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Washington, D.C. 20554

In the Matter of)
)
Local Competition and Broadband Reporting) CC Docket No. 99-301
)

NOTICE OF PROPOSED RULEMAKING

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I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (Notice), we propose rules to collect basic information about two important aspects of communications: the status of local telephone service competition and the deployment of "advanced telecommunications capability." We require this information for two reasons, both of which result from obligations imposed by the Communications Act of 1934, as amended.¹

2. First, we need timely and reliable information about the pace and extent of developing local competition in different geographic areas -- including rural areas -- in order to evaluate the effectiveness of actions this Commission and the states are taking to promote local competition, actions mandated by the Telecommunications Act of 1996.² Moreover, in section 706 of the 1996 Act, Congress instructed us to assess the availability of advanced telecommunications capability -- so-called broadband services such as high-speed internet access.³ We submitted our first report on broadband capability and deployment to Congress this past February, at which time we announced our intention to issue similar reports each calendar year.⁴ Simply put, we cannot accurately assess the development of local service competition and broadband deployment without timely and reliable information. We note, however, that the information collection proposed here would not be the only data that we would use to inform our next annual section 706 report. We also plan to issue a Notice of Inquiry, as we did last year, to seek comment from interested parties on the state of broadband capability and deployment.

3. Second, we require timely and reliable information about developing local competition and broadband deployment in order to avoid "one size fits all" regulation of incumbent local carriers and others, and, specifically, in order to reduce regulation wherever

¹ Communications Act of 1934, as amended, codified at 47 U.S.C. §§ 151 *et seq.* (the Communications Act or the Act).

² Telecommunications Act of 1996, Pub. Law No. 104-104, 110 Stat. 56, codified 47 U.S.C. §§ 151 *et seq.* (the 1996 Act). The 1996 Act amended the Communications Act of 1934.

³ Pub. Law No. 104-104, Title VII, § 706, reproduced in the notes under 47 U.S.C. § 157.

⁴ *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*. Report, CC Docket No. 98-146, FCC 99-5 (rel. Feb. 2, 1999) (*Advanced Telecommunications Report*). Key issues in evaluating broadband deployment include the state of competition in the residential broadband market, the existence of barriers to speedy deployment (especially of new technologies), the nature of demand for broadband among residential customers, and possible slow deployment in rural and low-income areas.

we can pursuant to new sections 10 and 11 of the Act.⁵ Section 10(b) requires the Commission to "consider whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services."⁶ Section 11 requires the Commission to undertake regular reviews of our existing regulations with a view towards their elimination. In relevant part, section 11 directs the Commission to "determine whether any . . . regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service."⁷ Gathering data about the development of local competition and broadband deployment will help ensure that we can properly evaluate the nature and impact of our existing regulation and, where appropriate, reduce or eliminate regulation.

4. Nonetheless, we are mindful of the need to limit, as much as possible, the burdens imposed by information collection and thus, we have constrained this effort to specifically targeted information. Although we think that additional information could prove useful to our tasks, we do not propose to ask carriers for information about, for example, investments, rates, revenues, earnings, traffic volumes, or other aspects of their operations. Instead, we propose to restrict collected information to that which is most essential to tracking the development of local competition and the deployment of broadband service to American consumers. To ensure that filing burdens on industry will remain minimal, moreover, we seek comment on how to ensure that the information collection program does not outlive its usefulness.⁸

5. We also believe that a single information collection program, appropriately designed to answer questions about both local competition and broadband deployment, will be less burdensome than two separate (and perhaps overlapping) programs. Indeed, it is our hope that the data collection form proposed here and included as Attachment A could replace or eliminate many similar, although not identical, reporting requirements currently imposed by the states.

6. Throughout this Notice, we seek comment on all the tentative conclusions we reach and on any other aspects of the proposed collection program that commenters wish to bring to our attention.

⁵ 47 U.S.C. §§ 160, 161.

⁶ 47 U.S.C. § 160(b).

⁷ 47 U.S.C. § 161(a)(2).

⁸ See ¶ 83, *infra*.

II. BACKGROUND

7. The 1996 Act imposed specific obligations on telecommunications carriers, particularly local exchange carriers (LECs), which are primarily designed to open telecommunications markets -- including local service markets -- to competitive entry, to promote universal service, and to lessen the need for government regulation of telecommunications. To achieve these overall goals, the statute directed us to adopt regulations to implement specific statutory requirements, including regulations governing the provision of interconnection of incumbent local exchange carrier (incumbent LEC) facilities with new local exchange service competitors, and the competitive entry of Bell Operating Companies (BOCs) into previously prohibited interexchange and other services markets. Central to these directives are new section 251, governing incumbent LEC provision of interconnection, unbundled network elements, and resold services to competitors,⁹ and new section 271, which provides a means whereby the BOCs may submit qualifying applications to enter certain interexchange, interLATA service markets.¹⁰ In short, although the 1996 Act did not confer on us jurisdiction to regulate local exchange service, it did task us with important roles in opening up all telecommunications markets -- including local exchange markets -- to competition.¹¹

⁹ 47 U.S.C. § 251.

¹⁰ 47 U.S.C. § 271.

¹¹ See *AT&T Corp. v. Iowa Utilities Board*, 119 S. Ct. 721 (1999).

8. Moreover, in section 706(b) of the 1996 Act, Congress directed us to monitor the pace of deployment of broadband services¹² to all Americans including, in particular, elementary and secondary schools and classrooms.¹³ Congress also instructed us, if we find that deployment is not "reasonable and timely," to take immediate action to lower barriers to investment and to promote competition. In our *Advanced Telecommunications Report*, we concluded that deployment of broadband to most residential consumers appeared timely and reasonable at the present time. We cautioned, however, that broadband deployment was in its initial stages and we proposed to monitor the future pace of broadband deployment and make regular reports about its progress and any necessary future regulatory undertakings on our part.¹⁴ Given the broad mandate of section 706, we have particular concerns about the deployment of broadband in rural areas.

9. Given these statutory mandates, and notwithstanding the importance of gathering timely and reliable information about the development of local competition and broadband deployment, we have not, heretofore, imposed mandatory data reporting requirements. Over the past two years we have, however, undertaken several initiatives to enhance our general understanding of the evolving nature of local competition.

10. First, we held an *en banc* hearing about the status of local competition in early 1998.¹⁵ Subsequently, the Common Carrier Bureau (Bureau) requested that nine large incumbent LECs complete, on a voluntary basis, a short survey about the status of local

¹² For simplicity, in this Notice we sometimes use the single term "broadband" to refer to facilities that have advanced telecommunications capability and/or services provided at retail to consumers on such facilities. The term broadband is generally used to convey sufficient capacity -- or bandwidth -- to transport large amounts of information. See, e.g., *Advanced Telecommunications Report* at n.2.

¹³ Section 706, the principal section of the 1996 Act concerning advanced telecommunications capability provides, in part:

SEC. 706. ADVANCED TELECOMMUNICATIONS INCENTIVES.

(a) IN GENERAL.--The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications markets, or other regulating methods that remove barriers to infrastructure investment.

1996 Act, § 706(a).

¹⁴ See *Advanced Telecommunications Report* at ¶ 7.

¹⁵ See *FCC to Conduct January 29 Presentation on Status of Local Telephone Competition*, Public Notice (rel. Jan. 22, 1998).

competition as of December 31, 1997.¹⁶ That survey, which the Bureau refined over the past year (and eventually expanded so as to include more incumbents and a small number of competitive LECs), provided the framework for a Bureau-issued Public Notice¹⁷ as well as this Notice. Finally, after reviewing the results of the voluntary surveys and surveying other publicly available information, the Bureau published a staff report, *Local Competition*, this past December.¹⁸

11. As participating carriers and Commission staff gained experience with the voluntary local competition survey, that survey evolved so as to focus primarily on the number and types of lines provided by incumbent LECs and by competitive LECs. Most recently, we have also taken initial steps to formalize the collection of data about broadband deployment. Following release of the *Advanced Telecommunications Report*, the Bureau revised the voluntary local competition survey to include questions about the number of broadband lines or channels in service to residential customers, and the technologies used to deliver those services. In March 1999, the Bureau invited a limited number of incumbent LECs and competitive LECs to participate in this revised voluntary survey by providing data on local competition and on broadband services provided to residential customers as of December 31, 1998.¹⁹

12. We have retained the basic format of the most recent voluntary survey for the collection program under consideration here, although we tentatively conclude, as explained in detail below, that a voluntary program cannot produce the comprehensive sets of data we require. The data collection form that we propose, which is set out in the form that appears

¹⁶ The nine carriers were asked to provide information for each state in which the carrier is an incumbent LEC. The form used in the first voluntary local competition survey can be accessed on the public internet at <http://www.fcc.gov/ccb/local_competition/survey>. Public (redacted) versions of the responses to that survey are posted at <http://www.fcc.gov/ccb/local_competition/survey/responses>.

¹⁷ See *Common Carrier Bureau Seeks Comment on Local Competition Survey*, Public Notice, 63 FR 29409, CC Docket No. 91-141, DA 98-839, 13 FCC Rcd 9279 (May 29, 1998) (*Local Competition Public Notice*). Parties who submitted comments or reply comments are listed in Attachment B of this Notice, and all references to comments or reply comments in this Notice refer to the *Local Competition Public Notice*.

¹⁸ See Common Carrier Bureau, Industry Analysis Division, *Local Competition* (rel. Dec. 1998) (summarizing, in section 3 of the report, voluntary local competition survey data as of Dec. 31, 1997 and June 30, 1998). This report was updated by Common Carrier Bureau, Industry Analysis Division, *Local Competition: August 1999* (rel. Aug. 1999).

¹⁹ This (fourth) voluntary local competition survey is posted on the internet at <http://www.fcc.gov/ccb/local_competition/survey4>, and public (redacted) versions of responses are posted at <http://www.fcc.gov/ccb/local_competition/survey4/responses>. This version of the voluntary survey also was used to request data as of June 30, 1999. See <http://www.fcc.gov/ccb/local_competition/survey5>.

in Attachment A, differs from the voluntary surveys in two key respects. First, we tentatively conclude, as explained more fully below, that because certain mobile wireless services have the potential to compete with local exchange services provided by incumbent LECs and competitive LECs, we must include data about the availability of such services if we are to accurately assess the evolving status of local competition.²⁰ Second, we tentatively conclude, again as discussed below, that it is appropriate to collect data on broadband deployment to business customers, as well as to residential customers.²¹ The form in Attachment A, which we propose to apply to a large class of telecommunications carriers and other entities, therefore provides the framework for discussion in the remainder of this Notice.

III. LOCAL COMPETITION AND BROADBAND REPORTING

13. We tentatively conclude, based on experience gained in the course of five voluntary surveys, and taking into consideration arguments made in response to the Bureau's *Local Competition Public Notice* and the conclusions we reached in the *Advanced Telecommunications Report*, that we should require certain carriers and other entities, identified herein, to report information about local competition and broadband deployment in at least the level of detail that is specified in the form that appears in Attachment A, in accordance with the Proposed Rules set out in Attachment B. Regulatory policies that are based on incomplete information are less effective than regulation based on an informed evaluation of what is actually happening in markets. Moreover, regulation based on incomplete data about market conditions and trends can, in certain cases, create costs that end up exceeding benefits. Although the voluntary data collection program that has been in place for the past year yielded some helpful information, in our experience, only a comprehensively imposed, mandatory data collection effort will provide us with a set of data of uniform quality and reliability.

