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

In the Matter of	)	
	)	
Modernizing the FCC Form 477 Data Program	)	WC Docket No. 11-10
	)	
Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership	)	WC Docket No. 07-38
	)	
Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering	)	WC Docket No. 08-190
	)	
Review of Wireline Competition Bureau Data Practices	)	WC Docket No. 10-132

NOTICE OF PROPOSED RULEMAKING

Adopted: February 8, 2011 **Released: February 8, 2011**

Comment Date: [30 days after publication in the Federal Register]
Reply Comment Date: [45 days after publication in the Federal Register]

By the Commission: Chairman Genachowski and Commissioners McDowell, Clyburn and Baker issuing separate statements; Commissioner Copps concurring and issuing a statement.

Heading Paragraph #

I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (NPRM), we seek comment on whether and how to reform the Form 477 data program to improve the Commission's ability to carry out its statutory duties, while streamlining and minimizing the overall costs of the program, including the burdens imposed on service providers. This NPRM is an important part of our larger Data Innovation Initiative to modernize and streamline how we collect, use, and disseminate data, and to ensure that all of the data we collect is useful for supporting informed policymaking, promoting competition, and protecting consumers. We are focused on giving careful consideration to the benefits and burdens of our data collections, and eliminating unnecessary collections where possible. For example, the Initiative already has identified over twenty data collections across the entire Commission that may be outdated and ripe for elimination, as well as a number of statutory reporting obligations that may have outlived their usefulness.[1] Similarly, for each type of data

[1] *Pleading Cycle Established for Comments on Review of Media Bureau Data Practices*, MB Docket No. 10-103, Public Notice, 25 FCC Rcd 8236 (MB 2010); *Pleading Cycle Established for Comments on Review of Wireless Competition Bureau Data Practices*, WT Docket No. 10-131, Public Notice, 25 FCC Rcd 8373 (WTB 2010); *Pleading Cycle Established for Comments on Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132, Public Notice, 25 FCC Rcd 8213 (WCB 2010). Commission action on the collections identified through the Initiative will occur in the dockets associated with those collections. For example, the Commission today issued a Notice of Proposed Rulemaking in which it proposes removal of the narrowband comparably efficient interconnection (CEI) and open network architecture (ONA) requirements that currently apply to the Bell Operating Companies (BOCs). *See Review of Wireline Competition Bureau Data Practices; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements*, WC Docket No. 10-132, CC Docket Nos. 95-20, 98-10, Notice of Proposed Rulemaking, FCC No. 11-15 (rel. Feb. 8, 2011). The Commission also may take action through its biennial review of telecommunications regulations. *See* 47 U.S.C. § 161; *Commission Seeks Public Comment in 2010 Biennial Review of Telecommunications Regulations; Announces Particular Focus on Data Collection Requirements*, CG Docket No. 10-266, EB Docket No. 10-267, IB Docket No. 10-268, ET Docket No. 10-269, PS Docket No. 10-270, WT Docket No. 10-271, WC Docket No. 10-272, Public Notice, FCC 10-204 (rel. Dec. 30, 2010) (2010 Biennial Review Public Notice).

discussed in this Notice, we will consider the burdens and benefits of any proposed changes. Our goal is to ensure that the Commission has the data it needs, while minimizing the overall burdens of data collection.

2. Established in 2000, Form 477 is the Commission's primary tool for collecting data about broadband and local telephone networks and services.[2] The form requires providers of broadband service, local telephone service, interconnected Voice over Internet Protocol (VoIP) service, and mobile telephone service to report the number of subscribers they have in their respective service areas.[3] But the Commission has in the past noted shortcomings of the data collected using Form 477,[4] and after more than a decade of rapid innovation in the market for broadband and telephone services, and consistent with the Government Accountability Office's (GAO) recent finding that the Commission's broadband data collection fails to collect key data required to inform policy decisions and generally needs improvement,[5] we believe it may be time to modify Form 477 to better serve the needs of the Commission, Congress, service providers, and consumers. In fact, since the last modification of Form 477, Congress directed the FCC to collect additional information to supplement its analysis of broadband deployment and availability.[6] As we have noted before, Form 477 collects data that are "a critical precursor" to the Commission's ability to fulfill its statutory duties,[7] and provides the Commission with "a set of data of uniform quality and reliability" superior to other publicly available information sources.[8] Form 477 also enables us to fulfill our obligation to reduce government regulation wherever possible,[9] by providing "a factual basis to evaluate the nature and impact of our existing regulation and, in particular, to identify areas where competition has developed sufficiently to justify deregulation."[10]

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[2] *Local Competition and Broadband Reporting*, CC Docket No. 99-301, Report and Order, 15 FCC Rcd 7717, 7718, para. 1 (2000) (*2000 Data Gathering Order*).

[3] *Local Telephone Competition and Broadband Reporting*, Report and Order, WC Docket No. 04-141, 19 FCC Rcd 22340, 22342-43, para. 3 (2004) (*2004 Broadband Data Gathering Order*).

[4] *See, e.g.*, *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*, GN Docket Nos. 09-137, 09-51, Notice of Inquiry, 24 FCC Rcd 10505, 10526–27, para. 45 (2009) (*2009 Sixth Broadband Deployment NOI*); *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*, CC Docket No. 98-146, Report, 14 FCC Rcd 2398, 2402, para. 7 (1999) (*1999 First Broadband Deployment Report*) (relying on subscribership data as a proxy for deployment and availability, and noting that such data "may not be a precise estimate of actual deployment and availability"); *see also* INDUS. ANALYSIS & TECH. DIV., FCC, INTERNET ACCESS SERVICES: STATUS AS OF DECEMBER 31, 2008 at 1 (Feb. 2010) at 4–5, nn.16 & 17 (*December 2010 Internet Access Services Report*) (explaining that mobile wireless connections are only reported at the state level and some business connections could be miscategorized as residential connections), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296239A1.pdf.

[5] UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE, TELECOMMUNICATIONS: CURRENT BROADBAND MEASURES HAVE LIMITATIONS, AND NEW MEASURES ARE PROMISING BUT NEED IMPROVEMENT, GAO-10-49 at 3-6 (Oct. 2009) (*October 2009 GAO Report*), *available at* http://www.gao.gov/new.items/d1049.pdf.

[6] Broadband Data Improvement Act of 2008, Pub. L. No. 110-385, 122 Stat. 4097 (codified at 47 U.S.C. §§ 1301-04) at § 103(b); 47 U.S.C. § 1303(b) (BDIA).

[7] *2000 Data Gathering Order*, 15 FCC Rcd at 7719, para. 2.

[8] *Id.* at 7726, para. 14.

[9] *See* 47 U.S.C. §§ 160(b), 161(a)(2).

[10] *2000 Data Gathering Order*, 15 FCC Rcd at 7720, para. 5.

II. BACKGROUND

A. Form 477 Data Program

3. *Development of FCC Form 477*. The Commission initiated the Form 477 data program in May 2000 to "materially improve its ability to develop, evaluate, and revise policy" for broadband and telephone services, and "to provide valuable benchmarks for Congress, the Commission, other policy makers, and consumers."[11] The Commission designed the program as a standardized collection, with separate sections on subscriptions to broadband services, local telephone service competition, and mobile telephony services.[12]

4. In establishing the Form 477 framework for broadband data, the Commission anticipated that a "regular and consistent survey of broadband deployment" would substantially assist it in fulfilling its statutory duty under section 706 of the Telecommunications Act to report to Congress on broadband deployment and availability, and to encourage the deployment of broadband to all Americans.[13] To that end, the initial Form 477 collected broadband subscribership data. Specifically, the form collected data from facilities-based providers on the numbers of connections to the Internet in service to consumers in each state, and whether such connections used the provider's own facilities, unbundled network elements (UNEs), special-access lines or other leased lines, or wireless channels.[14] The Commission established 200 kilobits per second (kbps) as the minimum transfer-speed threshold for the connections it would track,[15] and required providers to identify the technology used to provide the connections,[16] the percentage of connections offered to residential customers and small businesses,[17] and each ZIP code in which the providers had at least one connection in service.[18]

5. The initial Form 477 likewise collected subscribership data for local telephone service, including data from incumbent local exchange carriers (LECs) and competitive LECs on the number of voice-grade equivalent lines and fixed wireless channels in service for the provision of local exchange or exchange access service to end-user customers and for resale.[19] The original Form 477 required LECs to report the five-digit ZIP codes in which customers served, by reported lines and wireless channels. Mobile telephony providers were required to report their total subscribers by state, and the percentage of customers billed directly by the reporting provider.

6. The initial Form 477 program did not require small providers to file reports. Specifically, broadband service providers with fewer than 250 connections in service in a state were not required to file the form.[20] LECs with fewer than 10,000 voice-grade equivalent lines or wireless channels in service, and mobile telephony providers with fewer than 10,000 subscribers were similarly not required to file.[21]

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[11] *Id.* at 7718, para. 1.

[12] *Id.* at 7749–50, 7753–54, 7756–57, 7772–90, paras. 66, 75, 84, App. B.

[13] *Id*. at 7725, para. 13; 47 U.S.C. § 1302(b).

[14] *2000 Data Gathering Order,* 15 FCC Rcd at 7749–50, para. 66.

[15] *Id.*

[16] *Id*. at 7750, para. 67.

[17] *Id*. at 7751, para. 69.

[18] *Id*. at 7721, para. 6.

[19] In addition, LEC respondents reported the percentage of lines provided over the carriers' own facilities, the percentage provided over UNE loops obtained from other LECs, and the percentage provided by competitive LECs directly from incumbent LEC switching centers in which the competitive LEC was collocated.

[20] *2000 Data Gathering Order*, 15 FCC Rcd at 7739, 7745, paras. 40, 52.

[21] *Id.*

7. *Revisions to Form 477*. The Commission has twice modified Form 477. First, in 2004, the Commission revised the Form 477 program to require submissions from *all* facilities-based providers of broadband connections, in order to capture a more comprehensive picture of broadband deployment in rural areas.[22] Further, the Commission required filers to report the percentage of their connections that fell into five speed tiers.[23] The Commission also required all wired and fixed wireless providers to report the technologies used to provide service in the ZIP codes in which at least one connection was in service.[24] The Commission acknowledged that mobile broadband service differs in some respects from fixed broadband service, and required filers reporting mobile wireless broadband subscribers to list the ZIP codes that "best represent the filers' mobile wireless broadband coverage areas."[25]

8. The Commission next refined the Form 477 data program in 2008, establishing the framework that is currently in place. The Commission decided to collect more granular subscription and speed data, and to improve the quality of data on mobile wireless broadband services.[26] All wireline and terrestrial-fixed wireless broadband service providers must now report the numbers of subscribers at the census-tract level, broken down by technology and more disaggregated speed tiers;[27] and the percentage of subscribers that are residential.[28] Incumbent LECs must continue to report the percentage of their service areas where DSL connections are available to residential premises, and cable system operators must do the same with regard to cable modem service availability.[29] Providers of terrestrial mobile wireless broadband services must continue to submit their broadband subscriber totals on a state-by-state basis, rather than at

[22] *2004 Broadband Data Gathering Order*, 19 FCC Rcd at 22345-46, paras. 8-9 ("Based on our experience with the Form 477 over the past nearly five years, we now conclude that the current thresholds render impossible a thorough understanding of the dynamics of broadband deployment in states with rural and/or underserved areas.").

[23] *Id*. at 22347-48, para. 14. These tiers were: (1) greater than 200 kilobits per second (kbps) and less than 2.5 megabits per second (Mbps); (2) greater than or equal to 2.5 Mbps and less than 10 Mbps; (3) greater than or equal to 10 Mbps and less than 25 Mbps; (4) greater than or equal to 25 Mbps and less than 100 Mbps; and (5) greater than or equal to 100 Mbps.

[24] *Id*. at 22349-50, para. 18.

[25] *Id*.

[26] *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol*, WC Docket No. 07-38, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691 (2008) (*2008 Broadband Data Gathering Order and Further Notice*); *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Order on Reconsideration, 23 FCC Rcd 9800 (2008) (*2008 Broadband Data Gathering Reconsideration Order*).

[27] The Commission updated the broadband reporting tiers, which now consist of an upload speed tier of 200 kbps or less and upload and download speeds of: (1) greater than 200 kbps but less than 768 kbps; (2) equal to or greater than 768 kbps but less than 1.5 Mbps; (3) equal to or greater than 1.5 Mbps but less than 3.0 Mbps; (4) equal to or greater than 3.0 Mbps but less than 6.0 Mbps; (5) equal to or greater than 6.0 Mbps but less than 10.0 Mbps; (6) equal to or greater than 10.0 Mbps but less than 25.0 Mbps; (7) equal to or greater than 25.0 Mbps but less than 100.0 Mbps; and (8) equal to or greater than 100 Mbps—for a total of 72 speed-tier combinations. *2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9700–01, para. 20.

[28] Previously, the Commission required providers to compile a list of ZIP codes in which they offered service, but collected subscriber counts only at the state level and in accordance with less granular speed tiers. *See*, *e.g.*, *2000 Data Gathering Order*, 15 FCC Rcd at 7761, para. 94; 7772-73, App. B Cover Page, Part I.

[29] *See 2004 Broadband Data Gathering Order*, 19 FCC Rcd at 22349, para. 16.

the census-tract level, and must report on the census tracts that "best represent" their broadband service footprint for each speed tier in which they offer service.[30]

9. The *2008 Broadband Data Gathering Order and Further Notice* also required providers of interconnected VoIP services to report the number of subscribers in each state, the number of subscribers who purchase the service in conjunction with the purchase of a broadband connection and, of those, the types of connections purchased.[31] Interconnected VoIP providers also must report the percentage of subscribers who can use the service over any broadband connection.[32]

10. *2008 Further Notice*. The Commission sought comment in 2008 on further revisions to Form 477, including whether and how to institute a national broadband availability mapping program. The Commission tentatively concluded that it "should collect information that providers use to respond to prospective customers to determine on an address-by-address basis whether service is available."[33] The Commission sought comment on standardized collection formats; whether it should collect information on pricing and actual speeds of broadband services; how generally to maintain the confidentiality of broadband data; whether the Commission should conduct and publish periodic consumer surveys on broadband services; and whether it should require LECs and interconnected VoIP providers to report the number of subscribers in geographic units below the state level, either by ZIP code or census tract.[34]

B. Other Developments Relating to Data Collection

11. Since the adoption of the *2008 Broadband Data Gathering Order and Further Notice*, a number of legislative and regulatory developments have affected the obligations of the Commission and other government agencies to collect data related to telephone and broadband services.

1. Broadband Data Improvement Act

12. On October 10, 2008, Congress enacted the Broadband Data Improvement Act (BDIA), expressly finding that "[i]mproving Federal data on the deployment and adoption of broadband service will assist in the development of broadband technology across all regions of the nation."[35] The BDIA imposed several new obligations on the Commission and other federal agencies.[36]

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[30] *See 2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9698–99, para. 16.

[31] *Id.* at 9705-07, paras. 26-31.

[32] *Id.* at 9707, para. 31.

[33] *Id.* at 9709, para. 35.

[34] *Id.* at 9708, para. 33. This Notice addresses issues that were first raised in WC Docket Nos. 07-38, 08-190 and 10-123 that relate to the Commission's data programs. Given the changes that the industry has experienced since the *2008 Broadband Data Order and Further Notice*, the increased focus on broadband issues by the Commission and Congress (*see* Section II.B, *infra*), and the administrative efficiencies that will result from consolidating these issues in a single docket, we hereby open a new docket and incorporate the comments and *ex parte* presentations of WC Docket Nos. 07-38, 08-190 and 10-123. Commenters need not resubmit material previously filed in those proceedings.

[35] BDIA § 102(3); 47 U.S.C. § 1301(3).

[36] In particular, the Census Bureau, in consultation with the Commission, is required to expand the Census Bureau's American Community Survey to include additional questions on residential subscriptions to broadband services. *See* BDIA § 103(d); 47 U.S.C. § 1303(d). The BDIA also directed the Small Business Association to conduct a survey evaluating the impact of broadband speed and price on small businesses by October 10, 2010. *See* BDIA § 105; 47 U.S.C § 1304.

a. Revisions to Section 706 Reporting Requirements

13. The BDIA amended section 706 of the Telecommunications Act of 1996 to improve the quality and quantity of data the Commission collects on the deployment and adoption of broadband services.[37] First, the BDIA requires the Commission to publish its section 706 reports "annually" instead of "regularly," as previously required.[38] Second, the BDIA requires the Commission to compile "demographic information for unserved areas" as part of the annual section 706 inquiry.[39] Specifically, the BDIA requires that the Commission "compile a list of geographical areas not served by any provider of advanced telecommunications capability."[40] If Census Bureau data are available, the Commission must "determine, for each such unserved area—(1) the population; (2) the population density; and (3) the average per capita income."[41]

14. The BDIA also requires the Commission to perform an international comparison in its annual broadband deployment report conducted pursuant to section 706 of the Telecommunications Act.[42] Specifically, section 1303 of Title 47 now requires the Commission to "include information comparing the extent of broadband service capability (including data transmission speeds and price for broadband service capability) in a total of 75 communities in at least 25 countries abroad for each of the data rate benchmarks for broadband service utilized by the Commission to reflect different speed tiers."[43]

b. The GAO's Report on Broadband Metrics and Standards

15. In addition, the BDIA required the GAO's Comptroller General to conduct a study and issue a report on broadband metrics and standards by October 10, 2009.[44] That report evaluated the "broadband metrics that may be used by industry and the Federal Government [including the Commission] to provide users with more accurate information about the cost and capability of their broadband connection[s], and to better compare the deployment and penetration of broadband in the United States with other countries."[45]

16. The GAO found that current measures of broadband performance "have limitations," that "views were mixed on potential alternatives, and ongoing [broadband data collection] efforts need improvement."[46] Further, stakeholders reported to the GAO that the data collected by the FCC Form 477 "[do] not include information on availability, price, or actual delivered speeds, which limits the ability to make comparisons across the country and inform policy or investment decisions."[47]

2. Recovery Act

17. In February 2009, Congress enacted the American Recovery and Reinvestment Act (ARRA),[48] which directed the Commission to develop a national broadband plan to ensure that all people of the United

[37] BDIA § 101; 47 U.S.C. § 1301.

[38] BDIA § 103(a)(1); 47 U.S.C. § 1302(b).

[39] BDIA § 103(a)(3); 47 U.S.C. § 1302(c).

[40] *Id.*

[41] *Id.*

[42] BDIA § 103(b); 47 U.S.C. § 1303(b).

[43] *Id.*

[44] BDIA § 104(b).

[45] BDIA § 104(a).

[46] *See* OCTOBER 2009 GAO REPORT, n.4.

[47] *Id.*

[48] *See* American Recovery and Reinvestment Act of 2009, § 6001(k)(2), Pub. L. No. 111-5, 123 Stat. 115 (2009) (Recovery Act or ARRA).

States have access to broadband.[49] The ARRA also directed the National Telecommunications and Information Administration (NTIA) to develop and maintain a comprehensive nationwide and publicly available map of broadband service capability and availability.[50]

a. National Broadband Plan

18. Section 6001(k) of the ARRA instructed the Commission to submit to Congress a national broadband plan that would analyze mechanisms for ensuring broadband access by all people of the United States, provide a detailed strategy for achieving affordability and maximum usage, and include a plan for use of broadband to advance national purposes such as education, health care, energy, and public safety.[51] The resulting National Broadband Plan, published on March 16, 2010, noted the necessity for "continuous collection and analysis of detailed data on competitive behavior,"[52] and stressed the need for the Commission to conduct "more thorough data collection to monitor and benchmark competitive behavior."[53] In particular, recommendation 4.2 of the Plan suggested that the Commission "revise Form 477 to collect data relevant to broadband availability, adoption and competition."[54]

b. NTIA's Broadband Inventory Map

19. In order to comply with requirements under the BDIA and the ARRA, NTIA in July 2009 established a State Broadband Data and Development Grant Program (SBDD).[55] Through this program, NTIA has awarded grants, funded through 2015, to certain state-designated entities to fund the collection of data from broadband providers.[56] The data collected by NTIA as part of the SBDD program will help populate a national broadband inventory map, which will be made public in February of this year.[57] In

[49] FEDERAL COMMUNICATIONS COMMISSION, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN, GN Docket No. 09-51 (2010) (NATIONAL BROADBAND PLAN or Plan).

[50] Recovery Act § 6001(l).

[51] Recovery Act § 6001(k)(2).

[52] NATIONAL BROADBAND PLAN at 29.

[53] *Id.* at 9.

[54] *Id.* at 43.

[55] Department of Commerce, National Telecommunications and Information Administration, State Broadband Data and Development Grant Program, Docket No. 0660-ZA29, Notice of Funds Availability, 74 Fed. Reg. 32545, 32547 (July 8, 2009) (*NTIA State Mapping NOFA*).

[56] Awardees are required to "submit all of their collected data to NTIA for use by NTIA and the [Commission] in developing and maintaining the national broadband map, which will be displayed on an NTIA Web page before February 17, 2011." *Id*; *see also* Department of Commerce, National Telecommunications and Information Administration, State Broadband Data and Development Grant Program, Docket No. 0660-ZA29, Notice of Funds Availability; Clarification. 74 Fed. Reg. 40569 (Aug. 12, 2009) (*NTIA State Mapping NOFA Clarification*); NTIA, STATE BROADBAND DATA AND DEVELOPMENT PROGRAM (BROADBAND MAPPING PROGRAM) FREQUENTLY ASKED QUESTIONS (rel. Aug. 12, 2009), *available at* http://www2.ntia.doc.gov/html/files/BTOP_BroadbandMappingFAQs.pdf (*NTIA Aug. 12 FAQs*). Consistent with the ARRA, these grants include funding both for broadband mapping and for broadband planning and capacity building. Press Release, Department of Commerce, NTIA, *Commerce's NTIA Announces Final Recovery Act Investments for State-Driven Broadband Activities* (rel. Sep. 27, 2010), *available at* http://www.ntia.doc.gov/press/2010/BTOP_SBDD_09272010.html.

