

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of Advanced	)	GN Docket No. 12-228
Telecommunications Capability to All Americans	)	
In a Reasonable and Timely Fashion, and Possible	)	
Steps To Accelerate Such Deployment Pursuant to	)	
Section 706 of the Telecommunications Act of	)	
1996, as Amended by the Broadband Data	)	
Improvement Act	)	

**REPLY COMMENTS OF GOOGLE INC.**

Google Inc. (“Google”), by its attorneys, files these reply comments in response to the *Ninth Broadband Notice of Inquiry* released by the Federal Communications Commission (“FCC” or “Commission”) seeking data and information concerning the availability of broadband to all Americans.<sup>1</sup> The Commission seeks new data sources or information about ongoing efforts to collect broadband deployment or availability data to improve its annual broadband progress reports.<sup>2</sup>

Google believes in the value of data to inform and shape public policy. Data measuring broadband deployment and adoption is critical to determining “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion.”<sup>3</sup> Such data is also critical to addressing factors impeding broadband adoption and availability. To this end, Google submits two datasets to assist the Commission in the instant proceeding. The first dataset augments data previously compiled by the Commission and

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<sup>1</sup> *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Ninth Broadband Progress Notice of Inquiry, GN Docket No. 12-228 (rel. Aug. 21, 2012) (“Notice of Inquiry”).

<sup>2</sup> Notice of Inquiry ¶ 51.

<sup>3</sup> See 47 U.S.C. §1302(b) (2012); Notice of Inquiry ¶ 1.

published in the most recent *International Broadband Data Report* (“IBDR”).<sup>4</sup> The study Google commissioned includes additional pricing data on fixed and mobile broadband plans throughout the world and will enable the Commission to make a more comprehensive comparison of broadband pricing and availability in the United States and abroad. The second dataset focuses on the factors relating to broadband use and adoption on a local level. Google gathered this information in connection with the launch of Google Fiber in those communities.<sup>5</sup> Google hopes these datasets will assist the Commission in its efforts to analyze the factors influencing broadband deployment and to develop and adopt innovative policies that encourage broadband deployment.

### **I. International Broadband Pricing Study**

Consumer pricing data from foreign countries is invaluable to the assessment of public policies and their effects on broadband availability and adoption. This data is critical to the development of forward-looking policies that will give the United States a “strategic bandwidth advantage.”<sup>6</sup> To gain insight into what policies lower the cost of Internet access for users, Google recently commissioned an *International Broadband Pricing Study* (“IBPS”) from Communications Chambers and made the study and underlying dataset available for public use

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<sup>4</sup> *In the Matter of International Comparison Requirements Pursuant to the Broadband Data Improvement Act, International Broadband Data Report, Third Report*, IB Docket No. 10-171, GN Docket No. 11-121 (rel. Aug. 21, 2012) (“*Third International Broadband Data Report*”).

<sup>5</sup> Google Fiber is a large-scale ultra-high-speed network that will provide Internet access at speeds up to one gigabit per second—more than 100 times faster than the broadband speeds available to most Americans today. Google Fiber was launched officially in Kansas City, Kansas and Kansas City, Missouri on July 26, 2012. *See* Google Fiber Launch Announcement in Kansas City, July 2012, <http://www.youtube.com/watch?v=6uZVqPuq81c> (last visited Oct. 22, 2012).

<sup>6</sup> Comments of the Fiber-to-the-Home Council to *Ninth Broadband Progress Notice of Inquiry* in GN Docket No. 12-228, at 3-4 (filed Sept. 20, 2012) (“FTTH Council Comments”) (quoting Blair Levin, Gig.U, Keynote Address at Fujitsu Conference on Paving the Road to Unlimited Bandwidth: Upgrading America: Achieving a Strategic Bandwidth Advantage and a Psychology of Bandwidth Abundance to Drive High-Performance Knowledge Exchange, at 2 (June 13, 2012)).

on its “Policy by the Numbers” Blog.<sup>7</sup> The *IBPS* can contribute to the Commission’s broadband progress reports and assist in evaluating the rates of broadband adoption, speeds, and prices in the United States, as compared with international benchmarks, consistent with the Commission’s mandate under the Broadband Data Improvement Act.<sup>8</sup>

