

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?<sup>194</sup> 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.<sup>195</sup> 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?<sup>196</sup> 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

<sup>194</sup> See FCC Form 477 Instructions at 11-12.

<sup>195</sup> T-Mobile Aug. 13, 2010 Comments, WC Docket No. 10-132 at 5.

<sup>196</sup> Technology may include, for example, GSM, CDMA, EVDO, WiMAX, LTE, and WCDMA/HSPA, among others.

report on mobile wireless competition?<sup>197</sup>

80. *Geographic Area.* Form 477 currently collects voice telephony subscription data at the state level and broadband subscription data at the census tract level.<sup>198</sup> 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.<sup>199</sup> Commenters have also suggested that policymakers need more granular data about voice services, particularly in order to address competition issues.<sup>200</sup> 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.”<sup>201</sup> 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.<sup>202</sup> 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?”<sup>203</sup>

#### **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

<sup>197</sup> See *supra* para. 29.

<sup>198</sup> Except mobile wireless broadband subscribers, which are collected at the state level.

<sup>199</sup> See *supra* paras. 56-59.

<sup>200</sup> 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.

<sup>201</sup> See, e.g., OPASTCO-RICA Nov. 24, 2008 PRA Comments, WCB Docket NO. 07-38 at 2-3.

<sup>202</sup> See *FCC Form 477 Instructions* at 2, 7.

<sup>203</sup> 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?<sup>204</sup> 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.<sup>205</sup> We seek comment on whether and how such data should be collected from a larger universe of voice and broadband providers.

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<sup>204</sup> See *2008 Broadband Data Gathering Order and Further Notice*, 23 FCC Rcd at 9692, para. 3.

<sup>205</sup> 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.<sup>206</sup> 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?<sup>207</sup> 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.<sup>208</sup> In 2008, the

<sup>206</sup> 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](http://www.fcc.gov/Daily_Releases/Daily_Business/2010/db1206/DOC-303263A1.pdf).

<sup>207</sup> 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.

<sup>208</sup> *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.”<sup>209</sup> Some urge the Commission to adopt this tentative conclusion,<sup>210</sup> while others object, arguing that forbearance was justified and the metrics set forth in those reports are irrelevant and outdated.<sup>211</sup>

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.<sup>212</sup> 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.<sup>213</sup>

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.<sup>214</sup> In contrast, most broadband providers that commented objected to adopting any service quality data requirements.<sup>215</sup> 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

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<sup>209</sup> *Id.* at 13655, para. 35.

<sup>210</sup> *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.

<sup>211</sup> *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.

<sup>212</sup> *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.

<sup>213</sup> California PUC Nov. 14, 2008 Comments, WC Docket No. 08-190 at 4.

<sup>214</sup> *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.

<sup>215</sup> *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.<sup>216</sup> 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?<sup>217</sup>

## 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.<sup>218</sup> We also permit filers to determine the organizational level at which they submit their filings.<sup>219</sup> For example, a parent or holding company may file on behalf of its subsidiaries or the subsidiaries may file their own Form 477.<sup>220</sup> 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

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<sup>216</sup> 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).

<sup>217</sup> 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.

<sup>218</sup> *FCC Form 477 Instructions* at 4.

<sup>219</sup> *Id.*

<sup>220</sup> *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."<sup>221</sup> 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 any ancillary data that would be helpful to include on consumer-facing resources, such as the national broadband inventory map?<sup>222</sup> 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.<sup>223</sup> 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.

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

<sup>222</sup> See *supra* Section II.B.2.b.

<sup>223</sup> 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.<sup>224</sup> 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.<sup>225</sup> The Form 477 program collects data that are “a critical precursor” to the Commission’s ability to fulfill these directives.<sup>226</sup> Form 477 also enables us to fulfill our obligation to reduce government regulation wherever possible,<sup>227</sup> 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.”<sup>228</sup> 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.<sup>229</sup> 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.<sup>230</sup> 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.<sup>231</sup> 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.<sup>232</sup> 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.<sup>233</sup>

109. We note that the Commission is reviewing its data dissemination practices in connection with the Data Innovation Initiative.<sup>234</sup> 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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<sup>224</sup> 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.

<sup>225</sup> 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).

<sup>226</sup> *2000 Data Gathering Order*, 15 FCC Rcd at 7719, para. 2.