[57] Press Release, Department of Commerce, NTIA, *NTIA Unveils Program to Help States Map Internet Infrastructure*, (rel. Jul. 1, 2009), *available at* http://www.ntia.doc.gov/press/2009/BTOP_mapping_090701.html.

accordance with the ARRA, this map will allow consumers to determine broadband "availability" through a website that is "interactive and searchable."[58]

3. The Commission's Data Innovation Initiative

20. On June 29, 2010, the Commission launched the Data Innovation Initiative, designed to modernize and streamline how the Commission collects, uses, and disseminates data.[59] As part of the Initiative, the Wireline Competition, Wireless Telecommunications, and Media Bureaus released public notices seeking input on which existing data collections should be eliminated or improved, and which new ones should be added.[60] Review of the resulting record, along with staff work in the three Bureaus, has identified over twenty data collections that may be outdated and ripe for elimination, as well as a number of statutory reporting obligations that may have outlived their usefulness. We will initiate proceedings to consider elimination of those data collections that are completely within our purview.[61] Recognizing that data collection is essential to fulfill the Commission's central statutory obligations, including advancing universal service, protecting consumers, promoting competition, and ensuring public safety, we also look forward to working with Congress to eliminate any outdated statutory reporting obligations that they choose to relieve us of.

4. 2010 Biennial Review

21. The Commission also is conducting its 2010 biennial review of telecommunications regulations, pursuant to Section 11 of the Communications Act of 1934, as amended.[62] This section requires the Commission (1) to review biennially its regulations "that apply to the operations or activities of any provider of telecommunications service," and (2) to "determine whether any such regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service."[63] The Commission is directed to repeal or modify any regulations that it finds are no longer in the public interest.[64]

III. PURPOSES FOR WHICH THE COMMISSION MUST OBTAIN DATA

22. The Commission must collect timely and reliable information to carry out its statutory duties. In the eleven years that have passed since the Commission established the Form 477 data program, commenters in a number of proceedings have suggested that the broadband and telephone subscription data we currently collect are insufficient to allow the Commission to fulfill its statutory responsibilities. Telecommunications markets are now in a period of transition to a world in which fixed and mobile broadband networks give consumers access to not only voice communications capability but a myriad of

[58] Recovery Act § 6001(l). We note that neither the NTIA nor the Commission have defined broadband availability. *See infra* para. 34.

[59] Press Release, *FCC Launches Data Innovation Initiative* (rel. Jun. 29, 2010), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-299269A1.pdf.

[60] *Pleading Cycle Established for Comments on Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132, Public Notice, 25 FCC Rcd 8213 (WCB 2010); *Pleading Cycle Established for Comments on Review of Wireless Competition Bureau Data Practices*, WT Docket No. 10-131, Public Notice, 25 FCC Rcd 8373 (WTB 2010); *Pleading Cycle Established for Comments on Review of Media Bureau Data Practices*, MB Docket No. 10-103, Public Notice, 25 FCC Rcd 8236 (MB 2010).

[61] *See supra* n.1.

[62] 47 U.S.C. § 161; 2010 Biennial Review Public Notice. Comments in that proceeding are due January 31, 2011, with reply comments due February 22, 2011.

[63] 47 U.S.C. § 161.

[64] The Commission resolved several interpretative issues under the Section 11 standard in the *2002 Biennial Regulatory Review*, FCC 02-342, 18 FCC Rcd 4726 (2003), *aff'd, Cellco Partnership v. FCC,* 357 F.3d 88 (D.C. Cir. 2004) (*Cellco Partnership*).

other applications and services. Commission data shows that there are now more than 274 million mobile telephony subscriptions in the United States,[65] and interconnected VoIP subscriptions increased by more than 20% during 2009 while traditional PSTN switched access lines decreased by 6%.[66]

23. The National Broadband Plan recommended that the Commission closely observe this transition from legacy circuit-switched networks to all IP, broadband networks to ensure that legacy regulations and services do not impede the transition to a modern and efficient use of resources, that businesses can plan for and adjust to new standards,[67] and, perhaps most importantly, that consumers do not lose access to statutorily required "adequate facilities at reasonable charges."[68] Commenters in the National Broadband Plan suggested that the Commission collect data, or seek comment on the need to collect data, on a variety of issues related to this transition, including public safety,[69] service quality,[70] customer satisfaction,[71] and price.[72] Below, we identify a number of important purposes for which the Commission and commenters have noted that we may require more robust data, and seek comment on the data needed to fulfill those purposes.

A. Ensuring Universal Service

24. Section 254 of the Act, which governs administration of universal service programs, requires the Commission to base its universal service policies on certain principles, including that "[q]uality services" be "available at just, reasonable, and affordable rates,"[73] and that "[c]onsumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services . . . that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."[74] A key goal set forth in the National Broadband Plan is to reform the Universal Service Fund (USF) to "accelerate the deployment of broadband to unserved areas,"[75] and the

[65] WIRELINE COMPETITION BUREAU, FCC, INDUSTRY ANALYSIS AND TECHNOLOGY DIVISION, LOCAL TELEPHONE COMPETITION: STATUS AS OF DECEMBER 31, 2009, at 29 (rel. Jan. 2011) *available at* http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0111/DOC-304054A1.pdf.

[66] *Id.* at 3.

[67] NATIONAL BROADBAND PLAN, § 4.5 at 59; *see also Comment Sought on Transition from Circuit-Switched Network to All-IP Network*, NATIONAL BROADBAND PLAN PN #25, GN Docket Nos. 09-47, 09-51, 09-137, 24 FCC Rcd 14272 (Dec. 1, 2009).

[68] 47 U.S.C. § 151.

[69] *See, e.g.*, California Public Utilities Commission Comments in re NATIONAL BROADBAND PLAN PN #25, filed Dec. 18, 2009, at 8-11; Intrado Inc. et al. Dec. 21, 2009 Comments in re NATIONAL BROADBAND PLAN PN#25, GN Docket Nos. 09-47, 09-51, 09-137 at 2-7; Metaswitch Networks Dec. 17, 2009 Comments in re NATIONAL BROADBAND PLAN PN#25, GN Docket Nos. 09-47, 09-51, 09-137 at 4.

[70] *See, e.g.*, Empirix Comments in re NATIONAL BROADBAND PLAN PN #25, filed Dec. 4, 2009, at 7 (filed as Mark Ivanov); Southwick Comments in re NATIONAL BROADBAND PLAN PN #25, filed Dec. 4, 2009, at 1.

[71] *See, e.g.*, GVNW Comments in re NATIONAL BROADBAND PLAN PN #25, filed Dec. 22, 2009, at 3; Skype Comments in re NATIONAL BROADBAND PLAN PN #25, filed Dec. 22, 2009, at 9.

[72] *See, e.g.*, New Jersey Division of Rate Counsel Comments in re NATIONAL BROADBAND PLAN PN #25, filed Dec. 21, 2009, at 10.

[73] 47 U.S.C. § 254(b)(1).

[74] 47 U.S.C. § 264(b)(1), (3).

[75] NATIONAL BROADBAND PLAN at xiii, section 8.2. We seek comment in an item released today on a framework to modernize the Commission's USF and intercarrier compensation (ICC) regime. *Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board* (continued….)

Commission's unanimously adopted *Joint Statement on Broadband* calls for the USF to be reformed "to increase accountability and efficiency, encourage targeted investment in broadband infrastructure, and emphasize the importance of broadband to the future of these programs [76]

25. We seek comment on the data needed to ensure universal service. Numerous stakeholders have asserted that the Commission must collect deployment, price, and service quality data to effectively fulfill its obligations under section 254 and to modernize the USF to focus on broadband.[77] For example, Verizon has stated that the Commission must have reliable data to identify areas that are truly unserved by broadband to implement USF reform.[78] The National Broadband Plan noted that "[a]cross the four USF programs, there is a lack of adequate data to make critical policy decisions regarding how to better utilize funding to promote universal service objectives."[79] The Commission itself has noted the importance of having reliable data to measure the performance of the USF and to protect against waste, fraud, and abuse.[80] Would data on deployment, price, service quality, and subscription be required to assess whether the performance goals proposed for the USF high-cost program and Connect America Fund in the NPRM released today are being achieved?[81] Would voice and broadband pricing data be necessary to develop possible rate benchmarks for voice and/or broadband service in order to determine if services are "affordable" and "reasonably comparable to rates in urban areas?"[82] Would determining whether particular areas of the country—including rural, insular, and high-cost areas—should be exempt from aspects of the USF reform program or afforded different treatment require deployment, subscription, price and service quality data?[83]

B. Ensuring Public Safety

26. The Communications Act charges the Commission with ensuring that "wire and radio communications service with adequate facilities at reasonable charges" are available for the purpose of,

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on Universal Service; Lifeline and Linkup, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, GN Docket No. 09-51, CC Docket Nos. 01-92, 96-45, Further Notice of Proposed Rulemaking, FCC 11-13 (adopted Feb. 8, 2011) (*USF/ICC Transformation NPRM*).

[76] *Joint Statement on Broadband*, GN Docket No. 10-66, 25 FCC Rcd 3420, para. 3 (2010).

[77] *See, e.g.*, NASUCA and New Jersey Rate Counsel Sep. 2 Reply Comments, WC Docket 07-38 at 19, 26; Communications Workers of America (CWA) Jul. 17, 2008 Comments, WC Docket 07-38 at 3.

[78] Verizon Jul. 12, 2010 Comments, WC Docket Nos. 10-90, 05-337, GN Docket No. 09-51 at 6–7. *See also USF/ICC Transformation NPRM* at para. 269.

[79] NATIONAL BROADBAND PLAN at 144.

[80] *See*, *e.g.*, *Comprehensive Review of Universal Service Fund Management, Administration, and Oversight*, WC Docket Nos. 05-195, 02-60, 03-109, CC Docket Nos. 96-45, 02-6, 97-21, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 20 FCC Rcd 11308, 11318–19, para. 24 (2005) at para. 24 ("Clearly articulated goals and reliable performance data allow the Commission and other stakeholders to assess the effectiveness of the USF programs . . . ."); FCC, FISCAL YEAR 2010 AGENCY FINANCIAL REPORT (OCTOBER 1, 2009 - SEPTEMBER 30, 2010) at 84-87, *available at* www.fcc.gov/Reports/fr2010.pdf.

[81] *USF/ICC Transformation NPRM* at paras. 483-89 (proposing the following four specific performance goals for the current high-cost program and the Connect America Fund: (1) preserve and advance voice service; (2) increase deployment of modern networks; (3) reasonably comparable rates for broadband and voice services; and (4) limit universal service contribution burden on households.).

[82] 47 U.S.C. § 254; *USF/ICC Transformation NPRM* at para. 139.

[83] For example, deployment, subscription, price and quality of service data that can be verified by the Commission may be critical to determining whether to exempt Tribal lands, Alaska Native Regions, and Hawaiian Home Lands from the phase out of the interim competitive eligible telecommunications carrier cap. *See USF/ICC Transformation NPRM* para. 259.

inter alia, "promoting safety of life and property through the use of wIre and radio communications."[84] Congress has further tasked the Commission with a key role in guaranteeing that Americans have access to emergency services via 911.[85] The Commission must be able to monitor the performance of both legacy circuit-switched networks and broadband networks to ensure that consumers can access emergency services as service providers transition from one technology to the other. As noted in the National Broadband Plan, "[a] more reliable [broadband] network would also benefit homeland security, public safety, businesses and consumers, who are increasingly dependent on their broadband communications, including their mobile phones."[86]

27. We seek comment on what data the Commission needs to fulfill these goals. Would mobile service deployment data, for example, allow the Commission to identify areas where consumers lack access to 911 service, such as rural highways or remote worksites? Would service quality data enable the Commission to identify networks that limit consumers' access to emergency services as a result of excessive downtime? Could customer complaint data likewise serve as an indicator that networks are insufficiently reliable to ensure that consumers can depend on them in an emergency?

C. Promoting Telephone and Broadband Competition

28. Promoting competition is a core purpose of the Telecommunications Act of 1996, as amended,[87] and as the National Broadband Plan noted, "[c]ompetition is crucial for promoting consumer welfare and spurring innovation and investment in broadband access networks," and "provides consumers the benefits of choice, better service and lower prices."[88] Others have noted the importance of competition

[84] 47 U.S.C. § 151.

[85] Congress directed the Commission in 1999 to, among other things, designate 911 as the universal emergency assistance number for wireless and wireline calls. *See* Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286, § 3(b) (1999) (911 Act) (codified at 47 U.S.C. § 615). Congress since has amended the 911 Act to codify the Commission's 911 regulations for interconnected VoIP providers, and to establish an advisory committee. *See* New and Emerging Technologies 911 Improvement Act of 2008, Pub. L. No. 110-283, 122 Stat. 2620 (2008) (NET 911 Act). Congress also has directed the Commission to establish an advisory committee for the purpose of achieving equal access to emergency services by individuals with disabilities as part of our nation's migration to next generation 911 systems. *See* Twenty-First Century Communications and Video Accessibility Act of 2010, PL 111-260, § 106; *see also FCC Requests Nominations for Membership on the Emergency Access Advisory Committee in Accordance with the Twenty-First Century Communications and Video Accessibility Act of 2010*, Public Notice, DA 10-2001 (Oct. 19, 2010).

[86] NATIONAL BROADBAND PLAN at 251.

[87] *See* Conference Report, Telecommunications Act of 1996, House of Representatives, 104th Congress, 2d Session, H. Rpt. 104-458, at 1 (stating the purpose of the Telecommunications Act of 1996 was "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced services and information technologies and services to all Americans by opening all telecommunications markets to competition.").

[88] NATIONAL BROADBAND PLAN at 36. The Commission has repeatedly recognized the importance of competition information in carrying out its statutory duty to conduct broadband inquiries. The *2000 Data Gathering Order* identified several essential areas of inquiry from the *1999 First Broadband Deployment Report*, most of which center on competition analysis: "Key issues in evaluating deployment of advanced telecommunications capabilities include the state of competition in the residential advanced telecommunications services market, the existence of barriers to speedy deployment (especially of new technologies), the nature of demand for advanced telecommunications services among residential customers, and possible slow deployment in rural and low-income areas, and among persons with disabilities." *2000 Data Gathering Order*, 15 FCC Rcd at 7719, n.5. In the *2004 Broadband Data Gathering Order*, the Commission introduced state-level subscription estimates for cable modem and incumbent LEC DSL connections "to better enable us to monitor the extent to which these broadband platforms are available to all Americans, and to ascertain with more precision the pattern of competition between these platforms." *2004 Data Gathering Order*, 19 FCC Rcd at 22349, para. 16.

to consumer welfare.[89] In addition, vibrant competition in a market can reduce or eliminate the need for regulation. For example, competition, properly demonstrated, can be the basis for forbearance from regulations under section 10 of the Act.[90] As the Commission previously has found in the context of its section 10 analysis, "competition is the most effective means of ensuring that . . . charges, practices, classifications, and regulations . . . are just and reasonable, and not unjustly or unreasonably discriminatory."[91] The Commission also is required to annually present its findings regarding the state of competition in the mobile services marketplace pursuant to Congress's instruction in section 332(c)(1)(C) of the Act.[92]

29. Despite the importance of assessing competition in order to fulfill the Commission's statutory responsibilities, the Commission does not always have sufficient information about voice and broadband services sufficient to assess competition accurately. For example, the Commission has recognized that a lack of comprehensive data on telephone and broadband services has, in certain situations, compromised the rigor of its analysis in proceedings seeking the transfer of Title III licenses and section 214 authorizations.[93] Similarly, in a decision regarding whether to grant forbearance from network unbundling and other regulations pursuant to section 10 of the Act, the Commission was unable to make a definitive finding regarding market share in the telephony market when the primary cable operator did not voluntarily file reliable data.[94]

30. The National Broadband Plan also noted that statements from a number of commenters—including officials from the Department of Justice and the Federal Trade Commission—demonstrate that "additional data are needed to more rigorously evaluate broadband competition."[95] The Plan concluded that

[89] *See, e.g.*, Department Of Justice (DOJ) Jan. 4, 2010 Comments, GN Docket No. 09-51 at 21.

[90] 47 U.S.C. § 160; Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area, WC Docket No. 09-135, Memorandum Opinion and Order, 25 FCC Rcd 8622, 8633, 8642, paras. 23, 37.

[91] *Petition of US WEST Communications Inc. for a Declaratory Ruling Regarding the Provision of National Directory Assistance*, *Petition of U S WEST Communications, Inc., for Forbearance*, *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket Nos. 97-172, 92-105, Memorandum Opinion and Order, 14 FCC Rcd 16252, 16270, para. 31 (1999) (*US WEST Forbearance Order*).

[92] 47 U.S.C. § 332(c)(1)(C); *see, e.g.*, *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,* Fourteenth Report, WT Docket No. 09-66, FCC 10-81 (WTB 2010).

[93] *See*, *e.g.*, *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, WC Docket No. 05-65, Memorandum Opinion and Order, 20 FCC Rcd 18290, 18347, para. 102 n.307 (2005) (*SBC/AT&T*) ("We discuss the Applicants' market shares before and after the merger instead of HHIs for each geographic market because we do not have sufficient market share information for all of the significant competitors in these markets.").

[94] 47 U.S.C. § 160; *see Petitions of the Verizon Telephone Companies for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Boston, New York, Philadelphia, Pittsburgh, Providence and Virginia Beach Metropolitan Statistical Areas*, WC Docket No. 06-172, Memorandum Opinion and Order, 22 FCC Rcd 21293, 21308, para. 28 (2006) (*Verizon 6-MSA Order*) (determining that the Commission lacked sufficient evidence to determine Verizon's market share in the New York MSA consistent with its approach for the other MSAs, where the primary cable competitor did not voluntarily file complete and correct data).

[95] NATIONAL BROADBAND PLAN at 37, citing DOJ Ex Parte in re National Broadband Plan NOI, filed Jan. 4, 2010 at 7; Gregory L. Rosston, Deputy Director, Stanford Institute for Economic Policy Research, *Remarks at FCC Benchmarks Workshop* 5–17 (Sept. 2, 2009), *available at* http://www.broadband.gov/docs/ws_20_benchmarks.pdf; James Prieger, Professor of Pub. Policy, Pepperdine Univ., *Remarks at FCC Economic Growth, Job Creation and Private Investment Workshop* 4–15 (Aug. 26, 2009), *available at* http://broadband.gov/docs/ ws_16_economy.pdf; Ryan McDevitt, Lecturer, Dep't of Manag. & Strat., Northwestern Univ., *Remarks at FCC Economic Growth, Job Creation and Private Investment Workshop 23–34* (Aug. 26, 2009), *available at* http:// (continued….)

to ensure that the right policies are put in place so that the broadband ecosystem benefits from meaningful competition as it evolves, it is "important to have an ongoing, data-driven evaluation of the state of competition."[96] The National Broadband Plan therefore recommended that the Commission "revise Form 477 to collect data relevant to broadband availability, adoption and competition."[97] Numerous commenters have made similar observations and recommendations.[98]

31. It is important to note that although more robust deployment and subscription data may give the Commission a view of the potential for competition in an area,[99] the National Broadband Plan and a number of commenters have explained that such data alone would not necessarily reveal the actual extent of competition or the level of benefit that consumers enjoy from any competition that exists, and that price and service quality data could fill these gaps.[100] We seek comment on the need for price and service quality data as well as deployment and subscription data to satisfy relevant statutory goals.

D. Promoting Broadband Deployment and Availability

32. As discussed above, Section 706(b) of the Telecommunications Act of 1996, as amended, directs the Commission to annually "initiate a notice of inquiry concerning the availability of advanced telecommunications capability to all Americans" and "determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."[101] The Commission has noted that information about broadband deployment and availability throughout the nation is essential to fulfill its obligations under section 706, including the requirement to compile information about demographic information for unserved areas.[102]

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broadband.gov/docs/ws_16_economy.pdf; Joseph Farrell, Director, Bureau of Econ., FTC, *Remarks at FCC Economic Issues in Broadband Competition Workshop 55–66* (Oct. 9, 2009), *available at* http://broadband.gov/docs/ws_28_economic.pdf; Carl Shapiro, Deputy Ass't Attorney General for Economics, Antitrust Div., DOJ, *Remarks at FCC Economic Issues in Broadband Competition Workshop 66–83* (Oct. 9, 2009), *available at* http://broadband.gov/docs/ws_28_economic.pdf.

[96] NATIONAL BROADBAND PLAN at 37.

[97] *Id*. at 43.

[98] *See, e.g.*, DOJ Jan. 4, 2010 Comments, GN Docket No. 09-51 at 7; Free Press Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5 ("Broadband subscribership and availability, along with speed and price, represent the most basic information concerning broadband.").

[99] Though the NTIA obtains deployment data through the SBDD, the Commission does not currently collect deployment data. *See* Section II.B.2.b, *supra.*

[100] *See*, *e.g.*, NATIONAL BROADBAND PLAN at 42 ("[I]t is crucial that the FCC track and compare the evolution of pricing in areas where two service providers offer very high peak speeds with pricing in areas where only one provider can offer very high peak speeds. The FCC should benchmark prices and services and include these in future reports on the state of broadband deployment."); DOJ Jan. 4, 2010 Comments, GN Docket No. 09-51 at 20; Consumers Union et al. Sep. 2, 2008 Comments, WC Docket No. 07-38 at 8; People of the State of Illinois Sep. 2, 2008 Comments, WC Docket No. 07-38 at 6; NASUCA and New Jersey Rate Counsel Sep. 2, 2008 Reply Comments, WC Docket 07-38 at 26; Horizontal Merger Guidelines, issued by the U.S. Dept. of Justice & Federal Trade Commission (Apr. 2, 1992, revised Aug. 19, 2010) at 2 ("Enhancement of market power by sellers often elevates the prices charged to customers. For simplicity of exposition, these Guidelines generally discuss the analysis in terms of such price effects. Enhanced market power can also be manifested in non-price terms and conditions that adversely affect customers, including reduced product quality, reduced product variety, reduced service, or diminished innovation. Such non-price effects may coexist with price effects, or can arise in their absence.").

[101] 47 U.S.C. § 1302(b).

[102] *2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9694, para. 8 (citing 47 U.S.C. § 157nt (incorporating section 706 of the Telecommunications Act of 1996, Pub. Law No. 104-104, 110 Stat. 56 (continued….)

33. We seek comment on whether the Commission has data sufficient to effectively fulfill this purpose. The Commission has observed that the data it has collected to date have allowed only limited assessments of broadband deployment and availability. For example, the Commission has used information about the existence of at least one subscriber in a ZIP code or census tract as a proxy for both deployment and availability.[103] But the Commission and commenters have noted that subscription data, particularly when collected above the household level, is an imperfect proxy for network deployment or capability.[104] For example, deployment is overstated when households subscribe in one part of an area (such as a census tract) but service is not offered to households in other parts of the same area, while deployment is understated if no household in an area has chosen to subscribe to any service offering provided by a network, and capability is understated if no household has opted for the highest speed offering.