Google’s *IBPS* expands the geographic scope of the pricing information provided beyond the 38 countries covered in the Commission’s *IBDR*.<sup>9</sup> Google’s *IBPS* provides fixed broadband pricing data for 93 countries and mobile broadband pricing data for 106 countries.<sup>10</sup> Where practical, it includes data for multiple fixed and mobile operators in each country.<sup>11</sup> Retail broadband Internet connectivity prices covering a total of 3,655 fixed and mobile broadband retail price observations (1,497 fixed plans and 2,158 mobile plans) are included in Fusion Tables and provided on the Policy by the Numbers Blog. Additionally, Google’s *IBPS* provides more recent pricing data than the *IBDR*, which was based on information collected by FCC staff between August 2011 and December 2011.<sup>12</sup> Pricing information included in Google’s dataset was obtained by visiting the websites of the respective service providers during July 2012.<sup>13</sup>

Google opensourced the *IBPS* with the hope that ongoing public comment would continue to improve the data and generate a robust comparative policy analysis. Google believes additional public contributions to the dataset will help provide a more comprehensive set of

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<sup>7</sup> See Kenneth R. Carter, *International Broadband Pricing Study: Dataset for Public Use*, Google Policy by the Numbers Blog (Aug. 22, 2012), <http://policybythenumbers.blogspot.com> (“*International Broadband Pricing Study Blogpost*”).

<sup>8</sup> See 47 U.S.C. § 1303(b).

<sup>9</sup> See *Third International Broadband Data Report*, *supra* note 4 ¶¶ 8-9.

<sup>10</sup> See Communications Chambers, *Broadband Pricing Database - Explanatory Notes 2* (Aug. 2012) (“Explanatory Notes”) (“Our goal was to gather data for all countries with populations greater than 5m, representing in aggregate approximately 98% of world population.”). The Explanatory Notes are available at: <https://docs.google.com/a/google.com/document/d/1S2L6CaTxGTqfVo4fUhMYi5wzpw34Bt7rF0-3Rc2v7O0/edit?pli=1>.

<sup>11</sup> *International Broadband Pricing Study Blogpost*, *supra* note 7.

<sup>12</sup> See *Third International Broadband Data Report*, *supra* note 4, at App. C.

<sup>13</sup> See Explanatory Notes, *supra* note 10, at 2.

benchmarks for evaluating progress in the availability of fixed and mobile broadband in the United States as compared with other countries. Google already has improved some of the data based on comments and suggestions received.<sup>14</sup>

## II. Google Fiber Data

In connection with the development and launch of Google Fiber,<sup>15</sup> Google partnered with the Mayors' Bistate Innovation Team ("MBIT")<sup>16</sup> to collect data concerning broadband adoption and digital literacy in Kansas City, Kansas and Kansas City, Missouri on a neighborhood-by-neighborhood basis ("Kansas City Study").<sup>17</sup> The Kansas City Study found that the majority of respondents recognize the value of the Internet.<sup>18</sup> It also identified reasons residents of Kansas City do not use the Internet and provided suggestions to address these issues. For example, 19% of Internet non-users in Kansas City believe they do not "need" the Internet.<sup>19</sup> The study suggests that educating non-users about the Internet's resources related to their needs will increase relevancy. The study also found that 15% of Internet non-users in Kansas City believe that access to the Internet is too expensive or that they cannot take advantage of the Internet because they do not have a computer.<sup>20</sup> The study concludes that financial support will be

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<sup>14</sup> Revisions made to the original dataset include: additional incremental data added for fixed and mobile, including revising observations which were unclear or inaccurate; additional notations added for fixed plans according to whether a value-added tax was included or excluded in the price (where such data was available); an added notation identifying plans that required a voice line (where evident); an additional field added in the dataset for download speed in Mbps in order to facilitate comparison; and an additional standardized column added for data allowances in the mobile dataset.

<sup>15</sup> For a description of Google Fiber service, see <http://fiber.google.com/about/> (last visited Oct. 22, 2012).

<sup>16</sup> The MBIT was appointed by Mayors Sly James (Kansas City, Mo.) and Joe Reardon (Kansas City, Kan.) in September 2011, to develop a playbook of creative ways the community can use Google Fiber to spark economic development, advance opportunities, and improve daily life in Kansas City.

<sup>17</sup> See Attachment A, Kansas City's Digital Divide (2012); see also Kenneth R. Carter, *The State of Broadband Internet Access in Kansas City*, Google Policy by the Numbers Blog (June 22, 2012), <http://policybythenumbers.blogspot.com>.

<sup>18</sup> See Attachment A, *supra* note 17, at 5-6.

<sup>19</sup> *Id.* at 8.

