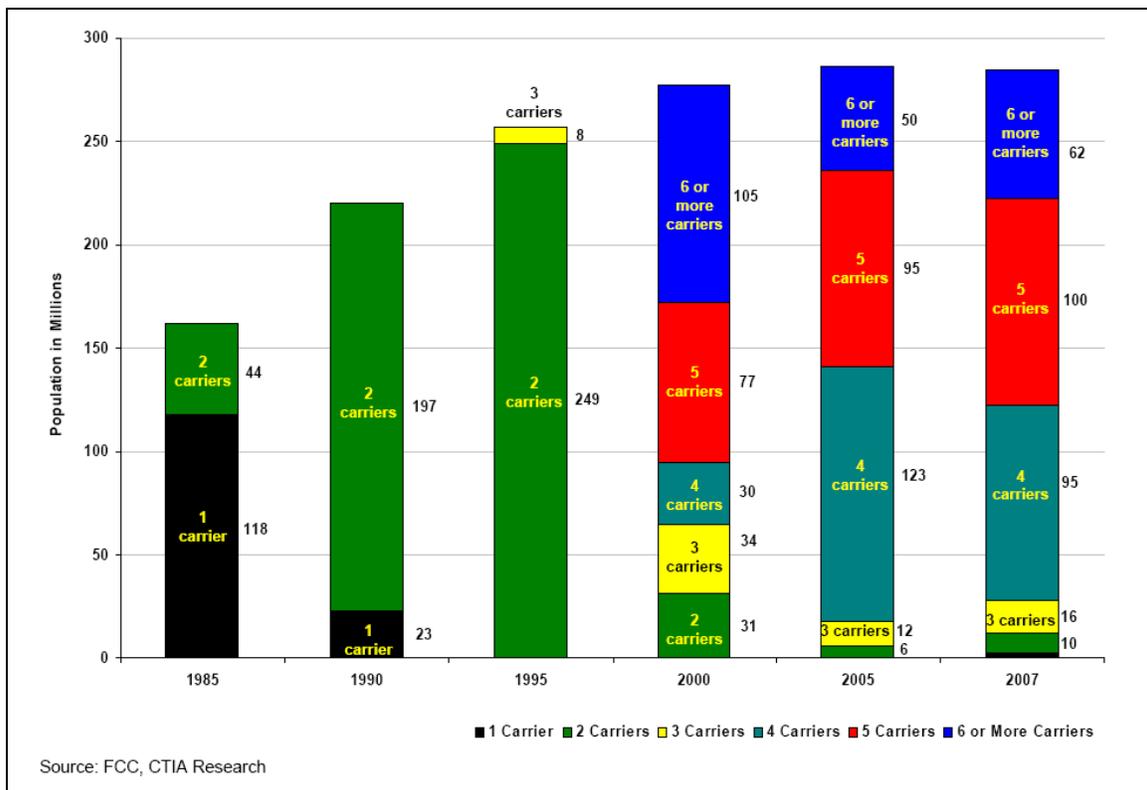
---

Conditions With Respect to Commercial Mobile Services, *Twelfth Report*, WT Docket No. 07-71, FCC 08-28, ¶1 (rel. Feb. 4, 2008) (“*Twelfth Report*”); *In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Eleventh Report*, WT Docket No. 06-17, FCC 06-142, ¶¶ 2-5 (rel. Sept. 29, 2006) (“*Eleventh Report*”); Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, WT Docket No. 08-27, DA 09-54, ¶ 1 (rel. Jan. 16, 2009) (“*Thirteenth Report*”).

<sup>4</sup> See CTIA’s Wireless Industry Indices: Semi-Annual Data Survey Results: A Comprehensive Report from CTIA Analyzing the U.S. Wireless Industry, Year-End 2008 Results (rel. May 26, 2009) (“CTIA’s Wireless Industry Indices Report”) at 4. See also Nick Jotischky, et al., “Global MVNO Operations - A study of current business models and emerging opportunities,” Informa Telecoms and Media, May 2009, *on-line summary available at* <http://www.telecomsmarketresearch.com/research/TMAAAQPN-WCIS-Insight--Global-MVNO-Operations---A-study-of-current-business-models-and-emerging->

- There are eight facilities-based carriers that serve more than one million subscribers in the U.S.
- More than 98 % of Americans have a choice of three or more wireless carriers;
  - 94 % have a choice of four or more;
  - 51 % have a choice of five or more wireless carriers.<sup>5</sup>

### Customer Choice Over Time



The success of the CMRS marketplace is due in large part to the FCC’s approach of free and open auctions, flexible license rules and deregulation. The Commission’s light regulatory touch allows licensees to manage the efficiency of their networks while maximizing technology and service advances. This regulatory policy has therefore produced a wireless market that is the envy of markets worldwide. The U.S. wireless

---

[opportunities.shtml](#) (last accessed May 29, 2009) (“The MVNO market remains competitive in USA with 43 such companies in operation” as of 3Q 2008).

<sup>5</sup> See Attachment B.

industry consistently demonstrates year after year that competition from multiple providers, not government intervention, is the best driver of innovation to meet the needs of consumers.<sup>6</sup> CTIA urges the Commission to maintain its posture of limited regulatory intervention and tread cautiously when considering proposals for regulation.<sup>7</sup> For the public interest to flourish, specifically in this economic environment, it is imperative that the Commission refrain from over-regulating an industry which continuously proves to be one of the most vibrant and dynamically competitive sectors of the U.S. economy.

Even with the promising state of the CMRS industry, however, there is more the FCC can do to further Congress's directive to promote competition. Existing and prospective mobile wireless providers must continually introduce new technologies and new service applications (such as mobile broadband Internet access, mobile TV, and other advanced services) in order to survive in the highly competitive, consumer-oriented marketplace. The Commission should commit to addressing issues that threaten to impede the sustained evolution of the wireless industry. Specifically, the Commission should dismiss the pending Skype Petition seeking imposition of Carterfone-type regulations on CMRS providers; decline to impose net neutrality regulations with respect to content, application, or device access obligations on wireless broadband providers or to adopt a new nondiscrimination principle; ensure that the mobile wireless industry has access to additional licensed spectrum in order to facilitate further deployment of bandwidth-intensive next generation voice, data, and video services; establish reasonable time periods for resolution of tower siting applications before local zoning authorities;

---

<sup>6</sup> As demonstrated in the metrics outlined in the *Thirteenth Report* at ¶ 2, and the extensive review of competitive-driven rivalry and consumer benefits appearing in Sections IV and VI of that report.

<sup>7</sup> See Statements of Commissioners Tate and McDowell accompanying the *Twelfth Report*.

renew the delegation of authority to the Chief of the Wireless Telecommunications Bureau to address applications referred to the Commission for review pursuant to the National Environmental Policy Act (“NEPA”); and recognize the benefits that the U.S. wireless industry now brings to wireless consumers specifically, and to the American economy in general.

**I. THE STRUCTURE OF THE U.S. WIRELESS INDUSTRY CONTINUES TO PROVIDE FOR VIBRANT COMPETITION WITH MINIMAL REGULATION.**

The rapid adoption of wireless telephony by Americans is one of the most remarkable trends in communications. Consumers have flocked to the vast array of choices that the U.S. wireless industry has delivered. There is no disputing the record of wireless competition, and the level of choice of carriers and handsets is astounding.

Concern over delivering value to customers continues to be a driver of wireless competition. Consumers can choose from among multiple carriers who vie head-to-head to win their business. Currently, there are four national facilities-based carriers, nine Tier 2 carriers operating regionally and approximately 140 Tier 3 carriers competing across the country. Importantly, no one carrier holds a dominant share of the wireless market, and as described below, the U.S. market is the most competitive of the 26 OECD countries tracked by Merrill Lynch.<sup>8</sup> As of the fourth quarter of 2008, the following were the market shares for the largest wireless providers:<sup>9</sup>

- AT&T Mobility – 77.0 million (28.5 %)
- Verizon Wireless – 72.2 million (26.7 %)
- Sprint – 49.2 million (18.2 %)
- T-Mobile USA – 32.8 million (12.1 %)

---

<sup>8</sup> Glen Campbell, et al., “Global Wireless Matrix: 1Q09, The Slowdown,” Bank of America / Merrill Lynch, Apr. 13, 2009, at 186 (“*BofA / Merrill Lynch*”); *see also* Attachment A.

<sup>9</sup> *Id.*

- Others – 39.2 million (14.5 %)

Even with the current number of contenders in the wireless space, there is opportunity for entry to the market, as exemplified by the 700 MHz, Advanced Wireless Services (“AWS-1”) and most recent Broadband PCS auctions. For example, new entrants resulting from the 700 MHz auction include EchoStar, Chevron, Cox Communications, and Vulcan Ventures, owned by Microsoft co-founder Paul Allen.<sup>10</sup> New entrants have gained access to the spectrum they need both through the auction process and through spectrum leasing or resale arrangements with existing facilities-based carriers.<sup>11</sup> Additionally, companies like T-Mobile, Leap Wireless, and Metro Communications acquired significant spectrum in the AWS-1 auction to serve areas that they previously did not have spectrum to serve. A number of the other incumbent companies that acquired spectrum in these auctions have already begun delivering service in their expanded service areas, winning record numbers of subscribers in these new markets.<sup>12</sup>

Beyond the facilities-based carriers, a dynamic resale market has emerged with the proliferation of MVNOs. Forty-three MVNOs compete to serve wireless consumers, offering personalized and differentiated products and services, including tailored handsets

---

<sup>10</sup> Auction of 700 MHz Band Licenses Closes, Public Notice, Attachment A (Mar. 20, 2008).

<sup>11</sup> See e.g., “Cox to Offer Wireless Service,” by Marguerite Reardon, CNET, Oct. 27, 2008, available at [http://news.cnet.com/8300-1035\\_3-94-1.html?keyword=LTE](http://news.cnet.com/8300-1035_3-94-1.html?keyword=LTE) (last accessed June 3, 2009)(“Cox isn't stopping with just reselling Sprint's wireless service. It also plans to build a 3G wireless network. And it will eventually build a 4G network using LTE technology. The company will use the nearly \$550 million worth of spectrum it bought in the Federal Communication Commission's AWS and the 700 MHz wireless auctions.”).

<sup>12</sup> See e.g., Roger Cheng, “3rd UPDATE: MetroPCS, Leap Wireless See Subscriber Growth,” Wall Street Journal, May 7, 2009, available at <http://online.wsj.com/article/BT-CO-20090507-723510.html>.

and applications.<sup>13</sup> These MVNOs target specific demographic and specialized interest groups by appealing to various lifestyles, including the young, the elderly, and differing ethnicities, by offering hip and trendy to user-friendly and affordable options.<sup>14</sup> For example, Boost Mobile and Virgin Mobile appeal to young urbanites and the “twenty-something” demographic, while Kajeet is focused on “tweens” and Jitterbug by Greatcall, Inc. serves the needs of senior citizens.<sup>15</sup> Two nationwide MVNOs, TracFone and Virgin Mobile USA, serve roughly 16.6 million subscribers by offering their customers affordable handsets and (primarily) pre-paid plans.<sup>16</sup> Just as among the facilities-based licensees, both entry and exit have occurred in the U.S. MVNO community, as the competitive intensity of the wireless marketplace has compelled service providers to modify their offerings or combine.<sup>17</sup> Further evidence of the intensely competitive nature

---

<sup>13</sup> See generally, Nick Jotischky, et al., “Global MVNO Operations - A study of current business models and emerging opportunities,” Informa Telecoms and Media, May 2009, *on-line summary available at* <http://www.telecomsmarketresearch.com/research/TMAAAQPN-WCIS-Insight--Global-MVNO-Operations---A-study-of-current-business-models-and-emerging-opportunities.shtml>.

<sup>14</sup> See CNET’s Quick Guide to MVNO Carriers, Nationwide MVNOs, *available at* [http://reviews.cnet.com/4520-3504\\_7-6780359-3.html?tag=lnav](http://reviews.cnet.com/4520-3504_7-6780359-3.html?tag=lnav) (last accessed May 29, 2009).

<sup>15</sup> See e.g., “Why kajeet,” at <http://www.kajeet.com/4u/kajeet-for-parents.html> (last accessed June 2, 2009); see also “About Us,” at <http://www.jitterbug.com/AboutUs/> (last accessed June 2, 2009).

<sup>16</sup> See “Virgin Mobile USA Announces Selected Q4 and 2008 Subscriber Information,” Press Release, rel. Jan. 7, 2009, *available at* <http://www.reuters.com/article/pressRelease/idUS135042+07-Jan-2009+PRN20090107> (last accessed May 26, 2009), and America Movil’s Fourth Quarter of 2008 Financial and Operating Report, rel. Feb. 8, 2009, *available at* [http://www.americamovil.com/docs/reportes/eng/2008\\_4.pdf](http://www.americamovil.com/docs/reportes/eng/2008_4.pdf) (last accessed May 26, 2009).

<sup>17</sup> See Tara Seals “Virgin Mobile to Acquire Helio,” xchange, June 28, 2008, (“Call it a tale of two business models: Successful MVNO Virgin Mobile USA Inc. will take over struggling MVNO Helio”) *available at* <http://www.xchangemag.com/hotnews/mvno->

of the wireless industry overall are the many wireless advertisements appearing in the media appealing for consumers' attention. The competitiveness of the wireless marketplace is further underscored by the many exhibitors who appeared at International CTIA WIRELESS 2009® to showcase devices, infrastructure, enabling technologies, and applications.<sup>18</sup>

## **II. THE COMMISSION MUST NOT DEPART FROM ITS ACCEPTED MEASURE OF COMPETITION.**

Recognizing the incredibly successful environment for innovation and consumer benefit that Congress and the Commission have created for wireless services, CTIA urges the Commission to retain its results-tested method for determining CMRS competition. The Commission should continue to analyze the market for CMRS in the manner that has ensured consumers benefit, consisting of the last thirteen consecutive dockets, which repeatedly conclude that the mobile wireless industry is robustly competitive in both rural and urban markets.<sup>19</sup>

In this economy, the Commission should be doing everything in its power to facilitate profitability. Profitability in the intensely-competitive wireless industry is what government should strive for, not disdain. Profitability drives the exact results that the American Recovery and Reinvestment Act seeks to promote – job growth, company growth, reinvestment through capital expenditures, the payment of dividends, and more. Profitability in an industry as competitive as wireless means that companies can get

---

[virgin-mobile-to-acquire-helio.html](http://web.virginmobileusa.com/helio) (last accessed May 26, 2009) and <http://web.virginmobileusa.com/helio>.

<sup>18</sup> See Post-Show Highlights and exhibitor news *available at* <http://daily.ctia.org/wireless2009/> (last accessed May 26, 2009).

<sup>19</sup> See *Thirteenth Report*, COMMENTS OF CTIA-THE WIRELESS ASSOCIATION®, WT Docket No. 08-27 at 3-4 (March 26, 2008) (“*CTIA 2008 Competition Report Comments*”).

access to capital whether to use for a network upgrade or buildout, spectrum purchases, advertising, research and development, or other competitive purposes.

CTIA appreciates this opportunity to share with the Commission its observations regarding the wireless marketplace, in order to provide the appropriate context within which to analyze the competitive performance of the wireless industry as a whole. As requested in the Notice, these Comments reference sources of information that will help both the Commission and Congress understand the wireless industry's current state of competition.<sup>20</sup>

The Notice asks whether the Commission should continue to consider a range of indicators in making a determination whether “effective competition is prevalent” or should adopt a “specific” definition similar to that in 47 U.S.C. Section 623(1)(I). CTIA urges the Commission to consider a range of indicators and its own prior CMRS competition report record, rather than construct an inflexible set of benchmarks. In fact, as the Notice observes, a number of alternatives exist, including that enunciated in the *1995 Foreign Carrier Entry Order*, in which the Commission stated “[e]ffective competition means competition among service providers in a market that benefits consumers by expanding service offerings, promoting development of innovative technology, and lowering prices.”<sup>21</sup> The wireless industry is the exact embodiment of this definition. This conforms with Professor Bork’s observation that “[w]hen we talk of the desirability of competition we ordinarily have in mind such things as low prices,

---

<sup>20</sup> CTIA does not itself possess non-public provider-specific or granular market-level information (e.g., provider-specific marketing and build-out information, or non-aggregated penetration and usage data). Therefore, these comments note other sources of data to help the Commission in its analysis.

<sup>21</sup> Notice at 3 (citation omitted).

innovation, choice among differing products – all things we think of as being good for consumers.”<sup>22</sup>

It should be kept in mind that, as Professor Bork also observed, “the economic model of perfect competition was never intended as a policy prescription, and it is a basic, though extremely common, error to suppose that markets do not work efficiently if they depart from the model.”<sup>23</sup> Too rigid a definition of effective competition may risk invoking regulatory intervention when it is not required. An “effectively competitive” market need not be a model of “perfect competition” – and, to paraphrase Voltaire, we should not make the perfect be the enemy of the good. In fact, the wireless marketplace in the U.S. is an exemplary model of both good *and* effective competition, in which multiple providers compete in offering a range of products and services, innovating in network technologies, handsets and applications, with multiple sources of information for consumers. Wireless providers are manifestly increasing output, competing for both new and existing consumers, and in doing so, offering more valuable packages of products and services to consumers at affordable rates. Both entry and exit are occurring in the wireless industry as well – a sure sign of a competitive market.

The proposals that the Bureau suggests go beyond these indicia and “examine profitability measures,” with the assumption that such levels equate to the degree to which there is (or is not) “effective competition,” and its avowed intention to “seek to determine whether wireless telecommunications providers are earning ‘abnormal profits,’ defined as revenue minus all costs, including all opportunity costs.”<sup>24</sup> These proposals

---

<sup>22</sup> ROBERT H. BORK, *THE ANTITRUST PARADOX* 61 (Basic Books 1978).

<sup>23</sup> *Id.* at 60.

<sup>24</sup> Notice at 12.

are a departure from, and inconsistent with, the market-driven approach that has benefited consumers since Congress passed the Omnibus Budget Reconciliation Act of 1993. As discussed above, in these economic times a profitable sector is the anomaly, and should be both protected and encouraged – particularly when it also is serving the public interest and satisfying customers. These benefits include the rapid build-out of wireless service nationwide, on-going price reductions, and the continuing technological innovations that have promoted economic growth and opportunity in the United States. The proposal outlined in the notice more closely resembles the presumptions underlying the regulatory approach taken to a rate-of-return regulated monopoly than one appropriate to the dynamic and competitive U.S. wireless industry – an industry that is a model for the world. Such an approach would be a step backward and would move away from a flexible and consumer focused approach historically used by the Commission.

In fact, the Commission’s historical “structure, conduct, performance” approach of assessing the competitive state of the wireless industry has appropriately considered both behavior and output as indicia of the performance of the wireless industry. As the following indicates, these metrics continue to demonstrate that the wireless industry in the United States is vibrantly competitive.

### **III. THE WIRELESS INDUSTRY COMPETES VIGOROUSLY AT EVERY LEVEL FOR CUSTOMERS.**

Fierce competition occurs at every level of the wireless industry. Service offerings, quality of service and customer care are just a few of the ways that wireless providers distinguish themselves in the market to win new consumers and meet existing customers emerging needs. Today’s wireless consumers have a multitude of facilities- and non-facilities-based service providers to choose from, with each provider offering a broad selection of calling plans, service options and tailored handsets. In the wireless

industry, players must act and react with the latest and greatest data offerings, multiple options for handsets and more creative packages of minutes and other services and features.

Individual wireless providers' websites show consumers the range of service options offered by the individual providers, including different usage volumes and the variety of service features available. Third-party tools also are available to identify for consumers the wireless providers that are offering services in markets around the country, and the multiple service plans available from those service providers.<sup>25</sup> Consumers can use these sites to compare plans and choose the most suitable one based on cost, features, and fit with their calling patterns. Websites like [www.mountainwireless.com](http://www.mountainwireless.com) also identify and provide capsule reviews on a state-by-state basis and links to wireless providers' websites.

#### **A. Investment and Build-Out**

At a time when the U.S. economy is struggling through a recession, the wireless industry continues to commit substantial resources to meet evolving consumer demands. The wireless industry's astounding growth and improved quality of service would not be possible without the ongoing investments providers make in innovative technology and infrastructure. This investment in the evolution of the networks is what fuels the development and evolution of handset and applications. Further, since network reliability and reach are pivotal to the ability to compete to serve customers, wireless carriers large and small collectively invest billions of dollars each year to improve the coverage, quality

---

<sup>25</sup> See, e.g., My Rate Plan, <http://www.MyRatePlan.org> (last accessed May 26, 2009)

and capacity delivered by their networks.<sup>26</sup> In 2008, U.S. wireless carriers' reported incremental capital expenditures in their operational systems amounted to \$20.17 billion, resulting in a total cumulative capital expenditure in operational systems of more than \$90 billion over the last four years (not including the billions of dollars paid to the federal treasury for spectrum, or investment in pre-operational systems).<sup>27</sup> In addition to CTIA's measurement of this investment, the U.S. Census also tracks wireless investment through its Annual Capital Expenditures Survey ("ACES"). The Census data provides investment broken-out between equipment and structures, as well as between new and used structures and equipment.<sup>28</sup> The ACES includes data on a variety of industries including

---

<sup>26</sup> See e.g., "Cellular One Announces 35th New Cell Site in Montana," Press Release, Mar. 18, 2009, *available at* <http://www.cellonation.com/media/releases/Cellular%20One%20Announces%20New%20Cell%20Site%20in%20Condon%20Montana.pdf> (last accessed June 2, 2009); see also "Tower Releases," Appalachian Wireless, *available at* <http://www.appalachianwireless.com/?page=towers> (releases noting network upgrades in Eastern Kentucky, Virginia and West Virginia) (last accessed June 2, 2009); and see "Wireless – New Cell Site" page of Union Wireless, *available at* <http://www.unionwireless.com/Cellular.aspx?page=Cellular&subpage=New-Cell-Site> (last accessed June 2, 2009)(listing new cell sites deployed in 2008 and 2009, with clickable maps to allow viewing of cell sites) (last accessed June 2, 2009); see also "Leap Expands Cricket Network in Texas; Offering Texas-Sized Unlimited Plans to Subscribers; Cricket Brings Variety of Unlimited Wireless Services to Beaumont, Brownsville, Corpus Christi, Laredo and McAllen, Expanding Its Texas Footprint to More Than 25,000 Square Miles, Press Release, May 6, 2009, *available at* <http://phx.corporate-ir.net/phoenix.zhtml?c=191722&p=irol-newsArticle&ID=1139647&highlight=>; see also "SouthernLINC Wireless Adds New Tower Sites in Fourth Quarter" Press Release, Dec. 16, 2008, *available at* [http://www.southernlinc.com/pressroom/press\\_Q408towers.asp](http://www.southernlinc.com/pressroom/press_Q408towers.asp) (new sites enhance cellular coverage in rural areas of Alabama and Georgia); and see "SouthernLINC Wireless Adds Eight New Tower Sites in the Third Quarter," Press Release, Oct. 27, 2008, *available at* [http://www.southernlinc.com/pressroom/press\\_towers.asp](http://www.southernlinc.com/pressroom/press_towers.asp) (the deployment of new cell sites improves "capacity and coverage" and "will help keep customers better connected.").

<sup>27</sup> See CTIA's Wireless Industry Indices Report at 124.

<sup>28</sup> U.S. Census Bureau, 2007 Annual Capital Expenditures Survey, rel. Jan. 22, 2009, Table 4a, *available at* <http://www.census.gov/csd/ace/xls/2007/Full%20Report.htm>.

wireless telecommunications. As part of its “Capital Expenditures for Structures and Equipment for Companies With Employees by Industry for 2007,” released January 22, 2009, ACES reported that wireless carriers spent approximately \$22.23 billion in 2007. Of that \$22.23 billion more than \$7.25 billion was spent on structures and more than \$14.97 billion was spent on equipment.<sup>29</sup>

## **B. Growth of Mobile Broadband.**

The growth of wireless high-speed Internet access and broadband offerings has been explosive. To accommodate this growing area of wireless use, wireless providers are actively engaged in upgrading their existing networks and building-out spectrum acquired at recent major auctions, including the 700 MHz and AWS-1 auctions.<sup>30</sup>

---

<sup>29</sup> *Id.*

<sup>30</sup> *See, e.g.,* “AT&T Plans Major Expansion of 3G Wireless Broadband Service in 2008,” Press Release, Feb. 6, 2008, available at <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=25146> (noting AT&T’s move to HSPA+ and LTE for 4G broadband services); *see also* “T-Mobile USA Begins Commercial 3G Rollout,” Press Release, May 5, 2008, available at [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20080505&title=T-Mobile%20USA%20Begins%20Commercial%203G%20Network%20Rollout](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20080505&title=T-Mobile%20USA%20Begins%20Commercial%203G%20Network%20Rollout) (announcing T-Mobile’s launch of 3G service in New York City and plans to rollout nationwide); *see also* “T-Mobile USA Further Expands Commercial 3G Network Availability in 2008; Washington, D.C., and Surrounding Areas to Launch in November; More than 120 Major Cities with T-Mobile 3G Coverage by End of Year,” Press Release, Oct 17, 2008, available at [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20081017&title=T-Mobile%20USA%20Further%20Expands%20Commercial%203G%20Network%20Availability%20in%202008](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20081017&title=T-Mobile%20USA%20Further%20Expands%20Commercial%203G%20Network%20Availability%20in%202008); *see also* Leap Wireless 2Q08 Earnings Conference Call, Aug. 5, 2008 at [http://library.corporate-ir.net/library/95/955/95536/items/303211/LEAP2Q0%20EarningsPresentation\\_FINAL\\_080508.pdf](http://library.corporate-ir.net/library/95/955/95536/items/303211/LEAP2Q0%20EarningsPresentation_FINAL_080508.pdf) (presentation notes markets with ~8 million “Advanced Wireless Service” Pops have been launched as of 2Q 2008); *and see* “U.S. Cellular Launches Mobile Broadband,” Press Release, Oct. 28, 2008, available at [http://www.uscc.com/uscellular/SilverStream/Pages/x\\_page.html?p=a\\_press081028](http://www.uscc.com/uscellular/SilverStream/Pages/x_page.html?p=a_press081028) (EVDO service “launched in Chicago, Rockford, Ill., northwestern Indiana, Tulsa, Okla., Des Moines, Iowa and southern Wisconsin” with more markets to follow in 2009).