34. We also note that the Commission has long identified broadband availability as a broader concept than broadband deployment.[105] A number of commenters have suggested that the Commission collect other types of data beyond the Form 477 subscribership data to fulfill its obligations under section 706, including information on where infrastructure has been deployed,[106] the price of broadband services,[107] and service quality.[108] Would the use of such data sources in conjunction with subscription data provide additional insights into broadband adoption in the United States?[109] If infrastructure data were collected,

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(1996))). Section 706 of the Telecommunications Act of 1996 was later codified at 47 U.S.C. § 1302 *et seq.* by the BDIA.

[103] *1999 First Broadband Deployment Report,* 14 FCC Rcd at 2402, 2404, paras. 7, 13 ("this Report uses actual subscribership as a proxy for 'deployment' and 'availability'"); *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*, CC Docket No. 98-146, Second Report, 15 FCC Rcd 20913, 20916-17, para. 7 (2000) (*2000 Second Broadband Deployment Report*); *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*, GN Docket No. 10-159, Seventh Broadband Deployment Notice of Inquiry, 25 FCC Rcd 11355, 11363, para. 18 (*2010 Seventh Broadband Deployment NOI*).

[104] *See, e.g., 2009 Sixth Broadband Deployment NOI,* 24 FCC Rcd at 10526–27, para. 45; *1999 First Broadband Deployment Report*, 14 FCC Rcd at 2402, para. 7 (relying on subscribership data as a proxy for deployment and availability, and noting that such data "may not be a precise estimate of actual deployment and availability"); *see also December 2010 Internet Access Services Report* at 4–5, nn.16 & 17 (explaining that mobile wireless connections are only reported at the state level and some business connections could be miscategorized as residential connections).

[105] *1999 First Broadband Deployment Report*, 14 FCC Rcd at 2409–10, para. 30 ("The record before us focuses on deployment of advanced capability, such as investment and construction plans, and generally lacks information about availability, which we believe refers to a consumer's ability to purchase a capability that has been deployed."); *2000 Second Broadband Deployment NOI*, 15 FCC Rcd at 16648, para. 13 n.26 ("Factors that affect the availability of broadband services might include the existence of content that requires broadband service for a consumer to receive it, the purchase of personal computers for the home, trends in the operation of the Internet, the ability of WebTV and other TV set-based forms of Internet access which require broadband speeds, and the development of technology that will enable a cost-effective fixed wireless last mile.").

[106] *See, e.g.*, California PUC Oct. 2, 2011 Reply Comments, GN Docket Nos. 09-137, 09-51 at 4 (recommending against the use of subscribership data because "[a]vailability data, or infrastructure data, shows where broadband is available. Meanwhile, subscribership data denotes where consumers are choosing to purchase broadband service.").

[107] *See, e.g.*, Consumer Federation of America *et al*. Sep. 2, 2008 Comments, WC Docket No. 07-38 at 4.

[108] *See*, *e.g.*, Hugh Carter Donahue & Josephine Ferringo-Stack, *Broadband Quality of Service Monitoring: A Promising Public Policy Response*, NTIA Docket No. 011109273-1273-01, *available at* http://www.ntia.doc.gov/ntiahome/broadband/comments2/donahuestack.htm.

[109] *See* BDIA § 102.

how could the Commission ensure that sensitive information on critical infrastructure is appropriately shielded and protected?

E. Other Statutory Obligations

35. We seek comment on other statutory obligations and Commission efforts that may require the Commission to reform its the 477 data program. In addition, we seek comment on whether the subscription data currently collected via Form 477 and the Commission's other data collection programs are sufficient for such obligations, or whether the Commission should collect additional types of data. Commenters who advocate the collection of additional data should explain how collecting specific types of data would result in concrete benefits for consumers, service providers, and other stakeholders, and explain whether the benefits would outweigh the burdens.

IV. REVISIONS TO THE FCC FORM 477 DATA PROGRAM

36. In the preceding section, we discussed specific statutory obligations of the Commission that, to be performed effectively, may require the collection of better data. We turn now to discussion of what specific data may be necessary to discharge these statutory responsibilities, and whether and (where relevant) how we should collect each type of data using Form 477. After reviewing input from outside parties, we believe that there are five categories of data that may be necessary to meet the Congressional mandates described in the prior section: deployment, pricing, and service quality and customer satisfaction data, which provide measures of supply; subscription data, which provides a measure of consumer demand; and ownership and contact information, which serves multiple statutory purposes. While collecting other categories of data, such as the location of last- and middle-mile infrastructure,[110] could prove useful to the Commission, Form 477 may not be the most appropriate tool for collecting such data. We seek comment on whether there are other types of data necessary for the Commission to complete its mandates that should be collected using Form 477.

37. We recognize that data collections place burdens – and potentially significant burdens – on those required to file, and we actively seek to balance the benefits of data collected against those burdens. We seek comment on whether each of the types of data noted below is necessary for the Commission to fulfill its statutory mandates. Those who suggest that the Commission does not need particular data should specify how the Commission can meet its obligations without such data. For data that the Commission should collect, we seek comment on whether the Commission should gather the data through an OMB-approved data collection or whether there are other sources. For example, are there commercial data sources that would allow the Commission to meet its obligations? Alternatively, would it be practical for Commission staff to collect data from public sources (*e.g.*, from service providers' websites)? Those advocating the use of commercial or publicly available data should discuss any limitations associated with such sources,[111] the resources the Commission would need to devote to the collection method proposed

[110] *See NTIA State Mapping NOFA*, 74 Fed. Reg. at 32557, NOFA Technical Appendix A; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering; Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of the Commission's ARMIS Reporting Requirements; Petition of Qwest Corporation for Forbearance from Enforcement of the Commission's ARMIS and 492A Reporting Requirements Pursuant to 47 U.S.C. § 160(c); Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of ARMIS Reporting Requirements; Petition of Frontier and Citizens ILECs for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of the Commission's ARMIS Reporting Requirements; Petition of Verizon for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of the Commission's Recordkeeping and Reporting Requirements; Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160 from Enforcement of Certain of the Commission's Cost Assignment Rules*, WC Docket Nos. 08-190, 07-139, 07-204, 07-273, 07-21, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 23 FCC Rcd 13647, 13664, para. 34 (2008) (*ARMIS Forbearance Order and Notice*) (tentatively concluding that the collection of infrastructure and operating data could be useful to the Commission's public safety and broadband policymaking).

[111] *See infra* para 42.

(*e.g.*, direct costs, staff time), and the impact such a collection method would have on other Commission efforts. Where a data collection is necessary, we seek comment on ways that the Commission can minimize the burden for filers, for example, in the design of the collection or in tools the Commission can provide. Commenters who cite the burden of an OMB-approved collection should quantify the burden they expect and explain their quantification methodology. We seek comment on issues specific to reducing the burden of each collection as they are discussed in the following sections.

A. General Considerations

1. Streamlining Collection

38. To reduce production burdens, commenters urge the Commission to ensure that the FCC Form 477 collection process is as "streamlined as possible," and we agree that streamlining the process where appropriate must be a top priority for the Commission.[112] For example, providers request that the Form 477 interface be redesigned to allow parties to file data on multiple states as a single file.[113] We seek comment on these proposals, and on other steps the Commission can take to streamline the Form 477 data program.

39. Reporting entities already maintain subscriber databases that include address-level information; thus, providing subscribership information at the address level could simplify reporting. At the same time, collection of address-level deployment and availability information would allow the Commission to make policy decisions based on a more granular and accurate understanding of the marketplace.[114] We note that some providers have explicitly requested that they be allowed to submit subscribership data at the address level to reduce their reporting burden.[115] We seek comment whether it would be less burdensome for providers to submit address-level data with respect to the deployment and availability of services. We also seek comment on other ways that the Commission can ease the burden on small- and medium-sized providers.

40. In addition, we seek comment on the extent to which technological tools can reduce the burden of producing information. For example, the Commission now makes available a Census Block Conversions application programming interface (API) that returns a U.S. Census Bureau Census Block number given a passed latitude and longitude.[116] The API also returns the state and county name associated with a block. Among other benefits, we expect that this API will assist providers in assigning subscribers to census-defined geographic areas. What other tools are available to reduce the burdens providers face in complying with our data reporting programs? Are there other tools that the Commission itself should develop?

2. Use of Third-Party and Publicly Available Data

41. We seek comment on whether and how the Commission can obtain reliable data from third parties and publicly available sources. The Commission in 2007 sought comment on the "availability of commercial sources of broadband deployment data or data-processing programs that could augment or otherwise add value to our use of Form 477 data, or reduce the associated costs and other burdens imposed on reporting providers."[117] The Commission declined to use any such sources in the *2008 Broadband Data*

[112] Verizon Aug. 13, 2010 Comments, WC Docket No. 10-132 at 7-8.

[113] *Id.*; *see also* T-Mobile Sept. 13, 2010 Reply Comments, WC Docket No. 10-132 at 4.

[114] We seek comment on the privacy implications of such collections in Section V.C below.

[115] *See, e.g.,* OPASTCO-RICA Nov. 24, 2008 Paperwork Reduction Act Comments, WC Docket No. 07-38, OMB Control No. 3060-0816.

[116] FCC, CENSUS BLOCK CONVERSIONS API—REBOOT.FCC.GOV, http://reboot.fcc.gov/developer/census-block-conversions-api.

[117] *Development of National Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Deployment of Data on Interconnected Voice Over Internet Protocol (VoIP) Subscribership*, Notice of Proposed Rulemaking, WC Docket No. 07-38, 22 FCC Rcd 7760, 7774, para. 32 (2007).

Gathering Order and Further Notice.[118] We note that the Commission currently relies on some third-party data that may be considered authoritative,[119] and seek comment on what other data could be obtained by the Commission from third parties. We also seek comment on whether there are new sources of data that could serve Commission goals.

42. We note that there are limitations associated with third-party data sources. Commercial data sources rarely rely on a census of all data sources of a particular type and more often rely on sampling.[120] The bias associated with sampling, or the use of proprietary methods to create or extrapolate from a sample, could limit the applicability of commercial data. Further, commercial data often include restrictions to data rights that could limit the Commission's ability to publish underlying data or resulting analysis. We seek comment on these potential shortcomings of commercial data, whether there are ways to mitigate them, and the balance between these limitations and the burden that could be avoided by the use of commercial data. The Commission could also cull some information from public sources, such as company websites. We note that such data may be unreliable or insufficiently detailed,[121] and seek comment on the extent to which the Commission can base policy on such data.[122] To the extent commenters advocate for the use of commercial or third-party data for a specific collection, we ask that they quantify the resources the Commission would have to devote to procure or process those data. How should the Commission balance the costs of purchasing data or collecting data itself from public sources against the burdens that Form 477 data collection may impose on service providers?

3. Who Must Report

43. Four classes of entities currently file FCC Form 477: facilities-based providers of broadband connections to end user locations;[123] providers of wired or fixed wireless local exchange telephone service;[124] providers of interconnected VoIP service;[125] and providers of mobile telephony services.[126]

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[118] *See generally, 2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9695-9708, paras. 9-32.

[119] The Commission currently licenses commercial data for mobile network deployment; *see infra* Section IV.B.1.a(ii).

[120] We note that the Recovery Act authorized NTIA to expend up to $350 million to "develop and maintain a comprehensive nationwide inventory map of existing broadband service capability and availability in the United States." *See* Recovery Act § 6001(l). Such expenditures are likely outside the ability of commercial or non-profit firms.

[121] For example, data available on websites about mobile-network coverage do not indicate signal strength.

[122] *See* Free Press Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5 (urging the Commission to "view calls to rely on third party information as an adequate substitute for Commission collection with serious skepticism.").

[123] Broadband connections, for the purpose of Form 477 reporting, are "wired 'lines' or wireless 'channels' that enable the end user to receive information from and/or send information to the Internet at information transfer rates exceeding 200 kbps in at least one direction." FCC, FCC FORM 477 INSTRUCTIONS FOR LOCAL TELEPHONE COMPETITION AND BROADBAND REPORTING (2010) (regarding filings due Sep. 1, 2010), *available at* http://www.fcc.gov/Forms/Form477/477inst.pdf (*FCC Form 477 Instructions*) at 2. In the *2010 Sixth Broadband Deployment Report*, the Commission chose to benchmark broadband as "a transmission service that actually enables an end user to download content from the Internet at 4 Mbps and to upload such content at 1 Mbps over the broadband provider's network. *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 199*6, CC Docket No. 09-137, 25 FCC Rcd 9556, 9563, para. 11 (2010) (*2010 Sixth Broadband Deployment Report*).

[124] Consistent with past practice, for purposes of this proceeding, "local telephone service," "local telecommunications service," and "local exchange and exchange access services" refer collectively to the services that are subject to the local competition reporting requirements established in the 2000 *Data Gathering Order*. *See 2000 Data Gathering Order*, 15 FCC Rcd at 7735-36, para. 32. These internal references are not meant to affect or modify any existing definitions of similar terms, such as "telephone exchange service," "exchange access," and (continued….)

Some entities may fill out only certain portions of the form.

44. Some of the proposals identified below would have the Commission collect from all providers of voice and broadband services data that may have in the past been collected only from a subset of providers. For example, some of the service quality data some have suggested we should collect from all broadband providers formerly were collected only from price cap carriers.[127] We seek comment on whether there are classes of providers that should be exempted from reporting elements of any proposed data collection. For example, small broadband providers may find it relatively more burdensome to comply with certain data reporting obligations than larger carriers.[128] Any proposals to exempt certain providers should include the legal and policy grounds and the policy implications for such an exemption.

45. We also seek comment on whether additional classes of entities should be required to file FCC Form 477. For example, should we revise our definition of "interconnected VoIP" for the purposes of this collection to include services that permit users to receive calls that originate on the public switched telephone network *or* to terminate calls to the public switched telephone network?[129] Proposals to require additional classes of entities to file should discuss the Commission's authority to do so.

4. Frequency of Reporting

46. The Commission previously has decided that it can best balance its need for timely information with its desire to minimize the reporting burden on respondents by requiring providers to report data on a semi-annual basis. One commenter has asked the Commission to require quarterly collections "to keep pace with rapidly evolving Internet technology and allow regulators to plan and adjust policies."[130] Another commenter asks that the Commission synchronize the filing deadlines for FCC Form 477 with those for the

(Continued from previous page)
"telecommunications service" as set forth in the Act and our prior orders. *See, e.g.,* 47 U.S.C. §§ 153(16), (46), (47); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501 (1998).

[125] *See* 47 CFR § 9.3.

[126] Consistent with past practice, for purposes of this proceeding, the term "mobile telephone service" has the same meaning as used in the *Data Gathering Order*. *See 2000 Data Gathering Order*, 15 FCC Rcd at 7735-36, para. 32 (noting that the mobile telephony market generally includes providers of cellular, broadband personal communications service (PCS), and specialized mobile radio services that offer real-time, two-way switched voice service that is interconnected with the public switched network utilizing an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless handoffs of subscriber calls); *see also* 47 C.F.R. § 20.15(b)(1). While only facilities-based mobile telephone service providers complete Form 477, those filers report the total number of voice telephone service subscribers served over their systems, whether served directly or via resale by an unaffiliated entity. *See 2000 Data Gathering Order*, 15 FCC Rcd at 7756-57, para. 84.

[127] *See supra* Section IV.B.4; *see, e.g.*, *ARMIS Forbearance Order and Notice at* 13648-49, paras. 1-2 (2008) (Explaining that the Commission established certain ARMIS reports in order to monitor two potential concerns raised by price cap regulation: first, that carriers might lower quality of service, instead of being more productive, in order to increase short term profits; and second, that carriers might not spend money on infrastructure development.).

[128] *See, e.g.*, Fred Williamson and Associates Feb. 12, 2009 Comments in Support of Request for Extension, WC Docket No. 07-38 at 1-2 ("FWA supports the purposes of the FCC Form 477, but is concerned that, unless the extension is granted, inaccurate and incomplete data will be provided regarding broadband deployment. . . . The additional time should allow small carriers the time to accurately develop and report the FCC Form 477 data . . . .").

[129] The Commission's rules currently define interconnected VoIP as "a service that: (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet protocol-compatible customer premises equipment (CPE); and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network." 47 C.F.R. § 9.3.

[130] MMTC Aug. 13, 2010 Comments, WC Docket No. 10-132 at 11.

NTIA's SBDD.[131] We seek comment on whether FCC Form 477 should be filed more or less frequently.

B. Specific Categories of Data

47. Commenters have identified five categories of data that may help the Commission more effectively carry out its statutory obligations: deployment, price, subscription, service quality and customer satisfaction, and ownership and contact information. We seek comment on whether and how the Commission should collect such data, and the Commission's authority to do so.

48. Those commenting on how to collect data should be as specific as possible. Establishing detailed data reporting requirements is an inherently difficult task. Particular elements of a dataset may be simple to describe conceptually, but difficult to specify as a practical matter. Conversely, a data element may be easily specified, but difficult to explain in plain language. To the extent commenters propose that we collect specific data elements, we ask that commenters both discuss the concept and provide an actual specification of each data element. To the extent particular proposals are offered, are there different data elements that might better achieve our goals, including minimizing production burdens on filers and processing burdens on the Commission?

1. Deployment

49. As discussed above, numerous stakeholders have urged the Commission to obtain data that would allow it to understand where providers have deployed networks capable of delivering a given service. We seek comment on whether deployment data are necessary to fulfill several of the purposes discussed above: ensuring universal service by tracking the expansion of broadband networks, identifying areas that lack access to fixed or mobile broadband and assisting the Commission in targeting support to areas that most need it; monitoring telephone and broadband competition by providing insight into the service areas of potential competitors regardless of the technology used; and promoting broadband deployment and availability by providing reliable information about broadband deployment nationwide. In this section, we seek comment on how the Commission might obtain deployment data for voice and broadband services.

a. Voice Network Deployment

(i) Fixed

50. The Commission currently does not collect data on fixed voice network deployment. And although the national telephone subscription rate has remained high over the last decade,[132] a number of commenters have informed the Commission that residents in some areas of the country—particularly rural, insular, high-cost, and Tribal areas—do not have access to basic fixed telephone service.[133] Other commenters assert that state carrier of last resort obligations are sufficient to ensure that fixed voice networks are ubiquitously deployed.[134] We seek comment on whether the Commission should collect fixed voice network deployment data. If such a collection is warranted, should it be limited to areas in which network deployment has historically been a concern, such as rural, insular, high-cost, and tribal areas? What geographic area (*e.g.*, census block or address-level) would be appropriate for reporting such data?

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[131] NCTA Aug. 13, 2010 Comments, WC Docket No. 10-132 at 11.

[132] *See* INDUS. ANALYSIS & TECH. DIV., FCC, TRENDS IN TELEPHONE SERVICE (rel. Sep. 2010) at 16-17, tbl. 16.5 (showing that the percentage of occupied housing units with telephone service in the United States has ranged between 94.1% and 98.2% since 2001).

[133] *See* CommNet Wireless Dec. 16, 2010 Comments, WT Docket No. 10-208 at 6; PR Wireless et al. Dec. 16, 2010 Joint Comments, WT Docket No. 10-208 at 13, *attached to* PR Wireless Dec. 16, 2010 Comments, WT Docket No. 10-208; National Tribal Telecommunications Association Nov. 26, 2008 Comments, CC Docket No. 96-45, WC Docket No. 04-36 at 9.

[134] *See, e.g.*, Embarq Jun. 2, 2008 Reply Comments, WC Docket No. 05-337, CC Docket No. 96-45 at 4, 7.

(ii) Mobile

51. The Commission currently licenses a dataset from a commercial source, American Roamer, for data on mobile network deployment.[135] American Roamer provides coverage boundary maps for mobile voice and broadband networks based on information provided to them by mobile wireless network operators.[136] The Commission previously has noted that analysis based on this data "likely overstates the coverage actually experienced by consumers, because American Roamer reports advertised coverage as reported to it by many mobile wireless service providers, each of which uses a different definition of coverage. The data do not expressly account for factors such as signal strength, bit rate, or in-building coverage, and they may convey a false sense of consistency across geographic areas and service providers. Nonetheless, the analysis is useful because it provides a quantitative baseline that can be compared across network types, technologies, and carriers, over time."[137]

52. We seek comment on whether it is appropriate to continue relying on American Roamer's mobile telephony deployment data. Are alternative datasets available, and if so, how do they compare to the data available to and currently purchased by the Commission? Are such datasets available only as off-the-shelf products, or would it be possible to acquire datasets tailored to the Commission's specifications? For such datasets, what are the likely costs, and how timely is the data? Should the Commission require carriers to submit mobile telephony deployment data, notwithstanding the availability of some data from third parties? If so, what data submissions should be required? Should the Commission collect data that are based on a standardized definition of coverage or a range of signal strengths that would reflect a likely consumer experience? We also seek comment on whether the Commission should collect data on the spectrum bands used for mobile voice network deployment in specific geographic areas, which would help the Commission to fulfill its spectrum management responsibilities under Title III of the Act.[138] How burdensome would the collection of mobile telephony deployment data be for providers? What are the benefits of obtaining such information?

b. Broadband Network Deployment

(i) SBDD Data

53. The national broadband inventory map under development by the NTIA is an important step toward collecting more robust data about broadband deployment and availability. The GAO's report noted that stakeholders "generally agreed" that this national broadband map "would address some gaps and provide detailed data on availability, subscribership, and actual delivered speeds," but there were concerns that the data collection mechanism used—which depends on voluntary reporting by providers to state entities whose methods may vary from state to state—could "result in inconsistent data and limit the effectiveness of the effort."[139]

54. Broadband deployment data collected via Form 477 could address these consistency concerns and provide an ongoing source of data at the conclusion of the SBDD program. Verizon, Sprint, T-Mobile, and NCTA suggest that the Commission consider the extent to which it is necessary to collect broadband deployment data through Form 477 once NTIA's national broadband inventory map is online and the data

[135] *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, WT Docket No. 09-66, Fourteenth Report, 23 FCC Rcd 11407, 11413, para. 4 (2010) (*14th CMRS Competition Report*).

[136] *Id.* at 11442, n.88.

[137] *Id*. at 11413, n.5, citing NATIONAL BROADBAND PLAN at 39.

[138] *See* 47 U.S.C. § 301 *et seq.*

[139] OCTOBER 2009 GAO REPORT, summary.

become available to the Commission.[140] We seek comment on this suggestion. On what data would the Commission rely at the conclusion of the SBDD program, and how would the Commission reliably analyze trends in broadband deployment if there are gaps in data collected by the SBDD program?

(ii) Data Collection by the Commission

55. We seek comment on a number of issues raised by commenters who recommend that the Commission collect data on broadband network deployment.