<sup>20</sup> *Id.*

critical to successful outreach with this group.<sup>21</sup> Finally, the study notes that respondents believe those without Internet access will be at a disadvantage for a range of activities, including job hunting, career skills development, and access to health care information, government services, and news. It provides an assessment of perceived obstacles broken down by neighborhood,<sup>22</sup> as well as specific suggestions for outreach to address these concerns.<sup>23</sup>

Google believes this data can help the Commission evaluate methods to increase broadband availability throughout the United States. It illustrates that awareness and perception of both users and non-users can impede broadband adoption. As one commenter in this proceeding has suggested, communications policy should foster “a psychology of bandwidth abundance.”<sup>24</sup> This is consistent with the Google Fiber approach—providing ultra-high speed Internet access at reasonable rates, in an effort to spark economic development, advance opportunities, and generally improve daily life in the Kansas City communities.<sup>25</sup>

### **III. Innovative Public Policies Can Facilitate Broadband Deployment**

In addition to its request for data, the *Ninth Broadband Notice of Inquiry* seeks comment on the issues identified in the *Eighth Broadband Progress Report*<sup>26</sup> as the chief barriers to broadband deployment, including “costs and delays in building out networks.”<sup>27</sup> The *Eighth*

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<sup>21</sup> *Id.* at 11.

<sup>22</sup> *Id.* at 12-16.

<sup>23</sup> *Id.* at 17-18 (Heat Map Summary).

<sup>24</sup> FTTH Comments, *supra* note 6, at 3 (quoting Blair Levin); *see also* Comments of Public Knowledge to *Ninth Broadband Notice of Inquiry* in GN Docket No. 12-228, at 4-5 (filed Sept. 20, 2012); Comments of The Writers Guild of America, West, Inc. to *Ninth Broadband Notice of Inquiry* in GN Docket No. 12-228, at 5-6 (filed Sept. 20, 2012) (criticizing data caps instituted by some Internet service providers and noting that such caps deter adoption of broadband services).

<sup>25</sup> Google anticipates providing even more compelling information concerning broadband adoption and related developments in Kansas City as Google Fiber is deployed.

<sup>26</sup> *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, Eighth Broadband Progress Report, GN Docket No. 11-121 (rel. Aug. 21, 2012) (“Eighth Broadband Progress Report”).

<sup>27</sup> Notice of Inquiry ¶ 55.

*Broadband Progress Report* accurately notes that “difficulty in accessing key inputs for broadband infrastructure, such as utility poles, conduits, rooftops, and rights-of-way” are some of the obstacles that contribute to the costs and delays in building out networks.<sup>28</sup> Policies that are designed to address these issues will encourage more investment in broadband, and ultimately will lower the cost of broadband service for consumers. In particular, Google supports efforts to reduce fiber deployment costs, such as “dig-once” policies,<sup>29</sup> as well as efficient processes for securing rights-of-way and rights to access utility poles.<sup>30</sup> Such policies will lower the costs associated with broadband deployment, expedite network build-out, and increase broadband adoption, innovation, and development in the United States.

#### **IV. Conclusion**

Google supports the Commission’s efforts to expand broadband access to all Americans. A critical component of this effort is the ongoing collection and analysis of meaningful data to inform the basis for the Commission’s policy decisions. Google hopes the data it submits herein will assist the Commission in this important effort.

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<sup>28</sup> Eighth Broadband Progress Report, *supra* note 26 ¶ 142.

<sup>29</sup> See Reply Comments of Google Inc. to *Notice of Inquiry* in MB Docket No. 12-203, at 5 (filed Oct. 10, 2012) (citing Broadband Conduit Deployment Act of 2011, H.R. 1695, 112th Cong. (2011); Broadband Conduit Deployment Act of 2009, H.R. 2428, 111th Cong. (2009); Exec. Order No. 13,616, Accelerating Broadband Infrastructure Deployment, 77 Fed. Reg. 36,903 (June 20, 2012)).

<sup>30</sup> See *id.* (advocating “efforts to improve access to utility poles and rights-of-way for *all* facilities-based providers of video and broadband services, as increased competition and better broadband access benefit both consumers and communities”); see also Comments of Broadband for America to *Ninth Broadband Notice of Inquiry* in GN Docket No. 12-228, at 5-6 (filed Sept. 20, 2012) (encouraging local governments to consider steps “to adopt a broadband-welcoming posture”).

Respectfully submitted,

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/s/

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