<sup>227</sup> See 47 U.S.C. §§ 160(b), 161(a)(2).

<sup>228</sup> *2000 Data Gathering Order*, 15 FCC Rcd at 7720, para. 5.

<sup>229</sup> 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.”).

<sup>230</sup> BDIA § 103(b); 47 U.S.C. 1303(b).

<sup>231</sup> See 47 U.S.C. §§ 154(i), 154(k), 218, and 403.

<sup>232</sup> *2000 Data Gathering Order*, 15 FCC Rcd at 7727-28, 7758, paras. 16, 87.

<sup>233</sup> See generally *id.* at 7757-61, paras. 86-94.

<sup>234</sup> Press Release, *FCC Launches Data Innovation Initiative* (rel. Jun. 29, 2010), available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-299269A1.pdf](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?<sup>235</sup> Once deemed confidential, should data always be confidential, or does the passage of time diminish the commercial sensitivity of certain types of data?<sup>236</sup> When data are given confidential treatment, should the Commission establish a program to allow researchers access to those data under certain conditions?<sup>237</sup> 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,<sup>238</sup> and the privacy provisions of the Cable Act,<sup>239</sup> 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

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<sup>235</sup> 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.

<sup>236</sup> 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.

<sup>237</sup> 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).

<sup>238</sup> SCA, 18 U.S.C. § 2701 *et seq.*

<sup>239</sup> 47 U.S.C. § 551 *et seq.*

accurate and useful.”<sup>240</sup> 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.<sup>241</sup> 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<sup>242</sup> 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.<sup>243</sup> 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.<sup>244</sup> 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.<sup>245</sup> The International Bureau has released its first *International Broadband Data Report*, which presented data and information on international broadband

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<sup>240</sup> See NATIONAL BROADBAND PLAN at 185.

<sup>241</sup> “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.

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

<sup>243</sup> 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).

<sup>244</sup> *Seventh Broadband Deployment NOI*, 25 FCC Rcd at 11371, para. 37.

<sup>245</sup> 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.<sup>246</sup>

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.

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<sup>246</sup> 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](mailto: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](mailto: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](mailto: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](http://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),<sup>1</sup> 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).<sup>2</sup> In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.<sup>3</sup>

**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),<sup>4</sup> 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

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<sup>1</sup> 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).

<sup>2</sup> See 5 U.S.C. § 603(a).

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

<sup>4</sup> 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.<sup>5</sup> The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>6</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>7</sup> 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).<sup>8</sup>

### 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.<sup>9</sup> 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.<sup>10</sup> Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.<sup>11</sup> 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.<sup>12</sup>

<sup>5</sup> 5 U.S.C. § 604(a)(3).

<sup>6</sup> 5 U.S.C. § 601(6).

<sup>7</sup> 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.”

<sup>8</sup> 15 U.S.C. § 632.

<sup>9</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>10</sup> 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*).

<sup>11</sup> See *id.*

<sup>12</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-\\_skip=600&-ds\\_name=EC0751SSSZ5&-\\_lang=en](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.<sup>13</sup> 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.<sup>14</sup> 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.<sup>15</sup> Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.<sup>16</sup> 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.<sup>17</sup> In addition, 72 carriers have reported that they are Other Local Service Providers.<sup>18</sup> Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.<sup>19</sup> 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.<sup>20</sup> 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.<sup>21</sup> According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.<sup>22</sup> Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.<sup>23</sup> 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

<sup>13</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>14</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-\\_skip=600&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en)

<sup>15</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>16</sup> See *id.*

<sup>17</sup> See *id.*

<sup>18</sup> See *id.*

<sup>19</sup> See *id.*

<sup>20</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>21</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-\\_skip=600&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en)

<sup>22</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>23</sup> 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.<sup>24</sup> Under that size standard, such a business is small if it has 1,500 or fewer employees.<sup>25</sup> 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.<sup>26</sup> 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.<sup>27</sup> 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.<sup>28</sup> 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.<sup>29</sup> 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.<sup>30</sup> Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup> 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,<sup>34</sup> 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

<sup>24</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>25</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>26</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-\\_skip=600&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>27</sup> TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

<sup>28</sup> 13 C.F.R. § 121.201, NAICS code 517911.

<sup>29</sup> [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-geo\\_id=&-\\_skip=800&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>30</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>31</sup> See *id.*

<sup>32</sup> 13 C.F.R. § 121.201, NAICS code 517911.