Licensees are eager to deploy the next generation of broadband-capable technologies that can support the latest applications and swiftly transmit large music, image and video files. As Nex-Tech Wireless, a provider of wireless solutions in 33 counties in central and western Kansas (as well as in eastern Colorado) declared last year: “The Alcatel-Lucent Rev. A platform has enabled Nex-Tech Wireless to provide customers with faster uploads and downloads when connecting to the internet, as well as enable the introduction of mobile high-speed data services including mobile video telephony, high-quality music and other multimedia applications.”<sup>31</sup> As Nex-Tech CEO and General Manager Johnie Johnson observed: “The demand for wireless broadband services continues to grow as users become more techno savvy and mobile. . . . The product has been a huge success in allowing us to differentiate ourselves in a fiercely competitive marketplace.”<sup>32</sup>

Carriers across the country are deploying mobile data services and broadband technologies outside of major metropolitan areas, including rural markets, to bring new technologies and faster speeds to consumers.<sup>33</sup> Companies like Alaska Communications

---

<sup>31</sup> “Nex-Tech Wireless Broadband Services Continue to Exceed Customer Expectations,” Press Release, Sept. 2008 (noting impact of deploying EVDO in central and western Kansas and eastern Colorado), available at <http://www.nex-techwireless.com/news.aspx> (last accessed June 1, 2009).

<sup>32</sup> *Id.*

<sup>33</sup> *See e.g.*, “Stelera Wireless Launches Inaugural Wireless Network,” Press Release, rel. Feb. 8, 2008, at <http://www.stelera.com/Portals/0/docs/2.08.08%20Stelera%20Wireless%20Launches%20Inaugural%20Wireless%20Network,%20Providing%20High%20Speed%20Internet%20in%20Rural%20America.pdf> (announcing rural wireless broadband service on AWS-1 spectrum).

Systems,<sup>34</sup> Bluegrass Cellular,<sup>35</sup> Cellular South,<sup>36</sup> General Communication Inc. (through its Alaska DigiTel and Alaska Wireless brand),<sup>37</sup> Nex-Tech Wireless,<sup>38</sup> nTelos,<sup>39</sup> and

---

<sup>34</sup> See “ACS Launches Rev A Technology: Provides Fastest Mobile Data Speeds Available in the Nation,” Press release, July 31, 2008, *available at* <http://www.acsalaska.com/assets/releases/2008-07-31.pdf> (“Rev A is the latest evolution in Mobile Internet. It will enable ACS wireless customers to move data--everything from pictures and spreadsheets to movies and music--at the fastest mobile speeds available in the United States. Rev A is the next step in ACS’ commitment to provide customers with the fastest relative speeds and most reliable wireless broadband service they have come to expect,” said Connie Dorman, ACS Director of Marketing.”).

<sup>35</sup> See e.g., “Bluegrass Cellular Announces New 3G Coverage In Cumberland County,” Press Release, Apr. 22 2009, *available at* [http://www.bluegrasscellular.com/about/news/bluegrass\\_cellular\\_announces\\_enhanced\\_voice\\_and\\_3g\\_coverage\\_in\\_grayson\\_coun](http://www.bluegrasscellular.com/about/news/bluegrass_cellular_announces_enhanced_voice_and_3g_coverage_in_grayson_coun) (“Bluegrass Cellular recently added 3G high speed data service coverage to Burkesville, KY in Cumberland County. The new site will improve 3G data service in the Burkesville area. The site adds high speed wireless data access to the existing 3G, EV-DO high speed data network that Bluegrass Cellular has in place across its 38 county coverage area.” and “3G high speed data access allows faster transmissions of pictures, web browsing, email access and other types of data using handheld devices and wireless air cards.”); *see also* Multiple releases announcing the deployment of 3G high-speed facilities across Bluegrass Cellular’s coverage area, *available at* <http://www.bluegrasscellular.com/about/news> (last accessed June 2, 2009).

<sup>36</sup> See “Cellular South to Expand Availability of Advanced 3G Mobile Broadband Services Throughout Much of Mississippi; Next Generation Wireless Gives Customers Faster Internet Connections, New High-Speed Data Services and Multimedia Applications,” Cellular South Press Release, March 10, 2009, *available at* <https://www.cellularsouth.com/news/2009/20090310.html> (noting plan to introduce 3G service in 78 cities in the second and third quarters of 2009).

<sup>37</sup> See “GCI Achieves Wireless Milestone with 100,000 Customers,” Press Release, Feb. 3, 2009, *available at* <http://www.gci.com/investors/wirelessmilestoneannouncement.pdf> (noting launch of EVDO Rev. A cards in the fourth quarter of 2008 growing their high speed data customer base).

<sup>38</sup> See “With iConnect data services from Nex-Tech Wireless, you can use your wireless phone for more than just phone calls,” Nex-Tech Wireless brochure, *available at* <http://www.nex-techwireless.com/applicationdata/1/Documents/iconnect.pdf> (“Nex-Tech Wireless utilizes a cutting-edge high-speed broadband network for data applications. With this network, customers can send and receive data via high-speed connection from their wireless device.”).

<sup>39</sup> See “nTelos Holdings Corp. Reports Third Quarter 2008 Operating Results,” Press Release, Nov. 4, 2008, *available at* <http://ir.ntelos.com/releasedetail.cfm?ReleaseID=345339> (nTelos has upgraded 46 % of

Stelera Wireless<sup>40</sup> have been deploying high-speed wireless broadband networks and solutions for customers in markets across the country. The following bulleted items provide details of some of CTIA's members' current high-speed wireless data service offerings and some recently-announced plans for investment in next-generation wireless infrastructure.

### **Selected Current High-Speed Offerings:**

- **AT&T Mobility:** *BroadbandConnect Network:* Available in most major metropolitan areas, the latest 3G devices provide typical download throughput of:
  - 700kbps to 1.7 Mbps for downloads
  - 500 kbps to 1.2 Mbps for upload*Edge Network:* AT&T's EDGE Network spans more than 17,000 cities and almost 40,000 miles of U.S. highways. EDGE provides typical download speeds of 70-135 kbps.<sup>41</sup>
- **Bluegrass Cellular:** Provides high-speed Evolution-Data Optimized ("EV-DO") Rev. A broadband service in select markets in its rural Kentucky coverage area.
- **Carolina West Wireless:** Currently provides 3G EV-DO service to 85% of its customers in cellular markets and plans deploy 3G EV-DO service in its PCS markets this summer.

---

its network to EVDO Rev. A, projects upgrading 70 % of cell sites by year-end 2008); *see also* "NTELOS Holdings Corp. Reports First Quarter 2009 Operating Results," Press Release, April 30, 2009, *available at* <http://www.ir-site.com/images/library/ntelos/04-30-09.html> ("EV-DO Upgrade Progress: The Company upgraded an additional 48 cell sites to the EV-DO Rev. A platform during the first quarter, adding service to the Harrisonburg, Virginia market. In total, 881 sites have been upgraded to EV-DO. The Company has approximately 160 sites in the Richmond/Norfolk, Virginia markets scheduled for upgrade in second quarter 2009, which would complete the final phase of the planned EV-DO upgrade.").

<sup>40</sup> *See* "Stelera Wireless Launches Wireless Broadband Network; Cutting Edge Internet Services Launched In South Texas," Press Release, Mar. 23, 2009, *available at* <http://dev.stelerawireless.com/Portals/0/docs/National%20STX%20Press%20Release.doc> ("Stelera is the first company in the nation to introduce its 3.5-generation cellular technology called HSPA (High Speed Packet Access)," said Ed Evans, CEO of Stelera Wireless. "We are unique in that we are deploying a wireless network that is purely focused on broadband services. Plenty of carriers are offering voice services and some data services, but we have built a network optimized for the broadband experience.").

<sup>41</sup> *See* AT&T Wireless Broadband Coverage & Speeds, *available at* <http://www.wireless.att.com/businesscenter/solutions/wireless-laptop/connections-coverage.jsp> (last accessed May 28, 2009).

- **Leap Wireless:** Via its Cricket operations, is “positioning itself to compete with home Internet providers by offering prepaid broadband over 3G networks. The \$40 monthly plan lets Windows PCs surf over the carrier's EV-DO Rev. A with a 5GB per month cap.”<sup>42</sup>
- **Nex-Tech Wireless:** Has deployed 3G service to 82% of its service area, providing broadband access on wireless devices and on computers through an aircard.
- **Sprint:** EV-DO Rev 0 Sprint Mobile Broadband devices operate at average download speed ranges from 400-700 Kbps with peak rates up to 2.4 Mbps, and at average upload speeds of 40-70 Kbps with peak rates up to 144 Kbps in Mobile Broadband (“EV-DO Rev 0”) coverage areas. Sprint Mobile Broadband devices that are EV-DO Rev A-capable will operate at average download speed ranges from 600 Kbps - 1.4 Mbps with peak rates up to 3.1 Mbps, and at average upload speeds of 350-500 Kbps with peak rates up to 1.8 Mbps in Mobile Broadband (“EV-DO Rev A”) coverage areas.<sup>43</sup>
- **T-Mobile USA:** T-Mobile traditionally offered mobile Internet access through General Packet Radio Service (“GPRS”), Enhanced Data for GSM Evolution (“EDGE”), and Wi-Fi Internet connectivity,<sup>44</sup> but has been deploying an HSPA network that was available to consumers in more than 130 cities by year-end 2008.<sup>45</sup>

---

<sup>42</sup> See “Leap Wireless Reveals Ambitious Plans: The regional carrier is seeking to double its coverage by 2010 and is pushing new features like prepaid wireless broadband,” by Marin Perez, InformationWeek, Sept. 15, 2008, *available at* <http://www.informationweek.com/news/mobility/business/showArticle.jhtml?articleID=210601722> (last accessed June 3, 2009); *see also* “Leap targets broadband market,” Telegeography’s CommsUpdate, Sept. 16, 2008, *available at* [http://www.telegeography.com/cu/article.php?article\\_id=25090&email=html](http://www.telegeography.com/cu/article.php?article_id=25090&email=html) (last accessed June 2, 2009)(“The service, which will use Leap’s EV-DO Rev A high speed data network, will allow Windows-based PCs and portable devices to connect via a USB modem. It is being marketed as an alternative to wired broadband systems such as DSL and cable.”).

<sup>43</sup> See Sprint Mobile Broadband Network, *available at* [www.nextel.com/en/coverage/support/mobile\\_broadband\\_network\\_popup.shtml](http://www.nextel.com/en/coverage/support/mobile_broadband_network_popup.shtml) (last accessed May 28, 2009).

<sup>44</sup> See T-Mobile Internet (GPRS/EDGE/Wi-Fi), *available at* [http://www.t-mobile.com/Business/Information.aspx?tp=Bus\\_Tab\\_DataSolutions&tsp=Bus\\_Sub\\_MobileInternet](http://www.t-mobile.com/Business/Information.aspx?tp=Bus_Tab_DataSolutions&tsp=Bus_Sub_MobileInternet) (last accessed May 29, 2009).

<sup>45</sup> See “T-Mobile USA Launches 3G webConnect USB Laptop Stick,” Press Release, rel. Mar. 25, 2009, *available at* [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20090325&title=T-Mobile%20USA%20Launches%203G%20webConnect%20USB%20Laptop%20Stick](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20090325&title=T-Mobile%20USA%20Launches%203G%20webConnect%20USB%20Laptop%20Stick) (last accessed June 1, 2009).

- **Verizon Wireless:** Growing high-speed wireless network covers 259 major metropolitan areas and 250 primary airports in the United States. Mobile Broadband EV-DO network from Verizon Wireless has been enhanced with EV-DO Rev. A to deliver download speed of 600 Kbps to 1.4 Mbps and upload speed of 500-800 Kbps. Outside of mobile broadband coverage area, speeds of 60-80 Kbps.<sup>46</sup>

Over the past few months, a number of wireless companies have provided more information on their plans for expanding and upgrading their networks with new technologies and capabilities. For example, national, regional, and local providers have discussed their plans for expanding their high-speed network coverage, including AT&T's 3G High Speed Packet Access ("HSPA") and Long-Term Evolution ("LTE") plans, Verizon's LTE deployment plans, Sprint's 4G deployment plans, and T-Mobile's 3G coverage target of 200 million pops by year-end 2009.

#### **Next Generation Network Plans:**

- **AT&T Mobility** has announced over the past several months its plans to upgrade its 3G network, including "nearly doubling the wireless spectrum dedicated to 3G in most metropolitan areas to deliver stronger in-building reception and more overall network capacity," the deployment of HSPA 7.2 to boost speeds prior to trialing LTE in 2010 and beginning LTE deployment in 2011.<sup>47</sup>
- **MetroPCS** followed up on its announcement last year that it would adopt LTE as its high-speed technology solution, by announcing earlier this year that it plans to deploy LTE in the second half of 2010.<sup>48</sup>

---

<sup>46</sup> See Verizon Wireless Broadband Coverage & Speeds, available at <http://b2b.vzw.com/broadband/coveragearea.html> (last accessed May 28, 2009).

<sup>47</sup> See "AT&T to Deliver 3G Mobile Broadband Speed Boost; Initiatives will Deliver Faster Speeds, Enhancements to Mobile Broadband Performance, Availability," Press Release, rel. May 27, 2009, available at <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=26835> (last accessed May 29, 2009). See also "AT&T 3G network going 850Mhz nationwide by 2010," by Will Park, Into Mobile News, Feb. 24, 2009, available at <http://www.intomobile.com/2009/02/24/att-3g-network-going-850mhz-nationwide-by-2010.html>.

<sup>48</sup> See "MetroPCS to launch LTE in 2010," by Phil Goldstein, Fierce Wireless, Mar. 4, 2009, available at <http://www.fiercewireless.com/story/metropcs-seeks-launch-lte-2010/2009-03-04>; see also "MetroPCS to lean on ZTE for its LTE phones," by Phil

- **Sprint** announced earlier this year its plans for deployment of its new high-speed wireless service in Atlanta, Charlotte, Chicago, Dallas, Ft. Worth, Honolulu, Las Vegas, Philadelphia, Portland and Seattle in 2009 and Boston, Houston, New York, San Francisco and Washington, D.C. in 2010.<sup>49</sup>
- **Stelera Wireless** recently selected a wireless backhaul solution provider to enable it to move forward with its plan to bring “advanced high-speed internet access services to rural America using HSPA (high-speed packet access) technology. The company holds licenses for spectrum covering a population of 6 million people, in ten states and over 300 cities. Stelera plans to offer service to 55 of these cities by the end of 2009, bridging the digital divide to the benefit of businesses and homes throughout rural America, with additional build out of its network in 2010.”<sup>50</sup>
- **T-Mobile** announced earlier this year its plans to double its high-speed wireless network coverage to reach a potential 200 million wireless users by the end of 2009 as it looks to catch up with rival services. The 3G network expansion will cover another 100 cities.<sup>51</sup>
- **U.S. Cellular** announced that its EV-DO upgrade will reach 60% of its cell sites by the end of 2009, covering about 75% of their post-paid subscribers. U.S. Cellular has expanded its 3G coverage “into parts of Chicago, Iowa, Oklahoma and Wisconsin, and plans to continue the expansion into the rest of Iowa, Tennessee and North Carolina in 2009.”<sup>52</sup>

---

Goldstein, Fierce Wireless, Apr. 28, 2009, *available at* <http://www.fiercewireless.com/story/metropcs-picks-zte-its-lte-phones/2009-04-28>.

<sup>49</sup> See “Sprint Extends 4G Leadership by Announcing Next U.S. Markets to Experience Sprint 4G; Atlanta, Charlotte, Chicago, Dallas, Ft. Worth, Honolulu, Las Vegas, Philadelphia, Portland and Seattle among Cities to Experience Turbo-Charged Mobile Broadband in 2009,” Press Release, Mar. 25, 2009, *available at* [http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle\\_newsroom&ID=1269807&highlight=](http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle_newsroom&ID=1269807&highlight=).

<sup>50</sup> See “Stelera Selects Ceragon IP Solutions to Backhaul Wireless Broadband in Rural America,” PR Newswire, May 4, 2009, *available at* [http://www.breitbart.com/article.php?id=prnw.20090504.UKSU004B&show\\_article=1](http://www.breitbart.com/article.php?id=prnw.20090504.UKSU004B&show_article=1).

<sup>51</sup> See “T-Mobile USA unveils high-speed plans, new device,” *Reuters*, March 25, 2009, *available at* <http://www.reuters.com/article/ousivMolt/idUSTRE52O0WV20090325>.

<sup>52</sup> See “US Cellular accelerates EV-DO push, weighing LTE trial,” by Sarah Reedy, *Telephony Online*, May 6, 2009, *available at* <http://telephonyonline.com/wireless/news/us-cellular-evdo-upgrade-0506/> (noting the doubling of EVDO cell sites from 23% to 60% from year-end 2008 to year-end 2009 will

- **Verizon Wireless** has, over the past few months, provided details of its LTE plans, including that there would be pre-commercial LTE network tests in 2009, and that the “network would launch commercially in 20-30 markets during ‘the second half of 2010,’ with ‘nationwide buildout complete in late 2013 to early 2014.’<sup>53</sup>

In the process of seeking to upgrade their networks while minimizing the impact on the environment, wireless providers are increasingly sharing facilities, deploying stealth towers and seeking alternative siting options, such as pole attachments, buildings, and rooftops.<sup>54</sup> As of December 2008, there were more than 242,000 cell sites in the United States. That averages one cell site for every 1,116 estimated wireless subscribers in the United States. Consider the following graph, which shows the growth in cell sites actively serving wireless subscribers.

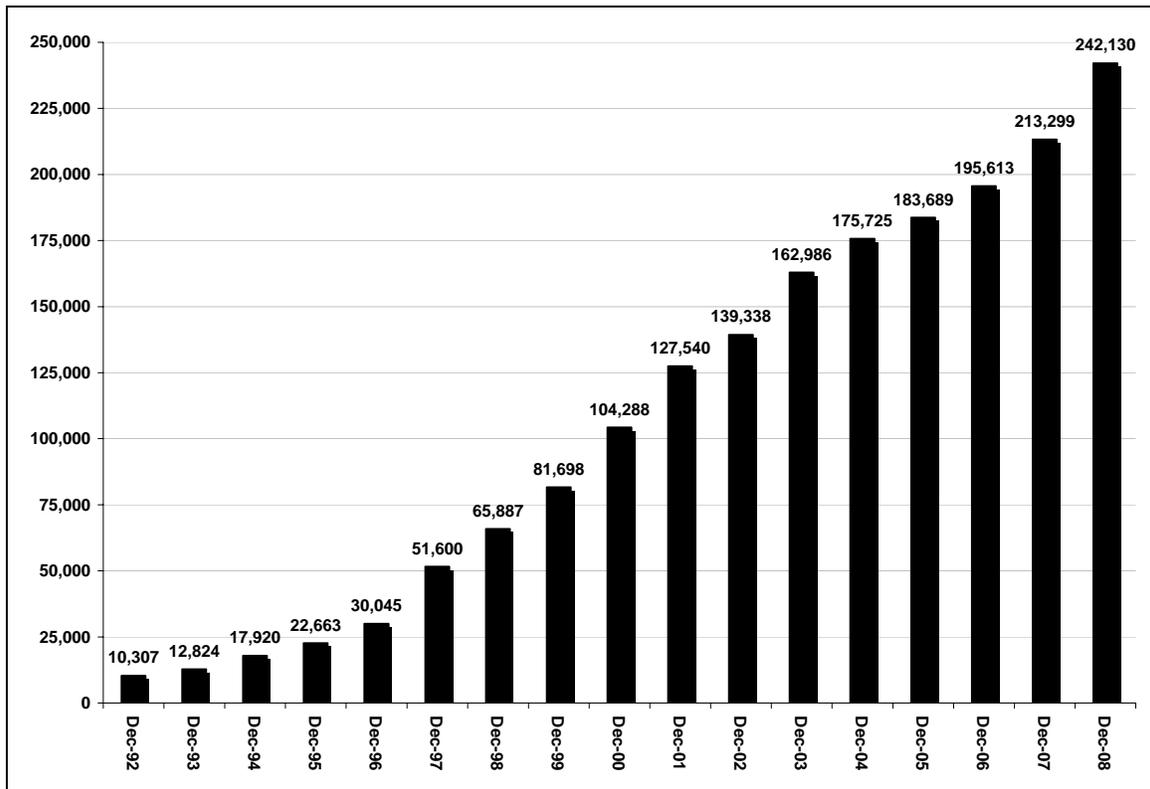
---

make possible the delivery of enhanced data services to its subscribers, with review of its LTE options following that deployment).

<sup>53</sup> See “[Verizon Tweaks LTE Launch Date: It's Now 2H10](http://www.gearlog.com/2009/05/verizon_tweaks_lte_launch_date.php),” Gearlog, May 13, 2009, available at [http://www.gearlog.com/2009/05/verizon\\_tweaks\\_lte\\_launch\\_date.php](http://www.gearlog.com/2009/05/verizon_tweaks_lte_launch_date.php); see also “Verizon Wireless Details Its Next Generation 4G Plans,” Washington Post, Feb. 18, 2009, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/02/18/AR2009021800747.html>; see also “[Verizon promises 4G wireless for rural America](http://news.cnet.com/wireless/?keyword=rural),” by Marguerite Reardon, CNET, Apr. 1, 2009, available at <http://news.cnet.com/wireless/?keyword=rural> (quoting Tony Melone, Verizon Wireless, Chief Technology Officer, to the effect that, using the 700 MHz spectrum, “we plan to roll out LTE throughout the entire country, including places where we don't offer our CDMA cell phone service today.”).

<sup>54</sup> See generally, *In re* Implementation of Section 224 of the Act; Amendment of the Commission’s Rules and Policies Governing Pole Attachments, Comments of CTIA-The Wireless Association®, WC Docket No. 07-245, RM-11293, RM-11303 (Mar. 7, 2008).

## Operational Cell Sites Exceed 242,000 at Year-End 2008



Source: CTIA Semi-Annual Survey

These considerable on-going investments will allow carriers to expand and enhance the scope and reliability of their networks to support new and better services for American consumers. As previously noted, carrier websites can and do include information on the expansion or upgrading of networks.<sup>55</sup> Some carrier press releases report the erection of new cell sites or the deployment of 3G coverage to new communities.<sup>56</sup> Other carriers' press releases outline their current expansion efforts and

<sup>55</sup> For example, the website of Plateau Wireless includes a notice listing the locations of 80 new cell sites, identifying and explaining the areas of improved coverage. See "Recent News," Plateau Wireless, at [http://www.plateautel.com/wireless\\_recentnews.asp](http://www.plateautel.com/wireless_recentnews.asp) (last accessed June 2, 2009).

<sup>56</sup> See e.g., "New York's Hudson Valley Residents To Benefit From Verizon Wireless Network Expansion; Investing to Stay Ahead of Growing Demand for Wireless Calling, Data Access and Music," Press Release, May 22, 2009, available at

outline their future deployment objectives.<sup>57</sup> These types of carrier announcements underscore the ongoing nature of the carriers' expansion and upgrading of networks as they compete to deliver more value to consumers, and to win their business.<sup>58</sup>

---

<http://news.vzw.com/news/2009/05/pr2009-05-22a.htm>; *see also* "Residents Of Jefferson, South Dakota, To Benefit From Verizon Wireless Network Enhancements; New Cell Site Means Clearer Reception, Fewer Dropped Calls," Press Release, May 18, 2009, *available at* <http://news.vzw.com/news/2009/05/pr2009-05-18a.html>; *and see* "Elko County, Nevada Customers Receive More 3G Coverage With New Verizon Wireless Cell Site; Investment increases consumer value as demand grows for calls, e-mail, text, web, video and music," Press Release, May 18, 2009, *available at* <http://news.vzw.com/news/2009/05/pr2009-05-18l.html>.