14. In this regard, we take note of a recent resolution of the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC Board) that it "supports federal efforts to collect consistent data on local competition and broadband

²⁰ See ¶¶ 28-30, *infra*.

²¹ See ¶ 32, *infra*.

deployment on a state-by-state basis."²² The NARUC Board observed, and we agree, that reliable information is required if state and federal regulators are to fashion policies to carry out Congress's directive to encourage local telephone competition and the widespread deployment of broadband services.²³ The NARUC Board also observed that "the Federal Communication Commission's current, voluntary data collection efforts do not elicit complete and fully comparable data on local competition and broadband deployment."²⁴

15. We note the suggestion by some commenters in the Bureau's Public Notice proceeding that, in lieu of creating a federal program, the Commission should rely on state data collection efforts and other, publicly available information.²⁵ Again, we think that, in this regard, the resolution adopted by the NARUC Board is telling about the need for a comprehensive *federal* program. We recognize that various states have implemented local competition reporting requirements and that these state programs tend to ask for information

²² The resolution continues as follows:

RESOLVED, that future federal collections of data on local competition and broadband deployment should be conducted on a comprehensive basis; and be it further

RESOLVED, that federal data collections should use the same definitions of geographic areas to the extent possible as used by a state when that state requires local competition or broadband deployment data to be reported for geographic areas smaller than the entire state; and be it further

RESOLVED, that the FCC continue to work with the states and with the industry to determine appropriate and reasonable data collection efforts that are not unduly burdensome or costly.

See Resolution On The Importance Of Systematically Collecting Data On Local Competition And Broadband Deployment, Resolutions Adopted by NARUC Board of Directors, Washington, D.C., Feb. 24, 1999, available at <<http://www.naruc.org/rescont.htm#Collecting Data>>.

²³ *Id.*

²⁴ *Id.*

²⁵ *See, e.g.*, BellSouth Comments at 5-6 (referencing several specific surveys by state PUCs; noting, in general terms, the existence of corporate, consultant, and investment analyst reports, and petition, notice-and-comment, and informal procedures available to the Commission); GVNW Comments (noting that some desired information is available from state PUCs); USTA comments at 3-5 (noting various and disparate public data sources) and 9 (recommending a Notice of Inquiry). *But see*, SBC Comments at 2-3 (alternative sources, such as 911/E911 databases, are inferior to direct reporting of lines served by carriers).

similar to that we seek here.²⁶ These state programs, however, are not uniform and differ sufficiently so that carriers serving different states may need to keep multiple sets of records in order to meet similar, but not identical, reporting requirements.

16. We think that a properly designed federal program can complement state efforts and end up reducing the reporting burdens imposed, overall, on carriers. We have directed our staff to work closely with state staffs to develop a system of tracking local competition and broadband deployment information that will eliminate as much duplication as possible. Ideally, using one data base, a carrier serving multiple states will be able to comply with our filing requirements and those of the individual states it serves.

17. It is also our experience that other publicly available information sources present less than complete pictures of actual conditions and trends in developing local service markets and in the deployment of broadband. Much publicly available analysis is based on company reports to shareholders and to other regulatory agencies. But these sources are problematical. For example, companies may rely on a variety of different -- and inconsistent -- measures in reporting information such as the number and capacity of lines in service. Among LECs, some may report information, such as the share of total access lines provided solely over their own facilities, in greater detail than other companies report. Moreover, financial and investment analysts tend to collect more complete information about publicly traded companies than about privately held companies, and may choose to analyze closely only a subset of companies.

18. It has been our experience that voluntary surveys are not a fully satisfactory source of provider data. The Bureau's five voluntary surveys conducted to date have yielded much useful information about evolving patterns of local competition, but participation has been spotty. Incumbent and competitive LEC survey respondents have not provided comprehensive information in all cases and some of the firms invited to participate have been unwilling to provide any information at all. In other cases, participating firms have responded only to some of the surveys. Furthermore, even carriers that have participated actively in the voluntary surveys have informed us informally that they are not interested in participating in voluntary efforts in the long run without the required participation of a more comprehensive

²⁶ For example, the Public Utility Commission of Oregon recently directed staff to conduct a mandatory survey of competition for local exchange services. See Public Utility Commission of Oregon, Order No. 98-506, available at <<http://www.puc.state.or.us/orders/98orders/98-506.htm>>. The Florida Public Service Commission collects and reports such information annually See Florida Division of Communications, *Competition in Telecommunications Markets in Florida*, Dec. 1998, and Dec. 1997.

set of providers.²⁷ Finally, the mere fact that participation has been voluntary may have encouraged participants to treat data collection as a provisional and unsystematic effort that does not require carrier reporting systems that can produce accurate and consistent results.

19. Comprehensive data about broadband deployment as solicited in the survey that appears in Attachment A would also aid our efforts in implementing section 706 of the 1996 Act. We ask commenters to identify, with particularity, any alternative sources that will both yield us the information we need and be less burdensome on reporting entities.

20. For all these reasons, we tentatively conclude that only a mandatory and systematic collection of local competition and broadband deployment information will provide the comprehensive set of reliable data we require to carry out our statutory mandates. We emphasize, however, that we invite comment on this conclusion and our analysis.

21. We also tentatively conclude that only a program of data collection as comprehensive as that embodied in the survey in Attachment A will produce meaningful data sufficient to allow us to accurately gauge the future development of local competition and broadband deployment throughout the United States. While we fully intend to supplement the data we propose to collect with non-duplicative data from state and other public sources, we tentatively conclude that the data gathering survey set out in Attachment A provides a necessary framework for accurately analyzing the future development of local competition and broadband deployment. We invite comment on this conclusion, particularly on whether the approach taken will yield data that will enable us to adequately gauge developments in all geographic areas, including rural areas.

22. We now proceed to consider individual elements -- and associated issues -- of the data collection program set out in the attached survey.

²⁷ Carriers that have expressed concern that the voluntary surveys have not been sufficiently inclusive include Bell Atlantic, BellSouth, and SBC. *See, e.g.*, letter from Dee May, Bell Atlantic, to Larry Strickling, Common Carrier Bureau (Dec. 24, 1998) (Bell Atlantic particularly looks forward to the time when both incumbent LECs and new entrants participate in the data collection effort); letter from W.W. (Whit) Jordan, BellSouth, to Larry E. Strickling, Common Carrier Bureau (Aug. 31, 1998) (a complete picture of local competition requires accurate and reliable data from all providers of local exchange service, including wireless providers; listing eleven competitive LECs operating in BellSouth's territory that were not invited to participate in the second voluntary survey); and letter from Todd F. Silbergeld, SBC Communications, Inc. to Peyton L. Wynns, Common Carrier Bureau (May 4, 1999) (all providers of local exchange and exchange access services must participate in order to have a complete and accurate picture of local competition).

A. Types of Entities That Must Report

23. In this section we discuss the types of entities that should be required to report data describing the extent and intensity of local competition and the extent of broadband services deployment. We discuss requirements with respect to local competition data first.

24. Our objective is to collect sufficient information about the evolving status of local competition to achieve the regulatory flexibility, pro-competition, and universal service objectives of the 1996 Act, while imposing on carriers the fewest burdens consistent with our need for the information.²⁸ We believe that the local competition information we propose to collect is less extensive than the information some carriers make publicly available on their own initiative²⁹ and, we believe, is not overly burdensome. By requiring all reporting carriers to provide information that is based on the same definitions and assumptions, moreover, we will assure that the information is comparable across reporting companies and consistently meaningful.

25. Based on our determination that we need comprehensive data about developing local services competition, we tentatively conclude that large and medium incumbent LECs -- as well as their wireline and fixed wireless telephony competitors, and also their mobile wireless telephony potential competitors -- should complete the survey.³⁰ We tentatively conclude, as discussed below,³¹ that we should require carriers with 50,000 or more local access lines or channels (of any capacity) nationwide, or 50,000 or more subscribers nationwide to file information pursuant to this program. Thus, we make specific provision to exempt most smaller carriers from the requirement to report local competition data. We seek comment, however, as to whether we should lower the proposed threshold for the reporting requirement in order to obtain data regarding developments in rural areas and, if so, whether

²⁸ We note that the Commission's authority to obtain full and complete information necessary to perform its duties and achieve the objects for which it was created is established in sections 4(i), 201(b), 215, 218, 219, and 220 of the Communications Act of 1934, as amended. 47 U.S.C. §§ 154(i), 201(b), 215, 218, 219, and 200. *See, e.g.*, Reply Comments of AT&T at 9-10.

²⁹ SBC, for example, makes frequent *ex parte* presentations in which it reports data on more aspects of local competition than we propose to collect in this Notice. *See, e.g.*, letter with attachment titled "1998 Year-End Competition Report," from Todd F. Silbergeld, SBC Communications Inc., to Magalie Roman Salas, Secretary, Federal Communications Commission, *In the Matter of Application by SBC Communications Inc., et al. for Provision of In-Region, InterLATA Services in Oklahoma, CC Docket No. 97-121* (Feb. 17, 1999).

³⁰ Sections I - III of the survey request information about local competition activities of wireline and fixed wireless LECs. Section VI requests information about local competition activities of mobile wireless telephony carriers.

³¹ *See* ¶¶ 38-40, 42, *infra*.

there is a less burdensome means of collecting such data from smaller carriers.³² We also tentatively conclude that each reporting carrier should, at a minimum, provide the required information for each state in which the carrier provides local exchange or exchange access service, or mobile wireless telephony service, throughout the reporting period.³³

26. We tentatively conclude that we should receive local competition data from competitive LECs as well as from incumbent LECs because our experience with the voluntary surveys shows that we cannot get a reasonably accurate picture of the status of local competition only from incumbent-provided information. For example, to the extent that a competing local telephone service provider supplies service to customers using only its own facilities, its customer lines would not be included in reports of incumbent LECs. We believe, moreover, that comprehensive information about lines provided solely over competitive LEC facilities is not available from any public source.

27. Moreover, consistent with our need for comprehensive local competition information, we tentatively conclude that the obligation to complete the survey should not depend on the type of technology that an incumbent LEC or a competitive LEC uses to provide local service. We tentatively conclude, therefore, that the requirement to report data on local competition should apply to all LECs meeting a defined threshold for reporting regardless of whether the LEC utilizes wireline or wireless technologies to provide local service. Thus, for example, competitive LECs, duly authorized as such by the appropriate state authorities, which utilize fixed wireless technology will be required to complete the survey if they otherwise qualify. Similarly, duly authorized competitive LECs which provide local exchange service over a hybrid fiber-coax platform will be required to complete the survey if they otherwise qualify.

28. Further, because certain mobile wireless services have the potential to become significant substitutes for local exchange services offered by incumbent LECs or competitive LECs, we also believe it necessary to monitor the development of these services to a limited extent. Mobile wireless services include both terrestrial commercial mobile radio services (CMRS) and satellite telephone services. Broadly speaking, CMRS can be divided into two

³² See also ¶ 44, *infra*.