<sup>33</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-geo\\_id=&-\\_skip=800&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en)

<sup>34</sup> 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.<sup>35</sup> 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.<sup>36</sup> According to Commission data,<sup>37</sup> 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.<sup>38</sup> 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.<sup>39</sup> 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.<sup>40</sup> Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.<sup>41</sup> 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.*<sup>42</sup> 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.<sup>43</sup> 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.<sup>44</sup> 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.<sup>45</sup> According to our data, at of September 2009, the number of 800 numbers assigned was 7,860,000; the number of 888 numbers

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<sup>35</sup> 13 C.F.R. § 121.201, NAICS code 517110.

<sup>36</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-fds\\_name=EC0700A1&-geo\\_id=&-\\_skip=600&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>37</sup> TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

<sup>38</sup> 13 C.F.R. § 121.201, NAICS code 517911.

<sup>39</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-geo\\_id=&-\\_skip=800&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>40</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>41</sup> See *id.*

<sup>42</sup> We include all toll-free number subscribers in this category, including those for 888 numbers.

<sup>43</sup> 13 C.F.R. § 121.201, NAICS code 517911.

<sup>44</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-geo\\_id=&-\\_skip=800&-ds\\_name=EC0751SSSZ5&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=800&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>45</sup> *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.<sup>46</sup> Prior to that time, such firms were within the now-superseded categories of “Paging” and “Cellular and Other Wireless Telecommunications.”<sup>47</sup> Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.<sup>48</sup> 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.<sup>49</sup> 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.<sup>50</sup> Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.<sup>51</sup> 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.<sup>52</sup> The SBA has approved these definitions.<sup>53</sup> The

<sup>46</sup> U.S. Census Bureau, 2007 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/naics/2007/def/ND517210.HTM#N517210>.

<sup>47</sup> 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>.

<sup>48</sup> 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).

<sup>49</sup> 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](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=700&-ds_name=EC0751SSSZ5&-lang=en).

<sup>50</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>51</sup> See *id.*

<sup>52</sup> *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.<sup>54</sup> 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.<sup>55</sup> The 2007 census also contains data for the specific category of “Paging” “that is classified under the seven-number NAICS code 5172101.<sup>56</sup> 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.<sup>57</sup> 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.<sup>58</sup> 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.<sup>59</sup> The SBA has approved these small business size standards.<sup>60</sup> An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.<sup>61</sup> 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

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<sup>53</sup> 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*).

<sup>54</sup> 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=&-skip=700&-ds\\_name=EC0700A1&-\\_lang=en](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-skip=700&-ds_name=EC0700A1&-_lang=en)

<sup>55</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>56</sup> See [http://factfinder.census.gov/servlet/IBQTable?\\_bm=y&-geo\\_id=&-skip=700&-ds\\_name=EC0751SSSZ5&-\\_lang=en](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.

<sup>57</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>58</sup> *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*).

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

<sup>60</sup> *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).

<sup>61</sup> *Id.* at 10085, para. 98.

standard for Wireless Telecommunications Carriers (except Satellite).<sup>62</sup> Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.<sup>63</sup> Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.<sup>64</sup> 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.<sup>65</sup> Of these, an estimated 222 have 1,500 or fewer employees and 212 have more than 1,500 employees.<sup>66</sup> 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.<sup>67</sup> Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.<sup>68</sup> 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.<sup>69</sup> 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.<sup>70</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>71</sup> 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.<sup>72</sup> On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22.<sup>73</sup> Of the 57 winning bidders in that auction, 48 claimed

<sup>62</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>63</sup> *Id.*

<sup>64</sup> 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](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-skip=700&-ds_name=EC0751SSSZ5&-lang=en).

<sup>65</sup> TRENDS IN TELEPHONE SERVICE, tbl. 5.3.

<sup>66</sup> *Id.*

<sup>67</sup> See *Trends in Telephone Service* at Table 5.3.

<sup>68</sup> See *id.*

<sup>69</sup> 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).

<sup>70</sup> See *PCS Report and Order*, 11 FCC Rcd at 7852, para. 60.

<sup>71</sup> See *Alvarez Letter 1998*.

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

<sup>73</sup> 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.<sup>74</sup> 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.<sup>75</sup> On May 21, 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction No. 71.<sup>76</sup> Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses.<sup>77</sup> On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78.<sup>78</sup> Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.<sup>79</sup>

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.<sup>80</sup> 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.<sup>81</sup>

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.