<sup>57</sup> *See e.g.* "AT&T's 2009 Investment Will Enhance Mobile Broadband Network throughout Pennsylvania; AT&T Continues to Expand Nation's Fastest 3G Wireless Network across State, Builds on \$775 million investment over past three years," Press Release, Mar. 26, 2009, *available at* <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=26694>; *see also* "AT&T Expands 3G Wireless Coverage in Louisville; Company Continues to Expand Nation's Fastest 3G Wireless Network in Kentucky," Press Release, Mar. 23, 2009, *available at* <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=26700>; *and see* "AT&T to Add 70 New Cell Sites in Louisiana This Year; Additionally, Company Continues to Expand Nation's Fastest 3G Wireless in Louisiana," Press Release, Feb. 16, 2009, *available at* <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=26562>. *See also* "T-Mobile USA Further Expands Commercial 3G Network Availability in 2008; Washington, D.C., and Surrounding Areas to Launch in November; More than 120 Major Cities with T-Mobile 3G Coverage by End of Year," Press Release, Oct. 17, 2008, *available at* [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20081017&title=T-Mobile%20USA%20Further%20Expands%20Commercial%203G%20Network%20Availability%20in%202008](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20081017&title=T-Mobile%20USA%20Further%20Expands%20Commercial%203G%20Network%20Availability%20in%202008) (including link to on-line 3G coverage map); *and see* "Leap Launches First Advanced Wireless Services (AWS) Market with Full Capacity Retail and Network Introduction of Cricket Unlimited Wireless Service to Oklahoma City," Press Release, Mar. 31, 2008, *available at* <http://phx.corporate-ir.net/phoenix.zhtml?c=191722&p=irol-newsArticle&ID=1123363&highlight=> (noting that "Cricket's network consisting of 98 cell sites will be fully operational at launch covering the sprawling Oklahoma City area including the cities of Norman, Guthrie and Shawnee and linking with the existing Tulsa market to create one large Oklahoma calling area.").

<sup>58</sup> *See e.g.*, "FREEPORT RESIDENTS TO BENEFIT FROM NEW U.S. CELLULAR TOWER; Investment Increases Network Coverage and Calling Capacity," U.S. Cellular Press Release, Dec. 30, 2008, *available at* [http://www.uscc.com/uscellular/SilverStream/Pages/x\\_page.html?p=a\\_press081230](http://www.uscc.com/uscellular/SilverStream/Pages/x_page.html?p=a_press081230) (noting deployment plans in Maine); *see also* "U.S. CELLULAR EXPANDS

### C. Calling Plan Innovations

Innovation in the wireless industry has not been limited to technology. Competition has motivated carriers to develop a variety of calling plans to satisfy all levels of subscriber usage, including friends and family plans, free long distance plans, national and local plans and unlimited calling and data services options. Carriers have experimented with a wide variety of calling plans to differentiate themselves, and appeal to consumers' varying preferences. For example, Nex-Tech Wireless' Calling Circle plan allows subscribers to choose 5, 10 or 20 wireless or landline numbers that can be called without using monthly plan minutes.<sup>59</sup> On the other hand, unlimited plans give high volume consumers complete freedom over their usage. The bottom line is that, through tiered pricing, the wireless industry accommodates consumers' needs across all income and usage levels.

Since the release of the *Twelfth Report*, many carriers have launched a variety of unlimited, flat-rate calling plans. This all-you-can-eat pricing innovation has been deemed by one writer the "worthy successor" to the Digital One Rate plan that was

---

NETWORK IN RURAL MISSOURI; Wireless Network Expansion Helps Economic Development & Public Safety," U.S. Cellular Press Release, Mar. 12, 2009, *available at* [http://www.uscc.com/uscellular/SilverStream/Pages/x\\_page.html?p=a\\_press090312](http://www.uscc.com/uscellular/SilverStream/Pages/x_page.html?p=a_press090312); *see also* "NTELOS WIRELESS LAUNCHES NATIONWIDE HIGH SPEED MOBILE BROADBAND SERVICE USING EV-DO TECHNOLOGY IN DANVILLE; Expands network with 39 new cell sites with 64 more scheduled in 2008," NTELOS Press Release, Oct. 2, 2008, *available at* [http://www.iminers.com/render.php?eid=ntls\\_20081002&symbol=NTLS&whichmodule=pressroom](http://www.iminers.com/render.php?eid=ntls_20081002&symbol=NTLS&whichmodule=pressroom).

<sup>59</sup> *See* "Nex-Tech Wireless Expands Services, Offers Calling Circle," Press Release, Sept. 2008, *available at* <http://www.nex-techwireless.com/news.aspx>.

introduced in the 1990s.<sup>60</sup> Initially, some carriers began offering unlimited voice services for calls to anyone in the U.S. at any time of the day.<sup>61</sup> Notably, Cricket Communications became the first wireless carrier in each of its markets to offer unlimited anytime local, long distance and text messaging without a service commitment.<sup>62</sup> Wireless providers have continued to seek to distinguish themselves by offering variations on unlimited calling packages.<sup>63</sup> T-Mobile's Individual Unlimited plan includes text messaging; while Sprint's "Simply Everything" plan goes one step further in offering text, picture and video messaging and GPS navigation services.<sup>64</sup> Regional

---

<sup>60</sup> See Joe Brancatelli, "Phone Home with All-You-Can-Eat Mobile Service," Mar. 6, 2008, *available at* <http://www.msnbc.msn.com/id/23502847/wid/6.b10984/5??cm=WaterCooler-SC>.

<sup>61</sup> *See, e.g.*, "Verizon Wireless Introduces New Unlimited Plans That Are as Worry Free as the Guarantee," Press Release, Feb. 19, 2008, *available at* <http://news.vzw.com/news/2008/02/pr2008-02-19.html> (announcing \$99.99 Nationwide Unlimited Anytime Minute Plans, and enhanced Broadband Access Plans offering 50 MB a month for \$39.99 or 5 GB a month for \$59.99); *see also* AT&T Talk Unlimited, *available at* [http://www.wireless.att.com/cell-phone-service/cell-phone-plan-details/?q\\_sku=sku1210020&q\\_planCategory=cat1370011](http://www.wireless.att.com/cell-phone-service/cell-phone-plan-details/?q_sku=sku1210020&q_planCategory=cat1370011) (last accessed June 12, 2009).

<sup>62</sup> *See* "Leap Announces the Launch of Cricket Unlimited(TM) – The First-Ever Complete Package of Unlimited Anytime Local, U.S. Long Distance," Mar. 16, 2004, *available at* <http://www.freshnews.com/news/48162/leap-announces-launch-cricket-unlimitedtm-first-ever-complete-package-unlimited-anytime-l>.

<sup>63</sup> *See e.g.*, "Big 2 continue price plan tweaks; AT&T Mobility goes after small biz, VZW after texters," Dan Meyer, RCR Wireless News, Apr. 15, 2008, *available at* <http://www.rcrwireless.com/apps/pbcs.dll/article?AID=/20080415/FREE/653517016>; *see also* "T-Mobile USA provides unlimited incentive for families," Dan Meyer, RCR Wireless News, June 4, 2008, *available at* <http://www.rcrwireless.com/apps/pbcs.dll/article?AID=/20080604/FREE/397755595>; *see also* "Verizon Wireless apes Alltel's MyCircle with new small businesses calling plan," Allie Winter, RCR Wireless News, June 11, 2008, *available at* <http://www.rcrwireless.com/article/20080611/FREE/141355073/Verizon-Wireless-apes-Alltels-MyCircle-with-new-small-businesses-calling-plan>.

<sup>64</sup> *See* T-Mobile Plans Overview, <http://www.t-mobile.com/shop/plans/detail.aspx?tp=tbl&id=dabdf217-d1f3-44ce-a5d2-322198f7a692> (last accessed June 15, 2009); *see also* Spring Simply Everything Plan, <http://www.sprintspecialoffers.com/everything/> (last accessed June 15, 2009).

providers, such as Cellular South, Leap's Cricket Communications and MetroPCS, also began offering unlimited calling for their customers.<sup>65</sup> In fact, Cricket's entire business model is based on flat-rate, unlimited calling within its coverage network.<sup>66</sup> Cricket's offering of unlimited EV-DO Rev. 0 data for only \$35 per month appeals to heavy data users within Cricket's footprint.<sup>67</sup> For those consumers who prefer not to sign a contract, Tracfone's Net10 introduced an unlimited plan that included calling and texting for only \$80 a month.<sup>68</sup> MetroPCS also began offering an unlimited, nationwide calling plan with no contract requirement in 300 U.S. markets.<sup>69</sup>

Since the release of the *Thirteenth Report*, the competitive pressure intensified by the arrival of unlimited plans has continued to provide consumers with numerous wireless

---

<sup>65</sup> See "Other Wireless Carriers Follow Cellular South's Lead on Unlimited Calling Plans," Reuters, Feb. 20, 2008, *available at* <http://www.reuters.com/article/pressRelease/idUS164353+20-Feb-2008+PRN20080220>; *see also* "Leap's Cricket Service Now Offers Free, Unlimited Messaging in All Plans," Business Wire, Apr. 3, 2007, *available at* [http://www.businesswire.com/portal/site/google/index.jsp?ndmViewId=news\\_view&newsId=20070403005453&newsLang=en](http://www.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20070403005453&newsLang=en); *see also* Cricket Plans, *available at* <http://www.mycricket.com/cricketplans/> (last accessed June 15, 2009); *see also* Cellular Plans from MetroPCS, *available at* <http://www.metropcs.com/ZipCode> (last accessed June 15, 2009).

<sup>66</sup> See About Cricket, <http://www.mycricket.com/aboutcricket/> (last accessed June 11, 2009).

<sup>67</sup> See "Cricket Wireless Offers Unlimited Data for \$35 a Month, Look Ma, No Cap," Engadget Mobile, Mar. 3, 2008, *available at* <http://www.engadgetmobile.com/2008/03/23/cricket-wireless-offers-unlimited-data-for-35-a-month-look-ma/>.

<sup>68</sup> See "Tracfone's Net10 dives into unlimited fray," Allie Winter, RCR Wireless News, June 28, 2008, *available at* <http://www.rcrwireless.com/article/20080728/FREE/237826969/Tracfones-Net10-dives-into-unlimited-fray>.

<sup>69</sup> See "MetroPCS Launches MetroPCS Unlimited Nationwide<sup>SM</sup>," Press Release, Nov. 6, 2008, *available at* <http://investor.metropcs.com/phoenix.zhtml?c=177745&p=irol-newsArticle&ID=1223573&highlight=>.

cost-saving opportunities and alternatives. In late February 2009, Boost Mobile announced a \$50/month plan that includes unlimited nationwide talk, text and multimedia messaging, web use, and walkie-talkie, which is available to 274 million people located in more than 15,800 cities across the United States.<sup>70</sup> Other national carriers have also begun offering less expensive or targeted unlimited plan offerings. For example, T-Mobile dropped its unlimited voice plan to \$50 per month for its long-time customers, which brought its monthly all-you-can-eat voice and data/texting plan from \$99 down to \$85.<sup>71</sup> Verizon Wireless has also introduced an unlimited calling plan targeting small businesses.<sup>72</sup>

Regional and pre-paid carriers offer unlimited, cost-efficient alternatives as well. In March 2009, MetroPCS launched its first BlackBerry with an unlimited plan for \$50/month, which includes unlimited voice, texting, web-browsing, and BlackBerry email access.<sup>73</sup> The following month, Virgin Mobile USA announced a new service offering of \$50/month for unlimited calling plus unlimited text and web-browsing for an

---

<sup>70</sup> See Calvin Azuri, "New Unlimited Plan from Boost Mobile Saves Customers Money," TMCNet, Feb. 24, 2009, available at <http://fixed-mobile-convergence.tmcnet.com/topics/mobile-communications/articles/51107-new-unlimited-plan-from-boost-mobile-saves-customers.htm>.

<sup>71</sup> See Allie Winter, "T-Mobile USA drops unlimited voice plan to \$50," RCR Wireless, Mar. 2, 2009, available at <http://www.rcrwireless.com/article/20090302/WIRELESS/903029987/1099>.

<sup>72</sup> See Marin Perez, "Verizon Adds Business Calling Plans: The carrier is targeting small businesses with wireless calling plans that offer unlimited mobile-to-mobile calls, free technical support, and online management tools," Information Week, May 13, 2009, available at <http://www.informationweek.com/news/mobility/business/showArticle.jhtml?articleID=217400801&subSection=Mobility>.

<sup>73</sup> "MetroPCS Introduces BlackBerry w/\$50 Unlimited Plan," Gearlog, Mar. 10, 2009, available at [http://www.gearlog.com/2009/03/breaking\\_metropcs\\_introduces\\_b.php](http://www.gearlog.com/2009/03/breaking_metropcs_introduces_b.php).

additional \$10/month – all without signing a contract.<sup>74</sup> Also during that time, a new wireless service provider called Zer01 Mobile entered the market claiming that it could give consumers “truly unlimited” voice and data on smartphones without a contract and over one of the biggest 3G networks in the U.S.<sup>75</sup>

While unlimited voice and data contract plans are particularly attractive to high volume users looking to reduce expenses, they are also influencing alternative plans (*e.g.*, prepaid/pay-as-you-go). Thus, for example, AT&T’s unlimited “GoPhone” calling plan is providing new options for prepaid consumers.<sup>76</sup> Likewise, T-Mobile and other carriers offer “pay by the day” service options.<sup>77</sup> Beyond the introduction of unlimited plans into the U.S. market, wireless competition has continued to flourish and consumers have continued to benefit from less costly and more valuable tailored wireless service packages. Carriers continue to innovate in their pricing and service options, not only offering lower priced unlimited monthly plans but also introducing such offerings as

---

<sup>74</sup> “Virgin Mobile Introduces \$50 Unlimited Calling Plan,” App Scout, Apr. 9, 2009, available at [http://www.appscout.com/2009/04/virgin\\_mobile\\_introduces\\_50\\_un.php](http://www.appscout.com/2009/04/virgin_mobile_introduces_50_un.php).

<sup>75</sup> “New Carrier Promises Unlimited 3G Data, VOIP,” by Sascha Segan, PCMAG.com, Mar. 12, 2009, available at <http://www.pcmag.com/article2/0,2817,2342994,00.asp>.

<sup>76</sup> See Phil Goldstein, “AT&T unveils \$3 per day unlimited GoPhone calling plan,” Fierce Wireless, May 8, 2009, available at [http://www.fiercewireless.com/story/t-unveils-3-day-unlimited-gophone-calling-plan/2009-05-08?utm\\_medium=nl&utm\\_source=internal](http://www.fiercewireless.com/story/t-unveils-3-day-unlimited-gophone-calling-plan/2009-05-08?utm_medium=nl&utm_source=internal) (AT&T Mobility is launching a new calling plan through its prepaid GoPhone service, which will “give users unlimited calling with no roaming or long distance fees for \$3 per day... customers using this new plan will also be able to get text messaging and data service at the same pay-per-use rates as all other GoPhone ‘Pay As You Go’ plans.”).

<sup>77</sup> “T-Mobile Offers Customers Additional Service Plan Flexibility,” Press Release, June 23, 2008, available at [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20080623&title=T-Mobile%20Offers%20Customers%20Additional%20Service%20Plan%20Flexibility](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20080623&title=T-Mobile%20Offers%20Customers%20Additional%20Service%20Plan%20Flexibility) (announcing “FlexPay” which offers customers the opportunity to subscribe to T-Mobile rate plans without a contract and highlighting “pay by the day” service).

AT&T Mobility's "Smart Limits for Wireless" suite that will allow customers to set a web use limit in advance and pay only that amount, rather than the standard \$35/month unlimited web service.<sup>78</sup> This is a convenient option for consumers who rarely use the mobile web, but nonetheless would like to be able to access it when and if they need to. Likewise, T-Mobile and other carriers offer "pay by the day" service options.<sup>79</sup>

#### **D. Consumer Friendly Practices**

Competitive forces continue to drive carriers to modify other features and policies. Such policies and features include, but are not limited to: pro-rating early termination fees ("ETFs"); pre-paid plans; and money-back guarantees. For example, as of November 16, 2006, Verizon Wireless began pro-rating on new and extended consumer contracts for postpaid wireless services by \$5 per month until the contract is completed.<sup>80</sup> Over the last year, other carriers followed course. T-Mobile announced it would begin pro-rating ETFs over the course of the contract period for postpaid wireless services beginning June 30, 2008.<sup>81</sup> AT&T Mobility announced it would implement pro-

---

<sup>78</sup> "AT&T adds feature to limit mobile web use," OC Register, Feb. 24, 2009, *available at* <http://gadgetress.freedomblogging.com/2009/02/24/att-adds-feature-to-limit-mobile-web-use/11109/>.

<sup>79</sup> "T-Mobile Offers Customers Additional Service Plan Flexibility," Press Release, June 23, 2008, *available at* [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20080623&title=T-Mobile%20Offers%20Customers%20Additional%20Service%20Plan%20Flexibility](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20080623&title=T-Mobile%20Offers%20Customers%20Additional%20Service%20Plan%20Flexibility) (announcing "FlexPay" which offers customers the opportunity to subscribe to T-Mobile rate plans without a contract and highlighting "pay by the day" service).

<sup>80</sup> "Verizon makes good on ETF promise," Fierce Wireless, Nov. 19, 2006, *available at* <http://www.fiercewireless.com/story/verizon-makes-good-on-etf-promise/2006-11-20>.

<sup>81</sup> <sup>81</sup> "T-Mobile to Introduce More-Flexible Contract Terms for Customers," Press Release, Nov. 7, 2008, *available at* [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20071107&title=T-Mobile%20to%20Introduce%20More-Flexible%20Contract%20Terms%20for%20Customers](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20071107&title=T-Mobile%20to%20Introduce%20More-Flexible%20Contract%20Terms%20for%20Customers) (Additional service options were

rating of ETFs on May 25, 2008, and Sprint Nextel announced its plan to begin pro-rating ETFs on new and renewed consumer contracts for postpaid wireless services effective November 2, 2008.<sup>82</sup>

Consumers also have a wide variety of wireless plans to choose from that do not include ETFs, including a variety of prepaid or “pay-as-you-go” options. Most consumers still choose term service agreements with ETFs because these agreements offer lower monthly rates and discounted equipment and service activation fees and best serve these consumers’ economic interests. Carriers are able to depend on a stream of revenue from consumers and pay the consumers back by offering cutting edge handsets and services at discounted rates.

Finally, due to the highly competitive nature of the wireless marketplace, carriers have adopted “money back guarantee” policies to accommodate their customers’ needs. For example, AT&T offers a 30-day cancellation period where customers will not pay an early termination fee. Under this policy, customers receive a refund for the activation fee

---

introduced in June 2008); *see also* “T-Mobile Offers Customers Additional Service Plan Flexibility,” Press Release, June 23, 2008, *available at* [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20080623&title=T-Mobile%20Offers%20Customers%20Additional%20Service%20Plan%20Flexibility](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20080623&title=T-Mobile%20Offers%20Customers%20Additional%20Service%20Plan%20Flexibility).

<sup>82</sup> *See, e.g.*, “AT&T Announces New Approach to Early Termination Fees; More Flexibility for Wireless Customers,” Press Release, Mar. 31, 2008, *available at* <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=25390> (announcing pro-rating will go into effect May 25, 2008); *see also* “AT&T changes fee policy for customer contracts,” Reuters, Oct. 16, 2007, *available at* <http://www.reuters.com/article/technologyNews/idUSWEN168820071016?feedType=RSS&feedName=technologyNews>; *see also* “Sprint Launches One of the Industry’s Most Customer-Friendly Policies on Pro-Rated Early Termination Fees,” Press Release, Oct. 31, 2008, *available at* [http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle\\_newsroom&ID=1220442](http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle_newsroom&ID=1220442).

if they terminate service within three days of activation.<sup>83</sup> Sprint Nextel offers a 30-day guarantee for customers not completely satisfied with the device, plan or service.

Customers can return the device and Sprint will refund any activation fee and waive the early termination fee.<sup>84</sup> T-Mobile allows customers to cancel service within 20 calendar days of activating a new line (30 days if activated in California).<sup>85</sup> Finally, Verizon Wireless allows customers to terminate service for any reason within 30 days of activation. Verizon also permits customers to return or make exchanges on all merchandise purchased from Verizon within 30 days of purchase.<sup>86</sup>

### **E. Handset Innovations & Choice**

While there is an ongoing debate about exclusive handset arrangements in the wireless industry, there is no doubt that there are an extraordinarily large number of handsets in the U.S. market. American consumers enjoy more than 630 wireless devices. From simple, voice-only devices to complex smartphones that more closely resemble a handheld computer than a telephone, the breadth and depth of devices manufactured and sold to American consumers far eclipses that in other developed countries.<sup>87</sup> This intense

---

<sup>83</sup> AT&T Return Policy, <http://www.wireless.att.com/cell-phone-service/legal/return-policy.jsp> (last visited May 29, 2009).

<sup>84</sup> Sprint Nextel Nextel Return Policy, <http://www.Sprint Nextel.com/landings/returns/>, (last visited May 29, 2009).

<sup>85</sup> T-Mobile Return Policy, [http://www.t-mobile.com/Templates/Popup.aspx?PAsset=Ftr\\_Ftr\\_ReturnPolicy&print=true](http://www.t-mobile.com/Templates/Popup.aspx?PAsset=Ftr_Ftr_ReturnPolicy&print=true) (last visited May 29, 2009).

<sup>86</sup> Verizon Wireless Return Policy, [http://www.verizonwireless.com/b2c/globalText?textName=RETURN\\_POLICY&jspName=footer/returnPolicy.jsp](http://www.verizonwireless.com/b2c/globalText?textName=RETURN_POLICY&jspName=footer/returnPolicy.jsp) (last visited May 29, 2009).

<sup>87</sup> As of February 12, 2009, manufacturers whose wireless devices are sold in the U.S. include Alcatel, Apple, ASUS, Axsisstel, Bandrich, BenQ, Cal-Comp, Casio, Firefly, HP, HTC, Huawei, Jitterbug, Kyocera, LG, Motorola, Nokia, Novatel, Option, Palm,

level of competition has produced a multitude of features in the last 18 months – such as handsets with digital cameras featuring improved picture quality and resolution, Global Positioning System (“GPS”) and Wi-Fi-enabled handsets, personal health features and touch screen devices – as well as a range of “form factors.”

The fact that there are now more than 630 unique wireless devices for sale in the U.S. is nothing short of amazing. Although this number of devices itself is impressive, the variety of offerings shows the true breadth and scope of the wireless handset marketplace. As handsets evolve into handheld computers, the services and capabilities available wirelessly continue to gain in popularity. There is a plethora of handsets that offer Internet access, including the 29 devices available in the U.S. market that have integrated Wi-Fi capability – a number that will likely continue to increase as more handsets are designed to handle 4G networks.<sup>88</sup> From surfing the net at Wi-Fi hotspots to integrated Wi-Fi calling technologies, these state-of-the-art handsets are bringing new services and ways to connect existing services to U.S. consumers. Increasingly, more handsets are incorporating Bluetooth capability – the short-range network service that connects wireless handsets to other wireless devices. According to NPD Group, more than three-quarters (83 %) of handsets sold in the fourth quarter of 2008 came with Bluetooth.<sup>89</sup> smartphones, which incorporate PDA capabilities and HTML browsers, are increasingly popular. In fact, Gartner Research recently reported that the North

---

Pantech & Curitel, Research in Motion, Samsung, Sanyo, Sharp, Siemens, Sierra Wireless, Sony Ericsson, Uniden, Waxess USA, and ZTE.

<sup>88</sup> This number is from research conducted at CTIA as of April 6, 2009 and includes devices with Wi-Fi and/or UMA capability.

<sup>89</sup> “The NPD Group: iPhone 3G Leads U.S. Consumer Mobile Phone Purchases in the Third Quarter of 2008,” Press Release, Nov. 10, 2008 *available at* [http://www.npd.com/press/releases/press\\_081110.html](http://www.npd.com/press/releases/press_081110.html) (last accessed May 18, 2009).

American smartphone market continued to grow in the fourth quarter of 2008, despite the larger economic problems. Smartphone sales in North America grew 69% in 2008 as a whole.<sup>90</sup>

In the fourth quarter of 2008, smartphones represented 23% of all handsets sold in the U.S.,<sup>91</sup> compared with just 12% during the first half of 2007.<sup>92</sup> The following is a sampling of the number of smartphones sold by U.S. carriers:

**Smartphone Offerings of Wireless Carriers as of May 2009**

	AT&T Mobility	Verizon Wireless	Sprint	T-Mobile USA	US Cellular
Number of "Smartphones" Available	16	17	12	12	7
	Bluegrass Cellular	Carolina West	Cellular One	Cincinnati Bell	nTelos
Number of "Smartphones" Available	5	4	9	9	8

In today's wireless market, U.S. consumers have multiple venues from which to purchase a handset, including nationwide electronics super-stores, independent retail outlets, manufacturer stores and websites, online auction sites, as well as carrier retail

<sup>90</sup> "Gartner Says Worldwide Smartphone Sales Reached Its Lowest Growth Rate With 3.7 Per Cent Increase in Fourth Quarter of 2008," Press Release, rel. May 11, 2009, available at <http://www.gartner.com/it/page.jsp?id=910112> (last accessed May 21, 2009).

<sup>91</sup> "The NPD Group: Despite Recession, U.S. Smartphone Market is Growing," Press Release, March 3, 2009, available at [http://www.npd.com/press/releases/press\\_090303.html](http://www.npd.com/press/releases/press_090303.html) (last accessed May 18, 2009).