³³ See ¶¶ 48-49, *infra*. We intend that the term "state" shall include the fifty (50) states, the District of Columbia, and Puerto Rico. We discuss the reporting period in Section III(B), *infra*.

major categories: mobile telephony and mobile non-telephony services.³⁴ The mobile telephony market generally includes facilities-based providers of cellular, broadband personal communications service (PCS), and specialized mobile radio (SMR) services that offer real-time, two-way switched voice service that is interconnected with the public switched network utilizing an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls, as well as resellers of these services. We have previously concluded in another context that these providers have the potential to compete directly with traditional providers of wireline telephony services.³⁵ We note also that we have found that typical broadband PCS and cellular telephony services meet the statutory definition of telephone exchange service.³⁶ We recognize, however, that in the specific context of a section 271 application, both Congress and the Commission have articulated standards that restrict the consideration of mobile wireless services when determining the presence of a facilities-based competitor.³⁷ We nevertheless believe that, because of their practical potential as a substitute for wireline service,³⁸ it would be valuable to obtain data on the deployment of mobile wireless services. We seek comment on this tentative conclusion.

³⁴ See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Third Report, FCC 98-81 (rel. June 11, 1998) (*Third Annual CMRS Competition Report*) at 55 (noting that "non-telephony" is a catchall phrase for non-voice services such as paging, two-way text messaging, e-mail, faxes, and internet access).

³⁵ See *Telephone Number Portability*, CC Docket No. 95-116, Second Memorandum Opinion and Order and Order on Reconsideration, 13 FCC Rcd 21204, 21228-31, ¶¶ 51-59 (1998); see also *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Memorandum Opinion and Order, 12 FCC Rcd 22665, 22702-05, ¶¶ 75-83 (1997).

³⁶ See *Application of BellSouth Corporation, et al. Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Louisiana*, Memorandum Opinion and Order, CC Docket No. 98-121, FCC No. 98-271 (rel. Oct. 13, 1998) at ¶¶ 28-30 (*BellSouth Louisiana Order*). While we reached our conclusion in the context of a section 271 application, the status of mobile wireless telephony service in the local market may enable future decisions to regulate wireline telephony services in a flexible manner.

³⁷ For example, the Commission has determined that broadband PCS carriers may be considered competitors, within the meaning of section 271(c)(1)(A), only to the extent that their service is being used to replace wireline service, not as a supplement to wireline service. *BellSouth Louisiana Order* at ¶ 31. Moreover, pursuant to section 271(c)(1)(A), cellular telephone service may not be treated as telephone exchange service when considering the presence of a facilities-based competitor under Track A. 47 U.S.C. § 271(c)(1)(A).

³⁸ For example, as the Commission has previously stated, there is evidence to suggest that PCS providers "appear to be positioning their service offerings to become competitive with wireline service." *BellSouth Louisiana Order* at ¶ 33.

29. In addition to terrestrial CMRS providers, providers using satellite technology can also offer mobile telephony services. Satellite services, particularly Geo-stationary L-band mobile satellite services and Big Low Earth Orbit systems, may in the future become significant providers of mobile telephony services in the United States.³⁹

30. Given the potential for mobile wireless services to substitute for wireline local telephony, we tentatively conclude that we should require providers of mobile wireless telephony services in the categories described above that serve 50,000 or more subscribers nationwide to report the limited information on number of subscribers that is requested in the survey.⁴⁰ So long as we receive this information on, at a minimum, a state-specific basis, we believe we will be able to develop an accurate sense of the developing potential of mobile telephony to substitute for wireline local service. At the same time, we consider that the limited amount of information sought from mobile service providers will impose the smallest burden on such carriers consistent with our need to have access to necessary information.

31. Turning to a consideration of requirements to report data on the extent of broadband services deployment, we tentatively conclude that, given our broad statutory mandate to evaluate the deployment of broadband services, regardless of the transmission media or technology employed,⁴¹ the survey should include questions about the deployment of what we term "full broadband" services.⁴² We also tentatively conclude, as discussed below,⁴³ that any entity that provides at least 1,000 full broadband service lines (or wireless channels), or has at least 1,000 full broadband subscribers, should be required to complete all relevant parts of the survey,⁴⁴ regardless of whether that entity meets the criterion for reporting local competition data (*i.e.*, at least 50,000 nationwide local access lines or telephony subscribers)

³⁹ Only Iridium among the four licensed Big LEO systems has commenced offering commercial service. See "Iridium Shares Fall After News of Missed Goals," *Wall Street Journal* (May 17, 1999) (noting Iridium had 10,294 users at the end of March).

⁴⁰ Section VI of the survey contains the local competition questions that are relevant to those providers of mobile wireless telephony services that are required to complete the survey.

⁴¹ See 1996 Act, § 706(b), (c)(1).

⁴² The particular questions appear in Sections IV and V of the survey in Attachment A, *infra*.

⁴³ See discussion at ¶ 41, *infra*.

⁴⁴ The relevant parts of the survey are those containing questions that pertain to the reporting entity's operations. Thus, it is possible, for example, that a LEC with fewer than 50,000 local access lines in service could have 1,000 or more broadband lines in service, in which case that LEC would complete Sections I - III of the survey (concerning local competition) as well as Sections IV and V (concerning broadband services). A mobile telephony provider in comparable circumstances would complete Sections IV, V, and VI of the survey.

discussed above. We recognize, however, that entities may provide services with bandwidth that exceeds voice grade but is less than 200 kilobits per second (Kbps). We seek comment on the extent to which the Commission should consider services deployed in this range of bandwidth in assessing the progress of broadband deployment. We also seek comment on the extent to which, in assessing the progress of broadband deployment, the Commission should consider the bandwidth necessary to accommodate specific services.

32. Actual or potential providers of broadband services may include: LECs (incumbent and competitive, both resale and facilities-based, regardless of the technology used), cable television companies, utilities, MMDS/MDS/"wireless cable" carriers, mobile wireless carriers (both terrestrial and satellite-based), fixed wireless providers, and others.⁴⁵ We believe that only by casting our net wide enough to include all such entities can we discern progress, or the lack of it, in meeting the goals stated in the *Advanced Telecommunications Report*: a competitive broadband market with many providers, many competing technologies bringing broadband to consumers, and new technologies increasing the capacity of the consumer's broadband service and, in turn, creating demand among consumers for new applications. We note that these goals were articulated in terms of *residential* consumers in the *Advanced Telecommunications Report*. As a result, we could limit our collection of broadband data to broadband lines provided to residential consumers. We believe, however, that we should cast our net wider and gather data about all broadband deployment, in other words, broadband deployment to both residential and business customers. Although we concluded in the *Advanced Telecommunications Report* that broadband deployment to business customers has been "reasonable and timely," only a complete set of data will allow us to analyze broadband deployment for all market segments. We seek comment on this analysis and our tentative conclusions.

33. We note the broad range of the types of entities which, under this approach, will need to determine whether they are required to report broadband data, and we tentatively conclude that most of these entities will find that they have a relatively easy time making that determination because they do not now provide broadband services to customers and may not do so for some time to come. Nevertheless, we ask whether there is some less intrusive and burdensome way to track the deployment of broadband services consistent with the mandate of section 706. We specifically invite comment about the scope of entities from which we propose to collect data.

⁴⁵ See, e.g., *Advanced Telecommunications Report* at ¶¶ 54-61 (outlining the deployment of broadband facilities by different kinds of companies).

34. Some broadband facilities and services may not be "telecommunications" within the precise terms of the Communications Act of 1934, as amended,⁴⁶ but may as a practical matter be competitive with broadband telecommunications. One such service is broadband provided over cable television systems. We do not decide whether cable-based broadband is "telecommunications," but we include it within the scope of our questions because it competes directly with services that are telecommunications.⁴⁷

B. Frequency of Reports

35. Regarding local competition data, a majority of parties who commented upon this issue in the Bureau's *Local Competition Public Notice* proceeding concluded that the information required by the survey should be reported each calendar year quarter.⁴⁸ Our own experience with the voluntary surveys tends to indicate that annual or semiannual reporting may be inadequate for tracking with specificity the development of local competition. We disagree with those commenters who supported more frequent reporting by incumbent LECs than by new entrants.⁴⁹ We ask commenters in this proceeding to address whether quarterly, semi-annual, or annual reporting would best serve the goals of this data collection program.

36. We also believe that broadband services data will be most useful for our purposes if it is consistently obtained from all reporting entities. We therefore seek comment on whether broadband services also should be reported quarterly, semi-annually, or annually.

C. Exempting Smaller Entities

37. As noted above,⁵⁰ we want to explore whether we can totally exempt some carriers from reporting without materially affecting our ability to effectively assess the development of local competition. As also discussed in this section, however, we need to

⁴⁶ See, e.g., 47 U.S.C. § 153 (43).

⁴⁷ See *Advanced Telecommunications Report* at ¶ 24.

⁴⁸ See, e.g., Allegiance Telecom Comments at 2 and TRA Comments at 5 (quarterly reporting by competitive LECs; monthly reporting by incumbent LECs); Ameritech Comments at 13 (quarterly reporting appropriate due to the dynamic nature of the marketplace); GSA Comments at 8 (quarterly reporting appropriately balances timely information and reporting burden); MCI Comments at 8 (data submitted annually or semi-annually would be outdated and therefore useless to the Commission).

⁴⁹ See, e.g., Allegiance Telecom Comments at 2 and TRA Comments at 5 (quarterly reporting by competitive LECs; monthly reporting by incumbent LECs).

⁵⁰ See ¶ 25, *supra*.

consider exemption criteria separately as applied to broadband service providers because section 706 requires us to monitor the deployment of broadband regardless of the technology or transmission media employed,⁵¹ and we anticipate that some broadband service providers will not provide telephone service.

38. Based on our experience with the voluntary surveys, we tentatively conclude that we can exempt any incumbent or competitive LEC with fewer than 50,000 nationwide local access lines⁵² (of any capacity) from our proposed reporting requirements unless, as discussed below, that carrier provides 1,000 or more "full broadband" lines to customers nationwide. Although the number of companies reporting will change over time, our preliminary estimate is that, if this exemption were adopted, fewer than 50 of the nation's (incumbent plus competitive) LECs would remain subject to our proposed reporting requirements.⁵³ Additional reasons for considering this reporting threshold include: our expectation that almost all of the reporting companies will have substantial resources; the threshold was suggested by certain commenters in the Bureau's *Local Competition Public Notice* proceeding, such as individual rural LECs and NTCA, that have direct experience with the costs of reporting burdens imposed on small carriers; and, as discussed below,⁵⁴ this

⁵¹ See 1996 Act, § 706(b), (c)(1).

⁵² The term "access line" is in widespread use within the incumbent LEC part of the industry, where the term is generally understood, if not always consistently defined in every detail. Also, many major competitive LECs report local access lines in service, or a similar measure. See, e.g., "e.spire Reports Strong Third Quarter Growth," e.spire Communications, press release, Nov. 4, 1998 (34,000 access lines installed in quarter; total installed access lines reaches 116,000); "ITC^DeltaCom Reports Fourth Quarter Financial Results," ITC^DeltaCom, press release, Feb. 24, 1999 (total of approximately 32,200 local lines in service at end of 1998). Wall Street analysts summarize such information and develop their own forecasts of "access line equivalents" for major competitive LECs. See, e.g., J.H. Henry and M. Wolf, "Global Competitive Telecom Weekly," Bear Stearns & Co., Inc. (Mar. 15, 1999) at tbl. 2.; D. Reingold, M. Kastan, and S. Cross, *CLEC Vital Signs: Update For 4Q98 Results*, Telecom Services--Local, Merrill Lynch & Company (22 Mar. 1999) at tbl. 8. We therefore believe that we can allow local exchange carriers to rely on their own reported, or calculated, values for "access lines" -- for the limited purpose of establishing a threshold requirement to report local competition information -- without affecting the usefulness of the proposed local competition information collection.