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

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

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

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

<sup>77</sup> *Id.*

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

<sup>79</sup> *Id.*

<sup>80</sup> *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).

<sup>81</sup> 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.<sup>82</sup> 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.<sup>83</sup> 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.<sup>84</sup> 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.<sup>85</sup> 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.<sup>86</sup> Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.<sup>87</sup> 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.<sup>88</sup>

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.<sup>89</sup> 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.<sup>90</sup> The SBA has approved these small business size standards for the 800 MHz and 900 MHz SMR Services.<sup>91</sup> 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.<sup>92</sup> Sixty bidders claiming that they qualified as small businesses under the

<sup>82</sup> 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).

<sup>83</sup> 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](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>84</sup> *220 MHz Third Report and Order*, 12 FCC Rcd at 11068-70, at paras. 291-95.

<sup>85</sup> *Id.* at 11068-70, para. 291.

<sup>86</sup> See letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

<sup>87</sup> See generally *220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (1998).

<sup>88</sup> *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (1999).

<sup>89</sup> 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

<sup>90</sup> 47 C.F.R. §§ 90.810, 90.814(b), 90.912.

<sup>91</sup> See *Alvarez Letter 1999*.

<sup>92</sup> “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.<sup>93</sup> 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.<sup>94</sup> 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.<sup>95</sup>

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.<sup>96</sup> 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.<sup>97</sup> 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.<sup>98</sup> 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.<sup>99</sup> 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.<sup>100</sup> 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.<sup>101</sup> SBA approval of these definitions is not required.<sup>102</sup> An auction of 52 Major Economic Area licenses commenced on September 6, 2000, and closed on September 21, 2000.<sup>103</sup> Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these

<sup>93</sup> *Id.*

<sup>94</sup> 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).

<sup>95</sup> See “Multi-Radio Service Auction Closes,” Public Notice, 17 FCC Rcd 1446 (WTB 2002).

<sup>96</sup> 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).

<sup>97</sup> See “800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced,” Public Notice, 16 FCC Rcd 1736 (WTB 2000).

<sup>98</sup> See generally 13 C.F.R. § 121.201, NAICS code 517210.

<sup>99</sup> 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*).

<sup>100</sup> See *746–764 MHz Band Second Report and Order*, 15 FCC Rcd at 5343, para. 108.

<sup>101</sup> See *id.*

<sup>102</sup> 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).

<sup>103</sup> 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.<sup>104</sup>

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.<sup>105</sup> 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.<sup>106</sup> 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.<sup>107</sup> These definitions were approved by the SBA.<sup>108</sup> 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.<sup>109</sup> A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).<sup>110</sup> 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.<sup>111</sup> 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.<sup>112</sup> Census data for

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

<sup>105</sup> 13 C.F.R. § 121.201, NAICS codes 517210.

<sup>106</sup> *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).

<sup>107</sup> *Id.*

<sup>108</sup> 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).

<sup>109</sup> The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

<sup>110</sup> BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

<sup>111</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>112</sup> 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.<sup>113</sup> 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.<sup>114</sup> 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,<sup>115</sup> private-operational fixed,<sup>116</sup> and broadcast auxiliary radio services.<sup>117</sup> They also include the Local Multipoint Distribution Service (LMDS),<sup>118</sup> the Digital Electronic Message Service (DEMS),<sup>119</sup> and the 24 GHz Service,<sup>120</sup> where licensees can choose between common carrier and non-common carrier status.<sup>121</sup> 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.<sup>122</sup> 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.<sup>123</sup> Of those 1,383,

<sup>113</sup> 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](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en).

<sup>114</sup> *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).

<sup>115</sup> See 47 C.F.R. Part 101, Subparts C and I.

<sup>116</sup> See 47 C.F.R. Part 101, Subparts C and H.

<sup>117</sup> 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.

<sup>118</sup> See 47 C.F.R. Part 101, Subpart L.

<sup>119</sup> See 47 C.F.R. Part 101, Subpart G.

<sup>120</sup> See *id.*

<sup>121</sup> See 47 C.F.R. §§ 101.533, 101.1017.

<sup>122</sup> 13 C.F.R. § 121.201, NAICS code 517210.

<sup>123</sup> 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](http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en).