56. *Geographic Area.* Parties have proposed varying levels of geographic specificity the Commission should require when collecting deployment information.[141] Currently, the Commission collects subscription data—which it uses as a proxy for deployment—for fixed broadband providers at the census tract level.[142] In the *2008 Broadband Data Gathering Order and Further Notice*, the Commission tentatively concluded that it should measure deployment on an address-by-address basis, which would provide the most granular and accurate information.[143] A number of commenters in prior proceedings, particularly state regulatory agencies, have expressed support for collection of broadband deployment data at the address level.[144] These commenters note that address-by-address data would yield the most useful data for the Commission about where broadband is deployed. Some smaller providers also state that reporting at the subscriber address level would ease the burden of reporting.[145] Other commenters, however, have suggested that reporting address-level deployment information would be unduly burdensome for providers, particularly for small- and medium-sized providers that do not maintain such data.[146] We seek comment on the benefits and burdens of requiring address-level deployment data. In addition, we seek comment on how to account for areas where networks are deployed, but there are no homes or businesses

[140] Verizon Aug. 13, 2010 Comments, WC Docket No. 10-132 at 8; Sprint Sep. 30, 2010 Reply Comments, WC Docket No. 10-132; T-Mobile Sep. 13, 2010 Reply Comments, WC Docket No. 10-132 at 4; Connected Nation Jul. 17, 2008 Comments, WC Docket No. 07-38. *But see generally* Kentucky Municipal Utilities Association Aug. 1, 2008 Comments and Reply Comments, WC Docket No. 07-38; Consumers Union et al. Aug. 8, 2008, Further Reply Comments, WC Docket No. 07-38 at 16–19. As discussed above, the national broadband inventory map must be online no later than February 17, 2010.

[141] Some commenters have argued that more granular data are needed. *See, e.g.*, TSTCI Aug. 1, 2008 Reply Comments, WC Docket No. 07-38 at 1. Providers generally recommend that we stay at the census tract level. *See, e.g.*, Verizon Aug. 1, 2008 Comments, WC Docket No. 07-38 at 3; Verizon Aug. 1, 2008 Reply Comments, WC Docket No. 07-38 at 3-5; AT&T Aug. 1, 2008 Reply Comments, WC Docket No. 07-38 at 2; TCA Aug. 1, 2008 Comments, WC Docket No. 07-38 at 4-5.

[142] *2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9697, para. 13.

[143] *Id.* at 9709, para. 35; Letter from Helen M. Mickiewicz, Assistant General Counsel, California Public Utilities Commission, to Marlene H. Dortch, Secretary, FCC, Aug. 19, 2008, Attach. at 10. As discussed below, we recognize that the privacy-based limitations on the government's access to customer information in both Title II of the Electronic Communications Act (ECPA), also known as the Stored Communications Act (SCA), 18 U.S.C. § 2701 *et seq.*, and the privacy provisions of Cable Act, 47 U.S.C. § 551 et seq., may be implicated by collection of address-level subscribership data. *See* Section V.C, *infra.* However, a request for address-level deployment information would not seek customer information, but only information about the services a provider can provide on an address-by-address basis. As such, we do not believe that address-level collection of deployment information would implicate the privacy provisions of those acts.

[144] *See, e.g.*, Maine Public Utilities Commission July 16, 2008 Comments, WC Docket No. 07-38 at 1; New Jersey Division of Rate Counsel Jul. 17, 2008 Comments, WC Docket No 07-38 at 12.

[145] *See, e.g.*, APPA *et al.* Jul. 17, 2008 Comments, WC Docket No. 07-38 at 3.

[146] Windstream Jul. 17, 2008 Comments, WC Docket No. 07-38 at 2; Verizon Jul. 17, 2008 Comments at 2; Connected Nation July 17, 2008 Comments, WC Docket No. 07-38 at ii-iii; ITTA Jul. 17, 2008 Comments, WC Docket No. 07-38 at 4.

with addresses (*e.g.*, uninhabited highways with mobile network coverage).[147] At least one state (California) already requires address-level reporting for the construction of its broadband map.[148] We seek comment on this and similar state agency initiatives and request any empirical evidence of the burdens and impact of compliance.

57. Some commenters in prior proceedings have suggested that the Commission collect deployment data at the census block level.[149] The California Public Utility Commission (PUC) notes that reporting by census block would yield an average of 22 households, whereas a census tract yields an average of 1,628 households.[150] Census block-level reporting could provide a balance between being more granular than census tract-level reporting and avoiding any privacy issues associated with address-by-address reporting. Commenters have also noted that the utilization of a Census geography facilitates the application and analysis of Census demographic data, such as income, race, age, and household size and composition.[151] We seek comment on whether the burdens imposed by collecting census block-level data are significantly greater than those associated with collecting census tract-level data. Would the burdens imposed by collecting census block-level data be substantially greater than requiring address-level reporting?[152] Are there particular benefits to using census-block level reporting? What were the costs and benefits of initiatives that have used census block-level reporting?[153] What alternative reporting methods could the Commission use to ease the burden on carriers that might find census block-level data to be unduly burdensome, while still collecting comparable and useful data?[154]

58. NTIA's broadband mapping effort sought deployment data for a smaller geographic area than a census block for census blocks larger than two square miles.[155] We seek comment on the benefits and costs

[147] The challenges of assigning mobile services to particular geographic areas is discussed more fully in para. 61, *infra*.

[148] California Public Utilities Commission Aug. 1, 2008, Reply Comments, WC Docket No. 07-38 at 4–5.

[149] *See* Letter from Helen M. Mickiewicz, Assistant General Counsel, California Public Utilities Commission, to Marlene H. Dortch, Secretary, FCC, Aug. 18, 2008, Attach. at 8.

[150] *Id.*

[151] *Id.*

[152] *See, e.g.,* OPASTCO-RICA Nov. 24, 2008 Paperwork Reduction Act Comments, WC Docket No. 07-38, OMB Control No. 3060-0816.

[153] *See, e.g.*, Connected Nation: Broadband Mapping FAQ: *What types of data are required for the broadband mapping project?*, http://connectednation.org/mapping/broadband_mapping_FAQ.php ("The dataset includes layers outlined in the technical appendix of the NOFA, such as broadband service availability by Census Block for those Census Blocks with an area of no greater than two square miles, broadband service availability by road segment in those Census Blocks larger in area than 2 square miles, and the footprint of wireless service providers (including fixed wireless, mobile wireless, and satellite).").

[154] For its mapping initiative, the California PUC provided the following format alternatives: 1) a list of all addresses, in a parsed address field format, with available broadband within the provider's service area; 2) a list of all addresses in a concatenated-address field format, with available broadband within the provider's service area, according to certain specifications; and 3) a GIS or CADD data file (an ESRI shapefile or personal geodatabase, or Autodesk AutoCAD DWG file, or Bentley Microstation DGN file), with available broadband within the provider's service area only if such areas are delineated by CBTF Speed as city blocks or smaller areas, according to certain specifications. California Public Utilities Commission Aug. 1, 2008, Reply Comments, WC Docket No. 07-38 at 4–5 (citations omitted).

[155] Michael Byrne, *Geographic Information Officer, FCC, National Broadband Map Update, Presentation for the Federal Geographic Data Committee*, at 4 (Dec. 10, 2010), *available at* http://www.fgdc.gov/ngac/meetings/december-2010/national-broadband-map-update.ppt#259,1,Slide 1. *See also* Connected Nation: Broadband Mapping FAQ: What types of data are required for the broadband mapping project?, http://connectednation.org/mapping/broadband_mapping_FAQ.php (last visited Jan. 6, 2011) ("The dataset includes (continued….)

of this approach. What unit of measurement should the Commission utilize for larger census blocks if the Commission does not use address-by-address reporting?

59. *Speed*. The National Broadband Plan noted the importance of speed data to consumers and policymakers, and stakeholders generally acknowledge its usefulness.[156] The Commission currently collects information about advertised broadband speeds in its Form 477 collection. The National Broadband Plan noted, however, that consumers and policymakers would benefit from data on actual speeds.[157] The Commission has sought information about how best to measure actual broadband speeds.[158] Recognizing the difficulty of measuring actual speeds, a number of stakeholders have nonetheless urged the Commission to require providers to report actual speeds.[159] Some have suggested that the Commission require providers to report a statistical sampling of average speeds.[160] Others have suggested requiring providers to report data contention ratios (the ratio of the potential maximum demand to the actual bandwidth available).[161] Broadband providers and their industry associations have argued that actual speeds are affected by a wide variety of factors, many beyond the providers' control, and that measuring speed will be "almost impossible."[162] We seek comment on whether the Commission should collect data on contention ratios or some other measure of network congestion. We further seek comment on whether the Commission should continue to collect data only on advertised speeds, or whether, for example, providers should provide information about actual speeds by geographic area, or speeds that extend beyond the access network (*e.g.*, end-to-end speeds that reflect an end user's typical Internet performance). We also seek comment on how to best measure the actual speeds of services that can be provided over a network. The Commission has undertaken a program to measure such speeds directly for a sample of end users of fixed broadband, and is considering a similar program for mobile broadband.[163] We seek comment on whether an approach like this one, a similar approach with more measurements, or some other method is appropriate. Comments on measurements of actual speed should identify the part or parts of the network where speed

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layers outlined in the technical appendix of the NOFA, such as broadband service availability by Census Block for those Census Blocks with an area of no greater than two square miles, broadband service availability by road segment in those Census Blocks larger in area than 2 square miles, and the footprint of wireless service providers (including fixed wireless, mobile wireless, and satellite).").

[156] *See* NATIONAL BROADBAND PLAN at 43; *see also* Free Press Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5.

[157] NATIONAL BROADBAND PLAN at 43.

[158] For example, the Commission has begun an effort, in partnership with broadband providers and SamKnows, to measure the actual speed and performance of broadband service. *See Comment Sought on Residential Fixed Broadband Services Testing and Measurement Solution, Pleading Cycle Established*, Public Notice, 25 FCC Rcd 3836 (2010) (SamKnows project); *Comment Sought on Measurement of Mobile Broadband Network Performance and Coverage*, Public Notice, 25 FCC Rcd 7069 (2010) (same).

[159] *See, e.g.*, National Assoc'n of State Utility Commissioners and New Jersey Rate Counsel Jul. 17, 2008 Comments, WC Docket No. 07-38 at 16-18; Consumers Union et al. Aug. 8, 2008 Further Reply Comments, WC Docket No. 07-38 at 17; National Association of Telecommunications Officers and Advisors Jul. 17, 2008 Comments, WC Docket No. 07-38 at 4.

[160] *See* National Association of Telecommunications Officers and Advisors Jul. 17, 2008 Comments, WC Docket No. 07-38 at 4.

[161] The higher the contention ratio, the greater the number of users that may be trying to use the actual bandwidth at any one time and, therefore, the lower the effective bandwidth or speed offered, especially at peak times. *See* Consumer Federation of America Sept. 2, 2008 Further Reply Comments, WC Docket No. 07-38 at 17.

[162] *See, e.g.*, Sprint Aug. 1, 2008, Comments and Reply Comments WCB Docket No. 07-38 at 3; American Cable Assoc'n Jul. 17, 2008 Comments, WCB Docket No. 07-38; CTIA Aug 1, 2008 Comments, WCB Docket No. 07-38 at *2;* Frontier Aug. 1, 2008 Comments, WCB Docket No. 07-38 at n.4.

[163] *See supra* n.158.

should be measured. What starting and ending points are most relevant for consumers, providers, and the Commission?

60. The Commission currently collects speed data in eight tiers of advertised download speeds and nine tiers of advertised upload speeds, leading to 72 possible combinations.[164] The SBDD established nine tiers of advertised download speeds and 11 tiers of advertised upload speeds, for 99 possible combinations.[165] We seek comment on whether the FCC and NTIA should conform their speed tiers.[166] Further, while there is value in having speed data broken out at a granular level, relevant speeds are likely to evolve over time, and having 72 or 99 speed-tier combinations may be unnecessarily complex. However, we note that there are benefits to maintaining some continuity in this area to enable tracking data on particular speed-tier combinations over time. Further, measuring the same speed tiers for both business and residential customers may not be appropriate, as they often have different needs for speed. When collecting speed data, should the Commission reduce the number of speed tiers reported by providers? Should we add a tier specifically tied to any speed benchmark that may be required to receive USF or Connect America Fund (CAF) funding?[167] Should any future increase in that potential benchmark result in the addition of a speed tier for that new speed? An alternative approach would be to define tiers by pairs of upstream and downstream speeds.[168] Such an approach would greatly reduce the number of tiers but would lock-in pairings of downstream and upstream speeds. We seek comment on these approaches, including comment on the number of speed tiers and breakpoints.

61. *Mobile Issues*. Mobile broadband presents additional challenges with respect to geography. We seek comment on whether a mobile service should be treated differently from a fixed service for reporting purposes. For mobile service, a billing address can provide a subscriber's home location but does not reflect the entire coverage area where a mobile broadband network is available; nor would a billing address necessarily be reflective of the primary usage area of the subscriber, particularly in the case of family plans and for businesses. As discussed above, American Roamer produces mobile voice and broadband coverage maps, which the Commission has used to estimate mobile broadband deployment at the census block level. However, these coverage maps have certain drawbacks, including that the data do not account for factors such as signal strength variations. Should the Commission collect some measure of signal strength beyond a simple "signal/no signal" flag? For example, would a "good/better/best" measure for each geographic area be appropriate, or would reported advertised speeds accurately reflect the impact of signal strength? How should reporting account for the variability of signal strength and capacity in a network that includes mobile users? We seek comment on whether billing address, census blocks, or another geographic area should be used to collect data on mobile broadband network coverage areas, separate from the maps obtained from American Roamer. In addition, Sprint has stated it has maps that would allow for the identification of service availability at the street address level, and has suggested that the Commission request such data on a trial basis from providers that currently produce such maps.[169] We

[164] We utilize the subscription speed data framework in the current Form 477 program to provide a starting point for our discussion of collecting deployment speed data. Current breakpoints for reporting advertised subscription speed are at 200 kbps, 768 kbps, 1.5 Mbps, 3 Mbps, 6 Mbps, 10 Mbps, 25 Mbps, and 100 Mbps. *See* http://www.fcc.gov/Forms/Form477/477inst.pdf; FCC 08-89 at para. 20.

[165] The SBDD breakpoints for reporting speed are at 200 kbps, 768 kbps, 1.5 Mbps, 3 Mbps, 6 Mbps, 10 Mbps, 25 Mbps, 50 Mbps, 100 Mbps, and 1 Gbps. *See* NOFA Technical Appendix A.

[166] *See, e.g.*, NCTA Aug. 13, 2010 Comments, WC Docket No. 10-132 at 11.

[167] *USF/ICC Transformation NPRM* at paras. 108-109.

[168] For example, tier one would be speeds of less than 4 Mbps downstream and 1 Mbps upstream; tier two would be 4 Mbps $\leq x <$ 10 Mbps downstream and 1 Mbps $\leq y <$ 3 Mbps; tier 3 would be 10 Mbps $\leq x <$ 25 Mbps downstream and 3 Mbps $\leq y <$ 10 Mbps; tier 4 would be 25 Mbps $\leq x <$ 100 Mbps downstream and 10 Mbps $\leq y <$ 50 Mbps; and tier 5 would be $x \geq$ 100 Mbps downstream and $y \geq$ 50 Mbps upstream.

[169] Sprint Nextel Jul. 17, 2008 Comments, WC Docket No. 07-38 at 2.

seek comment on conducting such a trial.

62. One carrier argues that mobile wireless providers should not be required to report speed data because of the difficulty of measuring factors that can affect mobile data transfer rates.[170] We seek comment on whether we should collect data on mobile connection speed, and whether fixed and mobile services should be treated differently when reporting speed data. In addition we seek comment on the extent to which data from the Commission's mobile broadband speed test could be meaningful in evaluating mobile data transfer rates.[171]

63. *Spectrum Issues*. We seek comment throughout this Notice on several issues concerning spectrum usage data, which would help the Commission to fulfill its spectrum management responsibilities under Title III of the Act.[172] How can the Commission best collect such information? Possible methods include requiring providers to indicate the band, radio service code, or call sign used to provide service.

64. *Satellite Issues*. We seek comment on how best to collect deployment data about satellite-based services. At least one satellite provider has pointed out the near-ubiquity of satellite signals.[173] Should the Commission exempt satellite broadband providers from reporting deployment information, or require only that satellite providers report areas where terrain or other impediments are likely to block line of sight to the satellite?

65. *Anchor Institutions*. Anchor institutions such as schools, libraries, or hospitals often require broadband offerings with quality of service guarantees not required by at least some retail customers, and section 254 of the Act places particular emphasis on educational providers, libraries, and health care providers for rural areas.[174] We seek comment on whether to treat anchor institutions like other businesses or whether they should be treated as a different category for the purposes of measuring deployment.

2. Price

66. We seek comment on whether price data are necessary to fulfill several of the purposes discussed above, including ensuring universal service by determining whether rural consumers are paying affordable and reasonably comparable rates to those in urban areas; monitoring telephone and broadband competition (*e.g.*, in forbearance proceedings) by providing data regarding the effect, if any, of competition on pricing or by determining whether nominally competitive providers in fact have comparable offerings in the market; reporting a comparison of U.S. and international prices for broadband service capability; and promoting broadband deployment and availability.

67. The Commission previously has considered whether to use Form 477 to collect price information. In the *1999 First Section 706 Report*, for example, the Commission sought suggestions on how to measure market demand through "indicia [such] as prices [and] willingness to pay."[175] In the *2008 Broadband Data Gathering Order and Further Notice*, the Commission sought comment on whether to require providers to report the monthly price charged for stand-alone broadband service.[176]

68. Some commenters have argued that broadband providers should not be required to submit price information because prices are competitive; bundled offerings, temporary discounts, different pricing plans, and other service attributes make comparing pricing complex; the production of pricing data is too

[170] T-Mobile Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5.

[171] *See* FCC, CONSUMER BROADBAND TEST (BETA), http://www.broadband.gov/qualitytest/about/.

[172] *See* 47 U.S.C. § 301 *et seq.*

[173] Hughes Network Systems Jul. 17, 2008 Comments, WC Docket No. 07-38 at 5.

[174] 47 U.S.C. § 254(h)(1)(A)-(B).

[175] *1999 First Broadband Deployment Report*, 14 FCC Rcd at 2410, para. 31.

[176] *2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9711, para. 11.

burdensome; and requiring the production of price data would impose Title II burdens on broadband providers.[177]

69. Others, however, have urged the Commission to require broadband and voice providers to report price information to assess competition,[178] determine whether prices are reasonably comparable in different demographic areas,[179] inform our USF distribution mechanism,[180] and to assess why consumers may not be purchasing broadband where it is available.[181] Such commenters have emphasized the need for the Commission to collect the actual price of broadband services to, for example, allow consumers to compare service prices.[182] Proposals on how to collect price data have varied widely, however, in substance and level of detail. For example, some state regulators have urged the Commission to collect price information for stand-alone and bundled services, and not to consider promotional prices or short term deals.[183] Some have urged the Commission to collect a measure of "price per megabit per second."[184] Others have urged the Commission to collect "information from commercial carriers regarding their tier pricing, credit and deposit requirements across various communities."[185] Commenters also have proposed a variety of geographic areas for reporting price,[186] and a variety of reporting periods.[187]

70. We seek comment on the Commission's legal authority to collect price data, whether we should use Form 477 to collect price data, and if so, how we should collect and analyze such data. We acknowledge that there are a number of challenges associated with any approach to collecting price information. We therefore seek detailed comment on the strengths and weaknesses of the approaches we describe below, and on other possible approaches.

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[177] *See, e.g.*, AT&T Aug. 1, 2008 Comments, WCB Docket No. 07-38 at 12-13; ITTA Aug. 1, 2008 Comments, WCB Docket No. 07-38 at 4.

[178] *See, e.g.,* State of Illinois Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 4; NASUCA and New Jersey Rate Counsel Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 26; Consumer Federation of America, Free Press and Public Knowledge Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 5.

[179] *See, e.g.,* State of Illinois Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 5.

[180] *See, e.g.,* NASUCA and New Jersey Rate Counsel Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 26; Consumer Federation of America, Free Press and Public Knowledge Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 5.

[181] *See, e.g.,* CWA Jul. 17, 2008 Comments, WB Docket No. 07-38 at 3; Consumer Federation of America, Free Press and Public Knowledge Sept. 2, 2008 Reply Comments, WB Docket No. 07-38 at 5.

[182] *See, e.g.,* New America Foundation Aug. 13, 2010 Comments, WC Docket No. 10-132, attach. at 6; CWA Jul. 17, 2008 Comments, WB Docket No. 07-38 at 9.

[183] *See, e.g.*, People of the State of Illinois Sep. 2, 2008 Reply Comments, WCB Docket No. 07-38 at 6; NASUCA Sep. 2, 2008 Reply Comments, WCB Docket No. 07-38 at 19; New Jersey Division of Rate Counsel Aug. 1, 2008 Comments, WCB Docket No. 07-38 at 13; New American Foundation Aug. 13, 2010 Comments, WC Docket No. 10-132 at 6.

[184] *See*, *e.g.*, Consumer Federation of America *et al.* Sep. 2, 2008 Further Reply Comments, WC Docket No. 07-38 at 8.

[185] MMTC Aug. 13, 2010 Comments, WC Docket No. 10-132 at 13. We note that credit and deposit requirements may affect consumer purchase decisions, and hence adoption rates, by different amounts in different communities. Subscription data would be required to capture such effects.

[186] Hughes Network Systems July 17, 2008 Comments, WC Docket No. 07-38 at 4, 7-8 (suggesting national price reports, if reports are required); ACA Comments in WC Docket No. 07-38 at 13 (July 17, 2008) (suggesting statewide reporting, if reporting is required).

[187] Hughes Network Systems July 17, 2008 Comments, WC Docket No. 07-38 at 4, 7-8 (suggesting monthly price reports, if reports are required); MMTC Comments in WC Docket No. 10-132 at 13 (Aug. 13, 2010) (suggesting semi-annual reports).

71. Price data can be collected in many different way. For example, the Commission could collect retail prices charged by providers for basic voice and broadband offerings.[188] Given the complexity and variety of bundles and discounts, the Commission could instead define a basket of services and collect, or require providers to post publicly, the price of that basket.[189] Alternatively, the Commission could collect information about all available prices and packages, or seek to determine effective prices that end users pay.