⁵³ About 35 of the nation's incumbent LECs, and about 15 of the nation's competitive LECs, would appear to meet the criterion of 50,000 access lines in service. For perspective, there are over 1,300 incumbent LECs and over 200 (facilities-based and resale) competitive LECs. See Common Carrier Bureau, Industry Analysis Division, *Local Competition* (rel. Dec. 1998) at tbl. 4.1 (146 competitive LECs that own at least some facilities, as of the third quarter of 1998); Telecommunications Resellers Association (TRA), attachment to letter to Hon. Tom Bliley, Dec. 1, 1998 at item 1 (175 TRA members offer competitive local exchange service) and appendix (56% of members use only resale to provide local service).

⁵⁴ See ¶ 42, *infra*.

particular threshold is one element of the definition of rural telephone company in the 1996 Act, a status that may qualify a company for exemption from interconnection duties set out in section 251 of the 1996 Act.⁵⁵

39. We observe that mobile telephony providers typically do not report numbers of access lines *per se* but instead report number of subscribers,⁵⁶ and we tentatively conclude that we may use number of nationwide subscribers in place of number of access lines in exempting mobile wireless telephony providers from the reporting requirement. Because mobile wireless telephony services are, as yet, potential substitutes for wireline telephony services in the marketplace, we require relatively little information from mobile wireless service providers at this time. We do require information about the potential presence of such carriers in the market, however, and we simply ask for the number of customers to which they provide service in each state, and possibly in smaller geographic areas,⁵⁷ in which they provide service. Mobile telephony providers do not report subscribership data to the Commission, and we therefore do not know the precise number of mobile telephony providers with at least 50,000 subscribers. Based on data available to us at present, we estimate that between 40 and 70 mobile telephony providers, including the mobile telephony affiliates or operating divisions of LECs, will be required to report data on their mobile telephony operations.⁵⁸

40. With respect to cable companies providing local exchange telephony services, we seek comment about the appropriate threshold for complying with our proposed reporting requirement. We expect that such cable companies typically must obtain specific

⁵⁵ See 47 U.S.C. § 251(f).

⁵⁶ See, e.g., CTIA's *Semi-Annual Wireless Industry Survey*, visited 5/14/99 at <<http://www.wow-com.com/wireless/survey>>.

⁵⁷ See ¶¶ 48-49, *infra*.

⁵⁸ Public sources of data on mobile telephony subscribership of individual carriers are summarized and analyzed in *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Fourth Report, FCC 99-136 (rel. June 24, 1999) (*Fourth Annual CMRS Competition Report*). Reliable public data are sparse for facilities-based cellular operators with fewer than about 300,000 subscribers, and also for resellers of mobile telephony services. All such carriers are required to report annual revenues to the Commission for its use in determining Telecommunications Relay Service fees, however. When combined with an estimate of a typical subscriber's monthly bill, these revenue data (which are not made public on an individual company basis) allow us to derive a preliminary estimate of the number of mobile telephony carriers (including all affiliated or jointly operated entities) with at least 50,000 subscribers.

authorization from state public utility commissions before offering such service.⁵⁹ Thus, such companies would in principle be included in our estimate of the number of (competitive plus incumbent) LECs that would remain subject to our proposed reporting requirements if the reporting threshold is 50,000 local access lines.⁶⁰ While at least some cable companies that provide local telephony service compile and report numbers of telephone lines or circuits provided,⁶¹ we note that cable companies typically describe their cable television service reach in terms of number of actual subscribers. In light of this practice, we seek comment whether the threshold for these companies should be described in terms of actual telephony subscribers, e.g., more than 50,000 telephony subscribers.⁶² Moreover, while we believe it possible that many cable companies offering local exchange services may not reach the trigger of 50,000 access lines or subscribers, it may nevertheless be desirable to obtain information from those companies, given the wide deployment of their infrastructure. Thus, we seek comment on whether some other measure, such as the number of homes passed by cable telephony services, would be a more desirable threshold for reporting actual lines or subscribers served by cable companies.

41. With respect specifically to broadband service, and irrespective of the criteria for reporting local competition data discussed above, we note that Congress has directed us to track the deployment of advanced telecommunications capability⁶³ to all Americans, including those in rural areas. Thus, we tentatively conclude that we should establish a more comprehensive (albeit more burdensome) reporting requirement for providers of broadband services to ensure that we do not miss broadband developments by smaller entities, for

⁵⁹ See, for example, Cox Communications, Inc., SEC 1998 Form 10-K Annual Report (filed Mar. 29, 1999) (*Cox 1998 10-K*) at 35 (new entrants providing local exchange services typically must apply for and receive state certification and operate in accordance with state commission pricing, terms and quality of service regulations).

⁶⁰ See ¶ 38, *supra*.

⁶¹ For example, MediaOne Group reports number of residential telephone lines (13,000 as of 12/31/98) as well as number of high speed data (i.e., internet access service) subscribers (84,000). See MediaOne Group, Inc. SEC 1998 Form 10-K Annual Report (filed Mar. 30, 1999) at 11. Similarly, Cox Communications reports, for residential telephony customers, both number of customers (27,819 as of 12/31/98) and number of lines (42,668) and, for business telephony customers, number of voice grade equivalent circuits (322,615). See *Cox 1998 10-K* at 7.

⁶² Because cable television companies currently do not provide telephony subscriber data to the Commission, we have no estimate of the number of cable companies, if any, that have at least 50,000 (residential plus business) telephony subscribers nationwide.

⁶³ Section 706 of the 1996 Act specifies both the ability to send and to receive information at high speeds. See, e.g., *Advanced Telecommunications Report* at ¶¶ 20-25.

example, in rural areas. We tentatively conclude, in particular, that any firm that provides "full broadband" service (which we define here as information carrying capacity over 200 Kbps capacity in each direction, simultaneously) to at least 1,000 customers nationwide should be required to complete the survey.⁶⁴ We note that what we term "full broadband" for purposes of this Notice accords with the definition of advanced telecommunications capability that we adopted in the *Advanced Telecommunications Report*. However, as discussed above, entities may provide services with bandwidth that exceeds voice grade but is less than 200 Kbps. As noted above, we seek comment on the extent to which the Commission should consider services deployed in this range of bandwidth in assessing the progress of broadband deployment. We also seek comment on the extent to which, in assessing the progress of broadband deployment, the Commission should consider the bandwidth necessary to accommodate specific services.⁶⁵ Finally, we seek comment on whether, in the alternative, we should use the asymmetric services that we term "one-way broadband" provided to customers as the criterion for determining which providers should complete the survey.⁶⁶ We ask for comments on our overall data collection approach as applied to broadband service providers in particular.

42. With respect to our proposed 50,000 nationwide access line reporting criterion for LECs, we note that the 1996 Act provides some guidance about alternative ways in which small LECs might be identified, although the term "small LEC" is not defined there.⁶⁷ In particular, a number of alternatives for identifying a "rural telephone company" are set out.⁶⁸

⁶⁴ We reiterate that we do not decide here whether broadband service provided over cable television systems is "telecommunications." See ¶ 34, *supra*.

⁶⁵ See ¶ 31, *supra*.

⁶⁶ See ¶ 65, *infra*.

⁶⁷ We note that, for the purposes of its Regulatory Flexibility Act Analyses, the Commission applies a definition of small LEC that was developed by the Small Business Administration. See Section IV.B., Initial Regulatory Flexibility Act Analysis.

⁶⁸ Section 3(37) of the Communications Act of 1934, as amended, defines:

RURAL TELEPHONE COMPANY.--The term "rural telephone company" means a local exchange carrier operating entity to the extent that such entity--

(A) provides common carrier service to any local exchange carrier study area that does not include either--

(i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or

(ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;

One of these defines a rural telephone company as providing fewer than 50,000 access lines.⁶⁹ We believe this definition has certain advantages in the context of reporting data on local competition. The definition is relatively precise, and therefore relatively easy to interpret, and it does not incorporate the regulatory terminology of "study area," which, strictly speaking, applies to service areas of incumbent LECs. A number of commenters in the *Local Competition Public Notice* support an exemption of some sort from reporting data on local competition; comments received from groups and associations of smaller incumbent LECs, in particular, suggest 50,000 access lines as the appropriate criterion for exempting carriers from a requirement to report data on local competition.⁷⁰ By contrast, the 1996 Act provides no guidance about defining a small provider of broadband services.⁷¹

43. Based on the exemptions we propose, the following entities would be required to file the survey: (1) any carrier (including, collectively, all majority owned or commonly controlled affiliates) with at least 50,000 nationwide *incumbent LEC* access lines in service will complete a separate survey to report data for the *incumbent LEC* operations, including the

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- (B) provides telephone exchange service, including exchange access service, to fewer than 50,000 access lines;
 - (C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or
 - (D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

47 U.S.C. § 153(37).

⁶⁹ See 47 U.S.C. § 153(37)(B).

⁷⁰ See, e.g., Comments of Rural LECs at 2 and Reply Comments of NTCA at 2 (Commission should exempt from reporting any small incumbent LEC that serves fewer than 50,000 access lines nationwide). See also, ALTS Comments at 5 (only carriers with operating revenues of over \$10 million should be required to report); TRA Comments at 4 (the Commission might consider a threshold of 10,000, or even 25,000, service lines within a reporting area); USTA Comments at 8 (urges the Commission not to require reporting by small, rural, and mid-size incumbent LECs).

⁷¹ For example, the market for broadband services to residential customers is relatively new, dynamic, and untested, and the total number of broadband services provided to residential customers is not large. At this time it is not yet clear which broadband services, provided by means of which particular technologies and by what types of carriers, will be purchased in large numbers by American consumers. In the *Advanced Telecommunications Report* we noted that, according to most estimates, cable TV companies now have at least 350,000 residential customers for their broadband offerings, although other estimates are as high as between 425,000 and 700,000. We also noted that we lack, at this time, information on numbers of residential consumers receiving broadband services from public utilities, competitive LECs, and so-called "wireless cable," MDS, or MMDS companies. According to one estimate, incumbent LECs now provide broadband to approximately 25,000 residential consumers. See *Advanced Telecommunications Report* at ¶¶ 54-58.

broadband services of those operations; (2) any carrier (including, collectively, all majority owned or commonly controlled affiliates) with at least 50,000 nationwide *competitive LEC* access lines in service⁷² will complete a separate survey to report data for the *competitive LEC* operations, including the broadband services of those operations; (3) any carrier (including, collectively, all majority owned, commonly controlled, or commonly operated affiliates) with at least 50,000 nationwide *mobile telephony* subscribers will complete a separate survey to report data for the mobile telephony operations, including the broadband services of those operations; and (4) any other entity (including, collectively, all majority owned or commonly controlled affiliates of that entity) that has at least 1,000 full broadband subscribers nationwide will complete a survey to report data on broadband services, at which time the entity also will complete any other parts of the survey that pertain to its operations.