<sup>92</sup> "The NPD Group: Smartphones Represent 19 Percent of all Handsets Sold to Consumers in the U.S.," Press Release, Sept. 8, 2008, available at [http://www.npd.com/press/releases/press\\_080908.html](http://www.npd.com/press/releases/press_080908.html).

stores and websites.<sup>93</sup> This availability is easily confirmed by looking to the web sites of some national retailers. For example, Best Buy alone offers more than 100 distinct handset models – including 24 distinct unlocked devices that consumers can take to any compatible carrier.<sup>94</sup>

Additionally, consumers have access to a number of unlocked handsets. Of the more than 630 wireless devices CTIA has identified at least **54 unlocked handsets currently available through third-party and manufacturer websites**. In the fall of 2007, many U.S. carriers announced that they would be opening their networks to outside devices and applications.<sup>95</sup>

Today, most U.S. carriers are selling unlocked handsets or offering the ability to unlock phones currently set up to run on their network.<sup>96</sup> This benefits consumers by creating increased consumer choice and opening the door to further competition in the handset arena.

---

<sup>93</sup> See Handset Market is Extremely Robust, CTIA *Written Ex Parte Communication*, WT Docket No. 08-274; RM-11361, at 5 (Mar. 20, 2008).

<sup>94</sup> See Best Buy, <http://www.bestbuy.com/site/olspage.jsp?id=pcmcat156400050037&type=category> (last accessed May 28, 2009) (omitting variations on models, distinguished only color).

<sup>95</sup> See Verizon News Center, Verizon Wireless To Introduce “Any Apps, Any Device” Option For Customers In 2008, Nov. 11, 2007, *available at* <http://news.vzw.com/news/2007/11/pr2007-11-27.html>; *see also* Nilay Patel, “Sprint Nextel agrees to start unlocking phones,” Oct. 27, 2007, *available at* <http://www.engadgetmobile.com/2007/10/26/sprint-nextel-agrees-to-start-unlocking-phones/> (Sprint agreed to provide codes that will “unlock phones for both current and former customers, and will begin training its customer service reps on how to connect non-Sprint phones to its network.”); *see also* Tom Krazit, “AT&T reopens its network,” CNET, Dec. 6, 2007, *available at* [http://news.cnet.com/8301-13579\\_3-9830094-37.html](http://news.cnet.com/8301-13579_3-9830094-37.html).

<sup>96</sup> See T-Mobile USA Website - “Ask T-Mobile,” *available at* [http://search.t-mobile.com/inquiraapp/ui.jsp?ui\\_mode=question&question\\_box=unlock](http://search.t-mobile.com/inquiraapp/ui.jsp?ui_mode=question&question_box=unlock) (last accessed June 4, 2009).

The dynamic nature of the wireless handset marketplace is characterized by the frequent rollout of affordable and attractive new devices and features has been a driver of handset churn. This in turn speeds the delivery of new and faster services to consumers, by continually placing handsets optimized to work with the constantly upgraded wireless networks into the hands of consumers. Of course, not all consumers are interested in the most fully-featured handsets. From the deliberately simple Jitterbug at one end of the spectrum to the most fully-featured smartphones at the other end, consumers have a wide range of choices. Recent data indicates that consumers are satisfied with the choices that they are making. J.D. Power and Associates recently released their customer satisfaction findings regarding both smartphones and traditional handsets.<sup>97</sup>

#### **F. Sources of Consumer Information**

A multitude of resources are available to help consumers measure their wireless options and determine which may best meet their needs including a wealth of publicly available information on carrier operations from the wireless providers themselves. At carrier retail stores and on their websites, consumers can perform personalized coverage checks, and evaluate and compare the myriad of pricing plans and handset options. Wireless providers have implemented on-line coverage mapping programs that allow consumers to determine both general coverage and relative coverage quality, including “drill-down” capabilities to the neighborhood and street level. While the precise look and

---

<sup>97</sup> See “As Customer Satisfaction with Feature-Rich Smartphones Increases, Satisfaction with Traditional Mobile Phones Remains Steady,” J.D. Power and Associates Press Release, Apr. 30, 2009, *available at* <http://www.jdpower.com/corporate/news/releases/pressrelease.aspx?ID=2009082>; *see also* “Rising Popularity of Smartphones and Feature-Rich Devices Drives Higher Mobile Phone Satisfaction,” J.D. Power and Associates Press Release, Nov. 13, 2008, *available at* <http://www.jdpower.com/corporate/news/releases/pressrelease.aspx?ID=2008246>.

feel of the information may vary by carrier, these programs provide coverage information to help consumers and would-be consumers determine the level of service coverage in specific areas. These coverage programs often include details not only of voice coverage but also of specific wireless data applications. Such mapping programs may be found on the websites of AT&T Mobility, Verizon Wireless, Sprint and T-Mobile USA, as well as other service providers.<sup>98</sup>

Multiple independent sources also offer reviews and provide guidance on how to shop for a service provider and choose a mobile phone. Thus, as previously noted, [www.myrateplan.com](http://www.myrateplan.com) provides consumers with tools to compare both prepaid and postpaid plans offered by multiple service providers (both licensees and MVNOs) in markets around the country, as well as guidance in picking both a wireless device and a plan appropriate for the would-be wireless consumer's needs.<sup>99</sup> Phonscoop offers news

---

<sup>98</sup> See, e.g., AT&T Mobility Coverage Viewer, <http://www.wireless.att.com/coverageviewer/> (last accessed June 15, 2009); see also [http://www.wireless.att.com/coverageviewer/popUp\\_3g.jsp](http://www.wireless.att.com/coverageviewer/popUp_3g.jsp) (last accessed June 15, 2009); see also Sprint Coverage, <http://coverage.sprintpcs.com/IMPACT.jsp?PCode=vanity:coverage> (last accessed June 15, 2009); see also T-Mobile USA "Personal Coverage Check," <http://www.t-mobile.com/coverage/pcc.aspx> (last accessed June 15, 2009); see also Verizon Wireless Coverage Locator, <http://www.verizonwireless.com/b2c/CoverageLocatorController> (last accessed June 15, 2009); Cincinnati Bell Wireless Coverage, <http://www.cincinnati-bell.com/consumer/wireless/coverage/> (last accessed June 15, 2009); and see MetroPCS Coverage, <http://www.metropcs.com/coverage/> (last accessed June 15, 2009).

<sup>99</sup> See My Rate Plan "Cell Phone Buying Guide," [http://www.myrateplan.com/cell\\_phone\\_buying\\_guide/](http://www.myrateplan.com/cell_phone_buying_guide/) (last accessed May 26, 2009); see also CNET and The New York Times, Cell Phones: CNET Editors' Buying Guide, available at <http://cnet.nytimes.com/html/ex/nytimes/bg/7609/index.html>. CNET also maintains a review of Smartphones, noting their availability, provider, options and price (last accessed June 15, 2009); see also CNET smartphone review, <http://reviews.cnet.com/smartphone-reviews/> (last accessed May 26, 2009); see also Adrian Covert, Giz Explains: What Makes The Five Smartphone Platforms Different," Gizmodo, Mar. 18, 2009, available at <http://i.gizmodo.com/5173865/giz-explains-what->

and information about wireless devices and their availability, while MountainWireless.com provides carrier reviews and recommendations.<sup>100</sup> J.D. Power and Associates continues to report on call quality, as well, noting the improvements driven by on-going investment in carrier networks.<sup>101</sup> *Consumer Reports* also publishes an annual review of wireless offerings.<sup>102</sup>

With access to an unprecedented amount of information, consumers can make informed decisions as to the carrier that best meets their needs, the appropriate calling plan and the right all-in-one device. Moreover, those who are either unhappy with their carrier's offerings or are intrigued by another carrier's offerings can, and do, switch carriers by porting their existing wireless number.

#### **G. Application Development**

Carriers and manufacturers are engaging with the broader wireless community through development relationships and tools that they make available on their websites to promote on-going innovation. Thus, manufacturers and other suppliers and carriers have Software Development Kits ("SDKs") and other developer-oriented resources accessible through their websites in order to promote the development of applications that will meet

---

[makes-the-five-smartphone-platforms-different](#) (containing a chart that lays out the different features of the Smartphones currently on the market).

<sup>100</sup> See e.g., Phone Scoop, <http://www.phonescoop.com/> (last accessed June 15, 2009); see also Mountain Wireless, <http://mountainwireless.com/> (last accessed June 15, 2009).

<sup>101</sup> See "The Gap in Call Quality Performance among Carriers Narrows As Competition Intensifies across the Wireless Service Industry," J.D. Power and Associates Press Release, Mar. 18, 2009, available at <http://www.jdpower.com/corporate/news/releases/pressrelease.aspx?ID=2009041>.

<sup>102</sup> See e.g., "Best cell-phone service: 51,700 readers reveal that carriers are improving and that a pay-as-you-go plan could be a good option for more people," *Consumer Reports*, Jan. 2009, at 28; see also "Cell phones: Our tests of 70 standard and smart models show they're sharing many more features." *Id.* at 34.

and stimulate the interests of millions of consumers, from personal to enterprise applications.<sup>103</sup> More recently, a number of applications stores have become available, including both carrier and manufacturer-associated stores (“app stores”).<sup>104</sup> For example, Apple’s iPhone,<sup>105</sup> Google and T-Mobile USA’s G1,<sup>106</sup> Palm’s PalmOS platform,<sup>107</sup> and

---

<sup>103</sup> See e.g., Apple's "iPhone Dev Center," <http://developer.apple.com/iphone/> (last accessed June 4, 2009); see also Android Developers, <http://developer.android.com/> (last accessed June 4, 2009); see also LG Mobile Developer Network, <http://developer.lgmobile.com/> (last accessed June 4, 2009); see also MOTODEV, <http://developer.motorola.com/> (last accessed June 4, 2009); see also Forum Nokia, <http://www.forum.nokia.com/> (last accessed June 4, 2009); see also RIM's plazmic™ subsidiary's content developer kit, <http://www.plazmic.com/en/index.shtml> (last accessed June 4, 2009); see also Samsung Mobile Innovator - Samsung Developer Program, <http://innovator.samsungmobile.com/index.do> (last accessed June 4, 2009); see also Sony Ericsson - Developer World, [http://developer.sonyericsson.com/site/global/home/p\\_home.jsp](http://developer.sonyericsson.com/site/global/home/p_home.jsp) (last accessed June 4, 2009); see also AT&T devCentral, <http://developer.att.com/developer/index.jsp?page=toolsAndTech> (last accessed June 4, 2009); see also Sprint Application Developer's Website, [http://developer.sprint.com/site/global/home/p\\_home.jsp](http://developer.sprint.com/site/global/home/p_home.jsp) (last accessed June 4, 2009); see also T-Mobile Partner Network, [http://developer.t-mobile.com/site/global/home/p\\_home.jsp](http://developer.t-mobile.com/site/global/home/p_home.jsp) (last accessed June 4, 2009); and see Verizon Wireless' "Welcome to The ZON," <http://www.vzwdevelopers.com/aims/> (last accessed June 4, 2009).

<sup>104</sup> See e.g., Jason Chen, “Blackberry’s app store called ‘App World’ goes live tonight,” Gizmodo Blog, Mar. 4, 2009, available at <http://i.gizmodo.com/5164429/blackberrys-app-store-named-app-world-goes-live-tonight>; see also Yardena Arar, “BlackBerry App Store Gets a Name: BlackBerry App World,” PCWorld, Mar. 4, 2009, available at [http://www.pcworld.com/article/160711/blackberry\\_app\\_store\\_gets\\_a\\_name\\_blackberry\\_app\\_world.html](http://www.pcworld.com/article/160711/blackberry_app_store_gets_a_name_blackberry_app_world.html); see also BlackBerry App World: <http://na.blackberry.com/eng/services/appworld/> (last accessed); see also Colin Gibbs, “T-Mobile USA unveils new portal,” RCR Wireless News, Nov. 21, 2008, available at <http://www.rcrwireless.com/article/20081120/WIRELESS/811209989/0/CARTOON>, (T-Mobile introduces web2go portal, to improve mobile Internet browsing, shopping and downloads, including a customizable home page, and allowing users to “continue to access some of their downloaded content even after upgrading to new phones”); and see T-Mobile, <http://support.t-mobile.com/doc/tm23842.xml;jsessionId=NqRU6ePhJP-fTVscgs?> (last accessed June 15, 2009).

<sup>105</sup> See “App Store and Applications for iPhone” at <http://www.apple.com/iphone/appstore/> (last accessed Apr. 7, 2009).

Research in Motion's BlackBerry platform<sup>108</sup> all have online stores dedicated to providing users access to applications for their wireless devices. Verizon Wireless recently announced it will launch an apps store based on Java ME, and work to make it easier for developers to create applications and make them available to Verizon Wireless' customers.<sup>109</sup> Palm has an application store for its new webOS platform launched to coincide with the first webOS device – The Palm Pre.<sup>110</sup> Press reports also indicate that Microsoft is planning a store for its Windows Mobile platform.<sup>111</sup> Additionally, Nokia

---

<sup>106</sup> See “Android | Market” at <http://www.android.com/market/> (last accessed Apr. 7, 2009).

<sup>107</sup> See Palm Software, [http://software.palm.com/us/html/top\\_products\\_treo.jsp?device=10035300025](http://software.palm.com/us/html/top_products_treo.jsp?device=10035300025) (last accessed June 15, 2009); see also Pocketgear Palm Applications, <http://appstore.pocketgear.com/palm/> (last accessed June 15, 2009).

<sup>108</sup> See Blackberry App World, [http://na.blackberry.com/eng/services/appworld/?](http://na.blackberry.com/eng/services/appworld/) (last accessed Apr. 7, 2009).

<sup>109</sup> See Marin Perez, "Verizon Rolling Out Java ME App Store; In a change from its past, the carrier will open up so developers can easily target and create programs for Verizon customers," Information Week, June 2, 2009, available at <http://www.informationweek.com/news/mobility/business/showArticle.jhtml?articleID=217701320>.

<sup>110</sup> See Palm Developer, <http://developer.palm.com/> (last accessed June 15, 2009)..

<sup>111</sup> Trade press reports that Microsoft is planning a marketplace for Windows Mobile devices called “SkyMarket.” See Jason Ankeney, “Microsoft to launch WinMo app store next month?,” Fierce Developer, Jan. 19, 2009, available at <http://www.fiercedev.com/story/microsoft-launch-winmo-app-store-next-month/2009-01-19>.

has announced the launch of its own apps store.<sup>112</sup> Sony Ericsson has recently announced it will provide mobile applications through its PlayNow Arena movie / content site.<sup>113</sup>

Like mobile wireless broadband services generally, American consumers have embraced the world of applications and services that are being designed for their mobile platforms. For example, in Apple’s iTunes App Store alone there are more than 35,000 applications available for download. The following chart shows the application stores that are available to U.S. consumers:

<u>Application Store</u>	<u>Date Launched</u>	<u>Number of Apps Available</u>
iTunes App Store	July 2008	> 35,000 <sup>114</sup>
Android Market	October 2008	> 1,000 <sup>115</sup>
Palm Software Store	January 2009	> 5,000 <sup>116</sup>
BlackBerry App World	April 2009	Launched with appx. 1,000 <sup>117</sup>

<sup>112</sup> See Elizabeth Woyke, “Nokia’s Gigantic App Store,” *Forbes*, May 7, 2009, available at <http://www.forbes.com/2009/05/07/nokia-ovi-store-technology-wireless-nokia.html>; see also “Nokia starts roll-out of Apple App Store rival,” *Reuters*, May 25, 2009, available at <http://www.reuters.com/article/newsOne/idUSTRE54O2MI20090525>.

<sup>113</sup> See James Middleton, "Sony Ericsson jumps on app store bandwagon," *Informa Telecoms & Media Group*, June 4, 2009, available at <http://www.telecoms.com/11775/sony-ericsson-jumps-on-app-store-bandwagon> ("By teaming up with independent app store GetJar, Sony Ericsson will expand its mobile content offering with a library of over 45,000 free applications that will complement a series of premium apps from Sony Ericsson.").

<sup>114</sup> See Apple iPhone, <http://www.apple.com/iphone> (last accessed June 15, 2009).

<sup>115</sup> See Adam Ostrow, “Paid Apps Enter Google’s Android Market,” *Mashable*, Feb. 13, 2009, available at <http://mashable.com/2009/02/13/google-android-paid-apps/>.

<sup>116</sup> See Palm Software Store, [http://software.palm.com/us/html/top\\_products\\_treo.jsp?device=10035300025](http://software.palm.com/us/html/top_products_treo.jsp?device=10035300025) (last accessed June 15, 2009); see also Pocketgear App Store, <http://appstore.pocketgear.com/palm/> (last accessed June 15, 2009).

<sup>117</sup> See “RIM Launches BlackBerry App World,” *Press Release*, Apr. 1, 2009, available at <http://na.blackberry.com/eng/newsroom/news/press/release.jsp?id=2223>.

Nokia Ovi Store	May 2009	20,000 Apps and Media Files <sup>118</sup>
Palm App Catalog	June 2009 <sup>119</sup>	
Windows Mobile Marketplace <sup>120</sup>		

In the short time since the iTunes App Store’s launch – just nine months – more than one billion applications have been downloaded by consumers.<sup>121</sup> Even the Skype application, the subject of a pending proceeding before the Commission,<sup>122</sup> is available on the iTunes App Store for the iPhone<sup>123</sup> and available for download to any Windows Mobile device on the Skype website.<sup>124</sup> According to Skype’s own website, the application is now available for more than 100 wireless devices.<sup>125</sup>

#### **IV. CONSUMERS HAVE BENEFITED FROM THE PERFORMANCE OF THE WIRELESS INDUSTRY**

##### **A. Consumption and Output**

---

<sup>118</sup> See *supra* n. 19.

<sup>119</sup> See “New Apps for Plam Pre,” The Official Palm Blog, June 8, 2009, *available at* <http://blog.palm.com/palm/2009/06/new-apps-for-new-palm-pre.html>.

<sup>120</sup> See *supra* n. 111.

<sup>121</sup> See Apple Download Countdown, <http://www.apple.com/itunes/billion-app-countdown/> (last accessed June 15, 2009).

<sup>122</sup> Petition to Confirm a Consumer’s Right to Use Internet Communications Software and Attach Devices to Wireless Networks, Skype Communications S.A.R.L., RM-11361 (filed Feb. 20, 2007).

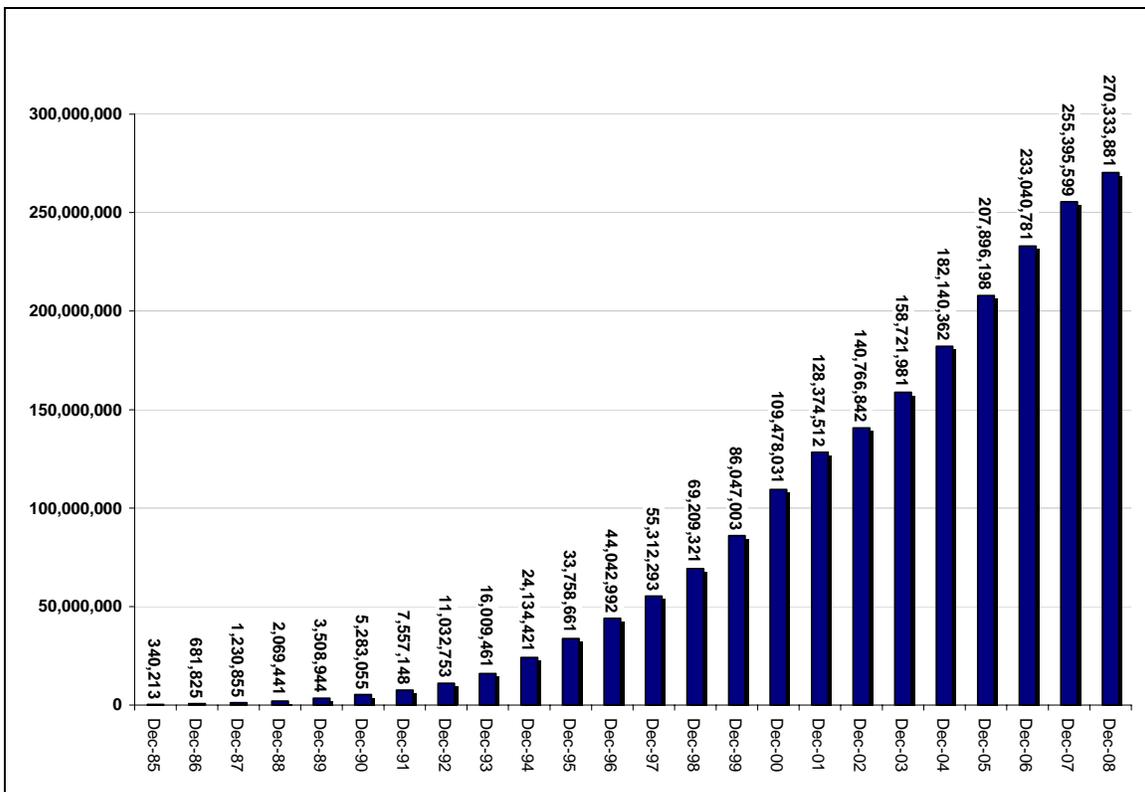
<sup>123</sup> See iTunes Skype Application, <http://www.skype.com/go/gets skype-iphone> (last accessed June 15, 2009).

<sup>124</sup> “Skype 2.5 for Windows Mobile” *at* <http://www.skype.com/download/skype/windowsmobile/> (last accessed Apr. 7, 2009).

<sup>125</sup> See Skype, <http://www.skype.com> (last accessed June 15, 2009).

Americans across all demographics and incomes subscribe to and rely on wireless service. Wireless subscribership continues to grow, with more than 270.3 million active wireless subscribers as of December 31, 2008, a figure that increased by approximately 15 million from just one year earlier.<sup>126</sup> With some 308 million persons residing in the U.S. and its territories,<sup>127</sup> wireless penetration in the U.S. now stands at approximately 87.8%, up from 83.2% as of year-end 2007.<sup>128</sup>

**Estimated Wireless Subscribers Exceed 270 Million in 2008**



Source: CTIA Semi-Annual Survey

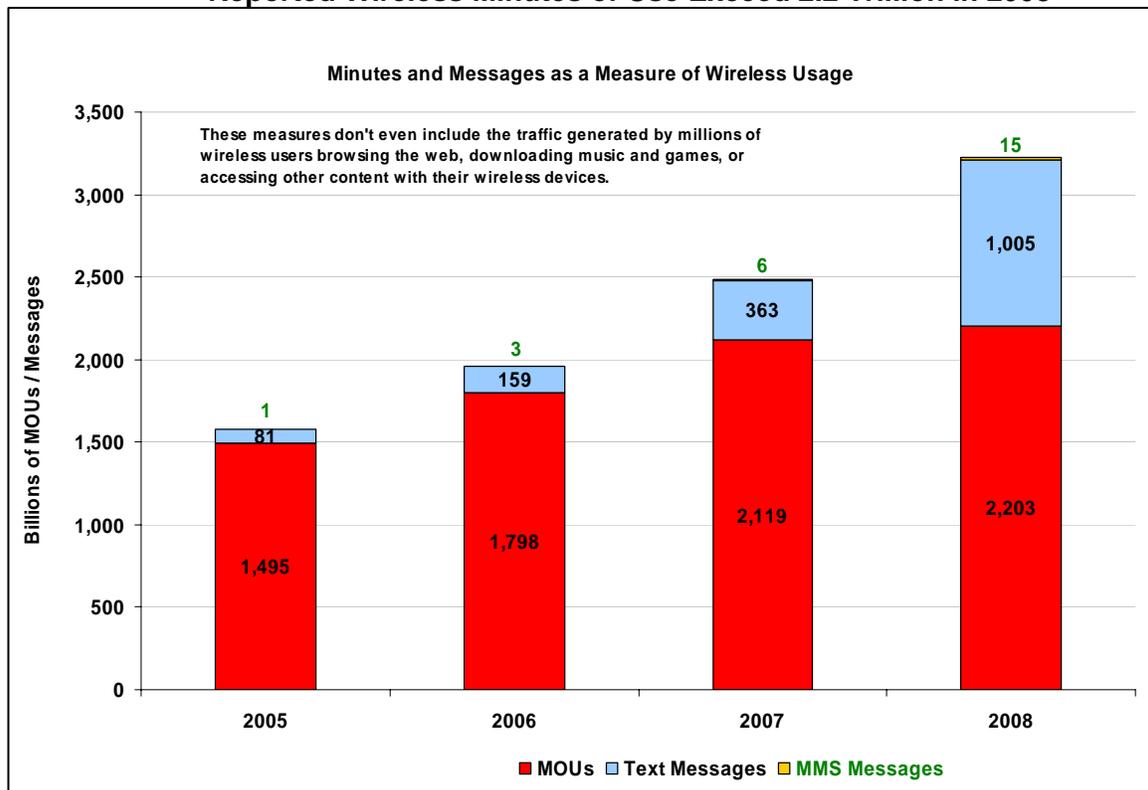
<sup>126</sup> See CTIA’s ANNUALIZED WIRELESS INDUSTRY SURVEY RESULTS - DECEMBER 1985 TO DECEMBER 2008, [http://files.ctia.org/pdf/CTIA\\_Survey\\_Year-End\\_2008\\_Graphics.pdf](http://files.ctia.org/pdf/CTIA_Survey_Year-End_2008_Graphics.pdf) (last accessed June 15, 2009).