72. Another approach would be to have providers report the total revenue associated with all offerings (including voice, video (*i.e.*, pay television), and broadband Internet access services), and identify the attributes associated with that revenue, such as the types of services provided (*e.g.*, voice, video, and broadband) and key descriptors of those services (*e.g.*, basic video, extended video, very high speed Internet access). The Commission could then determine the average effective price for each attribute in a given area by performing statistical analysis on aggregate revenue and attribute data across areas large enough to generate a significant number of measurements. We seek comment on whether such an approach would yield meaningful results for the purposes outlined above. We also seek comment on how this approach might be specified. For example, how many and what attributes would be needed to support a useful analysis? Given that resolving the price for more attributes will require more measurements of total revenue, how should the number and selection of attributes be balanced against the geographic size of the measurement, given that a sufficiently large sample size for a larger number of attributes will require more measurements and a larger geographic area? Should revenue be inclusive or exclusive of taxes and fees? Should revenue be reported separately for business and residential customers?

73. We note that the Commission has sought comment on the need for price data to set benchmarks in the context of our intercarrier compensation and universal service proceedings.[190] Would any of these approaches provide data suitable for the establishment of such benchmarks, or are more appropriate data available from other sources?

74. If the Commission collects price data, over what geographic area should prices be collected? As discussed in Section V.C below, ECPA may limit the Commission's ability to require providers to report price data from service providers at the household or address level.[191] Should the Commission collect price data at the census block level? Could the Commission collect data using, for example, street segments as the collection geographic area? If so, would it need to guard against collecting single home street segments? How could it do so? What impact would different geographic-level collections have on the value of the data produced? Would collecting data at a more granular level that is consistent with the restrictions imposed by ECPA (*e.g.*, at the street-segment level) materially improve the quality of the analysis and justify the added complexity of the collection?

75. Were we to collect pricing data for mobile services, how should prices for mobile services be assigned to a geographic area? Assigning a fixed service subscriber to a single census block is a relatively simple process that providers currently use to provide subscribership data at the census-tract level.[192] Assigning price data for mobile services to a geographic area, however, is less straightforward, particularly in light of the billing address issues related to mobile addressed above. Should providers of mobile services use the billing address as the customer's location, and report data for that customer in the corresponding census block? For those that suggest mobile services do not have any inherent location, how should the Commission evaluate substitution of fixed service by mobile?[193] How should the Commission account for

[188] The California Broadband Task Force conducted such a survey in 2007. *See* Advertised Broadband Price and Speed Survey, *available at* http://www.cio.ca.gov/broadband/xls/CBTF_PricingSurvey_2007.xls.

[189] *See, e.g.*, OECD Communications Outlook 2009 at 268-274, *available at* www.oecd.org/sti/telecom/outlook.

[190] *See, e.g., USF/ICC Transformation NPRM* at paras. 139-147, 573-578.

[191] *See* Section V.C, *infra*.

[192] We note that the Commission provides tools to assist with this process. *See* http://fcc.gov/developer.

[193] NATIONAL BROADBAND PLAN at 42.

various types of pre-paid and family plans that are common in mobile services?

76. The impact of a given price will be very different for consumers, businesses, and anchor institutions. The impact of those prices could vary significantly within those groups as well. For example, schools and libraries may seek a broadband service similar to a community hospital, but may have less funding. Should the Commission specify narrower customer classes (*e.g.*, small, medium, and large business) when collecting price data? How would any such customer classes be defined?

3. Subscription

77. We seek comment on whether subscription data, which the Commission currently collects, are necessary to fulfill several of the purposes discussed above: monitoring telephone and broadband competition by providing a measure of competition's outcome: how many customers subscribe to different providers' services in each area; promoting broadband deployment and availability; ensuring public safety by providing a measure of what networks and providers are relied on by how many customers in each area; monitoring the effects of PSTN-to-IP conversion by providing insight into how many customers are reliant on each type of network technology in each area; and ensuring that affordable voice and broadband services are available to all Americans.

78. No commenter has asked the Commission to cease collecting subscription data for wireline services. Are there types of subscription data the Commission need not continue to collect? For example, should the Commission continue to require providers to report the percentage of their local exchange telephone service lines for which they are the presubscribed interstate long distance carrier or that are provided over UNE-Platform?[194] One provider has urged the Commission to cease collecting subscription data from wireless service providers, and instead to "seek broadband and telephony data based on coverage areas" like those provided by American Roamer, because coverage areas more accurately indicate where mobile subscribers have access to wireless service than do subscriber billing addresses or area codes.[195] We seek comment on this proposal. Would data collected by coverage area be sufficient to achieve the outcomes discussed in Section III above?

a. Issues Applicable to Both Voice and Broadband Subscription.

79. *Mobile issues*. Should the Commission modify its data collection practices with respect to mobile voice or mobile broadband subscribers? For example, if most providers treat each line, telephone number, or device as a separate subscription, to what extent does over-counting result from individuals owning or using more than one device? We also ask that providers comment on the way in which family plans are counted. Is one family plan a subscription, or is each line within the plan counted as a separate subscriber? In addition, certain challenges can arise in collecting data on prepaid subscribers, particularly subscribers to traditional pay-as-you-go prepaid plans. For instance, the address or location of such subscribers is typically unknown, and these subscribers may frequently stop using one device and start using another without the first device being counted as a disconnect. We seek comment on the best way to account for pre-paid plan subscribers given these challenges. In addition, should we collect data on the number of mobile voice and mobile broadband subscriptions by spectrum band, by customer class (*i.e.*, residential and business), and by technology?[196] Should we require that mobile voice and mobile broadband providers distinguish which subscribers are voice-only, broadband-only, or both voice and broadband? How should we account for mobile data services for non-traditional devices, such as data-only e-readers, machine-to-machine communications, telemetry systems, and others? Are there other ways for the Commission to access this information? How would any proposed changes help us to produce our annual

[194] *See FCC Form 477 Instructions* at 11-12.

[195] T-Mobile Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5.

[196] Technology may include, for example, GSM, CDMA, EVDO, WiMAX, LTE, and WCDMA/HSPA, among others.

report on mobile wireless competition?[197]

80. *Geographic Area*. Form 477 currently collects voice telephony subscription data at the state level and broadband subscription data at the census tract level.[198] We seek comment on whether voice and broadband subscription data should be collected at the same level of geographic specificity. Are there differences in the need for such data that would justify continuing to use different levels of specificity? We also seek comment on whether the Commission should require entities to report deployment and subscription levels at the same level of geographic specificity.

81. As discussed above, commenters in prior proceedings have advocated more granular subscribership data for broadband services.[199] Commenters have also suggested that policymakers need more granular data about voice services, particularly in order to address competition issues.[200] Should voice and broadband subscription data be reported at the address level, the census block level or some other level? Is it important for voice and broadband subscription data to be reported at the same geographic level, regardless of which one? As discussed below, the Electronic Communications Privacy Act may be implicated should the Commission collect address-level subscription data from service providers. However, some smaller providers have specifically requested that the Commission allow them to provide address-level data because that "would reduce reporting burdens on small businesses serving high-cost rural areas."[201] Therefore, we seek comment on the propriety of allowing production of such data at the request of a provider, the benefits and drawbacks to having some, but not all subscribership data at that level of granularity, and whether such collections would violate ECPA.

82. Data on mobile wireless broadband subscribers are currently collected at the state level, while mobile broadband availability is reported at the census tract level. We seek comment on whether we should treat fixed and mobile services differently. How should we account for users of resold or prepaid mobile broadband services, where the address of the end user may be unknown?

83. *Residential and Business Subscription Breakdown*. Form 477 currently requires that providers report subscriptions separately for residential and business customers.[202] We recognize that this distinction may be imprecise, particularly for mobile plans where lines used primarily for business may be paid for by an individual, or vice versa. We seek comment on whether there are better ways to distinguish residential and business customer classes, for data and voice services. For example, should we require providers to treat all fixed broadband connections with a service-level agreement as "business" and all those without one as "residential?"[203]

b. Voice Subscription Data

84. To the extent the Commission continues to collect subscription data, we seek comment on whether we should modify the way in which we collect that data.

85. *Fixed.* Should the Commission modify its data collection practices with respect to fixed voice services? For example, should the Commission distinguish among services sold as stand-alone offerings

[197] *See supra* para. 29.

[198] Except mobile wireless broadband subscribers, which are collected at the state level.

[199] *See supra* paras. 56-59.

[200] *See, e.g.,* People of the State of Illinois Sept. 2, 2008 Reply Comments, WCB Docket No. 07-38 at 6; NASUCA and New Jersey Rate Counsel Sept. 2, 2008 Reply Comments, WCB Docket No. 07-38 at 15.

[201] *See, e.g.,* OPASTCO-RICA Nov. 24, 2008 PRA Comments, WCB Docket NO. 07-38 at 2-3.

[202] *See FCC Form 477 Instructions* at 2, 7.

[203] A SLA is an agreement between a user and a service provider that defines the nature of the service provided and establishes a set of metrics to be used to measure the level of service actually provided against the agreed level of service. *See* HARRY NEWTON, NEWTON'S TELECOM DICTIONARY at 999 (25th ed. 2009).

and services that are bundled with a subscription to broadband, video, or mobile services? The Commission currently collects data on the proportion of subscribers that have the filing carrier as their presubscribed interexchange carrier (PIC). Should the Commission collect information on what type of interexchange service plans these subscribers purchase (*e.g.*, per minute, bundles of minutes, or unlimited local and long distance)?

86. Form 477 currently collects limited data on the extent of facilities-based competition for fixed voice services. Should the Commission distinguish among the types of loops provided under unbundled network element (UNE) arrangements? For example, should the Commission collect data on the number of DS0, DS1, and DS3 loops provided to unaffiliated telecommunications carriers under a UNE loop arrangement? The Commission does not currently collect information for voice services that are provided using special access or other high capacity services/facilities that have not been channelized. Should the Commission collect information on voice services provided in this manner?

87. *Interconnected VoIP.* Should the Commission modify its requirements concerning interconnected VoIP?[204] For example, should the Commission distinguish among stand-alone, facilities-based interconnected VoIP; stand-alone over-the-top interconnected VoIP; and interconnected VoIP that is bundled with a broadband subscription? Should Form 477 distinguish "nomadic" from "fixed" interconnected VoIP (*i.e.*, distinguish whether an interconnected VoIP service can be used from one or multiple fixed locations)? Should the Commission begin collecting data on VoIP services that do not meet the definition of interconnected VoIP (*e.g.*, services that can make calls to *or* receive calls from the PSTN)?

c. Broadband Subscription Data

88. Currently, Form 477 collects data on broadband subscribership at 72 speed tiers for each census tract in the nation. As with deployment data, we seek comment on whether we should reduce the number of speed tiers at which providers report. Should the speed tiers used for deployment and subscription data be the same? Should providers of fixed and mobile broadband services provide the number of subscribers by technology? We also seek comment on whether wireless broadband providers should include information about the spectrum band(s) they use to provide service.

4. Service Quality and Customer Satisfaction

89. We seek comment on whether service quality and customer satisfaction data are necessary to fulfill several of the purposes discussed above: reducing waste, fraud, and abuse and increasing accountability in our universal service programs by ensuring that recipients of government support provide services to their customers that are reliable and of comparable quality to those not provided with government support; ensuring public safety by ensuring that networks remain a reliable means of contacting public safety organizations; monitoring telephone and broadband competition by ensuring that service providers with overlapping footprints provide comparable levels of service; promoting broadband deployment and availability; protecting consumers by ensuring that end users have information about network performance; and tracking the effects of the conversion from PSTN to IP services by providing insight into the performance levels of both networks.

a. Issues Applicable to Both Voice and Broadband

90. *Who Should Report.* The Commission previously has collected voice service quality and customer satisfaction data from a small subset of the total number of carriers.[205] We seek comment on whether and how such data should be collected from a larger universe of voice and broadband providers.

[204] *See 2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9692, para. 3.

[205] The Commission previously collected such data only from carriers transitioning from rate-of-return to price cap regulation. *See ARMIS Forbearance Order and Notice*, 13 FCC Rcd at 13649, 52-53, paras. 2, 8.

91. *What Data Should Be Collected*. If we do collect such data, we seek comment on what aspects of service quality and customer satisfaction are relevant to the purposes described above or otherwise identified by commenters. The Commission could collect, for example, data regarding the number of trouble reports or complaints that customers make regarding network performance or degradation; complaints regarding service provider customer care and billing; installation and repair intervals; and general customer satisfaction. The Commission has conducted surveys that include questions on customer satisfaction.[206] To what extent could data from these surveys and others like it be used to address concerns about service quality, particularly with respect to individual carriers in particular geographic areas? In addition, the Commission could collect direct measures of network performance, such as network downtime and number of customers affected; call blocking; prevalence of dropped calls; and speed, latency, and jitter.

92. To what extent should the Commission specify common metrics for voice and broadband services. For example, should the Commission collect data on gross churn as a measure of customer dissatisfaction?[207] Should the Commission collect data from all providers on the number of complaints made to providers and to state public utility commissions? Should data for residential customers include the time interval for installation and service commitments, the percent of time those commitments are met, and the out-of-service repair interval? How could the Commission ensure that such metrics were comparable for all reporting entities?

93. *Geographic Area.* We seek comment on over what geographic areas would be appropriate to collect service quality and customer satisfaction data. Given the role states play in regulating some voice services, we seek comment on whether collecting data by provider by state is appropriate. However, some provider networks may cross state boundaries, suggesting that market- or carrier-level information would be more appropriate. It may also be the case that different aspects of the proposed service quality collection will be most meaningful when measured in different geographic areas (*e.g.*, wireline voice by state; but cable information by system), which suggests that the collection should be made over a smaller geographic area to allow for different levels of aggregation. To the extent commenters suggest the Commission collect data, we ask that they specify the appropriate geographic area for these data, and the relative burden that reporting for different geographic areas might impose.

b. Voice

94. The Commission in 1990 established ARMIS Reports 43-05 and 43-06 in order to monitor whether the implementation of price caps would lead to carriers lowering service quality.[208] In 2008, the

[206] *See, e.g.,* FCC, WORKING PAPER, BROADBAND SATISFACTION: WHAT CONSUMERS REPORT ABOUT THEIR BROADBAND INTERNET PROVIDER, December 2010 (rel. Dec. 6, 2010), *available at* http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db1206/DOC-303263A1.pdf.

[207] One definition of churn is "the level of disconnects from service relative to the total subscriber base of the system." HARRY NEWTON, NEWTON'S TELECOM DICTIONARY at 273 (25th ed. 2009). To the extent commenters advocate including churn, we seek input about how precisely to specify that term.

[208] *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering; Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of the Commission's ARMIS Reporting Requirements; Petition of Qwest Corporation for Forbearance from Enforcement of the Commission's ARMIS and 492A Reporting Requirements Pursuant to 47 U.S.C. § 160(c); Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of ARMIS Reporting Requirements; Petition of Frontier and Citizens ILECs for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of the Commission's ARMIS Reporting Requirements; Petition of Verizon for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of Certain of the Commission's Recordkeeping and Reporting Requirements; Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160 from Enforcement of Certain of the Commission's Cost Assignment Rules*, WC Docket Nos. 08-190, 07-139, 07-204, 07-273, 07-21, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 23 FCC Rcd 13647, 13649, para. 3 (2008) (*2008 ARMIS Order and NPRM*) (citing *Policy and Rules Concerning Rates for Dominant Carriers*, Second Report and Order, CC Docket No. 87-313, 5 FCC Rcd 6786, 6827, 6830, paras. 334-37, 357 (1990) (*Price Cap Order*)).

Commission granted certain incumbent LECs conditional forbearance from "the current partial and uneven" collection of those reports. The Commission noted, however, "the possibility that service quality and customer satisfaction data . . . might be useful to consumers to help them make informed choices in a competitive market, but only if available from the entire relevant industry," and tentatively concluded that the Commission should collect this type of information from "facilities-based providers of broadband and/or telecommunications."[209] Some urge the Commission to adopt this tentative conclusion,[210] while others object, arguing that forbearance was justified and the metrics set forth in those reports are irrelevant and outdated.[211]

95. CWA proposes that the Commission require all providers of voice telecommunications services to file all of the data previously submitted on ARMIS Reports 43-05 and 43-06, and to expand service quality measurements to include answer times for live representatives responding to customer inquiries.[212] We note, however, that all parts of the ARMIS 43-05 and 43-06 collections may not be helpful to fulfillment of the policy objectives discussed in Section III. For example, the California PUC offers a more limited proposal, that the Commission collect data formerly reported on four of the six tables of ARMIS Report 43-05.[213]

96. We seek comment on whether the Commission should use Form 477 to collect service quality and customer satisfaction data for voice networks. Should the Commission collect some or all of the service quality metrics formerly collected through ARMIS, or other measures of voice quality? Should we collect metrics from switched and interconnected VoIP providers, over both fixed and mobile networks? Are there other metrics for service quality and customer satisfaction that would be more appropriate and less burdensome for reporting entities? Should metrics vary depending on the technology over which service is provided?

c. Broadband

97. Several commenters have suggested that the Commission collect service quality and customer service data from broadband providers.[214] In contrast, most broadband providers that commented objected to adopting any service quality data requirements.[215] We seek comment on whether Form 477 should be revised to collect service quality and customer satisfaction data from broadband providers, and the authority under which such a collection would be conducted.

98. The metrics set forth in ARMIS Reports 43-05 and 43-06 were not designed with broadband networks in mind, and therefore might not be the best tools for collecting relevant data. To the extent that the Commission decides to extend customer service measurement to broadband services, we seek comment

[209] *Id*. at 13655, para. 35.

[210] *See, e.g.,* CWA Aug. 13, 2010 Comments, WC Docket No. 10-132; Free Press Aug. 13, 2010 Comments in WC Docket No. 10-132 at 2-4.

[211] *See, e.g.*, Verizon Aug. 13, 2010 Comments, WC Docket 10-132 at 4; AT&T Sept. 13, 2010 Reply Comments, WC Docket No. 10-132 at 1-2; CTIA Nov. 14, 2008 Comments, WC Docket No. 08-190 at 3-4.

[212] *See*, *e.g.*, Communications Workers of America Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5-8; Texas Office of Public Utility Counsel Nov. 14, 2008 Comments, WC Docket No. 08-190. The complete data definitions for the most recent (2009) ARMIS 43-05 and 43-06 reports are available on the Commission website at http://www.fcc.gov/wcb/armis/instructions/2009/definitions05.htm#gen and http://www.fcc.gov/wcb/armis/instructions/2009/definitions06.htm#gen, respectively.

[213] California PUC Nov. 14, 2008 Comments, WC Docket No. 08-190 at 4.

[214] *See*, *e.g.*, Michigan PSC Nov. 14, 2008 Comments, WC Docket No. 08-190; Free Press Nov. 16, 2008 Comments, WC Docket No. 08-190 at 6-7.

[215] *See*, *e.g.*, Satellite Industry Association Nov. 14, 2008 Comments, WC Docket No. 08-190.

on what metrics should be used to assess broadband network service quality and customer satisfaction.[216] How would the Commission measure network downtime? Should downtime reports include specific locations of outages and the number of customer-hours relating to the outage? Should the Commission collect packet loss, latency, and jitter data? How can it do so in a meaningful way; and over what geographic area would such a collection have meaning? Should the Commission collect data on mobile and fixed traffic volume and network congestion, and if so, how should those metrics be specified? Over what geographic area is such a collection meaningful, and what measure of traffic is most meaningful?

99. We note that the recently adopted *Open Internet Order* requires broadband providers to publicly disclose the network management practices and performance characteristics of their broadband Internet access services. Are these disclosures adequate to satisfy any need the Commission may have for service quality data? If Form 477 were used to collect information regarding network management practices or performance characteristics, would the benefits outweigh the burdens?[217]

5. Ownership and Contact Information

100. We seek comment on whether ownership and contact information are necessary to fulfill one or more of the purposes discussed above, including reducing waste, fraud, and abuse and increasing accountability in our universal service programs by simplifying the process of determining the total amount of public support received by each recipient regardless of corporate structure; ensuring public safety by providing a means for Commission staff to contact network operations centers rapidly in the event of an emergency; and monitoring telephone and broadband competition by revealing whether service providers with overlapping service footprints are in fact under common ownership or control.

101. Currently, we permit Form 477 filers to consolidate data for multiple operations within a state on a single submission.[218] We also permit filers to determine the organizational level at which they submit their filings.[219] For example, a parent or holding company may file on behalf of its subsidiaries or the subsidiaries may file their own Form 477.[220] This provides filers with significant flexibility in how they submit data on Form 477, but may not provide the Commission with a sufficiently detailed picture of the markets for which data are reported.

102. We seek comment on whether we should revise the Form 477 to collect additional ownership information and related data. Would additional ownership information help inform the Commission's overall understanding of the broadband ecosystem? In particular, would additional or different ownership data help us understand the interrelationships among the data on services and thereby improve our ability to evaluate markets and report to the public? Given the importance of broadband competition, would the benefit to the Commission of understanding the relationships between companies that appear to be providing competitive services in a particular area outweigh any burden of producing such information?

103. We also seek comment on the most effective and least burdensome means of collecting

[216] *See*, *e.g.*, New America Aug. 13, 2010 Comments, WC Docket No. 10-132, Attach. at 12 (suggesting that service quality information could consist of performance and customer service statistics such as average speeds up/down, average latency, jitter, dropped packets, uptime, service outages, and customer equipment failures).

[217] *See, e.g.,* Reply Comments of Google, WC Docket No. 10-132 at 7-8 (filed Sep. 13, 2010). Under Google's proposal, relevant network management practices include traffic prioritization, traffic blocking or throttling, processes to address traffic congestion such as usage download or upload restrictions, content/message examination processes (*e.g.*, deep packet inspection), and traffic routing processes that are based on sender/receiver or type of traffic.

[218] *FCC Form 477 Instructions* at 4.

[219] *Id*.

[220] *Id*.

additional ownership data. One option could be to require filers to report data such as that collected on FCC Form 602 for wireless carriers, which collects all of a filer's "disclosable interest holders."[221] Would such an approach be necessary to enable us to evaluate ultimate ownership of, and common control among, filers, or would a more limited dataset be sufficient? Should we require the submission of data on any branding used in the marketing or provision of service? If we require the submission of additional ownership information, should we also collect other reporting identifiers the filers use in making submissions to the Commission, such as the Physical System ID (PSID) used by the Media Bureau for cable systems? These and other measures might allow the Commission more easily to evaluate the actual number of providers offering services in a given area and to report non-confidential information about carriers by the names by which most consumers know them. Are there are ancillary data that would be helpful to include on consumer-facing resources, such as the national broadband inventory map?[222] Would it be useful, for example, to make available a provider's website address and other non-confidential data? Should entities that file report their FCC Registration Number (FRN) and Universal Service Administrative Company Study Area Code (SAC)?