44. Although we intend to limit the burdens on reporting entities as much as possible, we also recognize that we must examine information from enough providers to avoid overlooking significant competitive and technological developments and trends. We seek comment, therefore, on whether limiting local competition data gathering to entities with 50,000 or more local access lines in service will enable us to accurately measure the scope and extent of progress in local competition. Likewise, we seek comment on whether limiting broadband data gathering to entities with 1,000 or more "full broadband" lines in service will enable us to accurately measure the scope and extent of progress in broadband deployment.

45. Finally, we seek comment on whether, to reduce reporting burdens even further, we should allow an incumbent LEC *of any size* to file a brief letter in lieu of reporting local competition and broadband deployment data for states where that incumbent faces no local service competition and if it provides a *de minimis* number of broadband lines. In such cases, we could require an attesting officer to state (1) that the incumbent does not face competition for voice grade local service from any competitive LEC within the designated state, or from any carrier offering mobile telephony service that is being used by customers as the full equivalent of local exchange service; and, (2) that the incumbent LEC does not provide full broadband lines to 1,000 or more customers on a nationwide basis. We tentatively conclude that such an approach would reduce reporting burdens imposed on carriers without compromising our ability to get necessary information.

⁷² In ¶ 40, *supra*, we ask for comment on whether 50,000 *subscribers* is a more appropriate reporting threshold in the case of telephony services provided by cable television companies on the grounds that cable companies may not consistently report their telephony operations in terms of access line equivalents. Because many customers of incumbent LECs have more than one voice grade telephone line in service, information about numbers of telephone subscribers is generally less useful, for purposes of evaluating the status of local telephone service competition, than is information about numbers of lines (or equivalent circuits) in service.

D. Definition of Reporting Area

46. For information to be useful, it must be reported on a geographically coherent and consistent basis by all entities submitting data. Although many geographic classification systems are employed by the telecommunications industry for regulatory compliance purposes, no single system applies to all providers of local exchange or exchange access service, and some geographic classifications predictably will become irrelevant over time.⁷³ Of course, new local service competitors need not design their business plans around any of the geographic classification systems that are traditional in the industry, although they must comply with requirements legitimately imposed by state regulatory authorities. Providers of terrestrial mobile wireless telephony services have received licenses to serve markets defined, variously, as Major Trading Areas, Basic Trading Areas, Metropolitan Statistical Areas, Rural Service Areas, and Economic Areas.⁷⁴

47. The situation with respect to broadband services is even more complex. Providers of broadband services may include, for example, cable television companies, utilities, MMDS/MDS/"wireless cable" carriers, and satellite-based wireless carriers, with service territories that need not fit within the "exchanges" and "study areas" of the incumbent LEC industry.

48. Regardless of these variances, all carriers will maintain state-by-state data for a variety of tax, regulatory, and other purposes. Thus, we believe that compiling local competition and broadband deployment information by state will not be administratively difficult for any reporting company, particularly in comparison with compiling information for smaller geographic areas on a consistent basis. We therefore tentatively conclude that we should, at a minimum, require data to be reported by state, as specified in the form that appears in Attachment A to this Notice. We ask for comment on this tentative conclusion.

49. We recognize, however, that collecting information about competitive activity and broadband services deployment in smaller geographic areas *might* yield sharper pictures of the extent and intensity of these developments.⁷⁵ At the same time, we recognize that

⁷³ The regional Bell companies, for example, generally may provide toll services only within Local Access and Transport Areas (LATAs), but the 1996 Act explicitly provides for the removal of this operating restriction. See 47 U.S.C. § 271.

⁷⁴ See, e.g., *Third Annual CMRS Competition Report* at tbl. 1A.

⁷⁵ See, e.g., Bell Atlantic Comments at 2 (the Commission should require reporting by state and should require competitive LECs, until they operate on a ubiquitous basis, to list zip codes where they provide residential service and zip codes where they provide business service); TRA Comments at 5 (an incumbent LEC should have to identify the cities, towns, and municipalities within which it is providing total service resale,

companies may regard such information as confidential, and we seek comment on whether a requirement that they disclose such information is appropriate to the extent such confidentiality concerns exist. We therefore seek comment on whether the data specified in Attachment A should be collected, from some or all reporting entities, at some more narrowly defined geographic area, such as the level of zones established by the state utility commissions for use in setting rates for interconnection and access to unbundled elements,⁷⁶ the wire center level, or a level based on Zip Codes.⁷⁷ For example, parties should address the extent to which, and the precise methods by which, other sources of information, such as data extracted from numbering resources databases, number portability databases, or E-911 databases, might, at this time, provide us with more detailed information about local competition and broadband deployment on a comprehensive basis.⁷⁸

unbundled network elements, or collocation); KMC Telecom Comments at 1-2 (information should be provided on a Metropolitan Statistical Area (MSA) basis within a state); AT&T Comments at 3-4 (long term number portability implementation has been scheduled by MSA; facilities-based competitive LECs generally begin their operations in cities corresponding to MSAs); BellSouth Comments at 8 (competitive LECs should report by study area); Allegiance Telecom Reply Comments at 6; GSA Reply Comments at 6. *But see* Bell Atlantic Reply Comments at 5 (Bell Atlantic's wire center boundaries are not coterminous with MSA boundaries; MSA-related data that are now reported to the Commission are not tracked by *specific* MSA).

⁷⁶ In the Local Competition Order, we promulgated certain rules to implement section 251 of the Communications Act of 1934, including rules that address the pricing of interconnection and access to unbundled network elements. *See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Report and Order, FCC 96-325, CC Docket No. 96-98, 11 FCC Rcd 15499, 15882 (rel. Aug. 8, 1996). One such rule, section 51.507(f), requires each state commission to "establish different rates for [interconnection and unbundled network elements] in at least three defined geographic areas within the state to reflect geographic cost differences." 47 C.F.R. § 51.507(f). On April 28, 1999, we stayed the effectiveness of section 51.507(f). *See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deaveraged Rate Zones for Unbundled Network Elements*, Stay Order, FCC 99-86, CC Docket No. 96-98 (rel. May 7, 1999) (discussing history of judicial decisions with respect to this rule). The stay will remain in effect until six months after we issue our order in CC Docket No. 96-45 finalizing and ordering implementation of high-cost universal service support for non-rural local exchange carriers under section 254 of the Act. *Id.*

⁷⁷ Note below, additional discussion about whether collecting information about competitive activity and broadband deployment in smaller geographic areas is more likely to raise concerns about disclosure of competitively sensitive information. *See* ¶ 75, *infra*.

⁷⁸ *See, for example, Numbering Resource Optimization*, FCC 99-122, CC Docket No. 99-200 (rel. June 2, 1999) at ¶¶ 69-82 (discussing the need to strengthen the system for collecting data on current and forecasted utilization of telephone numbering resources; tentatively concluding that all users of telephone numbering resources should report telephone number status data at the rate center level, at a minimum).

E. Data to be Reported

50. In this section, we discuss the specific data items set out in Attachment A. We believe that reliable information about these items will reveal the pattern and speed of development of local competition and broadband services as they evolve.⁷⁹ We invite comment on whether answers to the survey questions are necessary and sufficient to describe and understand the state of local competition and deployment of broadband services in diverse areas of the nation.

1. Voice Grade Lines in Service to End Users by LECs

51. Section I of the survey collects information about: (1) the number of voice grade and equivalent wireline or fixed wireless lines/channels⁸⁰ in service that connect residential and, separately, non-residential end users to the public switched telephone network (for convenience, "voice grade lines"); and (2) the extent to which LECs use their own facilities, and the facilities or services of other LECs, in providing these lines. Providers of mobile telephony services (including mobile telephony affiliates of LECs) would not report data in Section I, but would instead report data on number of subscribers to voice grade mobile telephony service in Section VI.⁸¹

52. In Section I.A., a reporting LEC (incumbent or competitive) would break down its total number of voice grade lines into three categories: (1) switched lines that terminate at the premises of residential end users; (2) switched lines that terminate at the premises of non-residential end users (including business, government, education, shared tenant system, institutional and pay telephone customers); and (3) special access lines that terminate at the premises of end users and over which switched service is provided. The reporting LEC would report voice grade lines in service to all end users with whom the reporting carrier has

⁷⁹ Trends that become apparent in reported data over time should shed light on questions (*e.g.*, the speed with which competitive LECs can add customers) that might otherwise require separate information collection (*e.g.*, about capacity installed or on order). Ameritech, for example, has argued that the Commission should collect information about measures of order activity, as well as information about lines in service. *See* Ameritech Comments at 10 (monitoring facility order activity will capture instances where a competitive LEC is building up capacity to serve future customers).

⁸⁰ That is, physical lines or fixed wireless channels whose function is similar to lines. *See also* Introduction to notes following Section VI of the proposed survey set out in Attachment A.

⁸¹ Providers of mobile telephony service also would not report data in Section II or Section III.

a business relationship directly, or through a non-carrier sales or billing agent.⁸² To avoid double-counting of total LEC lines in service to end users, each reporting LEC would also distinguish between voice grade lines that it provides to end users over its own facilities, and voice grade lines that it provides to end users over lines that it has leased from another communications carrier.⁸³

53. In Section I.B., a reporting LEC would report the number of voice grade lines it provides to other communications carriers, who in turn provide voice grade switched service to end users. The total number of such lines in service would be broken down into three categories: (1) switched lines that terminate at the premises of residential end users; (2) switched lines that terminate at the premises of non-residential end users (including business, government, education, shared tenant system, institutional and pay telephone customers); and (3) unbundled network element (UNE) loops or special access lines that terminate at the premises of end users and over which switched service is provided. In the case of services provided to other carriers for resale to end users, the reporting carrier will in most cases know whether the line connects to a residential or to a non-residential end user.⁸⁴ A reporting LEC would separately report the number of lines that it provides, over its own facilities, as UNE loops,⁸⁵ under total service resale arrangements,⁸⁶ and under other resale arrangements.⁸⁷ To

⁸² This specific information would be reported in Section I.A. of the survey that appears in Attachment A.

⁸³ As a subcategory of lines used to provide service to end users, a carrier would include among its reported "owned" lines any lines it obtains from entities that are *not* communications carriers. Lines that the reporting carrier has obtained from other communications carriers under unbundled network element, total service resale, or other resale arrangements would be reported in the (separate) category of lines the carrier has "leased". See Attachment A, n.4.

⁸⁴ A reporting ILEC may not know if a resold line is connected to a residential or to a non-residential CLEC customer if the CLEC is reselling ILEC "Centrex" services, but may be able to make reasonable estimates in such cases.

⁸⁵ Section 251(c)(3) of the Act establishes the duty of incumbent local exchange carriers to provide access to network elements on an unbundled basis. See 47 U.S.C. § 251(c)(3). A reporting ILEC may not know if a UNE loop connects to a residential or to a non-residential CLEC customer. The survey in Attachment A therefore asks the reporting carrier to report only total UNE loops provided to other carriers.

⁸⁶ Section 251(c)(4) of the Act establishes the duty of incumbent local exchange carriers to offer retail services at wholesale rates for resale, and section 251(b)(1) establishes the duty of all local exchange carriers not to prohibit or place unreasonable or discriminatory conditions or limitations on the resale of telecommunications services. See 47 U.S.C. § 251(b)(1), (c)(4).