<sup>127</sup> See U.S. Census Bureau data on the populations of the United States, Guam, the U.S. Virgin Islands, Commonwealth of the Northern Mariana Islands, Puerto Rico and American Samoa accessible via drop-down menu at the International Database summary page maintained by the Census, <http://www.census.gov/ipc/www/idb/summaries.html> (last accessed May 26, 2009).

<sup>128</sup> See CTIA’s Wireless Industry Indices Report at 30.

Total wireless output – including both minutes of use (“MOU”) and messages – has also continued to climb. America’s wireless consumers generated 2.2 trillion MOU, 1.005 trillion text messages, and 14.9 billion MMS messages in 2008, up from 2.1 trillion MOU, 362.5 billion text messages, and 6.1 billion MMS messages in 2007.<sup>129</sup> By the last half of 2008, wireless customers in the U.S. were using an average of 758 wireless MOU per month.<sup>130</sup> For the fourth quarter of 2008, Bank of America / Merrill Lynch reported a monthly average of 829 MOU per user.<sup>131</sup>

### Reported Wireless Minutes of Use Exceed 2.2 Trillion in 2008



Source: CTIA Semi-Annual Survey

<sup>129</sup> See CTIA’s Wireless Industry Indices Report at 187; see also CTIA Wireless Quick Facts, <http://www.ctia.org/advocacy/research/index.cfm/AID/10323> (last accessed June 15, 2009).

<sup>130</sup> CTIA’s Wireless Industry Indices Report at 187.

<sup>131</sup> Glen Campbell, et al., “Global Wireless Matrix: 1Q09, The Slowdown,” Bank of America / Merrill Lynch, Apr. 13, 2009, at 35 (“BofA / Merrill Lynch”).

These mobile usage metrics do not include other uses by mobile consumers such as web-browsing, mobile content downloads, game-play, or office systems access, none of which are tracked by CTIA. Nonetheless, such other forms of mobile usage have been measured via on-going wireless consumer surveys conducted by research firms such as comScore and Nielsen Mobile.<sup>132</sup>

## **B. Sources of Demographic Information**

Just as CTIA does not track sub-national usage of wireless services and applications, CTIA does not itself track the demographics of wireless users. Third-party firms such as Harris Interactive have surveyed specific user populations with respect to their attitudes about wireless, just as comScore and the Pew Internet & American Life Project have surveyed consumers about their use of different applications.<sup>133</sup> The NPD

---

<sup>132</sup> See, e.g., Brian Jurutka and Evan Neufeld “Mobile Internet & Applications - Gaining Momentum,” comScore, Apr. 9, 2009, *available at* [http://www.comscore.com/layout/set/popup/Press\\_Events/Presentations\\_Whitepapers/2009/Mobile\\_Internet\\_Applications\\_-\\_Gaining\\_Momentum](http://www.comscore.com/layout/set/popup/Press_Events/Presentations_Whitepapers/2009/Mobile_Internet_Applications_-_Gaining_Momentum); see also “Mobile Internet Becoming A Daily Activity For Many,” comScore Press Release, Mar. 16, 2009, *available at* [http://www.comscore.com/Press\\_Events/Press\\_Releases/2009/3/Daily\\_Mobile\\_Internet\\_Usage\\_Grows](http://www.comscore.com/Press_Events/Press_Releases/2009/3/Daily_Mobile_Internet_Usage_Grows); see also “Mobile Video: Despite Uptick, Still Room For Growth In U.S.,” Nielsen Mobile, Jan. 8, 2009, *available at* [http://blog.nielsen.com/nielsenwire/online\\_mobile/mobile-video-update-despite-uptick-still-room-for-growth-in-us/](http://blog.nielsen.com/nielsenwire/online_mobile/mobile-video-update-despite-uptick-still-room-for-growth-in-us/); and see “In US, SMS Text Messaging Now Tops Mobile Phone Calling,” Nielsen Mobile, Sept. 22, 2008 *available at* [http://blog.nielsen.com/nielsenwire/online\\_mobile/in-us-text-messaging-tops-mobile-phone-calling/](http://blog.nielsen.com/nielsenwire/online_mobile/in-us-text-messaging-tops-mobile-phone-calling/).

<sup>133</sup> See e.g., “Teenagers: A Generation Unplugged: A National Survey by CTIA–The Wireless Association® and Harris Interactive,” *available at* <http://www.ctia.org/content/index.cfm/AID/11483> (last accessed June 15, 2009)(including related materials); see also “In Tough Economy, Lower Income Mobile Consumers Turn to iPhone As Internet & Entertainment Device; comScore unveils demographics of iPhone owners and their usage behavior in new report,” Press Release, Oct. 27, 2008, *available at* [http://www.comscore.com/Press\\_Events/Press\\_Releases/2008/10/Lower\\_Income\\_Mobile\\_Consumers\\_use\\_Iphone/\(language\)/eng-US](http://www.comscore.com/Press_Events/Press_Releases/2008/10/Lower_Income_Mobile_Consumers_use_Iphone/(language)/eng-US); see also John Horrigan, “The Mobile Difference,” Pew Internet & American Life Project, Mar 25, 2009, *available at*

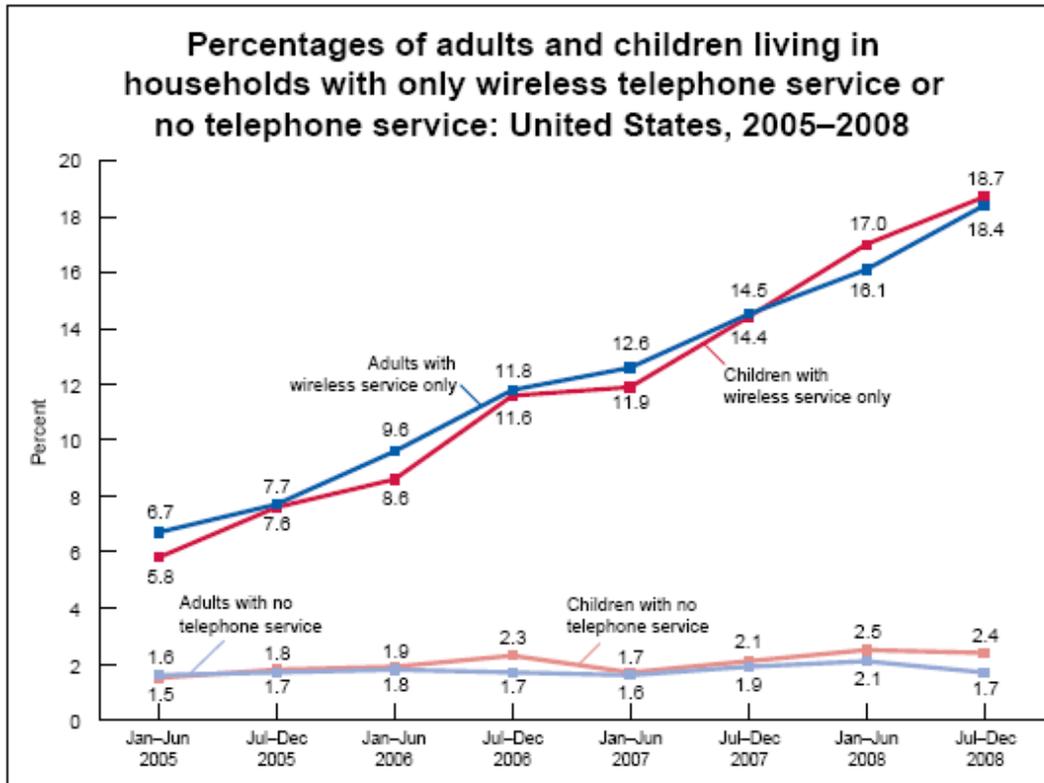
Group, Nielsen Mobile, InStat, the Yankee Group, Forrester Research, and others likewise examine usage and adoption of different devices and applications.

Additionally, surveys by the National Center for Health Statistics (“NCHS”) at the Centers for Disease Control and Prevention look at the demographics of wireless users. Among the most recent NCHS findings were that adults living with unrelated roommates have the highest prevalence rate of living in a wireless-only household (60.6%), up from 56.9% at year-end 2007.<sup>134</sup> As the following graphic provided by NCHS illustrates, 18.4% of adults and 18.7% of children lived in households with only wireless phone service in July – December 2008 by contrast with 6.7% of adults and 5.8% of children as of January – June 2005.

---

<http://www.pewinternet.org/Reports/2009/5-The-Mobile-Difference--Typology.aspx>; and see Barry Wellman, et al., “Networked Families,” Pew Internet & American Life Project, Oct. 19, 2008, available at <http://www.pewinternet.org/Reports/2008/Networked-Families.aspx>.

<sup>134</sup> NCHS 2008 Findings.



Source: NCHS

### C. Broadband Availability and Adoption

In the broadband marketplace, mobile wireless service providers strive to serve consumers. Availability and subscribership to wireless broadband Internet continues to grow apace. While consumers today have the option of choosing from a number of broadband access providers that include not only wireless but also cable, traditional telephone, Broadband over Power Line (“BPL”) and other providers, mobile wireless broadband Internet access is the fastest growing segment of the U.S. broadband market. Notably, the Commission’s most recent publicized data shows mobile broadband additions driving the growth of high-speed lines overall.<sup>135</sup> The following graph demonstrates how wireless broadband additions from December 2006 to December 2007

<sup>135</sup> See High-Speed Services for Internet Access: Status as of Dec. 31, 2007 (rel. Jan. 2009) (“2007 High-Speed Services Report”).

outpaced the additions for cable companies and traditional telephone companies combined both in total numbers and as a percentage of all broadband additions.

### Wireless is a Growing Means of High-Speed Access

- From Dec. 2006 to Dec. 2007, total high-speed lines grew 46%, from 82.8 million to 121.2 million lines, and 75% of all adds were mobile wireless subscriptions.
- Mobile wireless' high-speed subscribership rose from 22.3 million to 51 million subscribers.
- Mobile wireless' share of total broadband lines rose from 27% to 42% of total broadband lines.
  - Other forms of broadband access also grew, but not by as much as wireless access, and their total share of broadband lines fell.
  - Since then, high-speed wireless access has kept growing.

**High Speed Net Adds by Type, Dec. 2006 – Dec. 2007**

Type	Additions (Millions)
ADSL	4.0
Cable Modem Broadband	4.5
Other	1.1
Wireless	28.7

Source: FCC Report, "High-Speed Services for Internet Access: Status as of Dec. 31, 2007," January 2009.

Copyright 2009 CTIA - The Wireless Association®. All rights reserved.

Collectively, wireless companies are providing wireless broadband coverage to roughly 270 million Americans in communities across the country.<sup>136</sup> The FCC's 2007 *High-Speed Services Report* found an increase of over 15 million new mobile wireless high-speed lines in just six months resulting in a total mobile wireless count of 51 million high-speed lines in December 2007, up from 22.3 million as of year-end 2006.<sup>137</sup> The Report also notes the number of mobile wireless residential high-speed and advanced lines was 9.1 million as of December 2007.<sup>138</sup> In early 2009, comScore reported that

<sup>136</sup> See *supra* note 4.

<sup>137</sup> 2007 *High-Speed Services Report* at Tables 1, 6.

<sup>138</sup> *Id.* at Tables 3, 4.

wireless high-speed subscribership subsequently grew 80% year-over-year, reaching 64.2 million 3G-equipped subscribers by mid-2008.<sup>139</sup> More recent data from comScore extends this growth through January 2009, when comScore estimates there were more than 73 million 3G subscribers in the United States.<sup>140</sup> Beyond these findings, wireless carriers responding to CTIA's semi-annual wireless industry reported that more than 200 million of their subscribers had web-capable devices operating on their networks at year-end 2008, with more than 228 million devices being data-capable.<sup>141</sup>

Wireless consumers have a number of options for mobile Internet access. Consumers requiring less data can choose to subscribe to metered broadband, paying for either a bucket of bits – similar to voice plan pricing – or simply paying for the bits used.<sup>142</sup> This option enables consumers to tailor their wireless service plans to their broadband needs. Like wireline broadband offerings, wireless broadband customers also have the choice of subscribing to “all-you-can-eat” broadband offerings either on a month-to-month basis or under longer term contracts providing discounted recurring and non-recurring fees. Through innovative service features and plans, wireless carriers are

---

<sup>139</sup> See “comScore Reports that the U.S. Catches Up with Western Europe in Adoption of 3G Mobile Devices; U.S. Experiences 80 Percent Growth in 3G Subscribers,” comScore Press Release, Sept. 8, 2008, *available at* <http://www.comscore.com/press/release.asp?press=2434>.

<sup>140</sup> See “The comScore 2008 Digital Year in Review,” Jan.30, 2009, comScore, *available at* [http://www.comscore.com/Press\\_Events/Presentations\\_Whitepapers/2009/2008\\_Digital\\_Year\\_in\\_Review](http://www.comscore.com/Press_Events/Presentations_Whitepapers/2009/2008_Digital_Year_in_Review) at 12 (comScore also reported that from November 2007 to November 2008 “3G [wireless broadband]” penetration grew 43 percent from November).

<sup>141</sup> See CTIA's Wireless Industry Indices Report at 10.

<sup>142</sup> See, e.g., “Mobile Broadband Connection Plans,” Sprint Nextel, *available at* <http://nextelonline.nextel.com/NASApp/onlinestore/en/Action/SubmitRegionAction> (last accessed June 13, 2007); see also “Data Cell Phone Plans,” AT&T, *available at* <http://www.wireless.att.com/cell-phone-service/cell-phone-plans/data-cell-phone-plans.jsp> (last accessed June 13, 2007).

bringing additional competition to the broadband marketplace and offering American consumers unique new ways to stay connected to information.

Although some have bemoaned the lack of a third pipe to the home, this concept has been overtaken by events. It ignores that many American communities have three, four, five, or more additional choices in the form of mobile wireless broadband competitors providing connectivity to the person. In these communities, residents have the option of using wireless as their broadband access service. As the record demonstrates, consumers have shown significant interest in adopting wireless broadband as a viable competitive alternative to traditional wireline Internet access options. Unlike traditional wireline Internet access, wireless broadband un-tethers users by offering the unique benefit of mobility. Wireless is not a third pipe into the *home*, but rather a third pipe to the *person*, wherever they are, whenever they want access to information. For some areas, mobile wireless broadband may be the only broadband option available. Certainly, rural and high-cost areas benefit from the availability of broadband mobile wireless technologies.

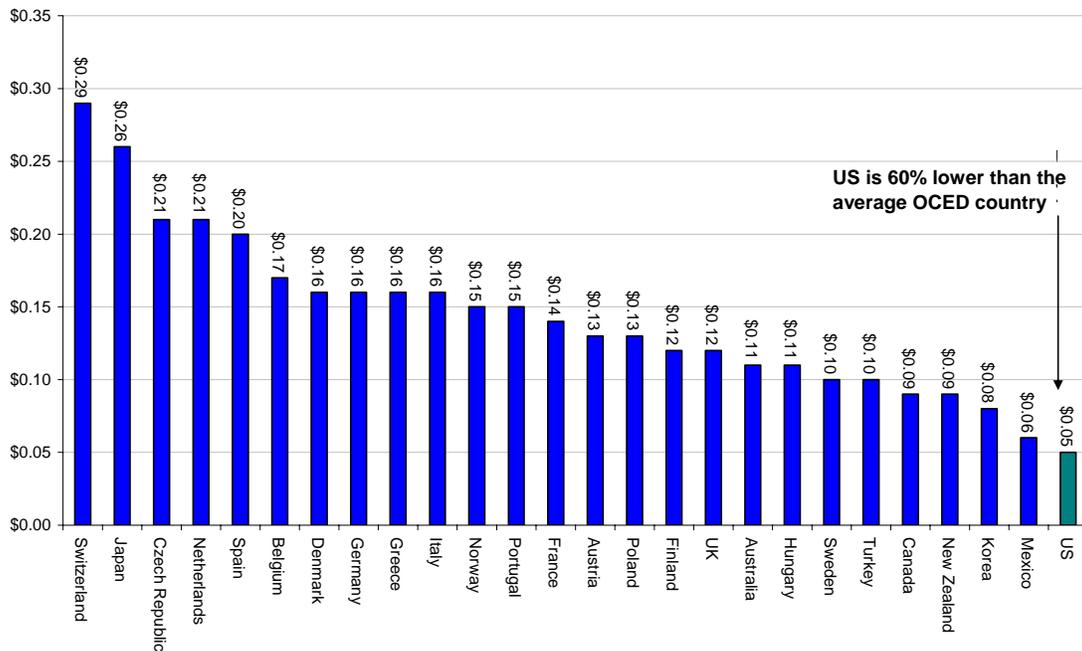
Today, broadband providers face unique challenges in continuing to bring consumers the high quality, high-speed, innovative services they demand. Wireless providers face particularly high hurdles to delivering broadband service because of the shared and scarce nature of spectrum and the challenge of providing time-sensitive voice communications over the same interface as high-speed data. In the rapidly evolving mobile wireless broadband market, carriers need to retain the ability to manage their networks to provide consumers not only with a positive broadband experience, but also with the security of an “always with you” mobile voice network. For these reasons, the

Commission should take steps to preserve the ability of broadband carriers to manage their unique networks for the benefit of their customers.

**V. INTERNATIONAL COMPARISONS – THE U.S. WIRELESS MARKETPLACE LEADS THE WORLD IN EFFICIENCY, COMPETITION, AND VALUE FOR CONSUMERS**

As CTIA documented for the Commission in its May 12, 2009 *ex parte* filing in RM-11361, GN Docket No. 09-51, and WC Docket No. 07-52, the wireless industry in the United States provides unparalleled value for U.S. consumers, including “the lowest cost per minute, the highest minutes of use, and the lowest HHI of the 26 Organization for Economic Co-Operation and Development (‘OECD’) countries measured by an independent third party.”<sup>143</sup>

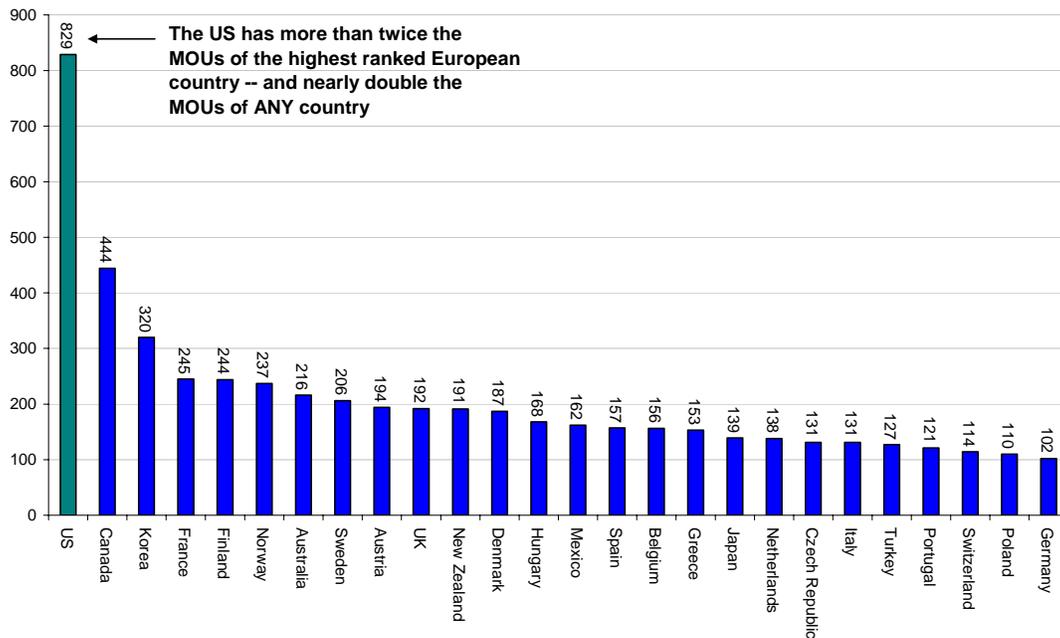
**Comparative Revenue Per Minute in 26 OECD Countries, 4Q08**



Source: Merrill Lynch, “Global Wireless Matrix 4Q08”

<sup>143</sup> Letter from Christopher Guttman-McCabe, Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, Federal Communications Commission, RM-11361, GN Docket No. 09-51, and WC Docket No. 07-52 (filed May 12, 2009).

### Comparative Monthly Wireless MOUs in 26 OECD Countries, 4Q08



Source: Merrill Lynch, “Global Wireless Matrix 4Q08”

That ex parte, attached hereto, demonstrated that “American consumers have more choices than consumers in nearly every developed country in the world” – drawing upon the *Global Wireless Matrix* for the fourth quarter of 2008, prepared by the analysts of Bank of America / Merrill Lynch to show both the comparative market share data of the operators in the majority of the countries that make up the OECD, and the HHI of those OECD countries.<sup>144</sup> That data demonstrates that the HHI for the U.S. is the lowest of the 26 countries tracked in that report, and that the combined market share of the top two U.S. carriers is less than that of the top two providers in all but one of those 26 OECD countries.<sup>145</sup>

<sup>144</sup> *Id.* at 6-7.

<sup>145</sup> *Id.* at 7-8.

<b>Wireless Mobile Competition in OECD Countries, 4Q08</b>					
<b>Mobile Operator Market Share by Subscription (%)</b>					
<b>Number of Operators</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Others</b>
Australia	40.7	32.6	18	8.7	
Austria	42.6	32.2	19.5	5.8	
Belgium	44.7	30.9	24.4		
Canada	36.8	30.6	28.4	2	2.2
Czech Republic	39.9	38.7	21.3		
Denmark	46.2	26.5	21.8	5.6	
Finland	39.5	37.5	23.1		
France	47.1	36.2	16.7		
Germany	36.5	33.7	16.6	13.2	
Greece	41.2	30.9	27.9		
Hungary	43.9	35.1	21.9		
Italy	38.5	33.2	18.7	9.7	
Japan	49.6	28	18.3	4.2	
Korea	50.5	31.5	18		
Mexico	72.3	19.7	4.5	3.5	
Netherlands	49.8	27	23.1		
New Zealand	52.7	47.3			
Norway	55.4	44.6			
Poland	32.9	32.3	30.2	4.6	
Portugal	44.2	35.5	20.3		
Spain	45.0	31.5	21.7	1.8	
Sweden	46.6	29.3	16.6	7.4	
Switzerland	61.9	20.4	17.8		
Turkey	55.7	25.2	19.1		
United Kingdom	25.5	25.1	22	20.9	6.5
<b>United States</b>	<b>28.5</b>	<b>26.7</b>	<b>18.2</b>	<b>12.1</b>	<b>14.5</b>

\* The figure for the third U.S. carrier was increased to account for their wholly-owned MVNO subsidiary.

Source: BofA / Merrill Lynch, Global Wireless Matrix

Wireless Mobile Competition in OECD Countries, 4Q08						
HHI Values						
Operators	1	2	3	4	Others	HHI Sum
Australia	1,656.49	1,062.76	324.00	75.69	0.00	3,118.94
Austria	1,814.76	1,036.84	380.25	33.64	0.00	3,265.49
Belgium	1,998.09	954.81	595.36	0.00	0.00	3,548.26
Canada	1,354.24	936.36	806.56	4.00	4.84	3,106.00
Czech Republic	1,592.01	1,497.69	453.69	0.00	0.00	3,543.39
Denmark	2,134.44	702.25	475.24	31.36	0.00	3,343.29
Finland	1,560.25	1,406.25	533.61	0.00	0.00	3,500.11
France	2,218.41	1,310.44	278.89	0.00	0.00	3,807.74
Germany	1,332.25	1,135.69	275.56	174.24	0.00	2,917.74
Greece	1,697.44	954.81	778.41	0.00	0.00	3,430.66
Hungary	1,927.21	1,232.01	479.61	0.00	0.00	3,638.83
Italy	1,482.25	1,102.24	349.69	94.09	0.00	3,028.27
Japan	2,460.16	784.00	334.89	17.64	0.00	3,596.69
Korea	2,550.25	992.25	324.00	0.00	0.00	3,866.50
Mexico	5,227.29	388.09	20.25	12.25	0.00	5,647.88
Netherlands	2,480.04	729.00	533.61	0.00	0.00	3,742.65
New Zealand	2,777.29	2,237.29	0.00	0.00	0.00	5,014.58
Norway	3,069.16	1,989.16	0.00	0.00	0.00	5,058.32
Poland	1,082.41	1,043.29	912.04	21.16	0.00	3,058.90
Portugal	1,953.64	1,260.25	412.09	0.00	0.00	3,625.98
Spain	2,025.00	992.25	470.89	3.24	0.00	3,491.38
Sweden	2,171.56	858.49	275.56	54.76	0.00	3,360.37
Switzerland	3,831.61	416.16	316.84	0.00	0.00	4,564.61
Turkey	3,102.49	635.04	364.81	0.00	0.00	4,102.34
United Kingdom	650.25	630.01	484.00	436.81	42.25	2,243.32
<b>United States</b>	<b>812.25</b>	<b>712.89</b>	<b>331.24</b>	<b>146.41</b>	<b>210.25</b>	<b>2,213.04</b>

Note that this calculation actually overstates the YE2008 HHI for the US, as it counts all "others" as a single operator with a 14.5% market share, instead of as 145 separate operators, with market shares ranging from 5% to less than 0.001%. Also note that when the United State numbers are adjusted to account for the Verizon Wireless – Alltel transaction (which took place in 1Q09) the overstated U.S. HHI still rises to only 2280. Source: Merrill Lynch, "Global Wireless Matrix 4Q08"

Source: BofA / Merrill Lynch, Global Wireless Matrix

The data in the *Global Wireless Matrix* for the fourth quarter of 2008 also demonstrates that U.S. consumers not only use more than twice the MOUs of consumers in all but one other country tracked by Bank of America / Merrill Lynch, but also that the

U.S. has the lowest revenue per minute of all 26 OECD countries tracked in that report, and that it is 60 % lower than the average of the other 25 countries.<sup>146</sup>

The *ex parte* also documents that wireless carriers in the U.S. make the most efficient use of spectrum – as measured by subscribers served per MHz of spectrum allocated.<sup>147</sup> By each of these measures, the competitive wireless industry is leading in delivering value to America’s wireless consumers.