104. We also seek comment on revising Form 477 to collect contact information for use in emergency situations. The Commission maintains a voluntary reporting system, the Disaster Information Reporting System (DIRS) that facilitates contact with carriers in emergencies. The Commission also maintains a number of databases that include contact information for other purposes. There is, however, no structured, mandatory collection of contact information in place specifically for use in emergencies affecting telephone or broadband networks. As a mandatory, recurring filing by providers of telephone and broadband service, Form 477 may be a particularly effective vehicle for collecting emergency-contacts data that are comprehensive and current, with a relatively small burden on filers. We seek comment on whether we should revise Form 477 to collect data of this type and, if so, what data would best facilitate emergency communications with providers. Would a telephone number and email address for each provider's Network Operations Center or equivalent be sufficient? Would the current six-month cycle for filing Form 477 be frequent enough to ensure that information was current? Are there any additional steps the Commission should take to collect data of this type?

6. Other Data

105. Stakeholders have periodically suggested that the Commission collect other types of data via Form 477. MMTC, for example, suggests that the Commission collect via Form 477 "socioeconomic data," "social metrics," data to assess socially and economically disadvantaged businesses and minority or woman-owned business entities, and data on hardware and software availability in underserved areas.[223] What other data should the Commission collect via Form 477 in support of the purposes identified in section III above? Commenters should explain the purpose for which the Commission would collect such data, the legal authority for the collection, and the extent to which the benefits outweigh the burdens of collecting it.

106. We also note that there are some alternate geographic areas relevant to Commission analysis that cannot be re-created by aggregating even the smallest census geographies. Such alternate areas include, for example, wire centers or study areas. Information about what alternate areas are associated with each reported geography (*i.e.*, the geography reported with one or more of the possible collections described above) would assist in any analysis related to those areas. We seek comment on the burden to provide information about these alternate geographic areas on those reporting data.

[221] FCC, FORM 602, INFORMATION AND INSTRUCTIONS at 5 (2007), *available at* http://www.fcc.gov/Forms/Form602/602.pdf.

[222] *See supra* Section II.B.2.b.

[223] MMTC Aug. 13, 2010 Comments, WC Docket No. 10-123 at 12-13.

V. LEGAL ISSUES

A. Authority

107. The Commission has previously noted it must collect data on the provision of voice and broadband services to fulfill numerous statutory obligations.[224] For example, the Telecommunications Act of 1996 required the Commission to open all telecommunications markets to competition, and to assess the availability of broadband services.[225] The Form 477 program collects data that are "a critical precursor" to the Commission's ability to fulfill these directives.[226] Form 477 also enables us to fulfill our obligation to reduce government regulation wherever possible,[227] by providing "a factual basis to evaluate the nature and impact of our existing regulation and, in particular, to identify areas where competition has developed sufficiently to justify deregulation."[228] Many other statutory obligations cannot be implemented without the collection of data about the deployment and adoption of communications technologies and the state of relevant marketplaces.[229] For example, the BDIA requires the Commission to collect comparative data reflecting the extent of broadband service capability in other countries, and data for the United States, to inform its annual consideration of whether broadband is being deployed to all Americans on a reasonable and timely basis.[230] We believe our authority to collect the proposed additional data derives from these statutory obligations, as well as additional grants of authority in the Act, including those in sections 4(i), 4(k), 218 and 403.[231] We invite comment on this conclusion.

B. Disclosure

108. The Commission has always recognized that the Form 477 broadband and local telephone service data it collects can be of significant value not only to the Commission, but also to the states and to the public.[232] In establishing and administering the Form 477 collection, however, the Commission has also been cognizant of the potential sensitivity of the data collected and has limited their disclosure.[233]

109. We note that the Commission is reviewing its data dissemination practices in connection with the Data Innovation Initiative.[234] How can we best provide stakeholders with useful data while protecting filers' legitimate confidentiality interests? Should the Commission retain the simple check box

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[224] *See* section III, *supra*; *see, e.g., Price Cap Order*, 5 FCC Rcd at 6827-31, paras. 332-64; *2000 Data Gathering Order*, 15 FCC Rcd at 7718-20, paras. 2-5, 7723-24, para. 12; *2004 Broadband Data Gathering Order*, 19 FCC Rcd at 22343, para. 6, 22345, para. 9, 22350-51, para. 19; *2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9692, para. 1, 9694, para. 8.

[225] *See* 47 U.S.C. §§ 251, 252, 257, 271, 1302; Joint Statement of Managers, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess., at 1 (1996).

[226] *2000 Data Gathering Order*, 15 FCC Rcd at 7719, para. 2.

[227] *See* 47 U.S.C. §§ 160(b), 161(a)(2).

[228] *2000 Data Gathering Order*, 15 FCC Rcd at 7720, para. 5.

[229] *See, e.g.*, 47 U.S.C. §§ 154(k), 154(o), 201, 202, 211, 218-20, 254, 256, 301, 309. *See generally Comcast*, 600 F.3d at 659 ("We readily accept that certain assertions of Commission authority could be 'reasonably ancillary' to the Commission's statutory responsibility to issue a report to Congress. For example, the Commission might impose disclosure requirements on regulated entities in order to gather data needed for such a report.").

[230] BDIA § 103(b); 47 U.S.C. 1303(b).

[231] *See* 47 U.S.C. §§ 154(i), 154(k), 218, and 403.

[232] *2000 Data Gathering Order*, 15 FCC Rcd at 7727-28, 7758, paras. 16, 87.

[233] *See generally id.* at 7757-61, paras. 86-94.

[234] Press Release, *FCC Launches Data Innovation Initiative* (rel. Jun. 29, 2010), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-299269A1.pdf.

on the FCC Form 477 that filers can use to request confidential treatment for all data submitted on that form? Are there classes of information that should always be considered public, and, therefore, not be granted confidential treatment? For example, given that SBDD data will be public, are there any reasons to accord confidential treatment to deployment data collected by the Commission? Are there circumstances where data submitted to the Commission should be held confidential, but aggregations of those data be made public, as is currently the case with subscription information?[235] Once deemed confidential, should data always be confidential, or does the passage of time diminish the commercial sensitivity of certain types of data?[236] When data are given confidential treatment, should the Commission establish a program to allow researchers access to those data under certain conditions?[237] How would such a program be administered?

C. Privacy

110. We seek comment on any privacy concerns that may arise from the reporting of address-level data. We note that the privacy-based limitations on the government's access to customer information in Title II of ECPA,[238] and the privacy provisions of the Cable Act,[239] may be implicated by collection of address-level subscribership data. We therefore seek comment on ways the Commission could alleviate any privacy concerns while complying with all applicable laws.

111. We also seek comment on whether the Commission could establish a registry or database through which consumers could themselves share data with the Commission or choose to have their providers share data with the Commission. What would be the benefits and drawbacks of such a registry, and how could it be set up both to get useful data and to minimize the burden on consumers and reporting entities? Should consumers provide information directly to the Commission, or through reporting entities that must gain consumer consent? If the latter, what steps could the Commission take to ensure that consumers have provided consent? How could the Commission address any other privacy issues, and any other legal impediments to the creation and maintenance of such a registry?

112. We note that the presence or absence of a network at a particular address does not provide any subscriber-specific information. We seek comment, however, on whether any privacy concerns would arise if providers were required to report deployment data at the address level.

VI. OTHER ISSUES

A. Tribal Lands

113. The *National Broadband Plan* identifies the importance of improving data on Tribal lands, and recommends that the Commission "identify methods for collecting and reporting broadband information that is specific to Tribal lands, working with Tribes to ensure that any information collected is

[235] *See 2000 Data Gathering Order*, 15 FCC Rcd at 7759, para. 89 ("[W]e agree with those commenters who suggest that we can aggregate much of the data [for which confidentiality is sought] – for example, by carrier class and to the state level – so that it does not identify the individual provider in our regularly published reports."). The Industry Analysis and Technology Division of the Wireline Competition Bureau regularly publishes an analysis of the Form 477 data. *See*, *e.g., December 2010 Internet Access Services Report,* n.101.

[236] In 2004, the Commission considered but decided not to adopt a different approach for maintaining the confidentiality of historical data. *See 2004 Broadband Data Gathering Order*, 19 FCC Rcd 22352, para. 24.

[237] The NBP recommends implementing a process making confidential data available to academic researchers and others, subject to appropriate restrictions. *See* NATIONAL BROADBAND PLAN at 43-44. The Wireline Competition Bureau has also sought comment on a request to review Form 477 data and related issues. *See Comment Sought on Free Press Request to Review Form 477 Data and Request for Protective Order*, WC Docket No. 10-75, Public Notice, 25 FCC Rcd 2704 (2010).

[238] SCA, 18 U.S.C. § 2701 *et seq*.

[239] 47 U.S.C. § 551 *et seq*.

accurate and useful."[240] The Commission's rules identify federally recognized Tribal lands and define them for particular purposes, such as the eligibility and delivery requirements for universal service support programs.[241] The Commission's definition of Tribal lands identifies the boundaries of land holdings of federally recognized American Indian Tribal and Alaska Native Village government entities. We acknowledge that American Indian and Alaska Native areas defined as "Native Home Lands" by the U.S. Census Bureau for census taking purposes[242] encompass areas both within and beyond areas defined as Tribal Lands in the Commission's rules. Tribal leaders have asked that we consider disaggregating our analysis of the Census Bureau's "Native Home Land" areas, in part to allow for a more accurate assessment of broadband deployment in the Tribal Lands areas defined under the Commission's rules.[243] In the *Seventh Broadband Deployment NOI*, we sought comment on how to more accurately report data concerning the lands of federally recognized American Indians Tribes and Alaska Native Villages, as well as Native Hawaiian Home Lands.[244] Native Hawaiian Home Lands may also be able to be more accurately analyzed, as they are located exclusively within the state of Hawaii.

114. We seek comment on our analysis of broadband deployment and availability on federally recognized Tribal lands and how we could improve and refine this analysis. We also seek comment on analysis of broadband deployment and availability on Native Hawaiian Home Lands. We note that sources of such data may presently exist within the U.S. Department of Commerce, U.S. Department of the Interior, and from Tribal Government entities. We seek comment on whether there are other sources of data that would help the Commission better understand and analyze the nature of broadband deployment and availability on Tribal Lands and Native Hawaiian Home Lands.

B. International Data

115. As discussed above, the BDIA requires the Commission to include an international comparison in its annual broadband deployment report.[245] The International Bureau has released its first *International Broadband Data Report*, which presented data and information on international broadband

[240] *See* NATIONAL BROADBAND PLAN at 185.

[241] "Tribal lands" include any federally recognized Indian tribe's reservation, pueblo or colony, including former reservations in Oklahoma, Alaska Native regions established pursuant to the Alaska Native Claims Settlements Act (85 Stat. 688), and Indian Allotments, *see* 47 C.F.R. § 54.400(e) as well as Hawaiian Home Lands, areas held in trust for native Hawaiians by the state of Hawaii, pursuant to the Hawaiian Homes Commission Act, 1920, Act July 9, 1921, 42 Stat. 108, *et seq*., as amended.

[242] *See* U.S. Census Bureau, GEOGRAPHIC AREAS REFERENCE MANUAL, CHAPTER 5, *available at* http://www.census.gov/geo/www/garm.html.

[243] In the *2010 Sixth Broadband Deployment Report*, we found that only 12.5% of all households on Native Homeland areas subscribe to a broadband service faster than dialup compared to 56% of all households nationwide. *2010 Sixth Broadband Deployment Report*, 25 FCC Rcd at 9572, para. 25. If we instead designated a county as a Native Homeland area solely by whether at least 50% of the land mass is designated by the Census Bureau as American Indian Area/Alaska Native Area/Hawaiian Homeland, we would have found similar levels of unserved Americans. *Id*. We note that our analysis assumes that the geographic areas designated as Native Home Lands did not significantly change since the 2000 Census. *Id*. at 9572, n.105. We note also that the NATIONAL BROADBAND PLAN recognizes that "[a]vailable data, which are sparse, suggest that less than 10% of residents on Tribal lands have broadband available…[but], as the FCC has previously observed, [b]y virtually any measure, communities on Tribal lands have historically had less access to telecommunications services than any other segment of the population." NATIONAL BROADBAND PLAN at 152, Box 8-4, Broadband on Tribal Lands (citations omitted).

[244] *Seventh Broadband Deployment NOI*, 25 FCC Rcd at 11371, para. 37.

[245] *See* Section II.B.1.a, *supra*.

service capability, advertised prices or broadband services, community-level data, and information about the broadband market and broadband regulations in various nations.[246]

116. To conduct a rigorous comparison of the factors that affect broadband deployment in the U.S. and abroad, it is necessary to have comparable, detailed, and geographically disaggregated data. We therefore seek comment on how and whether revisions to the Form 477 program would facilitate comparing the U.S. broadband market to other countries. To what extent would revisions facilitate comparisons between the U.S. and other countries on the basis of a population's income (and variations in income), education (and variations in education), computer literacy, residential computer ownership, household size, and other factors? Should the Form 477 program be modified to collect data on the costs of deploying broadband, including as a function of population density at a geographically disaggregated level? Should the program be modified to collect data on alternative broadband technologies more prevalent in other countries? Should the program allow for or enable an assessment of the number of providers that offer alternative forms of broadband and the advertised and actual speeds that providers offer in local geographic areas? Are there modifications to the subscription data we currently collect that would make those data more suitable for international comparisons? Where U.S. providers offer multiple service packages, should the Commission collect data about the speeds and other service characteristics of these packages? Would information on actual data usage be useful, as well as data on the applications that residential consumers use, such as VoIP services? Finally, would the collection of pricing data facilitate comparisons with offerings in other countries?

VII. PROCEDURAL MATTERS

A. Paperwork Reduction Act Analysis

117. This document contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

B. Regulatory Flexibility Analysis

118. As required by the Regulatory Flexibility Act of 1980, as amended, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) for this further notice of proposed rulemaking, of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this further notice of proposed rulemaking. The IRFA is in the Appendix to this item. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the further notice of proposed rulemaking. The Commission will send a copy of the notice of proposed rulemaking, including this IRFA, to the Chief Counsel for Advocacy of the SBA. In addition, the notice of proposed rulemaking and IRFA (or summaries thereof) will be published in the Federal Register.

[246] The International Bureau has gathered: (1) information for actual prices advertised to consumers for broadband services in different parts of the world from the websites of competitive and new entrant broadband providers; (2) community-level data and information from the Organization for Economic Co-operation and Development (OECD), broadband adoption data from the European Commission's regional data, and other data from individual government agencies, either through the national statistical agency or the communications ministry and/or regulator; and (3) information about the broadband market and broadband regulations in various countries around the world. *International Comparison Requirements Pursuant to the Broadband Data Improvement Act, International Broadband Data Report*, First Report, GN Docket No. 09-47, DA 10-1348 25 FCC Rcd 11963 (2010).

C. *Ex Parte* Presentations

119. This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules. Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required. Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.

D. Comment Filing Procedures

120. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. All pleadings are to reference WC Docket No. 11-10. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies.

- *Electronic Filers*: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- *Paper Filers*: Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

121. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

122. All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th Street, S.W., Room TW-A325, Washington, D.C. 20554. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. The filing hours are 8:00 a.m. to 7:00 p.m. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, S.W., Washington D.C. 20554.

123. *People with Disabilities*: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (tty).

124. Parties should send a copy of each filing to the Competition Policy Division, Wireline Competition Bureau, Federal Communications Commission, 445 12th Street, SW, Washington, D.C. 20554, or by e-mail to CPDcopies@fcc.gov. Parties shall also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, SW, Room CY-B402, Washington, D.C. 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

125. Filings and comments will be available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554. They may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, telephone: (202) 488-5300, fax: (202) 488-5563, or via e-mail www.bcpiweb.com.

E. Contact Persons

126. For further information about this rulemaking proceeding, please contact Jeremy Miller, Industry Analysis and Technology Division, Wireline Competition Bureau at (202) 418-0940.

VIII. ORDERING CLAUSES

127. Accordingly, IT IS ORDERED that, pursuant to sections 1-5, 10, 11, 201-205, 211, 214, 215, 218-220, 251-271, 301, 303, 304, 307, 309, 316, 332, 403, 409, 502, and 503 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-155, 161, 201-205, 211, 214, 215, 218-220, 251-271, 301, 303, 304, 307, 309, 316, 332, 403, 409, 502, and 503, section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. 1302, and section 102 of the Broadband Data Improvement Act, 47 U.S.C. § 1303, this Notice, with all attachments, IS ADOPTED.

128. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order and the Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities from the policies and rules proposed in this Notice of Proposed Rulemaking (Notice). The Commission requests written public comment on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided on the first page of the Notice. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2] In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.[3]

A. Need for, and Objectives of, the Proposed Rules

2. In this Notice of Proposed Rulemaking, the Commission considers whether and how to reform the Form 477 data program, which serves as the Commission's primary tool for collecting broadband and local telephone data. After more than a decade of rapid innovation in the market for broadband and telephone services, the Commission believes it is time to consider whether modifying Form 477 will better serve the current and future needs of the Commission, Congress, consumers, and other stakeholders. Such reform seeks to improve the Commission's ability to carry out its duties under the Communications Act of 1934, as amended (the Act),[4] and is an important part of the Commission's larger initiative to modernize and streamline how the Commission collects, uses, and disseminates data. Specifically, the Commission seeks comment on five categories of data that may be necessary to collect: (1) deployment, (2) subscription, (3) price, (4) service quality, and (5) ownership and contact information. The Commission also seeks comment on whether there are other types of data necessary for the Commission to complete its mandates.

3. For these categories of data, the Commission identifies the purposes for which data may be needed, and seeks comment on the specifics of certain approaches to collecting data. For example, the Commission seeks comment on whether the Commission should use Form 477 to collect price data, which could help accomplish several purposes, including modernizing the universal service program to support broadband.

4. In addition, the Commission also seeks comment on whether service quality and customer satisfaction data may be necessary for several purposes, including increasing accountability in the Commission's universal service programs, ensuring public safety, promoting broadband deployment, and protecting consumers. The Commission then identifies certain metrics that could be collected, such as data regarding the number of trouble reports that customers make regarding network performance, and seeks comment.

5. The Commission also seeks comment on collecting ownership and contact information in order to reduce waste, fraud, and abuse in universal service programs and for other purposes.

6. The Commission also seeks comment on the extent to which technological tools and use of commercial and publicly available data can reduce the burden of producing information. The Commission also seeks comment on how to streamline the process in collecting the data it needs to inform its policymaking processes while minimizing the production burden on providers and the processing burden on

[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2] *See* 5 U.S.C. § 603(a).

[3] *Id.*

[4] Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (codified, as amended, at 47 U.S.C. § 151 et seq.).

the Commission.

B. Legal Basis

7. The legal basis for any action that may be taken pursuant to the Notice is contained in sections 1-5, 10, 11, 201-205, 211, 214, 215, 218-220, 251-271, 301, 303, 304, 307, 309, 316, 332, 403, 409, 502, and 503 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-155, 161, 201-205, 211, 214, 215, 218-220, 251-271, 301, 303, 304, 307, 309, 316, 332, 403, 409, 502, and 503, section 706 of the Telecommunications Act of 1996, as amended, 47 U.S.C. 1302, and section 102 of the Broadband Data Improvement Act, 47 U.S.C. § 1303.

C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

8. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein.[5] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[6] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[7] A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[8]

1. Wireline Providers

9. *Incumbent Local Exchange Carriers* (*Incumbent LECs*). Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[9] Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1000 or more. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.[10] Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.[11] Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the Notice. Thus under this category and the associated small business size standard, the majority of these incumbent local exchange service providers can be considered small providers.[12]

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[5] 5 U.S.C. § 604(a)(3).

[6] 5 U.S.C. § 601(6).

[7] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[8] 15 U.S.C. § 632.

[9] 13 C.F.R. § 121.201, NAICS code 517110.

[10] *See Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

[11] *See id*.

[12] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

10. *Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[13] . Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Competitive LECs, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers can be considered small entities.[14]. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services.[15] Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.[16] In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees.[17] In addition, 72 carriers have reported that they are Other Local Service Providers.[18] Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.[19] Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities that may be affected by rules adopted pursuant to the Notice.

11. *Interexchange Carriers*. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[20] . Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Interexchange carriers can be considered small entities.[21]. According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.[22] Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.[23] Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by rules adopted pursuant to the Notice.

12. *Operator Service Providers (OSPs)*. Neither the Commission nor the SBA has developed a

[13] 13 C.F.R. § 121.201, NAICS code 517110.

[14] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en

[15] *See Trends in Telephone Service* at Table 5.3.

[16] *See id.*

[17] *See id*.

[18] *See id*.

[19] *See id*.

[20] 13 C.F.R. § 121.201, NAICS code 517110.

[21] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

[22] *See Trends in Telephone Service* at Table 5.3.

[23] *See id.*

small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[24] Under that size standard, such a business is small if it has 1,500 or fewer employees.[25] . Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these Interexchange carriers can be considered small entities.[26].According to Commission data, 33 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 31 have 1,500 or fewer employees and 2 have more than 1,500 employees.[27] Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our proposed action.

13. *Local Resellers*. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[28] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[29] Thus under this category and the associated small business size standard, the majority of these local resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.[30] Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.[31] Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the Notice.

14. *Toll Resellers*. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[32] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[33] Thus under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data,[34] 881 carriers have reported that they are engaged in the provision of toll resale services. Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

15. *Payphone Service Providers (PSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard

[24] 13 C.F.R. § 121.201, NAICS code 517110.

[25] 13 C.F.R. § 121.201, NAICS code 517110.

[26] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

[27] TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

[28] 13 C.F.R. § 121.201, NAICS code 517911.

[29] http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

[30] *See Trends in Telephone Service* at Table 5.3.

[31] *See id*.

[32] 13 C.F.R. § 121.201, NAICS code 517911.

[33] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en

[34] TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[35] Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the majority of these PSPs can be considered small entities.[36].According to Commission data,[37] 657 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 653 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

16. *Prepaid Calling Card Providers*. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[38] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[39] Thus under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.[40] Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.[41] Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by rules adopted pursuant to the Notice.