⁸⁷ While most unbundled network element loops and most services provided for resale are provided by incumbent LECs at this time, competitive LECs also may provide facilities and services to other communications carriers.

avoid double-counting of total LEC lines provided as UNE loops or under resale arrangements, each reporting LEC would also report the total number of lines that it leases from another reporting communications carrier and, in turn, provides under UNE, total service resale, or other resale arrangements.

54. We believe that requiring LECs to report information about voice grade lines in the detail set out in Attachment A is necessary to obtain a reasonably complete picture of evolving local competition. For example, competitive LEC responses to the questions in Section I.A. will demonstrate the degree to which competitive LECs rely on resold incumbent LEC services (nationwide, in any specific state, and, potentially, in areas smaller than a state⁸⁸) in providing voice grade switched service to residential and to non-residential customers. These data also will demonstrate the extent to which competitive LECs rely on UNE loops in providing service to end users. The accuracy and reliability of data will be enhanced, moreover, by the ability to compare data reported by incumbent LECs and by competitive LECs, and we may thereby avoid double-counting end-user lines in assessing competitive market presence.

2. Voice Grade Lines and Collocation Arrangements of LECs

55. Section II of the survey collects information about numbers of voice grade lines served from LEC switching centers⁸⁹ in which local service competitors have operational collocation arrangements.⁹⁰ A reporting LEC would break down into two categories its reported total voice grade lines in service to end users over owned facilities: (1) lines served from switching centers in which at least one competing communications carrier has an operational collocation arrangement for switched local exchange services; and (2) lines served from switching centers in which no competing carrier has such an operational collocation arrangement. Within each of these two categories, a reporting carrier would separately report total residential switched lines, total non-residential switched lines, and total special access lines and UNE loops.

⁸⁸ See ¶¶ 48-49, *supra*.

⁸⁹ Many, but not necessarily all, carriers will be familiar with the "wire center" terminology used by incumbent LECs. Parties who are comfortable with that terminology may interpret "switching center" generally to refer to a "wire center," to a central office building, or to an entity identified by the first eight elements of a proper eleven-digit CLLI code. Parties should, however, note the more specific definition that appears in Attachment A.

⁹⁰ Section 251(c)(6) of the Act establishes the duty of incumbent LECs to provide for physical collocation of equipment necessary for interconnection or access to unbundled network elements at their premises, or for virtual collocation if physical collocation is not practical. See 47 U.S.C. § 251(c)(6).

56. We tentatively conclude that the questions in Section II of the survey are appropriate because we believe that local competition will be facilitated, particularly competition for residential customers, if competing LECs can locate their equipment in the switching center that most directly serves the customer the carrier seeks to serve. Incumbent LECs must provide for physical collocation of equipment that is necessary for a competitor to interconnect with or obtain access to the unbundled network elements of the incumbent LEC, and for virtual collocation in circumstances when physical collocation is not practical.⁹¹ Competitive LECs may choose, now or in the future, to provide collocation arrangements, *e.g.*, to other competitive LECs.

3. High Capacity Lines in Service to End Users by LECs

57. Section III of the survey collects information from LECs about the number of high capacity lines or channels in service connecting end users to the public switched network (for convenience, "high-capacity lines").⁹² Section III also requests information about the total capacity of these lines/channels. Our interest in high capacity lines stems from the Commission's need to monitor the development of competition in all kinds of local telecommunications serving both residential and business customers.

58. We tentatively conclude that we should define a high-capacity line, for purposes of local competition data collection, as a line with information carrying capability (in technical terms, bandwidth or data rate) to the customer's premises of 200 Kbps in at least one direction, and at least 48 Kbps (*i.e.*, voice grade) in the other direction. This definition of a high-capacity line has two attractive features. First, it fits naturally into a continuum of information carrying capability that begins with a voice grade line and increases to, and beyond, 200 Kbps in both directions -- the service-provider-to-consumer direction (downstream) and the consumer-to-service-provider direction (upstream) simultaneously -- which is the definition of broadband capability that we adopted in the *Advanced*

⁹¹ See 47 U.S.C. § 251(c)(6). See also 47 U.S.C. § 251(f) (exemptions for certain rural telephone companies).

⁹² High-capacity lines are by definition either "one-way broadband" or "full broadband" lines as defined below. See Section III.E.5 (discussing broadband lines). Therefore, all high-capacity lines reported in Section III of the survey will also be reported in Sections IV or V. We note, however, that broadband lines include some lines (*e.g.*, lines connecting end-user cable modems to internet service providers) that do not connect end users to the public switched telephone network and, therefore, do not fall within our definition of high-capacity lines.

Telecommunications Report.⁹³ Second, this definition of a high-capacity line encompasses a range of potential communications services that may prove to be significant in the marketplace in the near term,⁹⁴ but that do not fit the definition of broadband services adopted in the *Advanced Telecommunications Report* because they are slower than 200 Kbps in one direction, possibly the upstream direction from consumer to provider.

59. We tentatively conclude that we should require LECs to report, in Section III of the survey, the total number, and the total capacity, of two general categories of high-capacity lines: (1) lines at DS1/DS3 bandwidths,⁹⁵ and (2) other high-capacity lines.⁹⁶ Lines at DS1/DS3 bandwidths are proven incumbent LEC service offerings, and we believe it is important for us to monitor, to the limited extent we propose in this Notice, the presence of competitive LECs and other types of competitors in that part of the local services market.

60. We also tentatively conclude that we should require LECs to break down total high-capacity lines, and also the total capacity of those lines, in a manner that will provide a limited amount of information on types of customers served, and by what arrangements they are served: (1) end users served by lines the carrier owns; (2) end users served by lines the carrier leases from another communications carrier; and (3) lines in service to end users that the reporting carrier provides to other communications carriers. We believe that this limited information will shed highly useful light on competitive interactions in the market for high-capacity services, including the extent to which carriers use other carriers' facilities and services to serve end-user customers.

⁹³ Specifically, in this Notice, we use the term "full broadband" to refer to lines that meet the definition of broadband set out in the *Advanced Telecommunications Report*, i.e., lines that have a capability of supporting, in both the provider-to-consumer (downstream) and the consumer-to-provider (upstream) directions, a speed (bandwidth) in excess of 200 Kbps. See *Advanced Telecommunications Report* at ¶ 20. Such full broadband lines can be either physical lines or fixed wireless channels whose function is similar to lines. See ¶ 51, *supra*.

⁹⁴ We have noted that 200 Kbps in the last mile (about four times the carrying capacity of a standard phone line at 56 Kbps) would allow end users to change web pages received from the internet as fast as one can flip through the pages of a book. See *Advanced Telecommunications Report* at ¶ 20.

⁹⁵ DS1 bandwidth is 1.544 Megabits per second (Mbps); DS3 bandwidth is 28 times DS1 bandwidth.

⁹⁶ Higher capacity lines would include, for example, the optical carrier (SONET) levels OC-1, OC-3, etc. (OC-1 bandwidth is equivalent to DS3 bandwidth.)

4. Internet-Provided Telephony Services

61. The Commission does not regulate internet services, but recognizes that Internet Protocol (IP) telephony may become an important substitute for circuit-switched telephony.⁹⁷ As a result, when evaluating the development of local competition, we believe it is necessary to include the development of IP-telephony service. However, while the proposed survey instructions direct reporting entities to report lines that may be used in connection with IP-telephony service, as discussed below, the survey questions do not identify the use of IP-telephony *per se*. We seek comment whether we should undertake a more specific determination of the extent to which the internet is being used to provide telephony services and how we should do so.

62. Survey instructions⁹⁸ direct LECs to report lines in service that connect directly to an end user at one end and, at the other end, connect to a carrier switch or to a network that carries voice calls to the public switched telephone network. For purposes of this Notice, "public switched telephone network" includes the traditional circuit-switched telephone network as well as all alternatives to the wireline infrastructure, regardless of switching technology. The distinguishing characteristic is that only those networks that enable a telephone service subscriber to place a voice call to any other telephone service subscriber are included. Thus, for example, the number of lines reported by a LEC would not depend on whether that LEC has deployed packet-switching technology into some, or all, of its serving wire centers. Similarly, the LEC would report a line if it connects an end user to the network of another entity that offers telephone service to the general public, regardless of the switching technology deployed in the network of that entity.

63. Reported numbers of lines in service to end users therefore would include (but would not separately identify) lines serving residences in which computer hobbyists, for example, have installed software that enables voice calls to be placed over the public internet. The reported number of lines also would include any unbundled LEC loops that the LEC provides to another communications carrier in connection with the second carrier's offering of

⁹⁷ For a brief introduction to factors influencing individual and corporate use of IP-based telephony software and services, see Parts I - III of the series, "Special: IP Telephony," *Internet World*, at <<http://www.iw.com/daily/telephony>>.

⁹⁸ See Attachment A, n.1.

an IP-telephony service to the general public.⁹⁹ By contrast, to the extent that a corporation uses a dedicated network to carry IP-based voice calls,¹⁰⁰ the lines that comprise the dedicated corporate network would not be counted in the survey.

64. We note that numbers of lines in service to end users, reported in Sections I - III of the survey, also would not include lines (or, more precisely, added functionality of lines) that connect end users to internet service providers (ISPs) but which the reporting carrier provides to the ISP rather than to the end user.¹⁰¹ Examples of such arrangements are the recently announced agreements under which America Online will lease, from Bell Atlantic and SBC Communications, Digital Subscriber Line (DSL) capacity that America Online will incorporate into a premium (higher-speed) option for its internet service.¹⁰² In these circumstances, however, the LEC that provides DSL capacity to the ISP would continue to report the voice grade line that it provides to the end user. Also, if the DSL capacity that is provided to the ISP meets the definition of broadband that we propose to adopt for purposes of the survey (*i.e.*, supporting either one way or two way communication, at bandwidth

⁹⁹ While interconnection of IP-based and circuit-switched networks presumably would allow an IP-telephony message to be delivered to any telephone service subscriber, the ability of a particular subscriber to receive that message may depend on his or her investment in ancillary equipment (*e.g.*, a personal computer with IP-telephony software) or the availability, in the user's area, of other means (*e.g.*, an IP gateway service) of placing and receiving IP-telephony calls. That is, we consider it likely that, for some years, a substantial share of telephone service subscribers will continue to be served by local switches designed for circuit-based telephone networks.

¹⁰⁰ That is, calls made on the dedicated corporate network can not be delivered to a subscriber to the public switched telephone network, whether or not that subscriber has, *e.g.*, a personal computer with IP-telephony software.

¹⁰¹ By assumption, the ISP does not offer voice telephone service to the general public.

¹⁰² See "America Online and Bell Atlantic Form Strategic Partnership to Provide High-Speed Access for the AOL Service," Press Release, (Jan. 13, 1999); "America Online and SBC Communications to Offer High-Speed Upgrade to AOL Members," Press Release, Mar. 11, 1999 (noting that portions of the agreement are subject to the FCC's review of asymmetric digital subscriber line (ADSL) tariffs that SBC Communications operating units will file for volume purchases).

greater than 200 Kbps),¹⁰³ and the line connects to a customer, then, as outlined in the next section of this Notice, the ISP would report the line in Section IV and possibly Section V of the survey.¹⁰⁴ We invite comment on this particular means of collecting data about DSL, and potentially other, high-capacity communications services with internet-related uses.