---

<sup>146</sup> *Id.* at 3. Canada comes closest to the U.S., with an average of 444 MOUs a month per subscriber, compared to the U.S. figure of 829. By contrast, the other OECD countries’ subscriber usage averages between 102 and 320 MOUs a month, with 20 of the 26 countries’ subscribers averaging less than 200 MOUs a month.

<sup>147</sup> *Id.* at 9.

## VI. CONCLUSION

With multiple service providers serving the vast majority of Americans, the on-going investment in and rollout of advanced wireless services, the continuing introduction of innovative service options, enhanced mobile devices, an explosion of applications, and steadily declining prices alongside increasing usage by consumers, the wireless industry – and the wireless marketplace – continues to deliver effective competition and competitive benefits to consumers. As this filing indicates, wireless competition provides tremendous benefits for consumers and the U.S. economy as a whole. CTIA hopes that the information provided in these comments assists the Commission in preparing its *Fourteenth Annual CMRS Competition Report*.

Respectfully submitted,

/s/ David J. Redl

David J. Redl  
Counsel, Regulatory Affairs

Robert F. Roche, Ph.D.  
Vice President, Research

Michael F. Altschul  
Senior Vice President and General Counsel

Christopher Guttman-McCabe  
Vice President, Regulatory Affairs

CTIA-THE WIRELESS ASSOCIATION®  
1400 Sixteenth Street, N.W.  
Suite 600  
Washington, D.C. 20036  
(202) 785-0081

Dated: June 15, 2009

# **ATTACHMENT A**

May 12, 2009

***Electronic Filing***

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, SW  
12th Street Lobby, TW-A325  
Washington, D.C. 20554

**Re: *Written Ex Parte Communication*, RM-11361; GN Docket No. 09-51;  
WC Docket No. 07-52**

Dear Ms. Dortch:

Former Vice President Al Gore has said that the United States has “the most competitive wireless industry of any nation in the world” with less consolidation and more competition, and that “because of competition, we are seeing a continued pulse of investment to expand the capacity of broadband networks.” In this *ex parte*, CTIA presents numerous facts that detail for the Commission the unparalleled value that U.S. consumers enjoy, driven by the competition and innovation in the industry. The facts show that the United States has the lowest cost per minute, the highest minutes of use, and the lowest HHI of the 26 Organisation for Economic Co-operation and Development (“OECD”) countries measured by an independent third party. Additionally, the *ex parte* details the expansion of broadband services to wireless consumers, including access to 40,000 different wireless applications (soon to increase to over 60,000 applications).

Specifically, the first section on “Value” compares the cost, reflected in revenue per minute, that U.S. customers pay as compared to the 25 other OECD countries. It also compares minutes of use. In both categories, the United States is ranked first. In fact, in terms of per minute cost, the United States is 60% lower than the average of the other 25 countries. In terms of minute of use, the United States wireless consumer not only uses more minutes than consumers in the 25 other OECD countries, but actually uses more than twice as many minutes than 24 of the 25 countries.

The second section tracks the competitive state of the U.S. as compared to the same 25 other OECD countries. The statistics show that the U.S. is the least concentrated and most competitive market of the 26 countries reviewed. It is one of only three countries with more than four providers. The charts also show that the U.S. has the lowest Herfindahl-Hirschman Index (“HHI”).

The third section provides information on the stunning innovation in the industry. In the last year, at least six application stores have launched, with over 40,000 apps made available to consumers. There are over 630 handsets sold in the United States, manufactured by 33 companies. We expect this innovation to continue to accelerate, as the networks evolve to support new handsets and applications (and vice versa), and as the number of wireless-related patents continues to grow as they have uninterrupted over the last 10 years.

American consumers would be harmed considerably if the United States moved away from the vibrant, competitive model that has made it such a success and toward the regulatory model embraced by European markets. The end result of this competition and innovation is that Americans derive far

more benefit for far fewer of their telecommunications dollars. Some of the specific facts from the filing include:

- The price per minute of service in the **United States is the lowest of the 26 OECD countries** tracked by Merrill Lynch.
- Consumers in the **United States have the highest minutes of use per month of the 26 OECD countries** tracked by Merrill Lynch.
- The **United States has the lowest HHI** of the 26 OECD countries tracked by Merrill Lynch.
- In **the United States**, the top four carriers represent 86% of the market, making it **the most competitive market of the 26 OECD countries reviewed**.
  - The top four U.S. carriers represent 86% of the market.
  - In 23 of the 26 OECD countries the top four carriers have 100% of the market.
  - In 13 of the 26 OECD countries the top three carriers have 100% of the market.
- At least **33 companies manufacture wireless devices for the U.S. market**.
- **Over 630 different handset are sold in the United States**.
- **Consumers have access to over 40,000 applications** sold through four newly created app stores – with three more stores and more than 20,000 additional applications planned to launch this year.
- **U.S. consumers enjoy access to 29 different Wi-Fi enabled handsets**.
- Since 2005, **mobile wireless providers have been the fastest-growing providers** of both high-speed lines (over 200 kbps in at least one direction) and advanced service lines (over 200 kbps in both directions).
  - **Subscriber counts for high-speed lines more than doubled and advanced service lines more than tripled in the last year that the FCC measured – 2007.**
  - The United States has a higher percentage of consumers actively using mobile Internet capabilities than any country measured by Nielsen.

If you have any questions, please do not hesitate to contact me.

Sincerely,

*/s/ Christopher Guttman-McCabe*

Christopher Guttman-McCabe  
Vice President, Regulatory Affairs  
CTIA – The Wireless Association®

# **THE UNITED STATES AND WORLD WIRELESS MARKETS:**

**Competition and Innovation are  
Driving Wireless Value in the U.S.**

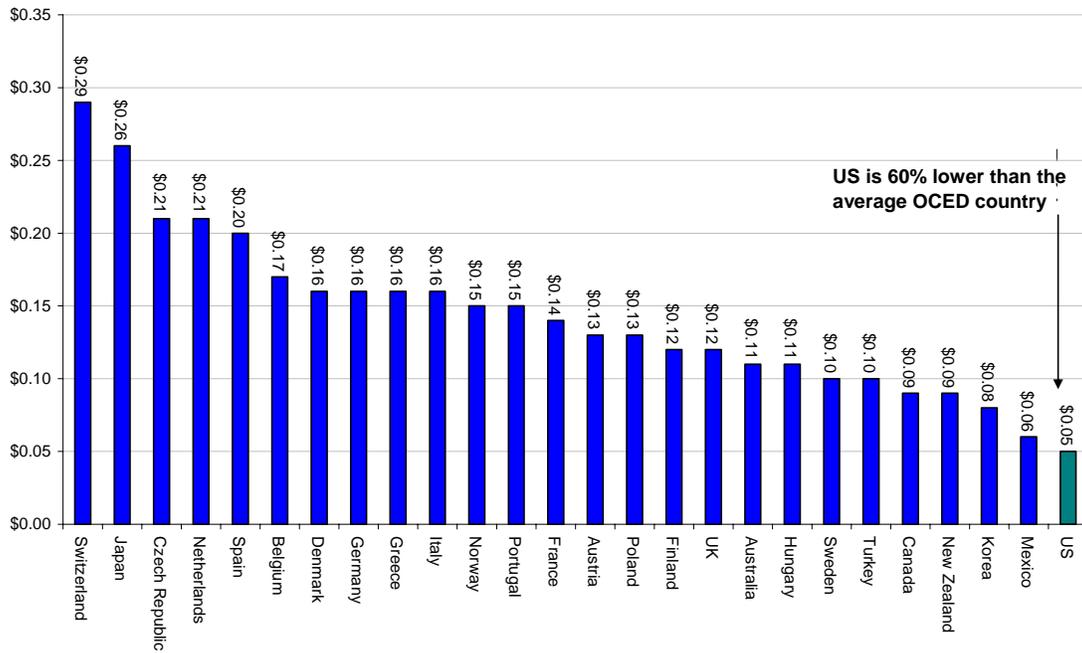
**May 2009**

**VALUE**

As CTIA has detailed for the Commission before, American consumers enjoy unparalleled value when compared to our foreign counterparts. As the following charts details, the low price per minute and high minutes of use result in a value calculation that is unmatched around the world.

- The United States has the lowest revenue per minute of all 26 OECD countries tracked by Merrill Lynch, it is 60 % lower than the average of the other 25.

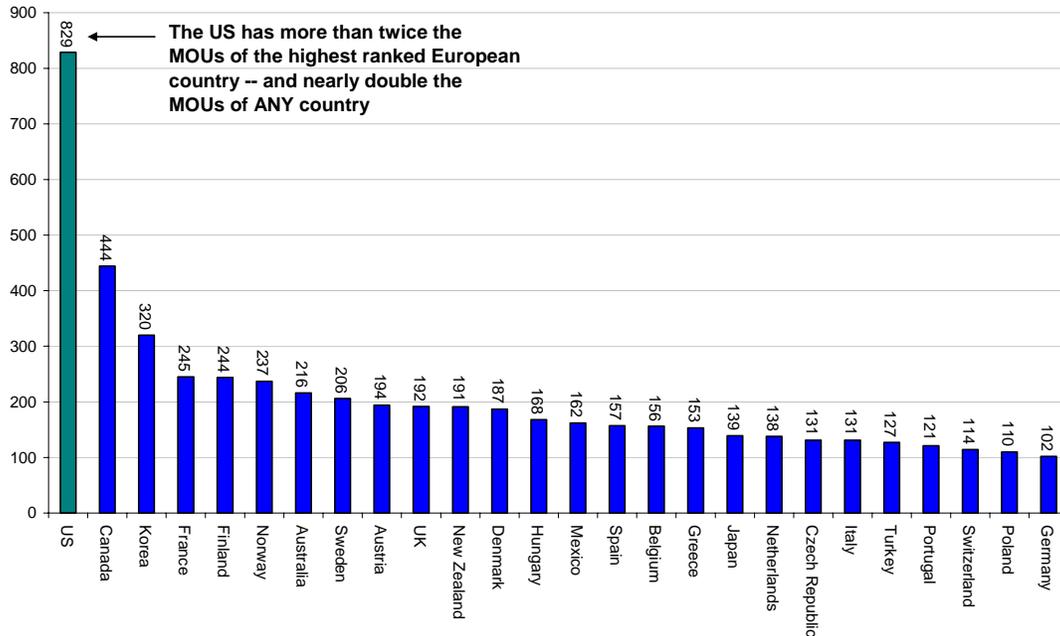
**Comparative Revenue Per Minute in 26 OECD Countries, 4Q08**



Source: Merrill Lynch, "Global Wireless Matrix 4Q08"

- Consumers in other parts of the world use sharply fewer minutes of wireless service. European wireless consumers, for example, average 172 MOUs. In fact, U.S. consumers use nearly twice the MOUs of consumers in any other country tracked by Merrill Lynch.

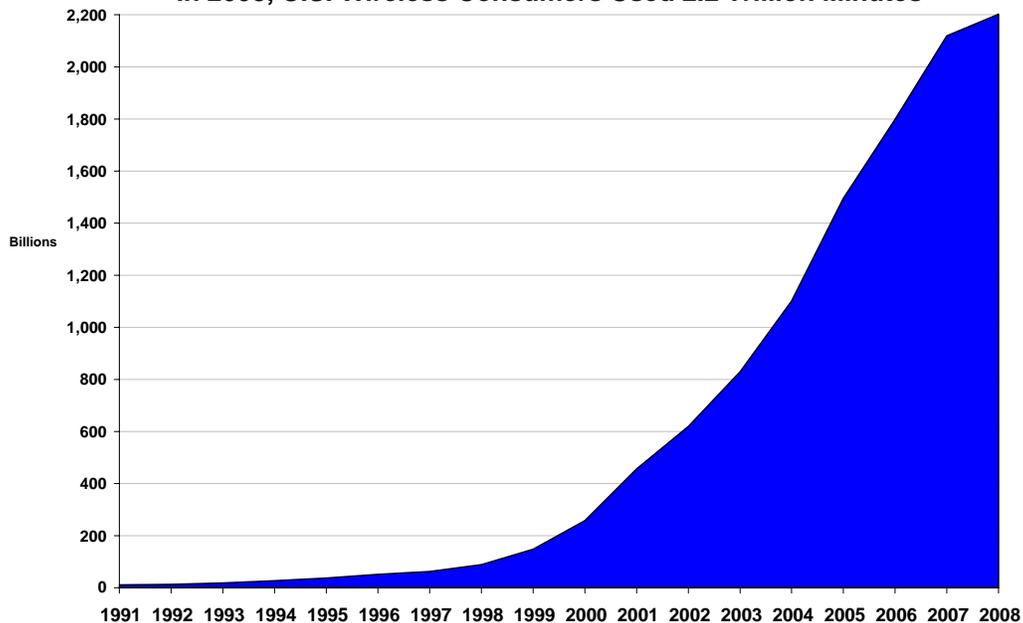
**Comparative Monthly Wireless MOUs in 26 OECD Countries, 4Q08**



Source: Merrill Lynch, "Global Wireless Matrix 4Q08"

- Because American consumers recognize value and desire the convenience of mobility, they use far and away the most minutes of use ("MOUs") of any country. Americans average 829 minutes per month, or more than 2.2 trillion minutes in 2008.

**In 2008, U.S. Wireless Consumers Used 2.2 Trillion Minutes**



Source: CTIA Semi-Annual Surveys

# COMPETITION

Not long ago, the U.S. wireless industry was denounced as an oligopoly, while praising the competitiveness of the European wireless market.<sup>1</sup> As CTIA has demonstrated for the Commission before, this description of the state of the U.S. market as compared to the world market for wireless couldn't be further from the truth. The reality is that American consumers have more choices than consumers in nearly every developed country in the world. A review of Merrill Lynch's *Global Wireless Matrix 4Q08* reveals the truth – American consumers have the kind of choices and value that consumers around the world strive for.

- Merrill Lynch data on the majority of the countries that make up the OECD show that the U.S. has the most competitive wireless market.

<b>Wireless Mobile Competition in OECD Countries, 4Q08</b>					
<b>Mobile Operator Market Share by Subscribership (%)</b>					
<b>Number of Operators</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Others</b>
Australia	40.7	32.6	18	8.7	
Austria	42.6	32.2	19.5	5.8	
Belgium	44.7	30.9	24.4		
Canada	36.8	30.6	28.4	2	2.2
Czech Republic	39.9	38.7	21.3		
Denmark	46.2	26.5	21.8	5.6	
Finland	39.5	37.5	23.1		
France	47.1	36.2	16.7		
Germany	36.5	33.7	16.6	13.2	
Greece	41.2	30.9	27.9		
Hungary	43.9	35.1	21.9		
Italy	38.5	33.2	18.7	9.7	
Japan	49.6	28	18.3	4.2	
Korea	50.5	31.5	18		
Mexico	72.3	19.7	4.5	3.5	
Netherlands	49.8	27	23.1		
New Zealand	52.7	47.3			
Norway	55.4	44.6			
Poland	32.9	32.3	30.2	4.6	
Portugal	44.2	35.5	20.3		
Spain	45.0	31.5	21.7	1.8	
Sweden	46.6	29.3	16.6	7.4	
Switzerland	61.9	20.4	17.8		
Turkey	55.7	25.2	19.1		
United Kingdom	25.5	25.1	22	20.9	6.5
<b>United States</b>	<b>28.5</b>	<b>26.7</b>	<b>18.2</b>	<b>12.1</b>	<b>14.5</b>

\* The figure for the third U.S. carrier was increased to account for their wholly-owned MVNO subsidiary.

Source: Merrill Lynch, "Global Wireless Matrix 4Q08"

<sup>1</sup> Statement of Tim Wu, Professor, Columbia Law School, Before the U.S. House of Representatives Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, at 3, 110<sup>th</sup> Cong. (July 11, 2007).

- Using the Herfindahl-Hirschman Index (“HHI”), a commonly accepted measure of market concentration, the HHI of the United States is the lowest of the OECD markets tracked by Merrill Lynch.

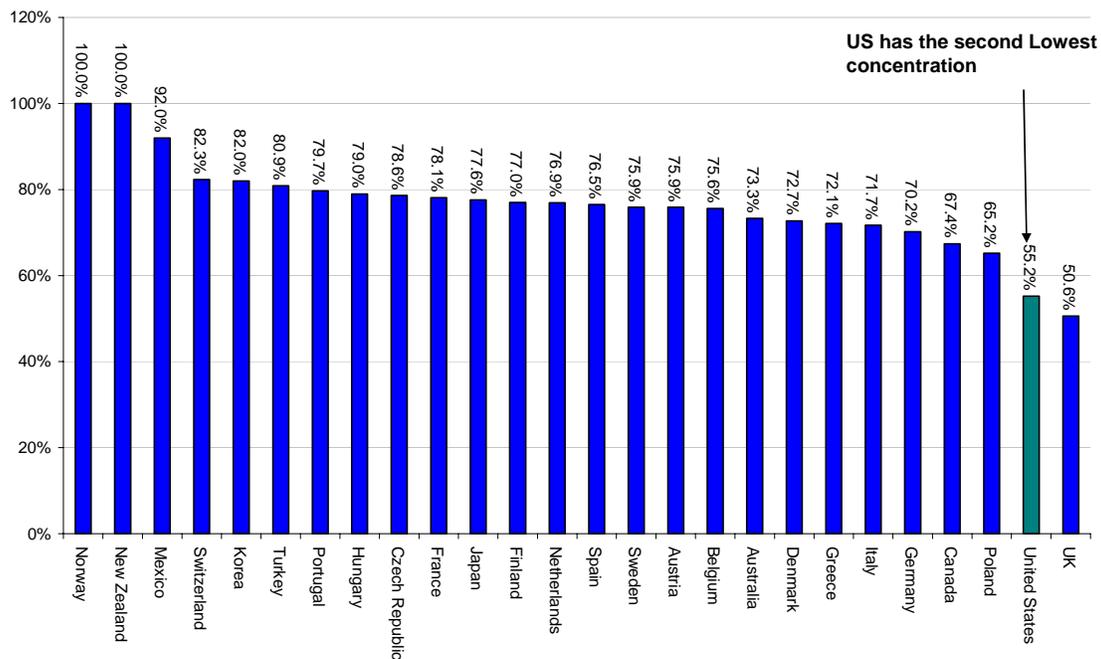
Wireless Mobile Competition in OECD Countries, 4Q08						
HHI Values						
Operators	1	2	3	4	Others	HHI Sum
Australia	1,656.49	1,062.76	324.00	75.69	0.00	3,118.94
Austria	1,814.76	1,036.84	380.25	33.64	0.00	3,265.49
Belgium	1,998.09	954.81	595.36	0.00	0.00	3,548.26
Canada	1,354.24	936.36	806.56	4.00	4.84	3,106.00
Czech Republic	1,592.01	1,497.69	453.69	0.00	0.00	3,543.39
Denmark	2,134.44	702.25	475.24	31.36	0.00	3,343.29
Finland	1,560.25	1,406.25	533.61	0.00	0.00	3,500.11
France	2,218.41	1,310.44	278.89	0.00	0.00	3,807.74
Germany	1,332.25	1,135.69	275.56	174.24	0.00	2,917.74
Greece	1,697.44	954.81	778.41	0.00	0.00	3,430.66
Hungary	1,927.21	1,232.01	479.61	0.00	0.00	3,638.83
Italy	1,482.25	1,102.24	349.69	94.09	0.00	3,028.27
Japan	2,460.16	784.00	334.89	17.64	0.00	3,596.69
Korea	2,550.25	992.25	324.00	0.00	0.00	3,866.50
Mexico	5,227.29	388.09	20.25	12.25	0.00	5,647.88
Netherlands	2,480.04	729.00	533.61	0.00	0.00	3,742.65
New Zealand	2,777.29	2,237.29	0.00	0.00	0.00	5,014.58
Norway	3,069.16	1,989.16	0.00	0.00	0.00	5,058.32
Poland	1,082.41	1,043.29	912.04	21.16	0.00	3,058.90
Portugal	1,953.64	1,260.25	412.09	0.00	0.00	3,625.98
Spain	2,025.00	992.25	470.89	3.24	0.00	3,491.38
Sweden	2,171.56	858.49	275.56	54.76	0.00	3,360.37
Switzerland	3,831.61	416.16	316.84	0.00	0.00	4,564.61
Turkey	3,102.49	635.04	364.81	0.00	0.00	4,102.34
United Kingdom	650.25	630.01	484.00	436.81	42.25	2,243.32
<b>United States*</b>	<b>812.25</b>	<b>712.89</b>	<b>331.24</b>	<b>146.41</b>	<b>210.25</b>	<b>2,213.04</b>

Note that this calculation actually overstates the YE2008 HHI for the US, as it counts all "others" as a single operator with a 14.5% market share, instead of as 145 separate operators, with market shares ranging from 5% to less than 0.001%. Also note that when the United State numbers are adjusted to account for the Verizon Wireless – Alltel transaction (which took place in 1Q09) the overstated U.S. HHI still rises to only 2280. Source: Merrill Lynch, “Global Wireless Matrix 4Q08”

Additionally, even when the analysis is confined to the two largest carriers in a country, the United States is still one of the most competitive markets.

- The combined market share of the top two U.S. carriers is **less** than that of the top two providers in all but one of the 26 OECD countries tracked by Merrill Lynch (the U.K is the other country).
  - The top four U.S. carriers represent 86% of the market.
  - In 23 of the 26 OECD countries the top four carriers have 100% of the market.
  - In 13 of the 26 OECD countries the top three carriers have 100% of the market.

**Top Two Providers' Combined Market Share for 26 OECD Countries, 4Q08**



Source: Merrill Lynch, “Global Wireless Matrix 4Q08”

CTIA's own research on the mobile wireless markets in the top ten OECD countries by GDP confirm what Merrill Lynch and others' reports detail, that U.S. wireless companies provide consumers with more service for their telecommunications dollar, while maintaining the most spectrally efficient networks in the world.



	 USA	 Japan	 Germany	 U.K.	 France	 Italy	 Canada	 Spain	 S. Korea	 Mexico
Subscribers**	270.3m	109.3m	107.2m	76.4m	57.4m	90.5m	21.6m	52.5m	45.6m	77.9m
Average Consumers' Minutes of Use per Month**	829	139	102	192	245	131	444	157	320	162
Average Revenue per Minute – A Measure of the Effective Price per Voice Minute**	\$0.05	\$0.26	\$0.16	\$0.12	\$0.14	\$0.16	\$0.09	\$0.20	\$0.08	\$0.06
Top Two Carriers Percentage of the Total Market**	55.2%	77.6%	70.2%	50.6%	78.1%	71.7%	67.4%	76.5%	82.0%	92.0%
Efficient Use of Spectrum -- Subscribers Served per MHz of Spectrum Allocated	651,100	312,968	347,540	214,002	148,958	290,622	103,414	144,692	194,420	630,833
Spectrum Assigned for Commercial Wireless Use	409.5 MHz*	347 MHz	305 MHz	352.8 MHz	374.6 MHz	311.4 MHz	205 MHz	358 MHz	233 MHz	120 MHz

\*Figure includes AWS-1, 700 MHz spectrum not yet in use and 55.5 MHz of spectrum at 2.5 GHz.  
 \*\* Glen Campbell, et al., "Global Wireless Matrix 4Q08," Merrill Lynch, April 13, 2009, at Table 1.

Finally, the Commission's own annual CMRS Competition Reports continually show that there is competition in the wireless industry.<sup>2</sup> It is this sound regulatory and economic policy of permitting mobile wireless broadband providers to differentiate themselves that has enabled the world of innovation and innovative service offerings that have been hallmarks of the U.S. mobile wireless industry.

<sup>2</sup> See, e.g. *In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Thirteenth Report*, WT Docket No. 08-27, DA 09-54, at ¶ 1 (Jan. 16, 2009).

# **INNOVATION**

## Handset Innovation

While there is an ongoing debate about exclusive handset arrangements, this is not intended to impact that discussion. Rather, this information shows that manufacturers develop and market an extraordinarily large number of handsets in the U.S. market. American consumers enjoy a wide variety of wireless devices from which they can choose the device that best fits their wireless needs. From simple, voice-only devices to complex smartphones that more closely resemble a handheld computer than a telephone, the breadth and depth of devices manufactured and sold to American consumers far eclipses that in other developed countries.