17. *800 and 800-Like Service Subscribers*.[42] Neither the Commission nor the SBA has developed a small business size standard specifically for 800 and 800-like service ("toll free") subscribers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[43] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[44] Thus under this category and the associated small business size standard, the majority of resellers in this classification can be considered small entities. To focus specifically on the number of subscribers than on those firms which make subscription service available, the most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, 877, and 866 numbers in use.[45] According to our data, at of September 2009, the number of 800 numbers assigned was 7,860,000; the number of 888 numbers

[35] 13 C.F.R. § 121.201, NAICS code 517110.

[36] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

[37] TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

[38] 13 C.F.R. § 121.201, NAICS code 517911.

[39] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

[40] *See Trends in Telephone Service* at Table 5.3.

[41] *See id*.

[42] We include all toll-free number subscribers in this category, including those for 888 numbers.

[43] 13 C.F.R. § 121.201, NAICS code 517911.

[44] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en.

[45] *Trends in Telephone Service* at Tables 18.4, 18.5, 18.6, 18.7.

assigned was 5,888,687; the number of 877 numbers assigned was 4, 721,866; and the number of 866 numbers assigned was 7, 867,736. The Commission does not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small businesses under the SBA size standard. Consequently, the Commission estimates that there are 7,860.000 or fewer small entity 800 subscribers; 5,888,687 or fewer small entity 888 subscribers; 4,721,866 or fewer small entity 877 subscribers; and 7,867,736 or fewer small entity 866 subscribers.

2. Wireless Carriers and Service Providers

18. Below, for those services subject to auctions, the Commission notes that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

19. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.[46] Prior to that time, such firms were within the now-superseded categories of "Paging" and "Cellular and Other Wireless Telecommunications."[47] Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.[48] For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[49] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services.[50] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[51] Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

20. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of $40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of $15 million for each of the three preceding years.[52] The SBA has approved these definitions.[53] The

[46] U.S. Census Bureau, 2007 NAICS Definitions, "517210 Wireless Telecommunications Categories (Except Satellite)"; http://www.census.gov/naics/2007/def/ND517210.HTM#N517210.

[47] U.S. Census Bureau, 2002 NAICS Definitions, "517211 Paging"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.; U.S. Census Bureau, 2002 NAICS Definitions, "517212 Cellular and Other Wireless Telecommunications"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.

[48] 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

[49] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[50] *See Trends in Telephone Service* at Table 5.3.

[51] *See id*.

[52] *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS)*, GN Docket No. 96-228, Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

Commission auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, seven bidders won 31 licenses that qualified as very small business entities, and one bidder won one license that qualified as a small business entity.

21. *Common Carrier Paging*. The SBA considers paging to be a wireless telecommunications service and classifies it under the industry classification Wireless Telecommunications Carriers(except satellite) . Under that classification, the applicable size standard is that a business is small if it has 1,500 or fewer employees. For the general category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[54] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.[55] The 2007 census also contains data for the specific category of "Paging" "that is classified under the seven-number NAICs code 5172101.[56]According to Commission data, 291 carriers have reported that they are engaged in Paging or Messaging Service. Of these, an estimated 289 have 1,500 or fewer employees, and 2 have more than 1,500 employees.[57] Consequently, the Commission estimates that the majority of paging providers are small entities that may be affected by our action. In addition, in the Paging Third Report and Order, the Commission developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[58] A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $3 million for the preceding three years.[59] The SBA has approved these small business size standards.[60] An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.[61] Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won.

22. *Wireless Telephony*. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size

(Continued from previous page)

[53] *See* Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (filed Dec. 2, 1998) (*Alvarez Letter 1998*).

[54] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[55] 13 C.F.R. § 121.201, NAICS code 517210.

[56] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en In this specific category, there were 248 firms that operated for the entire year in 2007.. Of that number 247 operated with fewer than 100 employees and one(1) operated with more than 1000 employees. Based on this classification and the associated size standard, the majority of paging firms must be considered small.

[57] *See Trends in Telephone Service* at Table 5.3.

[58] *Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service*, PR Docket No. 89-552, GN Docket No. 93-252, PP Docket No. 93-253, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295 (1997) (*220 MHz Third Report and Order*).

[59] *See* Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998).

[60] *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PR Docket No. 93-253, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, paras. 98-107 (1999).

[61] *Id.* at 10085, para. 98.

standard for Wireless Telecommunications Carriers (except Satellite).[62] Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.[63] Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[64] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small According to Trends in Telephone Service data, 434 carriers reported that they were engaged in wireless telephony.[65] Of these, an estimated 222 have 1,500 or fewer employees and 212 have more than 1,500 employees.[66] Therefore, approximately half of these entities can be considered small. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services.[67] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[68] Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

23. Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a "small business" for C- and F-Block licenses as an entity that has average gross revenues of $40 million or less in the three previous calendar years.[69] For F-Block licenses, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[70] These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.[71] No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D, E, and F Blocks.[72] On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22.[73] Of the 57 winning bidders in that auction, 48 claimed

[62] 13 C.F.R. § 121.201, NAICS code 517210.

[63] *Id*.

[64] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[65] TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

[66] *Id.*

[67] *See Trends in Telephone Service* at Table 5.3.

[68] *See id*.

[69] *See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap; Amendment of the Commission's Cellular/PCS Cross-Ownership Rule*; WT Docket No. 96-59, GN Docket No. 90-314, Report and Order, 11 FCC Rcd 7824, 7850–52, paras. 57–60 (1996) ("*PCS Report and Order*"); *see also* 47 C.F.R. § 24.720(b).

[70] *See PCS Report and Order*, 11 FCC Rcd at 7852, para. 60.

[71] *See Alvarez Letter 1998*.

[72] *See Broadband PCS, D, E and F Block Auction Closes*, Public Notice, Doc. No. 89838 (rel. Jan. 14, 1997).

[73] *See C, D, E, and F Block Broadband PCS Auction Closes*, Public Notice, 14 FCC Rcd 6688 (WTB 1999). Before Auction No. 22, the Commission established a very small standard for the C Block to match the standard used for F Block. *Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal*
(continued….)

small business status and won 277 licenses.

24. On January 26, 2001, the Commission completed the auction of 422 C and F Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status.[74] Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. On February 15, 2005, the Commission completed an auction of 242 C-, D-, E-, and F-Block licenses in Auction No. 58. Of the 24 winning bidders in that auction, 16 claimed small business status and won 156 licenses.[75] On May 21, 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction No. 71.76 Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses.77 On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78.[78] Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.[79]

25. *Narrowband Personal Communications Services*. To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of $40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order.[80] A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $15 million. The SBA has approved these small business size standards.[81]

26. *220 MHz Radio Service – Phase I Licensees*. The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, the Commission applies the small business size standard under the SBA rules applicable.

(Continued from previous page)
Communications Services (PCS) Licensees, WT Docket No. 97-82, Fourth Report and Order, 13 FCC Rcd 15743, 15768, para. 46 (1998).

[74] *See C and F Block Broadband PCS Auction Closes; Winning Bidders Announced*, Public Notice, 16 FCC Rcd 2339 (2001).

[75] *See Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58*, Public Notice, 20 FCC Rcd 3703 (2005).

[76] *See Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71*, Public Notice, 22 FCC Rcd 9247 (2007).

[77] *Id*.

[78] *See Auction of AWS-1 and Broadband PCS Licenses Closes; Winning Bidders Announced for Auction 78*, Public Notice, 23 FCC Rcd 12749 (WTB 2008).

[79] *Id.*

[80] *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456 (2000).

[81] *See* Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Dec. 2, 1998).

The SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.[82] For this service, the SBA uses the category of Wireless Telecommunications Carriers (except Satellite). Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[83] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.

27. *220 MHz Radio Service – Phase II Licensees*. The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the 220 MHz Third Report and Order, the Commission adopted a small business size standard for "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[84] This small business size standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years.[85] A "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed $3 million for the preceding three years. The SBA has approved these small business size standards.[86] Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.[87] In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.[88]

28. *800 MHz and 900 MHz Specialized Mobile Radio Licenses*. The Commission awards small business bidding credits in auctions for Specialized Mobile Radio ("SMR") geographic area licenses in the 800 MHz and 900 MHz bands to entities that had revenues of no more than $15 million in each of the three previous calendar years.[89] The Commission awards very small business bidding credits to entities that had revenues of no more than $3 million in each of the three previous calendar years.[90] The SBA has approved these small business size standards for the 800 MHz and 900 MHz SMR Services.[91] The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction was completed in 1996.[92] Sixty bidders claiming that they qualified as small businesses under the

[82] 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

[83] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[84] *220 MHz Third Report and Order*, 12 FCC Rcd at 11068-70, at paras. 291-95.

[85] *Id*. at 11068-70, para. 291.

[86] *See* letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

[87] *See generally 220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (1998).

[88] *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (1999).

[89] 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

[90] 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

[91] *See Alvarez Letter 1999*.

[92] "FCC Announces Winning Bidders in the Auction of 1,020 Licenses to Provide 900 MHz SMR in Major Trading Areas: Down Payments due April 22, 1996, FCC Form 600s due April 29, 1996," *Public Notice*, 11 FCC Rcd 18599 (WTB 1996).

$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band.[93] The 800 MHz SMR auction for the upper 200 channels was conducted in 1997. Ten bidders claiming that they qualified as small businesses under the $15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.[94] A second auction for the 800 MHz band was conducted in 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.[95]

29. The auction of the 1,053 800 MHz SMR geographic area licenses for the General Category channels was conducted in 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the $15 million size standard.[96] In an auction completed in 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were awarded.[97] Of the 22 winning bidders, 19 claimed small business status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

30. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than $15 million. One firm has over $15 million in revenues. In addition, we do not know how many of these firms have 1500 or fewer employees.[98] We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is approved by the SBA.

31. *700 MHz Guard Band Licensees*. In 2000, in the 700 MHz Guard Band Order, the Commission adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[99] A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $40 million for the preceding three years.[100] Additionally, a very small business is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $15 million for the preceding three years.[101] SBA approval of these definitions is not required.[102] An auction of 52 Major Economic Area licenses commenced on September 6, 2000, and closed on September 21, 2000.[103] Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these

[93] *Id*.

[94] *See* "Correction to Public Notice DA 96-586 'FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,'" Public Notice, 11 FCC Rcd 18,637 (WTB 1996).

[95] *See* "Multi-Radio Service Auction Closes," Public Notice, 17 FCC Rcd 1446 (WTB 2002).

[96] *See* "800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced," Public Notice, 15 FCC Rcd 17162 (WTB 2000).

[97] *See* "800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced," Public Notice, 16 FCC Rcd 1736 (WTB 2000).

[98] *See generally* 13 C.F.R. § 121.201, NAICS code 517210.

[99] *See Service Rules for the 746–764 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000) (*746–764 MHz Band Second Report and Order*).

[100] *See 746–764 MHz Band Second Report and Order*, 15 FCC Rcd at 5343, para. 108.

[101] *See id.*

[102] *See id.* at 5343, para. 108 n.246 (for the 746–764 MHz and 776–794 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain SBA approval before adopting small business size standards).

[103] *See 700 MHz Guard Bands Auction Closes: Winning Bidders Announced*, Public Notice, 15 FCC Rcd 18026 (WTB 2000).

bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.[104]

32. *Air-Ground Radiotelephone Service*. The Commission has previously used the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), i.e., an entity employing no more than 1,500 persons.[105] There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and under that definition, the Commission estimates that almost all of them qualify as small entities under the SBA definition. For purposes of assigning Air-Ground Radiotelephone Service licenses through competitive bidding, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding $40 million.[106] A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding $15 million.[107] These definitions were approved by the SBA.[108] In May 2006, the Commission completed an auction of nationwide commercial Air-Ground Radiotelephone Service licenses in the 800 MHz band (Auction No. 65). On June 2, 2006, the auction closed with two winning bidders winning two Air-Ground Radiotelephone Services licenses. Neither of the winning bidders claimed small business status.

33. *Rural Radiotelephone Service*. The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.[109] A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).[110] The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.[111] There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

34. *Aviation and Marine Radio Services*. Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category Wireless Telecommunications Carriers(except satellite)," which is 1,500 or fewer employees.[112] Census data for

[104] *See 700 MHz Guard Bands Auction Closes: Winning Bidders Announced*, Public Notice, 16 FCC Rcd 4590 (WTB 2001).

[105] 13 C.F.R. § 121.201, NAICS codes 517210.

[106] *Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review—Amendment of Parts 1, 22, and 90 of the Commission's Rules, Amendment of Parts 1 and 22 of the Commission's Rules to Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service*, WT Docket Nos. 03-103, 05-42, Order on Reconsideration and Report and Order, 20 FCC Rcd 19663, paras. 28–42 (2005).

[107] *Id.*

[108] *See* Letter from Hector V. Barreto, Administrator, SBA, to Gary D. Michaels, Deputy Chief, Auctions and Spectrum Access Division, Wireless Telecommunications Bureau, FCC (filed Sept. 19, 2005).

[109] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[110] BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

[111] 13 C.F.R. § 121.201, NAICS code 517210.

[112] 13 C.F.R. § 121.201, NAICS code 517210.

2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[113] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. Additionally, the Commission notes that most applicants for recreational licenses in this category of wireless service are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, the Commission estimates that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed $15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed $3 million dollars.[114] There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

35. *Fixed Microwave Services*. Microwave services include common carrier,[115] private-operational fixed,[116] and broadcast auxiliary radio services.[117] They also include the Local Multipoint Distribution Service (LMDS),[118] the Digital Electronic Message Service (DEMS),[119] and the 24 GHz Service,[120] where licensees can choose between common carrier and non-common carrier status.[121] The Commission has not yet defined a small business with respect to microwave services. For purposes of the IRFA, the Commission will use the SBA's definition applicable to Wireless Telecommunications Carriers (except satellite)—i.e., an entity with no more than 1,500 persons is considered small.[122] For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[123] Of those 1,383,

[113] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[114] *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

[115] *See* 47 C.F.R. Part 101, Subparts C and I.

[116] *See* 47 C.F.R. Part 101, Subparts C and H.

[117] Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. *See* 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

[118] *See* 47 C.F.R. Part 101, Subpart L.

[119] *See* 47 C.F.R. Part 101, Subpart G.

[120] *See id.*

[121] *See* 47 C.F.R. §§ 101.533, 101.1017.

[122] 13 C.F.R. § 121.201, NAICS code 517210.

[123] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. The Commission notes that the number of firms does not necessarily track the number of licensees. The Commission estimates that virtually all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities under the SBA definition.

36. *Offshore Radiotelephone Service*. This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.[124] There are presently approximately 55 licensees in this service. The Commission is unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for the category of Wireless Telecommunications Carriers (except Satellite). Under that standard.[125] Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.[126] Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[127] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.

37. *32.39 GHz Service*. The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of $40 million or less in the three previous calendar years.[128] An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[129] The SBA has approved these small business size standards.[130] The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by our action.

38. *Wireless Cable Systems*. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)).[131] In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than $40 million in the previous three calendar years.[132] The BRS auctions

[124] This service is governed by Subpart I of Part 22 of the Commission's Rules. *See* 47 C.F.R. §§ 22.1001-22.1037.

[125] 13 C.F.R. § 121.201, NAICS code 517210.

[126] *Id*.

[127] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[128] *See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, PP Docket No. 93-253, Report and Order, 12 FCC Rcd 18600 (1998).

[129] *Id.*

[130] *See* Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

[131] *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, MM Docket No. 94-131, PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

[132] 47 C.F.R. § 21.961(b)(1).

resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, we estimate that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities.[133] After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules. In 2009, the Commission conducted Auction 86, the sale of 78 licenses in the BRS areas.[134] The Commission offered three levels of bidding credits: (i) a bidder with attributed average annual gross revenues that exceed $15 million and do not exceed $40 million for the preceding three years (small business) will receive a 15 percent discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed $3 million and do not exceed $15 million for the preceding three years (very small business) will receive a 25 percent discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed $3 million for the preceding three years (entrepreneur) will receive a 35 percent discount on its winning bid.[135] Auction 86 concluded in 2009 with the sale of 61 licenses.[136] Of the ten winning bidders, two bidders that claimed small business status won 4 licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

39. In addition, the SBA's Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,032 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.[137] Thus, we estimate that at least 1,932 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."[138] . For these services, the Commission uses the SBA small business size standard for the category "Wireless Telecommunications Carriers(except satellite)," which is 1,500 or fewer employees.[139] To gauge small business prevalence for these cable services we must, however, use the most current census data. Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that

[133] 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard of 1500 or fewer employees.

[134] *Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86*, Public Notice, 24 FCC Rcd 8277 (2009).

[135] *Id.* at 8296.

[136] *Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period*, Public Notice, 24 FCC Rcd 13572 (2009).

[137] The term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)–(6). We do not collect annual revenue data on EBS licensees.

[138] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers," (partial definition), www.census.gov/naics/2007/def/ND517110.HTM#N517110.

[139] 13 C.F.R. § 121.201, NAICS code 517210.

operated that year.[140] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. The Commission notes that the Census' use the classifications "firms" does not track the number of "licenses".

40. In the 1998 and 1999 LMDS auctions,[141] the Commission defined a small business as an entity that has annual average gross revenues of less than $40 million in the previous three calendar years.[142] Moreover, the Commission added an additional classification for a "very small business," which was defined as an entity that had annual average gross revenues of less than $15 million in the previous three calendar years.[143] These definitions of "small business" and "very small business" in the context of the LMDS auctions have been approved by the SBA.[144] In the first LMDS auction, 104 bidders won 864 licenses. Of the 104 auction winners, 93 claimed status as small or very small businesses. In the LMDS re-auction, 40 bidders won 161 licenses. Based on this information, the Commission believes that the number of small LMDS licenses will include the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

41. *218-219 MHz Service*. The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a $6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than $2 million in annual profits each year for the previous two years.[145] In the 218-219 MHz Report and Order and Memorandum Opinion and Order, the Commission established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed $15 million for the preceding three years.[146] A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed $3 million for the preceding three years.[147] These size standards will be used in future auctions of 218-219 MHz spectrum.

42. *24 GHz – Incumbent Licensees*. This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. For this service, the Commission uses the SBA small business size standard for the category "Wireless Telecommunications Carriers(except satellite)," which is 1,500 or fewer employees.[148] To gauge

[140] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[141] The Commission has held two LMDS auctions: Auction 17 and Auction 23. Auction No. 17, the first LMDS auction, began on February 18, 1998, and closed on March 25, 1998. (104 bidders won 864 licenses.) Auction No. 23, the LMDS re-auction, began on April 27, 1999, and closed on May 12, 1999. (40 bidders won 161 licenses.)

[142] *See LMDS Order,* 12 FCC Rcd at 12545.

[143] *Id.*

[144] *See* Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau (FCC) from A. Alvarez, Administrator, SBA (January 6, 1998).

[145] *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330 (1994).

[146] *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (1999).

[147] *Id*.

[148] 13 C.F.R. § 121.201, NAICS code 517210.

small business prevalence for these cable services we must, however, use the most current census data. Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[149] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. The Commission notes that the Census' use of the classifications" firms" does not track the number of "licenses". The Commission believes that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent[150] and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

43. *24 GHz – Future Licensees*. With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of $15 million.[151] "Very small business" in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding $3 million for the preceding three years.[152] The SBA has approved these small business size standards.[153] These size standards will apply to the future auction, if held.

3. Satellite Service Providers

44. *Satellite Telecommunications Providers*. Two economic census categories address the satellite industry. The first category has a small business size standard of $15 million or less in average annual receipts, under SBA rules.[154] The second has a size standard of $25 million or less in annual receipts.[155]

45. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."[156] Census Bureau data for 2007 show that 512 Satellite Telecommunications firms that operated for that entire year..[157] Of this total, 464 firms had annual receipts of under $10 million, and 18 firms had receipts of $10 million to $24,999,999.[158] Consequently, the Commission estimates that

[149] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[150] Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

[151] *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 at para. 77 (2000); *see also* 47 C.F.R. § 101.538(a)(2).

[152] *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 at para. 77 (2000); *see also* 47 C.F.R. § 101.538(a)(1).

[153] *See* Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

[154] 13 C.F.R. § 121.201, NAICS code 517410.

[155] 13 C.F.R. § 121.201, NAICS code 517919.

[156] U.S. Census Bureau, 2007 NAICS Definitions, "517410 Satellite Telecommunications."

[157] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.

[158] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en

the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

46. The second category, i.e. "All Other Telecommunications" comprises "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry."[159] For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year.[160] Of this total, 2,347 firms had annual receipts of under $25 million and 12 firms had annual receipts of $25 million to $49, 999,999.[161] Consequently, the Commission estimates that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

4. Cable and OVS Operators

47. Because section 706 requires us to monitor the deployment of broadband regardless of technology or transmission media employed, the Commission anticipates that some broadband service providers may not provide telephone service. Accordingly, the Commission describes below other types of firms that may provide broadband services, including cable companies, MDS providers, and utilities, among others.

48. *Cable and Other Program Distributors*. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."[162] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[163] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of such firms can be considered small.

49. *Cable Companies and Systems*. The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide.[164] Industry data indicate that, of 1,076

[159] *See http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search*

[160] U.S. Censhttp://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en .

[161] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en .

[162] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers," (partial definition), http://www.census.gov/naics/2007/def/ND517110.HTM#N517110 (last visited Oct. 21, 2009).

[163] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[164] 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of $100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation,* Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

cable operators nationwide, all but eleven are small under this size standard.[165] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[166] Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000–19,999 subscribers.[167] Thus, under this second size standard, most cable systems are small.

50. *Cable System Operators*. The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[168] The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate.[169] Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.[170] We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[171] and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

51. *Open Video Services*. Open Video Service (OVS) systems provide subscription services.[172] The open video system ("OVS") framework was established in 1996, and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers.[173] The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,[174] OVS falls within the SBA small business size standard covering cable services, which is "Wired Telecommunications Carriers."[175] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for the OVS service, the Commission relies on data currently available from the U.S. Census for the year 2007. According to that source, there were 3,188 firms that in 2007 were Wired Telecommunications Carriers. Of these, 3,144 operated with less than 1,000 employees, and 44 operated with more than 1,000 employees. However, as to the latter 44 there is no data available that shows how many operated with more than 1,500 employees. Based on this data, the majority

[165] *See* BROADCASTING & CABLE YEARBOOK 2006, at A-8, C-2 (Harry A. Jessell ed., 2005) (data current as of June 30, 2005); TELEVISION & CABLE FACTBOOK 2006, at D-805 to D-1857 (Albert Warren ed., 2005).

[166] 47 C.F.R. § 76.901(c).

[167] TELEVISION & CABLE FACTBOOK 2006, at F-2 (Albert Warren ed., 2005) (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

[168] 47 U.S.C. § 543(m)(2); *see* 47 C.F.R. § 76.901(f) & nn. 1–3.