5. Broadband Lines in Service to Consumers

65. Sections IV and V of the survey collect information about the number of broadband lines in service to consumers. Section IV collects information about broadband lines in service to all customers, and Section V collects information about broadband lines in service to residential customers.¹⁰⁵ We tentatively conclude that we should, in each of these sections, require reporting entities to provide information about two categories of broadband lines that we define for purposes of this Notice: (1) "full broadband" lines, with information carrying capacity¹⁰⁶ in excess of 200 Kbps in both directions simultaneously; and (2) asymmetric "one-way broadband" lines, with information carrying capacity in excess of 200 Kbps in one direction but not both.¹⁰⁷ Our interest in broadband services generally stems from section 706 of the 1996 Act, which directs us to determine regularly whether full broadband services (to use the term we have adopted for the specific purposes of this Notice) are being deployed in a reasonable and timely fashion to all Americans. Our interest in what we are calling one-way broadband services stems from our need to collect data that will

¹⁰³ The capacities (640 Kbps, 1.6 Mbps, and 7.1 Mbps) of DSL services for which Bell Atlantic recently introduced volume and term discount plans would appear to fit within the definition of broadband lines/channels to be reported, by a broad range of entities, in Sections IV and V of the survey. See Bell Atlantic Transmittal No. 1138, Bell Atlantic Tariff F.C.C. No. 1. See also *In the Matter of Bell Atlantic Revisions to Tariff F.C.C. No. 1*, Partial Suspension Order, CC Docket No. 99-201, Transmittal No. 1138 (rel. June 2, 1999) (allowing the tariff to go into effect but suspending for five months pending investigation the language asserting that the services are provided at wholesale and are not subject to the rate provisions of sections 251(c)(4) and 252(d)(3) of the Communications Act, 47 U.S.C. 251(c)(4), 252(d)(3).)

¹⁰⁴ The ISP, in this example, would report a DSL line in service that is provided over resold facilities, assuming that the ISP is not otherwise exempt from reporting. See ¶¶ 41, 43, *supra*.

¹⁰⁵ From the total and residential information, we will be able to derive information about broadband lines in service to "all other" customers (*i.e.*, business, government, and institutional customers).

¹⁰⁶ In the case of packet-switched services, the information carrying capacity of a line/circuit is the customer's authorized maximum usage for that line/circuit.

¹⁰⁷ A one-way (*i.e.*, asymmetric) broadband line (or circuit), as defined for purposes of this Notice, can have as little as zero bandwidth in its slower direction although, as noted in footnotes 1 and 7 to the survey in Attachment A, lines over which broadcast cable television service is provided do not fall within this definition. A one-way broadband line is also a high-capacity line, as defined for purposes of this Notice, only if it has at least 48 Kbps bandwidth (*i.e.*, is at least voice grade) in its slower direction.

reveal the use of services with over 200 Kbps bandwidth in the downstream direction, but less than 200 Kbps bandwidth in the upstream direction. Service with these speeds would accommodate the needs of customers who make only small transmission upstream (e.g., 'please send me the movie *Saving Private Ryan*'), but who receive large transmissions downstream (e.g., the full-length color movie with movie theater clarity). That is, we intend, by including questions about one-way broadband services in Sections IV and V of the survey, to track the development of services such as DirecPC,¹⁰⁸ which may become popular in the future although they are not "full broadband" services.

66. We also tentatively conclude that we should require reporting entities to provide information, separately, about the number of full broadband lines in service to residential consumers with speed in excess of 1.544 Mbps (DS1) in both directions simultaneously, and the number of one-way broadband lines in service to residential consumers with speed in excess of 1.544 Mbps in the "fast" direction only. In future years, the appropriate definition of broadband service may change as technology improves and consumer demand grows for more features and functions from residential broadband service. We intend these questions to detect the evolution of supply and demand for such future generations of broadband.

67. We ask for comment whether questions about these specifications of speeds will achieve our goal, which is to gather facts about both supply and demand that will enable us to decide whether broadband services are reaching all Americans in a reasonable and timely fashion. Should we be asking about other speeds of transmission in the limited number of questions we can ask without unduly burdening providers?

68. We tentatively conclude that we should require reporting companies to report separately, in Sections IV and V, numbers of lines in service to consumers that the company provides over its own facilities, and of lines in service to consumers that the company provides over resold facilities of another company.

69. We also tentatively conclude that we should require reporting companies to break down, in Sections IV and V, numbers of lines in service to consumers according to the technology used in the "local loop" at its point of termination at the consumer's premises: copper-based DS1/DS3; xDSL; coaxial (including fiber-fed coaxial); optical carrier (SONET); electrical power line; satellite fixed service; satellite mobile service; fixed terrestrial wireless service; mobile terrestrial wireless service; and other.

¹⁰⁸ See, e.g., "DirecPC experiencing slow consumer growth, but is optimistic," *Communications Daily* (Apr. 8, 1999) (noting that the DirecPC satellite-based data transmission service relies on a telephone return link, and also that competitors Skybridge and Teledesic are not yet operational).

70. Many companies other than wireline LECs will provide the information requested in Sections IV and V. The reporting companies will be any of the following types of companies who provide services to customers at any of the speeds specified in these sections: LECs (incumbent and competitive (resale and facilities-based, regardless of technology used)), cable television companies, utilities, MMDS/MDS/"wireless cable" carriers, mobile wireless carriers (both terrestrial and satellite-based), and others.¹⁰⁹ We tentatively conclude that all such companies with more than 1,000 full broadband lines in service (or 50,000 telephone lines to all customers, or 50,000 telephony subscribers) will complete Sections IV and V of the survey (and other relevant sections of the survey.¹¹⁰) Only by casting our net this wide can we discern progress, or lack of it, towards many of the goals of section 706 of the 1996 Act. We have asked whether there is some less intrusive and burdensome way to track our achievement of these goals.¹¹¹ We also ask for comment about whether the technologies that these companies will use to provide broadband to consumers fit the terms of the questions in Sections IV and V. For example, is it clear what, in each broadband technology, is the "line" that is the basic subject of the questions?

71. We tentatively conclude that each reporting company will, at a minimum, supply data on a state-by-state basis.¹¹² We note, however, that rural and low-income areas are areas that some observers believe will not receive full broadband service through the operation of a competitive market. The *Advanced Telecommunications Report* promised to monitor the pace of deployment of full broadband services in these areas.¹¹³ Information collected on a state-by-state basis, for example, may enable us to conclude that broadband is being deployed in a reasonable and timely manner in New Mexico as a whole. It will not permit us, however, to find whether all such deployment is in Albuquerque while rural New Mexico is suffering from a "bandwidth famine." We seek comment, therefore, on how best to track the deployment of full broadband service in rural or low-income areas, and on whether it might be appropriate to require responding companies to supply information that would indicate the number of customers they have in smaller geographic areas within a state. We ask whether there is a way to make such a determination reliably and with less burden on the reporting entities particularly since these entities may include small rural LECs. Further, we

¹⁰⁹ See ¶ 32, *supra*.

¹¹⁰ The firm required to complete the survey by virtue of providing broadband lines will complete Sections IV and V of the survey and the other sections of the survey that are relevant to its operations (Sections I-III in the case of small LECs, and Section VI in the case of small mobile wireless telephony providers).

¹¹¹ See ¶ 33, *supra*.

¹¹² See ¶¶ 48-49, *supra*.

¹¹³ *Advanced Telecommunications Report* at ¶ 74.

ask whether we can make a reliable determination without requiring reporting companies to disclose business information that they may regard as confidential.¹¹⁴ We also seek comment on whether it might be appropriate to permit broadband entities that serve fewer than 2,000 subscribers nationwide to report on nationwide, rather than a statewide, basis.

72. We also request more general comment on our proposed questions about broadband services. Are there other means that will both yield us the information we need for the many purposes stated above and be less burdensome on the answering entities? Will the trade press and providers' web pages, for example, enable us to track the deployment of broadband in rural areas with enough reliability to enable us to conclude whether rural deployment is reasonable and timely? Would the burden of answering the questions in Sections IV and V be less than the burden on the reporting companies of filing comments and reply comments as they did in the proceeding, CC Docket No. 98-146, that led up to the *Advanced Telecommunications Report*?¹¹⁵

6. Voice Grade Mobile Telephony Service Subscribers

73. We tentatively conclude that systematic data on the number of subscribers to voice grade mobile telephony services, when combined with publicly available information on mobile telephony rates, will provide a valuable insight into the extent that those mobile services are a competitive constraint on other providers in local exchange markets. We invite comment on this conclusion. We also tentatively conclude that subscriber counts should be provided separately for (i) cellular and (ii) PCS and other mobile telephony. We invite comment on the reporting burden imposed by requiring these two separate categories. Additionally, we invite comment on the extent to which distinguishing these two categories will further our objectives as described in this Notice. Finally, while we tentatively conclude that subscriber counts should be based on billing record addresses,¹¹⁶ we recognize that the billing address may differ from the geographic area or areas in which the mobile telephony service is principally used. Therefore, we seek comment on whether subscriber counts based on other data such as, for example, assigned telephone numbers would be more accurate without imposing substantially greater burdens on reporting entities.

¹¹⁴ See ¶¶ 74-76, *infra*.

¹¹⁵ We are aware that § 706(b) requires us to "regularly . . . initiate a notice of inquiry." If the survey in Attachment A will yield us most of the information that we need to determine whether the deployment of broadband is reasonable and timely, however, that notice and the inquiry it starts can be shorter, and far less burdensome, on both the Commission and the answering companies, than they would otherwise be.

¹¹⁶ See Attachment A, n.9.

F. Confidentiality of Data

74. We think it extremely important that *all* local competition and broadband information collected pursuant to the proposed survey be made available to the public. Public availability will assist Commission staff in interpreting and utilizing such data, and it will facilitate Commission publication of data and analysis in Commission reports. Moreover, public scrutiny of the surveyed information will promote a general awareness and public discussion of how local competition is developing and how readily broadband services are being deployed. This kind of public awareness and discussion will promote the development of efficient markets by educating consumers and investors. It will also provide a desirable adjunct to the Commission's own expert analysis and will help ensure the quality of that analysis. For all these reasons, we tentatively conclude that all information submitted pursuant to this information collection program should be publicly released.

75. We anticipate opposition to this tentative conclusion from some parties who may assert that some of the submitted information is sensitive or otherwise protectible. We point out that we do not propose to collect carrier information that is often asserted to be sensitive. Thus, for example, we do not propose to collect rate or revenue information from participating carriers. We seek comment on this analysis and, to the extent that parties disagree with our tentative conclusions, we invite commenters to provide a detailed explanation of how disclosure of the proposed data collection would cause substantial harm to the competitive position of the filers. Further, where parties believe that legitimately protectible information would be collected under our proposal, we ask commenters to suggest whether it would be possible to refine the proposal to reduce concerns about confidentiality while preserving the usefulness of the data collected. For example, to what extent would changing the size of the geographic reporting areas alter our analysis of competitive sensitivity of the data collected?