- According to our research, there are more handsets available in the United States than in any other country in the world, and likely more than are available in any other *region* in the world.
  - There are more than 630 different wireless handsets and devices available in the U.S.
  - By contrast, in the U.K., there are only 147 different handsets available to consumers.<sup>3</sup>

HANDSET MANUFACTURERS PRODUCING/SELLING IN THE UNITED STATES		
Alcatel	HTC	PCD
Apple	Huawei	Research in Motion
ASUS	Jitterbug	Samsung
Axxesstel	Kyocera	Sanyo
BandRich	LG	Sharp
BenQ	Motorola	Siemens
Cal-Comp	Nokia	Sierra Wireless
Casio	Novatel Wireless	Sony Ericsson
Firefly	Option	Uniden
HP	Palm	Waxess USA
	Pantech & Curitel	ZTE

Part of the mobile wireless broadband experience has been the increased functionality that smartphones and other advanced wireless devices have brought to consumers. Handsets are becoming tools of productivity and gateways to information in ways that are evolving every day. The smartphone market expanded in a major way in 2008, enabling consumers to get their hands on mobile technology that had previously only seen major penetration in the business marketplace. According to NPD Group, 23 percent of the wireless handsets sold in the U.S. in the fourth quarter of 2008 were smartphones.<sup>4</sup> Importantly, the innovation in smartphones is being felt in the U.S. first as a result of our robust marketplace. In the last 18 months, some of the most advanced handsets have been launched in the U.S., including Apple's iPhone 3G,<sup>5</sup> LG's Voyager,<sup>6</sup> Samsung's Instinct,<sup>7</sup> Google's G1,<sup>8</sup> and four Research in Motion Blackberry devices (Blackberry Storm, Blackberry Bold, Blackberry Pearl Flip and Blackberry Curve 8900).<sup>9</sup>

<sup>3</sup> See BT, <http://www.bt.co.uk>; O2, <http://www.o2.co.uk>; 3, <http://www.3.co.uk>; Virgin Mobile, <http://www.virginmobile.com>; Carphone Warehouse, <http://www.carphonewarehouse.co.uk>; Vodafone, <http://www.vodafone.co.uk>. Handsets of the same model with differing color schemes were not counted as unique handsets.

<sup>4</sup> [http://www.npd.com/press/releases/press\\_090303.html](http://www.npd.com/press/releases/press_090303.html)

<sup>5</sup> Press Release, at <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=25146>

<sup>6</sup> Verizon Press Release, at <http://news.vzw.com/news/2007/11/pr2007-11-19.html>

<sup>7</sup> Sprint Press Release, at [http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle\\_newsroom&ID=1124417](http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle_newsroom&ID=1124417)

## ***Wi-Fi and Unlicensed Mobile Access***

U.S. consumers also have access to a number of wireless devices that leverage other wireless platforms, like Wi-Fi. These devices can access any Wi-Fi hotspot, not just those branded by the carriers, and enable the use of the Wi-Fi connection for data delivery – and in some cases, voice service.

- Carriers across the country, including, but not limited to, each of the national carriers, offer handsets with integrated Wi-Fi.
- Nationwide, there are at least 29 handsets featuring Wi-Fi on the market, with many more on the way.<sup>10</sup>

Unlicensed Mobile Access – the seamless switching of voice and data sessions from the commercial wireless network – is another area of Wi-Fi access where American wireless companies are leading the world.

- 12 of the 26 dual-mode handsets available worldwide are sold in the U.S.<sup>11</sup>
- Of all wireless providers worldwide, only eight offer UMA service, and two of them are in the United States.<sup>12</sup>

## ***Application Innovation***

With this increased ability to access the Internet on-the-go and significant growth of adoption of smartphones, an explosion of applications to run on these devices also has emerged. Current generation smartphones more closely resemble computers than the phones of old and the applications that are available reflect this increased computing ability. Apple's iPhone,<sup>13</sup> Google and T-Mobile USA's G1,<sup>14</sup> Palm's PalmOS platform,<sup>15</sup> and Research in Motion's BlackBerry

---

<sup>8</sup> Martyn Williams and James Niccolai, *ComputerWorld*, at [http://www.computerworld.com/action/article.do?command=viewArticleBasic&taxonomyName=mobile\\_and\\_wireless&articleId=9117740&taxonomyId=15&intsrc=kc\\_top](http://www.computerworld.com/action/article.do?command=viewArticleBasic&taxonomyName=mobile_and_wireless&articleId=9117740&taxonomyId=15&intsrc=kc_top)

<sup>9</sup> See <http://na.blackberry.com/eng/devices/>.

<sup>10</sup> See e.g. Verizon Wireless, <http://www.verizonwireless.com>; AT&T Mobility, <http://www.wireless.att.com>; Sprint Nextel Corp., <http://www.sprint.com>; T-Mobile USA, <http://www.t-mobile.com>; See also <http://nteloswireless.com/phones/htc/htc6800.php>; Phone Scoop, [www.phonescoop.com](http://www.phonescoop.com); [http://www.cincinnati-bell.com/consumer/wireless/phones\\_and\\_devices/?id=blackberry\\_8120r](http://www.cincinnati-bell.com/consumer/wireless/phones_and_devices/?id=blackberry_8120r).

<sup>11</sup> See “Dual Mode Handsets” *UMA Today*, available at <http://www.umatoday.com/mobileHandsets.php> (last accessed Apr. 22, 2009) (Details are not available for all of these handsets); see also <http://www.t-mobile.com/shop/phones/> and

[http://www.cincinnati-bell.com/consumer/wireless/phones\\_and\\_devices/?view=fusionwifi](http://www.cincinnati-bell.com/consumer/wireless/phones_and_devices/?view=fusionwifi) (last accessed Apr. 30, 2009).

<sup>12</sup> See “UMA Operators” *UMA Today*, available at <http://www.umatoday.com/operators.php> (last accessed Apr. 21, 2009); see also, “T-Mobile HotSpot@Home,” available at <http://www.theonlyphoneyouneed.com> (last accessed Apr. 21, 2009); “Fusion Wifi”, Cincinnati Bell Wireless, available at [http://www.cincinnati-bell.com/consumer/wireless/fusion\\_wifi/](http://www.cincinnati-bell.com/consumer/wireless/fusion_wifi/) (last accessed Apr. 21, 2009).

<sup>13</sup> See “App Store and Applications for iPhone” at <http://www.apple.com/iphone/appstore/> (last accessed Apr. 7, 2009).

<sup>14</sup> See “Android | Market” at <http://www.android.com/market/> (last accessed Apr. 7, 2009).

<sup>15</sup> See [http://software.palm.com/us/html/top\\_products\\_treo.jsp?device=10035300025](http://software.palm.com/us/html/top_products_treo.jsp?device=10035300025) and <http://appstore.pocketgear.com/palm/>.

platform<sup>16</sup> all have online stores dedicated to providing users access to applications for their wireless devices. Palm has an application store in development for their new webOS platform<sup>17</sup> and press reports indicate that Microsoft is planning a store for its Windows Mobile platform.<sup>18</sup> Additionally, Nokia has announced the launch of its store.<sup>19</sup>

Like mobile wireless broadband services, generally, American consumers have embraced the world of applications and services that are being designed for their mobile platforms. For example, in Apple's iTunes App Store alone there are more than 35,000 applications available for download. The following chart shows the application stores that are available to U.S. consumers:

<b>Application Store</b>	<b>Date Launched</b>	<b>Number of Apps Available</b>
iTunes App Store	July 2008	> 35,000 <sup>20</sup>
Android Market	October 2008	> 1,000 <sup>21</sup>
Palm Software Store	January 2009	> 5,000 <sup>22</sup>
BlackBerry App World	April 2009	Launched with appx. 1,000 <sup>23</sup>
Palm App Catalog	Pending Launch of Palm webOS	
Nokia Ovi Store	Launch Scheduled in July 2009	20,000 Apps and Media Files <sup>24</sup>
Windows Mobile Marketplace <sup>25</sup>		

In the short time since the iTunes App Store's launch – just nine months – more than one billion applications have been downloaded by consumers.<sup>26</sup> Even the Skype application, the subject of a pending proceeding before the Commission<sup>27</sup>, is available on the iTunes App Store for the iPhone<sup>28</sup> and available for download to any Windows Mobile device on the Skype website.<sup>29</sup>

These incredible innovations in applications on mobile wireless devices have brought consumers literally tens of thousands of applications for use whenever and wherever consumers want. However, as CTIA has described for the Commission before, in the absence of reasonable

<sup>16</sup> See "App World" at <http://na.blackberry.com/eng/services/appworld/> (last accessed Apr. 7, 2009).

<sup>17</sup> See <http://developer.palm.com/>

<sup>18</sup> Trade press reports that Microsoft is planning a marketplace for Windows Mobile devices called "SkyMarket".

See <http://www.fiercedeveloper.com/story/microsoft-launch-winmo-app-store-next-month/2009-01-19>.

<sup>19</sup> Elizabeth Woyke, "Nokia's Gigantic App Store", *Forbes.com available at* <http://www.forbes.com/2009/05/07/nokia-ovi-store-technology-wireless-nokia.html>.

<sup>20</sup> See <http://www.apple.com/iphone>

<sup>21</sup> See "Paid Apps Enter Google's Android Market", at <http://mashable.com/2009/02/13/google-android-paid-apps/>.

<sup>22</sup> See [http://software.palm.com/us/html/top\\_products\\_treo.jsp?device=10035300025](http://software.palm.com/us/html/top_products_treo.jsp?device=10035300025) and <http://appstore.pocketgear.com/palm/>.

<sup>23</sup> See "RIM Launches BlackBerry App World", *available at* <http://na.blackberry.com/eng/newsroom/news/press/release.jsp?id=2223>.

<sup>24</sup> See *supra* n. 19.

<sup>25</sup> Trade press reports that Microsoft is planning a marketplace for Windows Mobile devices. See <http://www.fiercedeveloper.com/story/microsoft-launch-winmo-app-store-next-month/2009-01-19>; see also <http://www.downloadsquad.com/tag/windows-marketplace-for-mobile>.

<sup>26</sup> See <http://www.apple.com/itunes/billion-app-countdown/>.

<sup>27</sup> Petition to Confirm a Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks, Skype Communications S.A.R.L., RM-11361 (filed Feb. 20, 2007).

<sup>28</sup> <http://www.skype.com/go/getskype-iphone>.

<sup>29</sup> "Skype 2.5 for Windows Mobile" at <http://www.skype.com/download/skype/windowsmobile/> (last accessed Apr. 7, 2009).

network management, wireless carriers cannot ensure the high level of quality service that consumers have come to expect from wireless and that have enabled this growth in application development.<sup>30</sup> In fact, the efficient use of the spectrum to provide quality service is consistently ranked one of the highest factors in consumer choice of wireless provider. The technological limitations of the spectrum medium demands careful management in order to provide wireless consumers a quality, fast and reliable wireless broadband experience. The U.S. mobile wireless industry continues to evolve and adapt to serve consumer needs.

### ***Network Innovation***

Of course, 3G handsets cannot perform to their full potential without a strong network supporting them, and so carriers have made significant strides in bulking up the nation's infrastructure. AT&T<sup>31</sup> and T-Mobile<sup>32</sup> both undertook major expansions of their 3G network in 2008. Many carriers, including Verizon Wireless,<sup>33</sup> have already started planning for their fourth-generation networks, to bring even more speed and flexibility to American consumers in the near future. Sprint and Clearwire also formed a new company to combine their WiMAX businesses to create an open mobile broadband network.<sup>34</sup> Additionally, CTIA's Tier II and Tier III carriers continue to evolve their networks. For example, U.S. Cellular has announced that it continues to upgrade its CDMA network and that more than 60% of its sites will be EV-DO capable by the end of this year.<sup>35</sup> Wireless carriers in late 2007 and 2008 have also, independently, moved to empower their consumers with additional choices by opening up their networks to compatible wireless handsets. Verizon<sup>36</sup> and AT&T<sup>37</sup> both opened their networks in the past year to compatible devices.

The networks are becoming more open, and the software driving wireless mobility is as well. In 2008 there was a major push towards open source software in the wireless mobile world, and carriers are embracing it as a way to provide consumers with even more flexibility from their mobile handsets. Google's Android mobile operating system saw its first major handset release on T-Mobile's G1,<sup>38</sup> and Sprint also came aboard the Open Handset Alliance.<sup>39</sup> Verizon Wireless joined an open source group, the LiMo Foundation, working on expansion of the popular open-source Linux operating system to mobile handsets.<sup>40</sup>

---

<sup>30</sup> See Comments of CTIA – The Wireless Association®, WC Docket No. 07-52 (filed Feb. 13, 2008).

<sup>31</sup> Press Release, at <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=25146>

<sup>32</sup> Press Release, at [http://www.t-mobile.com/company/PressReleases\\_Article.aspx?assetName=Prs\\_Prs\\_20081017&title=T-Mobile%20USA%20Further%20Expands%20Commercial%203G%20Network%20Availability%20in%202008](http://www.t-mobile.com/company/PressReleases_Article.aspx?assetName=Prs_Prs_20081017&title=T-Mobile%20USA%20Further%20Expands%20Commercial%203G%20Network%20Availability%20in%202008)

<sup>33</sup> Press Release, at <http://news.vzw.com/news/2007/11/pr2007-11-29.html>

<sup>34</sup> Sprint Press Release, May 7, 2008 at [http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle\\_newsroom&ID=1141088&highlight=xohm](http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle_newsroom&ID=1141088&highlight=xohm)

<sup>35</sup> "US Cellular accelerates EV-DO push, weighing LTE trial", available at <http://telephonyonline.com/wireless/news/us-cellular-evdo-upgrade-0506/>.

<sup>36</sup> Kim Hart, *The Washington Post*, at <http://www.washingtonpost.com/wp-dyn/content/article/2007/11/27/AR2007112701077.html>

<sup>37</sup> Leslie Cauley, *USA Today*, at [http://www.usatoday.com/tech/wireless/phones/2007-12-05-att\\_N.htm](http://www.usatoday.com/tech/wireless/phones/2007-12-05-att_N.htm)

<sup>38</sup> Martyn Williams and James Niccolai, *ComputerWorld*, at [http://www.computerworld.com/action/article.do?command=viewArticleBasic&taxonomyName=mobile\\_and\\_wireless&articleId=9117740&taxonomyId=15&intsrc=kc\\_top](http://www.computerworld.com/action/article.do?command=viewArticleBasic&taxonomyName=mobile_and_wireless&articleId=9117740&taxonomyId=15&intsrc=kc_top)

<sup>39</sup> Sprint Press Release, at [http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle\\_newsroom&ID=1072575&highlight=handset](http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle_newsroom&ID=1072575&highlight=handset)

<sup>40</sup> "Verizon joins rival of Google handset group," by Eric Benderoff, *Chicago Tribune*

The combination of highly efficient networks and handsets have made U.S. carriers the most efficient users of spectrum worldwide – serving more consumers with less spectrum. With access to just 409 MHz of spectrum (which includes AWS and 700 MHz spectrum, some of which is not available, as well as 55 MHz of 2.5 GHz BRS spectrum), the U.S. wireless industry serves over 270 million subscribers – that’s more than 630,000 consumers per MHz of spectrum. Further, as detailed above, these 630,000 customers per MHz also use their service at a much higher rate than our foreign counterparts.



	 USA	 Japan	 Germany	 U.K.	 France	 Italy	 Canada	 Spain	 S. Korea	 Mexico
Efficient Use of Spectrum -- Subscribers Served per MHz of Spectrum Allocated	651,100	312,968	347,540	214,002	148,958	290,622	103,414	144,692	194,420	630,833
Spectrum Assigned for Commercial Wireless Use	409.5 MHz*	347 MHz	305 MHz	352.8 MHz	374.6 MHz	311.4 MHz	205 MHz	358 MHz	233 MHz	120 MHz

\*Figure includes AWS-1, 700 MHz spectrum not yet in use and 55.5 MHz of spectrum at 2.5 GHz.  
 \*\* Glen Campbell, et al., "Global Wireless Matrix 4Q08," Merrill Lynch, April 13, 2009, at Table 1.

Additionally, as CTIA has described before, the concept of the “third pipe to the home” has been surpassed by technological advances and consumer expectations. Mobile wireless broadband is broadband to the person, wherever and whenever they want it. In bringing this unparalleled level of convenience to consumers, however, wireless carriers are limited by the spectrum medium over which they operate. Despite these very real limitations of spectrum-based services, consumers’ ability to access the Internet through their mobile wireless device continues to expand and improve at breathtaking speed.

In the absence of a regulatory mandate, U.S. wireless carriers continue to bring consumers the mobile Internet services they demand. As carriers acquire increased spectrum resources – and are permitted to manage the resources for maximum efficiency – consumers benefit from the speed and services that are enabled. Over the last several years, statistics have confirmed that broadband consumers are going mobile.

- The Commission’s data shows that, since 2005, mobile wireless providers have been the fastest-growing providers of both high-speed lines (over 200 kbps in at least one direction) and advanced service lines (over 200 kbps in both directions).
- Subscriber counts for high-speed lines more than *doubled* and advanced service lines more than *tripled* from just one year earlier.<sup>41</sup>
- As of December 2007, mobile wireless providers served more than 15 million customers with advanced service lines – nearly 20 percent of all advanced services.<sup>42</sup>
- Additionally, CTIA’s semi-annual survey has found that more than 78 percent of U.S. wireless consumers have a wireless device that is capable of accessing the Internet.<sup>43</sup>

<sup>41</sup> HIGH-SPEED SERVICES FOR INTERNET ACCESS: STATUS AS OF DECEMBER 31, 2007, *available at* [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-287962A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-287962A1.pdf), at tbls.1-2.

<sup>42</sup> *Id.* at tbl. 2.

- When the market for all data services is considered, the numbers are even more staggering. More than half of all American wireless consumers are “data users,” which includes data messaging services like SMS and MMS.<sup>44</sup> This incredible growth in data use has been made possible by wireless carriers’ ability to carefully maintain and balance network load to ensure quality of service.

Worldwide, the wireless broadband comparisons are equally impressive. American wireless consumers are among the most prolific mobile Internet users worldwide.

- According to a Nielsen Media study, the United States has a higher percentage of consumers actively using mobile Internet capabilities – 15 percent – than any country measured in the survey.<sup>45</sup>
- Put in terms of total number of users, 15 percent of wireless subscribers equals 40 million American consumers who are “active users” of mobile web service – 75 percent more than just two years earlier.<sup>46</sup>

Additionally, while much has been made of reports on U.S. broadband rankings, when it comes to mobile broadband, U.S. consumers are leading the way.

- U.S. wireless web use ranks first in the world, accounting for 29.3 percent of all mobile web surfing worldwide according to Bango, a firm that tracks statistics for surfing of web sites optimized for mobile users.<sup>47</sup>

---

<sup>43</sup> *CTIA’S Wireless Industry Indices, Semi-Annual Data Survey Results: A Comprehensive Report from CTIA Analyzing the U.S. Wireless Industry, Midyear 2008 Results*, rel. Oct. 2008 at p.10.

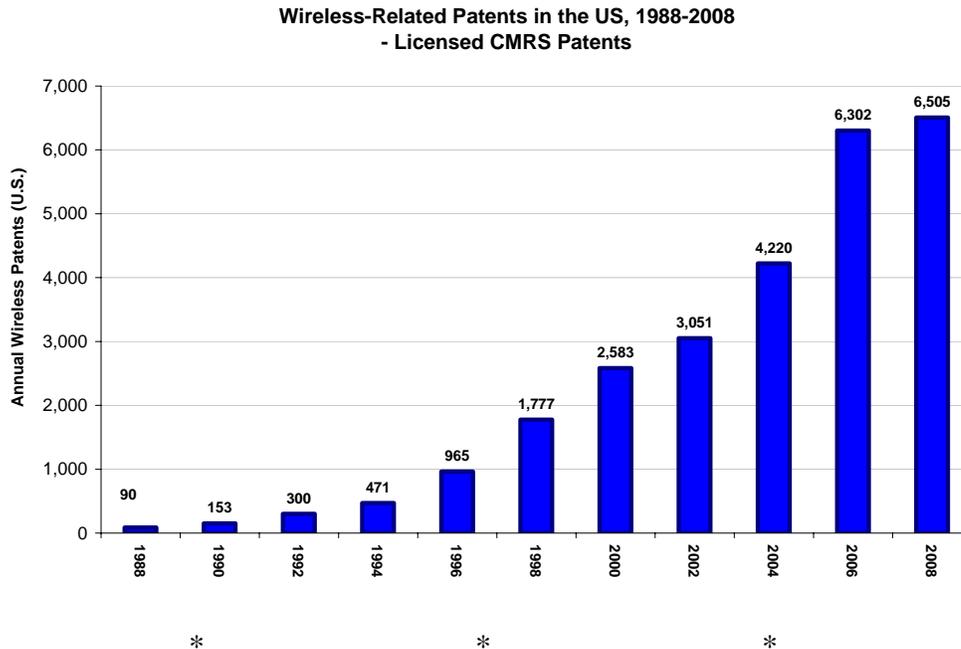
<sup>44</sup> *Id.* at 3.

<sup>45</sup> “Critical Mass: The Worldwide State of the Mobile Web”, Nielsen Mobile (July 2008) at 2, 4, attached as Appendix B.

<sup>46</sup> *Id.* at 2.

<sup>47</sup> “U.S. tops worldwide charts for mobile web browsing and spending”, Bango.com *available at* <http://news.bango.com/2009/03/12/us-tops-mobile-web-browsing-and-spending-charts/> (last accessed Apr. 29, 2009).

The U.S. wireless industry has a history of evolving and offering new and improved services as technology advances allow. The growth of mobile wireless broadband itself is an example of this evolution to meet consumer demand. Innovation in the mobile wireless sector occurs at all levels of service. From the core to the handset edge, network evolution in mobile wireless continues at a staggering pace. CTIA believes this trend will continue. As the chart below shows, the number of wireless-related patents has grown over the last 10 years with more than 6,500 patents filed in 2008.



## CONCLUSION

The Federal Communications Commission should be proud of the environment they have created for wireless consumers in the United States. American consumers have more choices, lower costs, and better value in wireless than the 25 other countries measured. A light regulatory touch has resulted in a market that other consumers throughout the world envy, not the opposite. For United States wireless carriers large and small, the true regulator is the customer, and carriers move quickly to react to that “regulatory” pressure. The Commission should not disrupt the innovative and competitive U.S. wireless market that Vice President Gore described as “one of the great success stories in the American economy and the global economy.”

Pursuant to Section 1.1206 of the Commission’s rules, a copy of this letter is being filed via ECFS with your office. Should you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

*/s/ Christopher Guttman-McCabe*

Christopher Guttman-McCabe

# **ATTACHMENT B**

January 23, 2008

***Electronic Filing***

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
12<sup>th</sup> Street Lobby, TW-A325  
Washington, DC 20554

**Re: *Ex Parte Communication***; PS Docket No. 06-229; WT Docket Nos.  
96-86, 05-194, 06-150, 06-169, 07-71

Dear Ms. Dortch:

At a time when the United States' economy is teetering on the brink of a recession, the wireless industry continues to be a key driver of the economy, making more than \$14 billion in capital investments for the first three quarters of last year (not including amounts paid to the federal treasury for spectrum licenses). With the 700 MHz auction scheduled to begin tomorrow, the wireless industry is poised to continue these investments in 2008 and beyond, bringing new services to wireless consumers, and benefits to the U.S. economy in general. As certain groups ask the FCC to consider price or network regulation of the wireless industry, hopefully the Commission will look at the consumer performance of those industries that are regulated by agencies versus those – like the wireless industry – that are driven by their customers and competition.

This *ex parte* highlights some of what the U.S. wireless industry is delivering to American wireless consumers and the American economy – lower prices, more minutes of use, greater affordability, competition, extraordinary choice in carriers, handsets and service plans, innovation, broadband access, job growth, capital expenditures, buildout, and more. As these metrics demonstrate, consumers recognize the value they get from their wireless service, and their increased usage of wireless communications records their vote for the competitive model. We truly hope that the Commission allows this success story to continue in 2008.