[169] 47 C.F.R. § 76.901(f); *see* Public Notice, *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, 16 FCC Rcd 2225 (Cable Services Bureau 2001).

[170] *See* BROADCASTING & CABLE YEARBOOK 2006, at A-8, C-2 (Harry A. Jessell ed., 2005) (data current as of June 30, 2005); TELEVISION & CABLE FACTBOOK 2006, at D-805 to D-1857 (Albert Warren ed., 2005).

[171] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. *See* 47 C.F.R. § 76.909(b).

[172] *See* 47 U.S.C. § 573.

[173] 47 U.S.C. § 571(a)(3)-(4). *See 13th Annual Report*, 24 FCC Rcd at 606, ¶ 135.

[174] *See* 47 U.S.C. § 573.

[175] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers"; http://www.census.gov/naics/2007/def/ND517110.HTM#N517110.

of these firms can be considered small.[176] In addition, we note that the Commission has certified some OVS operators, with some now providing service.[177] Broadband service providers ("BSPs") are currently the only significant holders of OVS certifications or local OVS franchises.[178] The Commission does not have financial or employment information regarding the entities authorized to provide OVS, some of which may not yet be operational. Thus, at least some of the OVS operators may qualify as small entities. The Commission further notes that it has certified approximately 45 OVS operators to serve 75 areas, and some of these are currently providing service.[179] Affiliates of Residential Communications Network, Inc. (RCN) received approval to operate OVS systems in New York City, Boston, Washington, D.C., and other areas. RCN has sufficient revenues to assure that they do not qualify as a small business entity. Little financial information is available for the other entities that are authorized to provide OVS and are not yet operational. Given that some entities authorized to provide OVS service have not yet begun to generate revenues, the Commission concludes that up to 44 OVS operators (those remaining) might qualify as small businesses that may be affected by the rules and policies adopted herein.

5. Electric Power Generation, Transmission and Distribution

52. *Electric Power Generators, Transmitters, and Distributors*. The Census Bureau defines an industry group comprised of "establishments, primarily engaged in generating, transmitting, and/or distributing electric power. Establishments in this industry group may perform one or more of the following activities: (1) operate generation facilities that produce electric energy; (2) operate transmission systems that convey the electricity from the generation facility to the distribution system; and (3) operate distribution systems that convey electric power received from the generation facility or the transmission system to the final consumer."[180] The SBA has developed a small business size standard for firms in this category: "A firm is small if, including its affiliates, it is primarily engaged in the generation, transmission, and/or distribution of electric energy for sale and its total electric output for the preceding fiscal year did not exceed 4 million megawatt hours."[181] According to Census Bureau data for 2007, there were 1,525 firms in this category that operated for the entire year[182]. Census data do not track electric output and we have not determined how many of these firms fit the SBA size standard for small, with no more than 4 million megawatt hours of electric output. Consequently, we estimate that 1,525 or fewer firms may be considered small under the SBA small business size standard.

6. Internet Service Providers, Web Portals and Other Information Services

53. In 2007, the SBA recognized two new small business, economic census categories. They are (1) Internet Publishing and Broadcasting and Web Search Portals,[183] and (2) All Other Information Services.[184]

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[176] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

[177] A list of OVS certifications may be found at http://www.fcc.gov/mb/ovs/csovscer.html.

[178] *See 13th Annual Report*, 24 FCC Rcd at 606-07, ¶ 135. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

[179] *See* http://www.fcc.gov/mb/ovs/csovscer.html (current as of February 2007).

[180] U.S. Census Bureau, 2002 NAICS Definitions, "2211 Electric Power Generation, Transmission and Distribution," http://www.census.gov/epcd/naics02/def/NDEF221.HTM (last visited Oct. 21, 2009).

[181] 13 C.F.R. § 121.201, NAICS codes 221111, 221112, 221113, 221119, 221121, 221122, n. 1.

[182] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-ds_name=EC0722SSSZ4&-_lang=en.

[183] 13 C.F.R. § 121.201, NAICS code 519130 (establishing a $500,000 revenue ceiling).

[184] 13 C.F.R. § 121.201, NAICS code 519190 (establishing a $6.5 million revenue ceiling).

54. *Internet Service Providers.* The 2007 Economic Census places these firms, whose services might include voice over Internet protocol (VoIP), in either of two categories, depending on whether the service is provided over the provider's own telecommunications facilities (*e.g.*, cable and DSL ISPs), or over client-supplied telecommunications connections (*e.g.*, dial-up ISPs). The former are within the category of Wired Telecommunications Carriers,[185] which has an SBA small business size standard of 1,500 or fewer employees.[186] These are also labeled "broadband." The latter are within the category of All Other Telecommunications,[187] which has a size standard of annual receipts of $25 million or less.[188] These are labeled non-broadband.

55. The most current Economic Census data for all such firms are 2007 data, which are detailed specifically for ISPs within the categories above. For the first category, the data show that 396 firms operated for the entire year, of which 159 had nine or fewer employees.[189] For the second category, the data show that 1,682 firms operated for the entire year. [190] Of those, 1,675 had annual receipts below $25 million per year, and an additional two had receipts of between $25 million and $ 49,999,999. Consequently, we estimate that the majority of ISP firms are small entities.

56. Internet Publishing and Broadcasting and Web Search Portals. This industry comprises establishments primarily engaged in 1) publishing and/or broadcasting content on the Internet exclusively or 2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals). The publishing and broadcasting establishments in this industry do not provide traditional (non-Internet) versions of the content that they publish or broadcast. They provide textual, audio, and/or video content of general or specific interest on the Internet exclusively. Establishments known as Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users. [191] The SBA has developed a small business size standard for this category; that size standard is 500 employees[192]. Less than 500 employees is considered small.[193] According to Census Bureau data for 2007, there were 2,705 firms that provided one or more of these services for that entire year. Of these, 2,682 operated with less than 500 employees and 13 operated with 500 to 999 employees.[194] Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

57. *Data Processing, Hosting, and Related Services*. This industry comprises establishments primarily engaged in providing infrastructure for hosting or data processing services. These establishments

[185] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers"; http://www.census.gov/naics/2007/def/ND517110.HTM#N517110.

[186] 13 C.F.R. § 121.201, NAICS code 517110.

[187] U.S. Census Bureau, 2007 NAICS Definitions, "517919 All Other Telecommunications"; http://www.census.gov/naics/2007/def/ND517919.HTM#N517919.

[188] 13 C.F.R. § 121.201, NAICS code 517919 (updated for inflation in 2008).

[189] U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 5171103 (released Nov. 19, 2010) (employment size). The data show only two categories within the whole: the categories for 1-4 employees and for 5-9 employees.

[190] U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, "Establishment and Firm Size," NAICS code 5179191 (released Nov. 19, 2010) (receipts size).

[191] *See* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=519130&search=2007%20NAICS%20Search

[192] *See* http://www.sba.gov/sites/default/files/Size_Standards_Table.pdf

[193] 13 C.F.R. § 121.201, NAICS code 519130.

[194] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=1000&-ds_name=EC0751SSSZ5&-_lang=en

may provide specialized hosting activities, such as web hosting, streaming services or application hosting; provide application service provisioning; or may provide general time-share mainframe facilities to clients. Data processing establishments provide complete processing and specialized reports from data supplied by clients or provide automated data processing and data entry services.[195] The SBA has developed a small business size standard for this category; that size standard is $25 million or less in average annual receipts.[196] According to Census Bureau data for 2007, there were 8,060 firms in this category that operated for the entire year.[197] Of these, 6,726 had annual receipts of under $25 million, and 155 had receipts between $25 million and $49,999,999 million.[198] Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

58. *All Other Information Services*. "This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives)."[199] Our action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is $7.0 million or less in average annual receipts.[200] According to Census Bureau data for 2007, there were 367 firms in this category that operated for the entire year.[201] Of these, 334 had annual receipts of under $5 million, and an additional 11 firms had receipts of between $5 million and $9,999,999.[202] Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

59. In the Notice, the Commission proposes additional or modified information collections that would impose further reporting and recordkeeping requirements on current Form 477 filers, including small entities. Specifically, the Notice invites comment on whether and how the Commission could collect data on the following additional or modified categories of data: (1) deployment, (2) subscription, (3) price, (4) service quality, and (5) ownership and contact information. The Commission also seeks comment on whether to collect "other data" such as socioeconomic and social metrics data to assess socially and economically disadvantaged parties. The Commission seeks further comment on the extent to which technological tools and use of commercial and publicly available data can reduce the burden of producing information. The Commission also seeks comment on how to streamline the process in collecting the data the Commission needs to inform its policymaking processes while minimizing the production burden on providers and the processing burden on the Commission. The Commission invites comments on the merits

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[196] 13 C.F.R. § 121.201, NAICS code 518210.

[197] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=1000&-ds_name=EC0751SSSZ4&-_lang=en .

[198] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=1000&-ds_name=EC0751SSSZ4&-_lang=en

[199] U.S. Census Bureau, "2002 NAICS Definitions: 519190 All Other Information Services"; http://www.census.gov/epcd/naics02/def/NDEF519.HTM.

[200] 13 C.F.R. § 121.201, NAICS code 519190. *See also* http://www.sba.gov/sites/default/files/Size_Standards_Table.pdf.

[201] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=1200&-ds_name=EC0751SSSZ4&-_lang=en.

[202] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=1100&-ds_name=EC0751SSSZ4&-_lang=en.

and methodologies of such data collections to include suggestions and discussions of other alternatives not specifically discussed in the Notice that would meet the objectives of the Notice but would impose lesser burdens on smaller entities.

60. Based on these questions, the Commission anticipates that a record will be developed concerning actual burden and alternative ways in which the Commission could lessen the burden on small entities of obtaining improved data about broadband deployment and availability throughout the nation.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

61. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[203]

62. In particular, the Commission seeks comment on whether it would be less burdensome for providers to submit address-level data with respect to the deployment and availability of services. The Commission also seeks comment on other ways that the Commission can ease the burden on small- and medium-sized providers.

63. Based on these questions, and the alternatives the Commission has discussed, the Commission anticipates that the record will be developed concerning alternative ways in which the Commission could lessen the burden on small entities of obtaining improved data about broadband. The Commission welcomes proposals of alternatives from any of the approaches as described in Section A, *supra*.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

64. None.

[203] 5 U.S.C. § 603(c).

STATEMENT OF
CHAIRMAN JULIUS GENACHOWSKI

Re: *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10; *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*; WC Docket No. 07-38; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering*, WC Docket No. 08-190; *Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132.

Re: *Review Of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10.

Commission policymaking is only as good as the facts and data on which our decisions are based. That's why data reform has been an important priority since I arrived here as Chairman. It's why it's vital that the Commission collects the data it needs to do its job and serve the public, why the Commission shouldn't waste resources collecting data it doesn't need, and why, wherever possible, we should use modern technology to increase the benefits of data collection and reduce the burdens.

It was with these principles in mind that I appointed Mary Beth Richards as Special Counsel for FCC Reform as one of my very first actions, and charged her and our FCC Reform Team, including Chief of our Office of Strategic Planning Paul de Sa, our new Chief Data Officer Greg Elin and the new data officers in the bureaus and offices, Managing Director Steven VanRoekel, and General Counsel Austin Schlick with conducting an agency-wide data review. This Data Innovation Initiative is a comprehensive effort to modernize and streamline how we collect, use, and disseminate data.

I am very pleased that in the first phase of the reform team's review, staff has identified 20 discrete data collections to target for elimination. These are collections that once made sense, but appear to have become unnecessary as technology, markets, and policies have evolved. Today, we are formally proposing the elimination of two of these—the comparably efficient interconnection and open network architecture reporting obligations—and I am instructing the FCC Reform Team and our data officers to move forward on the other 18, while continuing their agency-wide data review.

I'm also pleased to announce that today the Wireline Competition Bureau will be eliminating a separate outdated reporting requirement imposed on a carrier more than 20 years ago. That collection was imposed for reasons that no longer justify the costs it imposes on the carrier, or on the Commission.

We approach the review we launch today—of one of the FCC's most important data-gathering tools, Form 477—in the same spirit of efficient, effective governance. Since 2000, the FCC has relied on data gathered through Form 477 to inform its policies relating to voice and broadband services. In 2004 and in 2008, the Commission made modifications to parts of the Form 477 program in order to collect more information.

And now—in view of ongoing changes in technology and the marketplace, and questions raised about the existing Form—we ask stakeholders to help us take a comprehensive look at the Form 477 program and update its design to answer today's questions, not yesterday's. This review—another recommendation of the National Broadband Plan—will help us fulfill important statutory obligations, including promoting broadband in unserved areas, promoting competition, and ensuring public safety. It

will also ensure that we don't collect voice and broadband data that we no longer need.

These data efforts are just part of the FCC Reform Team's larger initiative to remove regulatory barriers to a thriving broadband economy. In the last year, the Commission has taken a number of actions to deliver on this goal, including expediting licensing of spectrum that can be used for broadband services; lifting restrictions on some mobile satellite spectrum that can be used for broadband; setting limits on how long localities can take to approve or deny tower sharing requests; significantly streamlining the E-Rate program's application forms; and making it easier for radio stations to certify compliance with our rules.

A few weeks ago, as part of this effort, we launched our biennial review of the FCC's telecommunications regulations to determine which of our regulations are no longer necessary due to competition. Tomorrow we will be hosting a conference with leaders from across the broadband marketplace to identify further opportunities to remove regulatory barriers to broadband buildout. And there is more to come, particularly when it comes to using technology to promote FCC reform and improved interaction with the public.

All of these efforts are in line with the President's recent executive order to ensure that our regulatory systems "use the best, most innovative, and least burdensome tools for achieving regulatory ends" in order to "promot[e] economic growth, innovation, competitiveness, and job creation." As I informed senior staff last week, I expect the FCC to perform its responsibilities consistent with the principles in the executive order.

In the months ahead, we will continue to look for opportunities to use modern technology and common sense to help make the FCC a model of excellence in government. I thank the data reform team for the important reforms it has already identified.

CONCURRING STATEMENT OF
COMMISSIONER MICHAEL J. COPPS

Re: *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10; *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*; WC Docket No. 07-38; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering*, WC Docket No. 08-190; *Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132.

Gathering good data—an issue near and dear to this Commissioner's heart, as I know it is to the Chairman's—is critical to the FCC's ability to do its job. For far too many years, we moved away from this responsibility, relying less on our own analysis and substituting limited commercial data for our own. Certainly we should be smart, sparing and efficient about the information we collect to avoid undue burdens. But the public interest must always be our lodestar in these considerations. Consumers are certainly my first and foremost concern, but markets, too, rely on credible and reliable government data. How can a country dig its way out of a recession without solid economic indicators like unemployment numbers and GDP? As I've said before, if federal and state governments decided tomorrow to stop gathering data and regulating how it is reported, the U.S. economy would screech to a halt.

If we want the Internet economy to continue to drive growth and opportunity in this country, we must have regular, systematic reporting of high-quality broadband data. How will we know where to invest scarce public resources if we don't know with any meaningful specificity where broadband is deployed? How can innovators and investors make informed decisions with regard to new technologies and applications if we don't know the broadband speed that American consumers are actually getting? Without understanding the value proposition broadband offers—that is, the price per bit—how can we promote its adoption and ensure that no American is on the wrong side of the digital divide?

These are not new questions before the Commission. We have asked many of them twice before. In 2008, I concurred with the Commission's further notice on many of these questions because I believed it was time then for a final Order detailing the kinds and amounts of data the Commission needs to protect American consumers. While I am more optimistic now that we will get action soon, consistency compels me to concur this time, too, on the first Notice before us today, the *Form 477 NPRM*. I look forward to the third time being the charm with a final Order in the very near term.

I vote to approve the second Notice, an NPRM proposing the elimination of legacy reporting obligations stemming from the *Computer Inquiries*. The Commission has already relieved carriers of the underlying obligations, partly through a controversial and altogether untidy "deemed granted" forbearance process. The original idea had been acquiring data to maintain competition. The forbearance process under two previous Commissions was tragically aimed at getting rid of both.

The history behind this item, though, begs a different question—not whether we are collecting data irrelevant to the Commission, but whether we have all the new data the Commission needs to understand what is going on in the world of business, technology and consumer information. I freely admit that the particular information here may be a vestige of a bygone era, but I only want to emphasize that ridding ourselves of unneeded data requirements is actually less important than guaranteeing we have the data we need.

STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL

Re: *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10; *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*; WC Docket No. 07-38; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering*, WC Docket No. 08-190; *Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132.

Re: *Review Of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10.

Many thanks to Mary Beth Richards and Greg Elin for your presentation. Your dedicated work in conducting a comprehensive review of the Commission's data collection obligations is appreciated. I wholeheartedly support reducing the Commission's regulatory burdens wherever possible, including eliminating certain reporting requirements. I am encouraged to hear that your team has already targeted 20 collections to discontinue soon.

In that spirit, I support the Notice of Proposed Rulemaking which proposes to eliminate the Commission's remaining *Computer III* requirements. Due to various reforms over the years, collection of this information may no longer be necessary, and it does not appear that the Commission relies on this data in its decision making process. In short, collection of this data is likely antiquated and burdensome. I commend the Chairman for taking this step to clear unnecessary regulatory underbrush.

In addition, I support the Notice of Proposed Rulemaking which seeks to modernize the FCC Form 477 Data Program. Given that the Form 477 process has not been reformed in more than 10 years, initiating this proceeding will hopefully result in a more efficient and effective program. It is important for the FCC to obtain appropriate and relevant data to help us make informed decisions, and this rulemaking will open the dialogue on this topic. However, we must ensure that we have adequate legal authority to require the collection of the information discussed in this notice. As such, I was encouraged that the Chairman agreed to ask about our legal authority throughout this rulemaking.

I am hesitant, however, about the section of the notice which discusses whether the FCC should collect broadband pricing information. Although such efforts may have the best of intentions, I am concerned that if the FCC ultimately decides that it should collect broadband pricing information, the process could lay the foundation for the FCC to engage in rate regulation of broadband Internet services in the future. I hope that doesn't happen. I will be interested to learn more about others' perspectives during the comment cycle. In sum, I do support our effort to modernize this process but we must be wary that we aren't taking one step forward and two steps back by reducing data collection requirements in some areas, but then imposing new and unnecessary burdens in other areas.

I thank Sharon Gillett and her team for their long hours working on these two notices, and I look forward to reviewing the record and working with my colleagues and stakeholders on these proceedings.

STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN

Re: *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10; *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*; WC Docket No. 07-38; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering*, WC Docket No. 08-190; *Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132.

Re: *Review Of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10.

Good policy must be informed by complete, accurate, and relevant information. We should be mindful, however, that the collection of data for accurate analysis occupies the resources of both industry and the Commission, and that ultimately, consumers and taxpayers are the ones who pay. Accordingly, it is appropriate for the FCC to periodically review the need for the information it requests. Where currently collected data is no longer relevant for the benefit of Congress, the Commission, or consumers, we should begin proceedings to explore the elimination of that information, as we do today, with respect to the CEI/ONA data.

Of course, to the extent that data from industry is required so that we can fulfill our statutory obligations, then it is important that we ensure that the information we obtain is sufficient for us to do so. As such, it is important to periodically assess whether the data we are collecting, relays the information we need to make good policy choices and to issue reports required by statute. With respect to the information we collect on the Form 477, which we use as our primary tool for analyzing the status of local telephone and broadband networks and services, I support the Notice's consideration of modifications to the types of data reported on the Form. As the Notice describes, our various duties to promote policies that ensure universal service, public safety, a competitive communications marketplace, and the reasonable and timely deployment of broadband networks, require that we have the data necessary to make informed decisions, and issue knowledgeable reports, just as Congress intended.

I believe it is appropriate for us to revisit the type of data we seek on the Form 477, given that both a GAO Report and the National Broadband Plan found that the data was insufficient, and limits our ability to fulfill certain of our policymaking and reporting duties. Certainly, we must balance the need for information with the burden that data collection may have on industry. The Notice recognizes this careful balance, by seeking guidance on the possible use and limitations of publicly available or third-party commercial data, to avoid such burdens on industry, including small businesses.

I am pleased that we are exploring the use of additional broadband data, such as pricing information, so that we can better assess affordable and comparable prices. As we consider explicitly supporting broadband networks and service in our USF/ICC Reform NPRM adopted today, it is important that we have the information necessary to determine whether rates in rural areas are comparable to rates in urban areas, so that we can assess whether we have met the goals of Section 254 for ensuring universal service. Furthermore, the Broadband Data Improvement Act, requires that we compare pricing for broadband service with other countries; thus, the collection of pricing information may be necessary to fulfill that obligation.

Finally, I am pleased that we are undertaking a significant effort to allow the public to access the data we collect, as well as our analysis of that information, through our website. It is important that as we are informed, we use every tool at our disposal to inform the public.

Many thanks are due to Mary Beth, Greg and the other data experts, for your work on our Data Innovation Initiative, as well as to the Wireline Competition Bureau for your work on the Form 477 and CEI/ONA Notices.

STATEMENT OF
COMMISSIONER MEREDITH ATTWELL BAKER

Re: *Modernizing the FCC Form 477 Data Program*, WC Docket No. 11-10; *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*; WC Docket No. 07-38; *Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering*, WC Docket No. 08-190; *Review of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132.

Re: *Review Of Wireline Competition Bureau Data Practices*, WC Docket No. 10-132; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10.

I support the process to right-size our data collections and appreciate the comprehensive approach we are taking. I also support the specific decision to review the narrowband *Computer III* CEI and ONA requirements. This is an overdue and welcome step forward. I hope we use the same standard – whether the Commission relies on a submission in the course of its normal decision-making – to make more proposals to eliminate or scale back other outdated data submissions.

The Commission also proposes to potentially expand its data requirements associated with our broadband deployment reporting. I welcome all efforts to ensure that we have reliable and accurate data to inform our decision-making. In a number of places, the *Notice* proposes increases—potentially significant ones—in the type and scope of data gathering required. In the spirit of the broader data initiative, I believe the Commission should act judiciously and answer a few threshold questions before expanding any of our data collection obligations: What is the nexus between the data to be requested and our statutory responsibilities? Is this new data integral to fulfilling a statutory responsibility? Is the data gathering the best and least burdensome means to acquire the data?

I appreciate that many of these questions are explicitly raised in the *Notice,* and welcome the Chairman's recognition of the heavy burden well-intentioned data requests may have on industry. I will be watching this proceeding closely with particular attention on proposals surrounding broadband pricing and customer satisfaction metrics. Thank you.