76. Notwithstanding our belief that submitted information will not ordinarily raise legitimate protection issues, we cannot prevent parties submitting data from asserting confidentiality or other claims and seeking protection from public release. We, of course, expect such parties to follow Commission rules and guidelines when seeking protection pursuant, primarily, to relevant sections of the Freedom of Information Act.¹¹⁷ In any event, we note that the Commission may, for good cause shown, release even otherwise protectible information if such release is determined to be in the public interest. We tentatively conclude that any party that files information pursuant to the proposed survey and who seeks to prevent

¹¹⁷ See C.F.R. § 0.459. See also *Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission*, Report and Order, FCC 98-184, GC Docket No. 96-55 (rel. Aug. 1998) (listing the showings required in a request that information be withheld and stating that the Commission may defer action on such requests until a formal request for public inspection has been made.)

public release of portions of such information should submit both complete and redacted, public file versions of data. Pending Commission disposition of the related request for protective treatment, only the redacted version would be publicly released. We seek comment on our tentative conclusions and related analysis.

G. Electronic Filing

77. If Commission staff is to efficiently analyze and manipulate submitted data, we must receive the data in some electronically readable format. At a minimum, therefore, we tentatively conclude that, consistent with the practices adopted for the Common Carrier Bureau's voluntary local competition survey, the completed surveys must be submitted in the form of electronic spreadsheets in Excel format. The spreadsheets that constitute the survey will be posted at a unique location within the Bureau's section of the Commission's internet site,¹¹⁸ from which they can be downloaded.

78. As a mechanism for submitting data, we tentatively propose a simple filing system in which the completed surveys (in the form of electronic spreadsheets in Excel format) must be filed with the Commission over the internet. In particular, we tentatively propose to establish a Commission e-mail address to which entities that are required to report local competition and/or broadband deployment data will send their completed surveys as attachments to an e-mail message. We seek comment on the appropriateness of e-mail as a transmission mechanism for filing completed surveys¹¹⁹ and the use of spreadsheets as the filing basis.

79. We seek comment about operational and other issues related to implementation of such an e-mail/spreadsheet-based electronic filing system. We note that there may be particular issues relating to the submission of data for which confidential treatment is sought. We seek particular comment on ways a survey filing system that uses the internet to transmit information can protect legitimately protectible information, while reiterating our general intention, discussed above, to routinely treat submitted information as publicly available.

80. We also seek comment on alternative electronic filing systems. For example, the electronic filing procedures adopted for the FCC Annual Cable Industry Price Survey allow filers to complete (and submit on diskette) the survey using stand-alone software, developed by Commission staff, that incorporates some data consistency checks and

¹¹⁸ Similarly, the spreadsheet to be completed by participants in the fourth of the Bureau's voluntary local competition surveys, for example, was posted at <http://www.fcc.gov/ccb/local_competition/survey4>.

¹¹⁹ Participants in the Bureau's voluntary local competition survey were requested to submit their completed surveys both on paper and on IBM-compatible 3.5-inch diskettes.

minimizes opportunities for inadvertent data entry error.¹²⁰ An alternative system could offer certain advantages to both filers and the Commission. It could remove the need for filers to transfer data to paper or to stand-alone electronic spreadsheets, could retain some information from period to period and perform various types of checks for data consistency, and/or could permit automatic data loading into a Commission data system. On the other hand, we note that the information collection program proposed in this Notice is designed to impose minimally necessary burdens on reporting entities and, as discussed below,¹²¹ will not be permanent. Electronic filing systems more sophisticated than a simple internet-based system could impose various costs -- including costs associated with employing data systems contractors to develop associated systems software -- that could exceed the benefits users would otherwise achieve. Therefore, we seek comment on whether more sophisticated electronic filing systems would be appropriate for the limited program set out in this Notice, and we ask commenters specifically to consider the costs and benefits associated with specific proposals. We tentatively conclude that we should not adopt an electronic filing system where associated costs exceed benefits.

81. We remain committed to making electronic filings and other electronic applications accessible to persons with disabilities to the fullest extent possible. We note that electronic filing is subject to program accessibility requirements of Section 1.850 of our rules.¹²² In addition, Congress has revised the requirements for access by persons with disabilities to federal information technology programs in the Workforce Investment Act of 1998.¹²³ We recognize that, in some instances, it may be difficult for persons with disabilities to access components of the proposed electronic filing. In particular, the accessibility of forms and certain types of electronic files raises complex technical issues. We will continue to work on these issues and fully expect that with advances in technology, we will be able to enhance the accessibility to persons with disabilities.

¹²⁰ See *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992; Statistical Report on Average Rates for Basic Service, Cable Programming Services and Equipment*, Order, MM Docket No. 92-266, DA 98-1439 (rel. July 21, 1998) at ¶ 8 (stand-alone software can be downloaded from the internet and run on any IBM-compatible personal computer with a 386 or higher processor, 8 megabytes of memory, and Windows 3.1 or later release).

¹²¹ See ¶ 83, *infra*.

¹²² See 47 C.F.R. § 1.850.

¹²³ *Workforce Investment Act of 1998*, P.L. No. 105-220, 112 Stat. 936 (Aug. 7, 1998). Section 508 of the Act provides that persons with disabilities and non-disabled persons must have comparable access and ability to use technology and electronic information, and federal agencies must take steps to ensure such comparable access for persons with disabilities unless an undue balance would be imposed. If an undue burden would be imposed, the agency must provide an alternative means of access that allows for persons with disabilities to access and use the information.

H. Survey Modification and Termination

82. We expect the local services and broadband services markets will become increasingly dynamic as competition develops. Therefore, it may be necessary to make changes to the form, content, or reporting obligations of this information collection to ensure its continuing value, while minimizing filing burdens on respondents.

83. The purpose of this undertaking is to assist the Commission in evaluating the development of local competition and broadband deployment during a critical transition period. This information collection program does not seek to impose a "permanent" regulatory burden on carriers and others. Therefore, we seek comment on how best to ensure that this program terminates once local competition and broadband deployment emerge from this transition period. Would it be best to sunset the program after five years? Would a review process, perhaps every three years, be a better tool for ensuring the program does not outlive its usefulness?

IV. PROCEDURAL MATTERS

A. Initial Paperwork Reduction Act Analysis

84. This Notice contains either a proposed or modified information collection. As part of our continuing effort to reduce paperwork burdens, we invite the general public to take this opportunity to comment on the information collections contained in this Notice, pursuant to the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due at the same time as other comments on this Notice. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

85. We estimate that the proposed local competition and broadband information collection will create a burden of 30 hours for the first state for which a completed survey is filed in a particular reporting period, 10 hours for the second state for which a response is filed, and 4 hours per state for each additional state for which a survey response is filed. In those cases in which a reporting carrier provides responses for geographic regions smaller than a state, we estimate that each such sub-state response will create an additional burden of 4 hours. These burden estimates include the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

86. We expect burdens would be somewhat higher in the initial reporting periods, while respondents familiarize themselves with the survey and set up appropriate internal procedures for assembling data and completing the survey. We also expect burdens to be somewhat less than our estimates in the case of competitive LECs pursuing a pure resale strategy, because questions about owned facilities would not apply to such carriers. Similarly, we expect burdens to be lower than our estimates in the case of mobile service providers, who would complete Section VI of the survey in lieu of completing Sections I - III.

87. We invite all interested parties to estimate the burden of preparing and submitting the survey that appears in Attachment A of this Notice. The survey that appears in Attachment A is substantially similar to the Bureau's recent voluntary surveys.¹²⁴ It differs from the voluntary survey by the deletion of questions about minutes of use, by the addition of questions about broadband lines in service to all customers, and by the addition of a new section (Section VI) requesting information about the number of subscribers to mobile wireless telephony services.

88. The overall burden per year of local competition and broadband information collection will depend on the number of items in the information collection, on the number of entities that report for at least one state in each reporting period, and on the average number of states for which reports are made. It is a purpose of this Notice to take comments on these determinants of the overall burden per year.

B. Initial Regulatory Flexibility Act Analysis

89. As required by the Regulatory Flexibility Act (RFA),¹²⁵ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this Notice. The IRFA is set forth as Attachment C. Written public comments are requested with respect to the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the rest of this Notice and they must have a separate and distinct heading, designating the comments as responses to the IRFA. The Office of Public Affairs, Reference Operations Division, will send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

¹²⁴ See the survey posted at <http://www.fcc.gov/ccb/local_competition/survey4> or the survey posted at <http://www.fcc.gov/ccb/local_competition/survey5>.

¹²⁵ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

C. *Ex Parte* Presentations

90. This proceeding will be treated as a "permit-but-disclose" proceeding subject to the "permit-but-disclose" requirements under section 1.1206 of the Commission's rules, as revised.¹²⁶ Additional rules pertaining to oral and written presentations are set forth in section 1.1206.¹²⁷

D. Comment Filing Procedures

91. *General.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on before [thirty days after publication in the Federal Register], and reply comments on or before [forty-five days after publication in the Federal Register]. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.¹²⁸

92. Comments filed through the ECFS can be sent as an electronic file via the internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

93. Parties who choose to file by paper must file an original and four copies of each filing.¹²⁹ If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings by paper must be sent to the Commission's Secretary: Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th St, SW, Washington, DC 20554. One copy of each

¹²⁶ 47 C.F.R. § 1.1206.

¹²⁷ *Id.*

¹²⁸ See *Electronic Filing of Documents in Rulemaking Proceedings*, Report and Order, FCC 98-56, 13 FCC Rcd 11322, 63 Fed. Reg. 24,121 (1998).

¹²⁹ See also 47 C.F.R. § 1.49 (concerning paper copies).

written filing, as well as a copy of the filing on a diskette, must be sent to the following persons at Federal Communications Commission, 445 12th St, SW, Washington, DC 20554: Ms. Terry Conway, Common Carrier Bureau, Industry Analysis Division; Mr. Andrew Wise, Cable Services Bureau, Policy and Rules Division, Federal Communications Commission; Mr. Jerome Stanshine, Office of Engineering and Technology; and Mr. Walter Strack, Wireless Telecommunications Bureau.

94. The required diskette copies of submissions should be on 3.5 inch diskettes formatted in an IBM compatible format using WordPerfect 5.1 for Windows or compatible software. Each diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (CC Docket No. 99-301), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file.

95. In addition, parties who choose to file by paper must send diskette copies to the Commission's copy contractor, International Transcription Service, Inc., 1231 20th St, NW, Washington, DC 20036. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Information Center, Courtyard Level, 445 12th St, SW, Washington, DC.

96. As noted above,¹³⁰ this Notice contains either a proposed or modified information collection. Written comments by the public on the proposed and/or modified information collections are due [thirty days after publication in the Federal Register]. Written comments must be submitted by the Office of Management and Budget (OMB) on the proposed and/or modified information collections on or before 60 days after date of publication in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 1-C804, 445 12th Street, SW, Washington, DC 20554, or via the Internet to jboley@fcc.gov and to Virginia Huth, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, DC 20503 or via the Internet to VHuth@omb.eop.gov.

¹³⁰ See ¶¶ 84-88, *supra*.

V. ORDERING CLAUSES

97. Accordingly, IT IS ORDERED that, pursuant to sections 1-5, 10, 11, 201-205, 215, 218-220, 251-271, 303(r), 332, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-155, 160, 161, 201-205, 215, 218-220, 251-271, 303(r), 332, and 403, and pursuant to section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt, this NOTICE OF PROPOSED RULEMAKING, with all attachments, is hereby ADOPTED.

98. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this NOTICE OF PROPOSED RULEMAKING, including the regulatory flexibility certification, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.* (1981).

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary