U.S. investment in wireless leads the world.

- The U.S. invests more in its networks than any other nation. Last year, U.S. wireless carriers **invested more than $34 billion** in their networks, accounting for 24 percent of the world's wireless capital investment. The U.S. also invested **four times more per subscriber than its global counterparts**: $104 per subscriber versus $26 per subscriber.[1]

- As a result, the U.S. is the world leader in LTE deployment and subscribership. While U.S. consumers represent only 5 percent of the world's wireless connections, they comprise almost **50 percent of the world's LTE connections**. By year-end 2013, nearly 30 percent of U.S. connections were on LTE networks compared to 2 percent in the EU.[2]

- Wireless is a key jobs driver. Between 2007 and 2011, the U.S. wireless industry gained almost 1.6 million new jobs while total U.S. private sector jobs fell by 5.3 million.[3] The wireless industry directly or indirectly accounts for 2.6 percent of all U.S. employment, and **wireless employees are paid 65 percent higher than the national average** for other workers. [4]

- The Wireless Industry is a Leading Driver of U.S. Economic Growth. In terms of contributions to the U.S. economy, the "U.S. wireless industry is now larger than the publishing, agriculture, hotels and lodging, air transportation, motion picture and recording, and motor vehicle manufacturing industry segments and rivals the computer systems design services and oil and gas extraction industries."[5]

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[1] *See* Didier Scemama, et al., *2014 wireless capex: BRICs & Europe to pick up the slack*, Bank of America Merrill Lynch, Global Telecom Equipment, Jan. 13, 2014, at Table 2. *See also* Glen Campbell, *2014: The year ahead,* Bank of America Merrill Lynch, Global Wireless Matrix 4Q13, Jan. 8, 2014, at Tables 1 and 2.

[2] Informa Telecoms & Media Group's World Cellular Information System (WCIS) Plus database, subscribers by geography and technology, (last visited March 6, 2014), and CTIA estimates.

[3] *See* ROBERT J. SHAPIRO AND KEVIN A. HASSETT, NDN, THE EMPLOYMENT EFFECTS OF ADVANCES IN INTERNET AND WIRELESS TECHNOLOGY: EVALUATING THE TRANSITIONS FROM 2G TO 3G AND FROM 3G TO 4G 1, 4 (Jan. 2012) ("NDN, EFFECTS OF ADVANCES IN INTERNET AND WIRELESS TECHNOLOGY") http://ndn.org/sites/default/files/blog_files/The%20Employment%20Effects%20of%20Advances%20In%20Internet%20and%20Wireless%20Technology_1.pdf (last visited Oct. 31, 2013).

[4] *See* ROGER ENTNER, RECON ANALYTICS, THE WIRELESS INDUSTRY: THE ESSENTIAL ENGINE OF U.S. ECONOMIC GROWTH 1 (2012), at http://reconanalytics.com/wp-content/uploads/2012/04/Wireless-The-Ubiquitous-Engine-by-Recon-Analytics-1.pdf (last visited Oct. 31, 2013).

[5] ROGER ENTNER, *id.*

U.S. consumers enjoy unparalleled value from their wireless service.

- Prices in the U.S. keep dropping. **Data prices have plummeted 93 percent over the past five years** to only $0.03 per megabyte while usage skyrocketed.[6] Overall, the wireless Consumer Price Index (CPI) fell again last year. From December 2005 to January 2014, the Wireless CPI fell 10 percent, while the overall CPI for all items increased 18.9 percent.[7]

- The U.S. wireless industry provides extraordinary value. U.S. consumers pay less per unit of usage – and use mobile far more extensively – than their foreign counterparts: the average voice revenue per minute in the U.S. is three cents, while the European average is ten cents; U.S. consumers use **five times more voice minutes** and **twice the data** than the EU average.[8] U.S. consumers also send **six times as many text messages** as Europeans.[9] Looking just at data services, the price per MB has fallen more than 93 percent in just five years.[10]

- Consumer satisfaction is high. Given the cutting edge services and superior value, it is not surprising that U.S. consumer satisfaction is strong. **91 percent of U.S. consumers are highly satisfied** with their wireless phone service, and Consumer Reports finds that the wireless industry has increasingly high consumer satisfaction.[11]

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[6] *See* Visage, *Infographic: The Staggeringly Huge Future of Mobility, at* *http://visagemobile.com/mobilityblog/2012/09/06/infographic-the-staggeringly-huge-future-of-mobility/ (last visited Oct. 17, 2013); see also* WANDERA, *5 Things Mobility Managers Need to Know About Reducing Mobile Data Expenses* (2013), http://www.wandera.com/wp-content/uploads/2013/02/Wandera_WP01213.pdf.

[7] *See* U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index: All Urban Consumers – (CPI-U), U.S. City Averages, Wireless Telephone Services (Series ID CUUR0000SEED03), http://data.bls.gov/cgi-bin/dsrv (last visited Feb. 20, 2014), and Consumer Price Index: All Urban Consumers – (CPI-U), U.S. City Averages, All Items, at ftp://ftp.bls.gov/pub/special.requests/ cpi/cpiai.txt (last visited Feb. 20, 2014).