This *ex parte* highlights the following major accomplishments of the U.S. wireless industry:

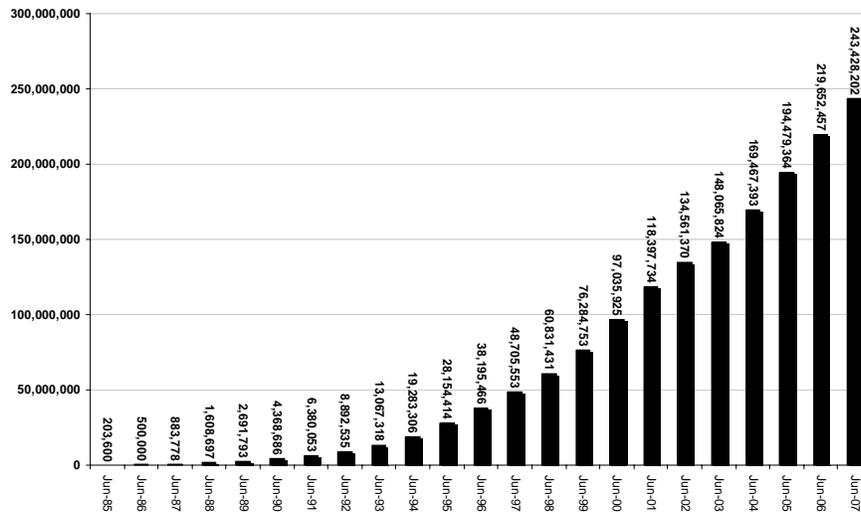
- Consumers are paying less today than they did 10 years ago while enjoying almost seven times as many minutes of use per month;
- Wireless brings broadband to the person – more than 80 percent of handsets on wireless carriers' networks can browse the web, including an increasing array of Wi-Fi-enabled handsets;
- 98 percent of Americans have a choice of three or more wireless carriers, and 94 percent have a choice of four or more carriers;

- The wireless industry's six-month incremental capital expenditure in operational systems was \$9.71 billion as of June 2007, resulting in a total cumulative capital expenditure in operational systems of more than \$233 billion (not including billions more paid to the federal treasury for their spectrum licenses);
- Wireless carriers reported 12,784 more cell sites as of June 2007 compared to June 2006;
- U.S. wireless carriers directly employ over 257,000 people, with over 3.6 million jobs directly or indirectly dependent on the U.S. wireless industry;
- More than 150 wireless companies provide service to more than 243 million customers in the U.S. as of June 2007;
- Americans generated 1.012 trillion minutes of use in the first six months of 2007 (up from 857 billion minutes in the first six months of 2006);
- 15 percent of wireless customers in the U.S. use prepaid or pay-as-you-go plans, without signing contracts;
- 13.6 percent of American households are now wireless-only; and
- Wireless providers have deployed high-speed networks reaching more than 210 million people and that expansion continues.

**U.S. Wireless Subscribership & Usage:** American consumers' attraction to and use of wireless devices grew stronger in 2007. As service quality and coverage have increased and innovation has continued to produce an amazing selection of wireless devices, American consumers across all incomes and demographics are subscribing to and relying on wireless service.

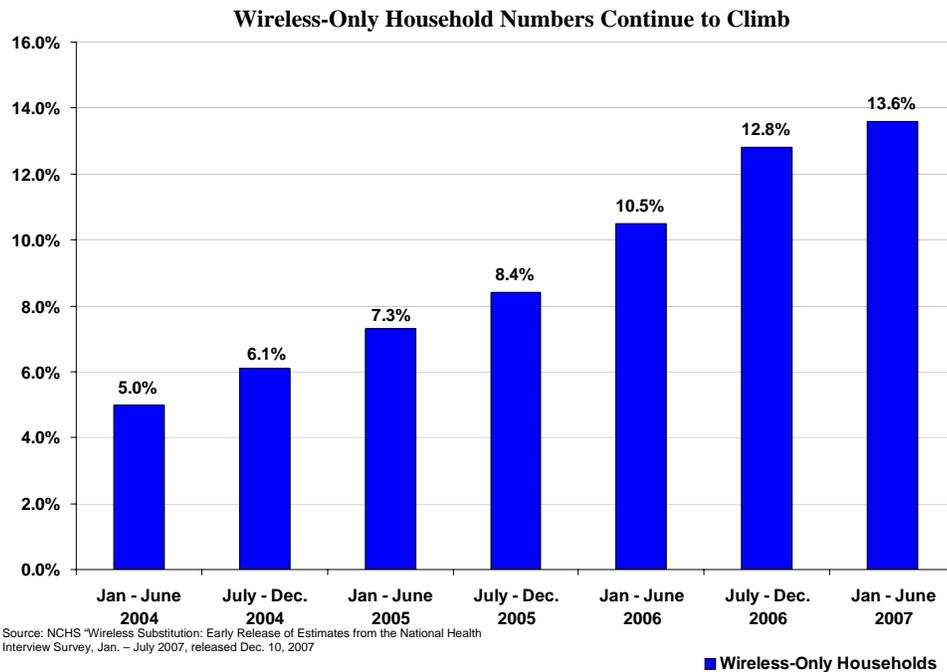
- Subscribership: More than 150 wireless companies provide service to more than 243 million customers in the U.S. as of June 2007, a figure that grew by almost 24 million subscribers from just one year earlier. Using these figures, wireless penetration now stands at 80 percent of the U.S. population, representing an increase from 73 percent as of mid-year 2006. While this level of growth is impressive, CTIA currently estimates that wireless subscribership exceeds 253 million.

**Subscribership Growth Reflects Wireless' Value**



Source: CTIA

- Wireless-Only Households: As wireless penetration continues to spread, more and more American households are becoming wireless-only. In fact, as of June 2007, wireless-only households stood at 13.6 percent – a figure that continues to rise.
  - According to Morgan Stanley, wireless substitution is accelerating and **could reach almost one-third of households by 2012**: “This phenomenon is driven by improved wireless coverage and better pricing and will be supported by new handsets and new wireless technologies.”<sup>1</sup>

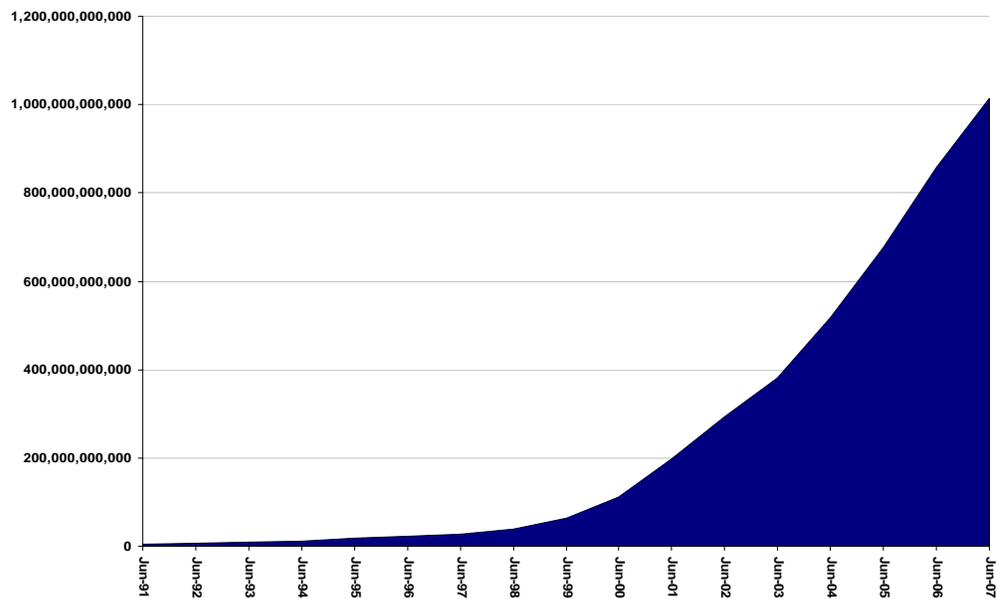


---

<sup>1</sup> See Simon Flannery, *et al.*, Cutting the Cord: Wireless Substitution Accelerating, Morgan Stanley Telecom Services (Sept. 27, 2007).

- Price + Value = Increased Usage: A key factor in American consumers' affinity for wireless communications is their ability to get more for less. Even the sophisticated consumers, Americans recognize the great value and flexibility of wireless. This is demonstrated by the fact that subscribers are talking more – and increasingly using data – while their monthly bills are dropping.
  - The average revenue per consumer, an indicator of what consumers pay in their monthly bills, is **below** the 1997 level, while minutes of use increased by a factor of seven – *i.e.*, seven times more minutes of use for a lower price.
  - Americans generated 1.012 trillion billable minutes in the first six months of 2007 (up from 857 billion minutes in the first six months of 2006):

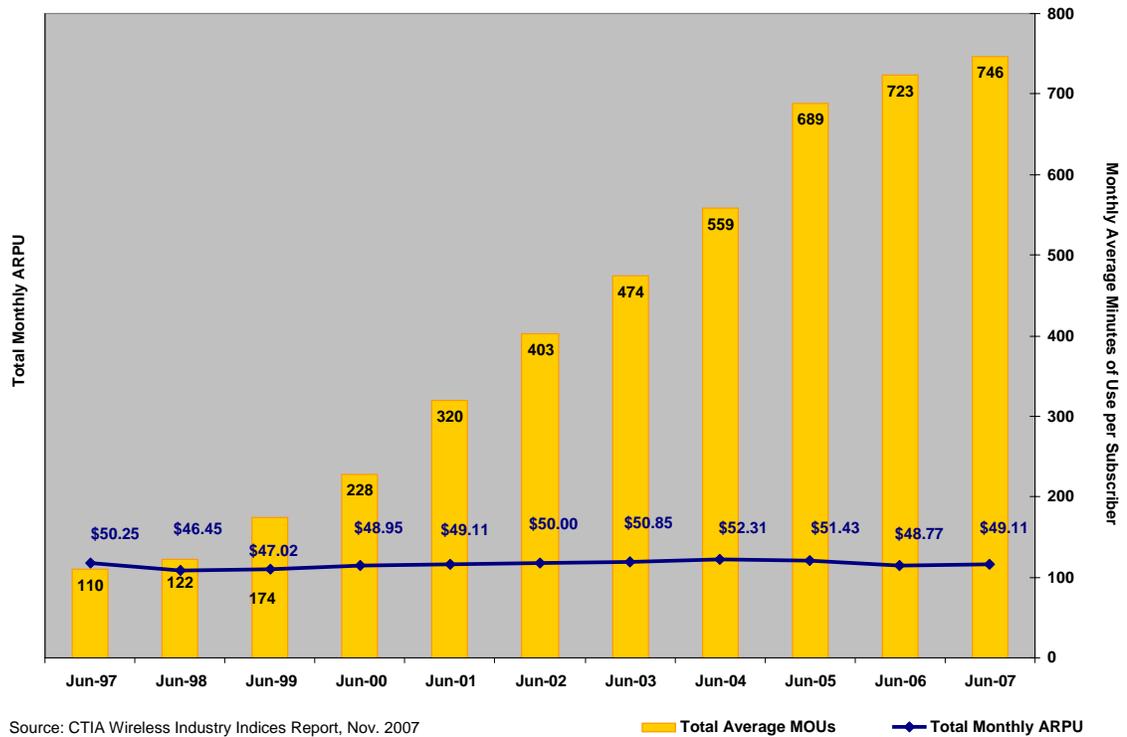
**Reported Wireless Minutes of Use Exceed 1 Trillion in First Half of 2007**



Source: CTIA

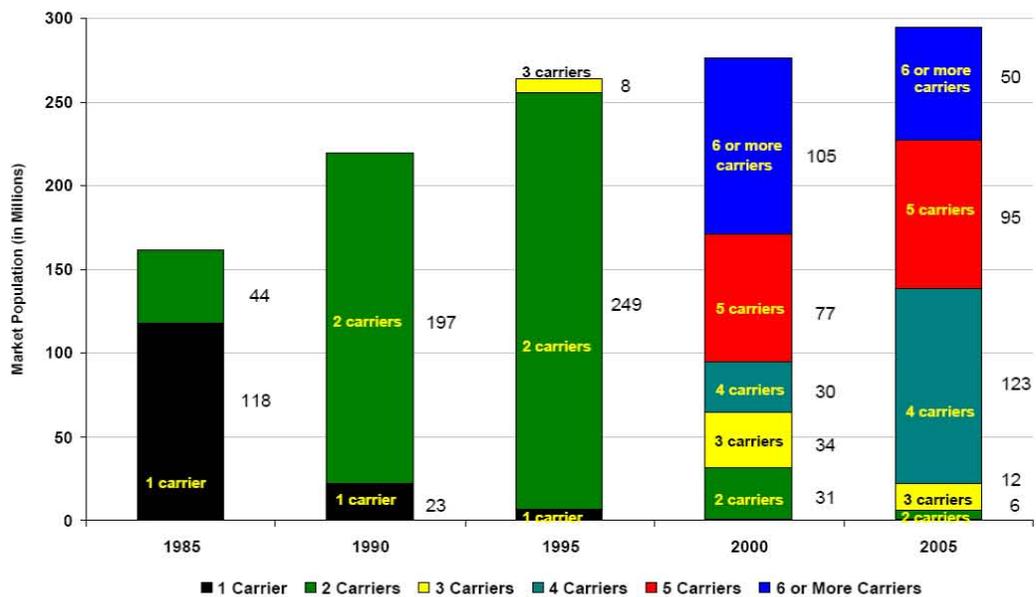
- Meanwhile, wireless carriers saw an average of 746 monthly minutes of use (“MOUs”) per subscriber while total monthly average revenue per user (“ARPU”) has remained constant:

**ARPU has Remained Relatively Stable, While Usage Has Soared**



**Competition and Choice:** The most likely driver of so many Americans flocking to wireless is the fierce competition and vast array of choices that marks the U.S. wireless industry – choice of carriers and choice of handsets. There is no contradicting the record on wireless competition: the U.S. wireless industry has delivered more choice for more people. Consider the following:

- 98 percent of Americans have a choice of three or more wireless carriers;
- 94 percent have a choice of four or more; and
- 51 percent have a choice of five or more wireless carriers.



Source: CTIA

Further underscoring the competition and choice that characterizes this industry is the fact that more than 150 wireless companies are serving American consumers. Consumers can choose among multiple national and regional carriers. One need only turn on the television to see carriers touting advertisements that reveal the intense competition for subscribers. Yet, unlike many other countries that can claim only one or two carriers dominating market share for subscribers, the U.S. market boasts broad competition typified by less concentration.<sup>2</sup> As of the 3<sup>rd</sup> quarter of 2007, the five largest U.S. carriers claimed a *combined* 89 percent market share, as follows:

<sup>2</sup> See CTIA Written Ex Parte Communication, WT Docket Nos. 07-71 and 05-194 (dated Jan. 8, 2008), available at [http://files.ctia.org/pdf/filings/080108\\_US-OECD\\_10\\_Comparison\\_Ex\\_Parte.pdf](http://files.ctia.org/pdf/filings/080108_US-OECD_10_Comparison_Ex_Parte.pdf).

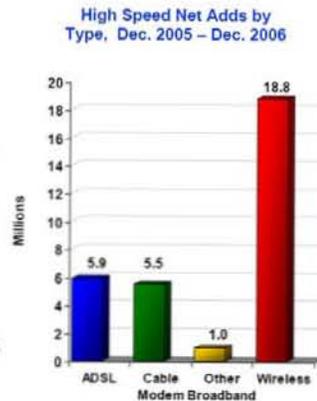
- AT&T Mobility – 65.27 million (26 percent)
  - Verizon Wireless – 63.65 million (25 percent)
  - Sprint - Nextel – 53.05 million (22 percent)
  - T-Mobile USA – 27.67 million (11 percent)
  - Alltel – 12.45 million (5 percent)
- 
- Collectively, there are about 700 handsets available to consumers in the U.S., compared to less than 200 based on CTIA’s review of the market in the United Kingdom. These handsets range from simple, streamlined models like the Jitterbug (aimed at consumers who want simple handsets for voice calling), to feature-rich devices like smartphones and other multimedia devices from manufacturers including Apple, LG, Motorola, Nokia, RIM, Samsung and Sony Ericsson.
  
  - 15 percent of wireless customers in the U.S. use prepaid or pay-as-you-go plans, without signing contracts. They use service offered by licensees like Alltel, AT&T Mobility, Leap Wireless, MetroPCS, Sprint Nextel, T-Mobile USA, Verizon Wireless and others, as well as by “Mobile Virtual Network Operators” or MVNOs such as NET10, TracFone and Virgin Mobile.

**Broadband:** Wireless providers are constantly expanding and upgrading their networks to bring broadband **to the person** – not just the home.

- Over the past several years carriers have deployed high-speed networks to reach more than 210 million people. These broadband technologies (including EVDO Rev. A and HSPA) offer average download speeds between 400-600 kbps (or more), and bursting speeds up to 1.6 Mbps. More high-speed facilities are being deployed every day.
- More than 80 percent of the handsets operating on wireless carriers' networks are capable of browsing the web. Each of the top five wireless providers in the U.S. offers Wi-Fi enabled handsets.

#### Wireless is a Growing Means of High-Speed Access

- \* In 2006, total high-speed lines grew 61%, from 51.2 million to 82.5 million lines, and 60% of all adds were mobile wireless subscriptions.
- \* From Dec. 2005 to Dec. 2006:
  - ADSL's share of total broadband lines fell from 38% to 31%.
  - Cable modem's share fell from 56% to 39%.
  - Mobile wireless' share of total broadband lines rose from 1% to 27% of total broadband lines.
  - The share of "other" forms of broadband (including fixed wireless, satellite, fiber, and broadband over power line) fell to 3% of total broadband lines – although their total line count grew 84%, from 1.1 to 2.1 million.



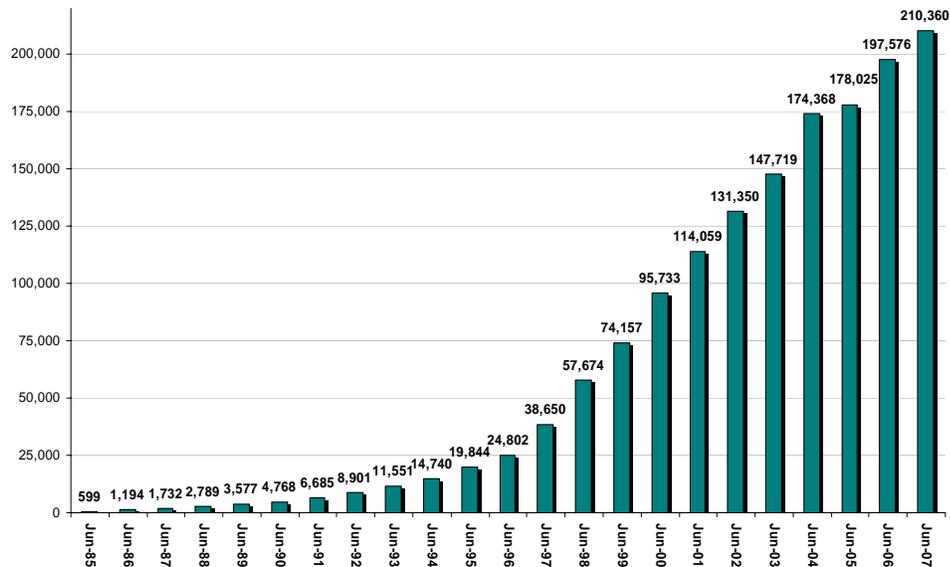
Copyright 2007 CTIA - The Wireless Association®. All rights reserved.

Source: FCC Report, "High-Speed Services for Internet Access: Status as of December 31, 2006," Oct. 2007.

**Capital Investment:** The astounding growth and improved service quality in the U.S. wireless industry could not be possible without substantial investment in innovative technology and infrastructure. Wireless providers' strong commitment to capital investment has enabled them to nimbly respond to demand for greater network coverage and upgrades.

- As of June 2007, the wireless industry's six-month incremental capital expenditure in operational systems was \$9.71 billion, resulting in a total cumulative capital expenditure in operational systems of more than \$233 billion (not including billions more paid to the federal treasury for their spectrum licenses).
- Wireless carriers reported 12,784 more cell sites as of June 2007 compared to June 2006, now totaling over 210,000. Further, wireless carriers are increasingly sharing facilities for cell sites and deploying stealth towers to minimize environmental impacts.

### Cell Sites – More Sites, More Coverage



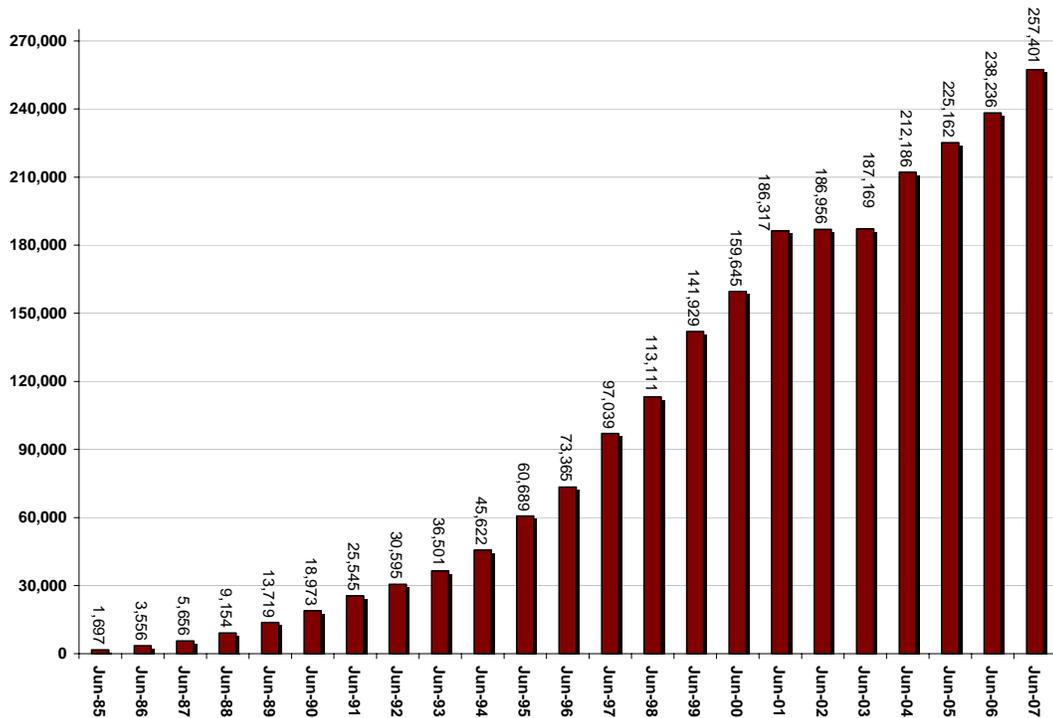
Source: CTIA

Cell Sites in Service are Up 6.5 Percent Year-over-Year

**Wireless Industry Job Growth:** Wireless and wireless-related job growth has remained strong and independent forecasts indicate that this growth will continue to flourish.

- Wireless carriers directly employed 257,401 people as of June 2007 – a six percent increase since June 2006.

**Direct Wireless Carrier Employment Grows 6 Percent Year-over-Year  
Direct Employment Exceeds 257,000 at Mid-Year 2007**



- In addition, the wireless industry's contribution to the overall economy is unmistakable: the industry generated \$118 billion in revenues and contributed \$92 billion to the U.S. Gross Domestic Product in 2004 (the most recent year available), while 3.6 million jobs are directly and indirectly dependent on the U.S. wireless industry.<sup>3</sup>
  - Ovum predicts that over the next 10 years, the U.S. wireless industry will create an additional 2-3 million new jobs, adding a cumulative additional \$450 billion in GDP (an estimate based on the conservative assumption that no new services are added beyond what are available today).<sup>4</sup>

<sup>3</sup> Source: Ovum / Indepen Report, Oct. 2005.

<sup>4</sup> *Id.*

**Wireless Complaints Are Low, While Resolution Rates Are High:** As wireless carriers continue to add subscribers and services, they have managed to keep consumers largely satisfied.

- As of the Second Quarter 2007, the number of complaints and the complaint rates related to wireless carriers – *i.e.*, those involving Contracts, Advertising, Billing & Rates, and Service Quality – were down from both the First Quarter 2006 and First Quarter 2007. From the First Quarter 2006 to the Second Quarter 2007:
  - the number of Contract-related complaints fell 49 percent;
  - Advertising-related complaints fell 47 percent;
  - Billing & Rates-related complaints fell 16 percent; and
  - Service quality-related complaints fell 26 percent.
- These complaint rates are extremely low when examined per million subscribers: as of the Second Quarter 2007, the quarterly complaint rates per million customers were in the single digits. For three of the categories, the Commission received a total of two or less complaints per million subscribers per quarter.
  - 1 Contract – Early Termination-related complaint per million subscribers per quarter;
  - 1 Carrier Marketing & Advertising-related complaint per million subscribers per quarter;
  - 2 Service Quality-related complaints per million subscribers per quarter; and
  - 8 Billing & Rates-related complaints per million subscribers per quarter.
- At the same time, the resolution rate for wireless-related complaints has risen to 91.5% according to the Better Business Bureau, while total wireless subscribership has risen by more than 23 million.

The data described above highlight the tremendous success of the U.S. wireless industry and the benefits that inure directly to American consumers. Wireless service providers and manufacturers have made great advances, thanks in part to the FCC's light regulatory touch. CTIA urges the Commission to consider the strong record of accomplishment in the wireless industry and carefully weigh the impact of any further regulations on the wireless market before taking any action.

Pursuant to Section 1.1206 of the Commission's rules, this letter is being filed via ECFS with your office. Should you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

*/s/ Christopher Guttman-McCabe*

Christopher Guttman-McCabe

cc: Chairman Kevin Martin  
Commissioner Michael Copps  
Commissioner Jonathan Adelstein  
Commissioner Deborah Taylor Tate  
Commissioner Robert McDowell  
Aaron Goldberger  
Bruce Gottlieb  
Renee Crittendon  
Wayne Leighton  
Angela Giancarlo  
Fred Campbell