[8] *See e.g.*, Hannes Wittig and Philip Cusick, *Deutsche Telekom: US exit? At what Price?* J.P. Morgan Europe Equity Research, January 13, 2014, at 13, *and see* Erik Bohlin et al., GSMA, MOBILE WIRELESS PERFORMANCE IN THE EU & THE US (May 2013), at p.8, at http://www.gsmamobilewirelessperformance.com/GSMA_Mobile_Wireless_Performance_May2013.pdf (last visited Feb. 21, 2014), *citing* Bank of America Merrill Lynch, Global Wireless Matrix data. *See also* Ericsson on-line *Traffic Exploration* tool, (allowing comparison of total voice minutes on a collective and individual user basis for North America and Western Europe, as well as total mobile data traffic volumes, at http://www.ericsson.com/TET/trafficView/loadBasicEditor.ericsson.

[9] *See e.g., GSMA European Mobile Industry Observatory 2011*, at pp.8, 15, at http://www.gsma.com/publicpolicy/wp-content/uploads/2012/04/emofullwebfinal.pdf (Europeans "send 54 mobile messages every month (per head of population)"), and *CTIA Wireless Industry Indices, Semi-Annual Data Survey Results: A Comprehensive Report From CTIA Analyzing the U.S. Wireless Industry, Year-end 2012 Results*, May 2013, at pp.181-182.

[10] *See* Visage *Infographic*, *op cit.*

[11] MCLAUGHLIN & ASSOCIATES AND PENN SCHOEN BERLAND, 2013 ANNUAL CONSUMER SURVEY, at http://www.mywireless.org/media-center/data-center/2013-national-survey/ (last visited Oct. 17, 2013), and Consumer Reports, *U.S. Cell Phone Carriers Ratings*, at http://www.consumerreports.org/cro/electronics-computers/phones-mobile-devices/cell-phones-services/us-cell-phone-carriers-ratings/ratings-overview.htm (last visited Oct. 18, 2013) (finding customers with and without contracts from a wide variety of carriers are "fairly well satisfied" to "very satisfied").

U.S. consumers benefit from staggering innovation.

- The U.S. enjoys increasing mobile broadband speeds. For example, in 2012, the average smartphone data connection speed for the U.S. was 2.9 Mbps, growing to 9.7 Mbps in 2013, and projected to grow to 19.6 Mbps by 2018. By contrast, the average smartphone data connection speed in Western Europe in 2012 was 2.6 Mbps, growing to 7.9 Mbps in 2013, and projected to grow to 13.7 Mbps in 2018.[12]

- A massive number of devices are available from dozens of manufacturers. There are currently more than **790 different handsets and devices** offered to American consumers by facilities-based carriers, MVNOs and more than **50 different device manufacturers**.[13]

- These devices are increasingly 4G-connected. The number of **4G LTE-connected devices in the U.S. market almost tripled** between 2012 and 2013, from 38 million devices to **more than 98 million devices** at year-end 2013.[14]

- More apps are available from more app stores on more operating systems. In 2012, there were more than **20 independent non-carrier mobile application stores**, offering **more than 3.5 million apps** for **14 different operating systems**.[15]

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[12] *See* Cisco Visual Networking Index, *VNI Mobile Forecast Highlights, 2012-2017*, at http://www.cisco.com/web/solutions/sp/vni/vni_mobile_forecast_highlight/index.html#~Country, and *VNI Mobile Forecast Highlights, 2013-2018*, at http://www.cisco.com/assets/sol/sp/vni/forecast_highlights_mobile/index.html (last visited Feb. 21, 2014).

[13] CTIA Research, mobile network operator, mobile virtual network operator, manufacturer and independent retailer websites.

[14] Informa Telecoms & Media Group, *op cit*. (last visited March 6, 2014).

[15] CTIA Research, Distimo at http://www.distimo.com/, *148apps.biz* at http://148apps.biz/app-store-metrics/?mpage=appcount, *AppBrain* at http://www.appbrain.com/stats/number-of-android-apps, and application store websites.

The U.S. market for mobile wireless services is highly competitive.

- Consumers are benefiting from competition across the dynamic mobile wireless ecosystem. From infrastructure and equipment manufacturers, to content and application developers, to platform and service providers – as prices fall, and investment and innovation increase – the U.S. wireless marketplace is competing to deliver unparalleled value to wireless users.

- The U.S. has the most facilities-based competitors. Notably, the U.S. has the most facilities-based mobile providers of any nation – 180 facilities-based providers, according to the FCC's most recent data – and is one of only two OECD countries with five or more licensees per market. Dozens of MVNOs offer service to consumers as well.[16]

- Moreover, the U.S. is the least concentrated mobile wireless marketplace. The U.S. has the lowest Herfindahl-Hirschman Index (HHI) of 28 OECD countries by a significant margin – 2,468, compared to 2,635 for the next lowest country (Poland).[17]

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[16] *See* FCC Wireline Competition Bureau, Industry Analysis and Technology Division, *Local Telephone Competition: Status as of December 31, 2012*, (Nov. 2013), at p.29 Table 18, at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-321568A1.pdf, and Bank of America Merrill Lynch, Global Wireless Matrix, *op cit.*

[17] Sources: Glen Campbell, Bank of America Merrill Lynch, Global Wireless Matrix (2013), CTIA Research, Canadian Wireless Telecommunications Association (CWTA), Japanese Telecommunications Carriers Association (TCA), and carrier investor releases.