

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Development of Nationwide Broadband) WC Docket No. 07-38
Data to Evaluate Reasonable and Timely)
Deployment of Advanced Services to All)
Americans, Improvement of Wireless)
Broadband Subscribership Data, and)
Development of Data on Interconnected)
Voice over Internet Protocol (VoIP))
Subscribership.)

**COMMENTS OF
THE
NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES**

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I. INTRODUCTION

A. Scope of Inquiry

On April 16, 2007, the Federal Communications Commission (“FCC” or “Commission”) released a Notice of Proposed Rulemaking (“NPRM”) intended to elicit suggestions on “how the Commission can continue to acquire the information it needs to develop and maintain appropriate broadband policies.”¹ In response to this NPRM, the National Association of State

¹*In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Notice of Proposed Rulemaking, FCC 07-17 (rel. April 16, 2007) (“NPRM”) at ¶ 1.

Utility Consumer Advocates (“NASUCA”)² submits these comments to assist the Commission in improving its data gathering procedures, which NASUCA hopes will contribute to progress in promoting the reasonable and timely deployment of affordable broadband services to all Americans.³

The Commission notes that it “has consistently recognized the critical importance of broadband services to the nation’s present and future prosperity and is committed to adopting policies to promote the development of broadband services, including broadband Internet access services.”⁴ The overarching issues that the NPRM seeks to address are:

- How can the Commission ensure it receives sufficient information regarding the deployment and availability of broadband services, particularly in rural and hard-to-serve areas?
- How can the Commission improve its collection of wireless broadband Internet access services data currently collected on FCC form 477?
- Should the Commission modify the speed tier information it currently collects?
- How should the Commission collect data with respect to subscribership to interconnected voice over Internet Protocol (“VoIP”) service?⁵

² NASUCA is a voluntary association of advocate offices in more than 40 states and the District of Columbia, incorporated in Florida as a non-profit corporation. NASUCA’s members are designated by the laws of their respective jurisdictions to represent the interests of utility consumers before state and federal regulators and in the courts. See, e.g., Ohio. Rev. Code Chapter 4911; 71 Pa.Cons.Stat. Ann. § 309-4(a); Md. Pub.Util.Code Ann. § 2-205; Minn. Stat. § 8.33; D.C. Code Ann. § 34-804(d). Members operate independently from state utility commissions as advocates primarily for residential ratepayers. Some NASUCA member offices are separately established advocate organizations while others are divisions of larger state agencies (e.g., the state Attorney General’s office). NASUCA’s associate and affiliate members also serve utility consumers but are not created by state law or do not have statewide authority.

³ NASUCA is also submitting comments today regarding broadband industry practices. *In the Matter of Broadband Industry Practices*, WC Docket No. 07-52, Notice of Inquiry (“NoI”), FCC 07-31 (rel. April 16, 2007).

⁴ NPRM at ¶ 1.

⁵ Id.

The Commission states that improved data collection would “enable us to better understand how subscriber choice among communications services is affecting the federal universal fund, and will thereby assist us in discharging our statutory mandate to secure the viability of universal service.”⁶ The Commission further states that “improved VoIP subscribership information would enable us to continue monitoring evolving competition for local telephone service customers.”⁷

B. Summary of NASUCA Recommendations

In these comments, NASUCA demonstrates that the current data collected by the Commission suffers from two weaknesses: (1) excessive geographic aggregation, and (2) a faulty definition of broadband availability.⁸ Addressing these data deficiencies will assist the Commission and states in advancing the goal of broadband deployment and availability. Better information will enable federal and state policy makers to design and to implement programs to promote broadband availability. NASUCA recommends that the Commission expand and refine its broadband data collection in several ways. Specifically, NASUCA proposes that the Commission:

- Require broadband deployment data to be provided at a more local granular geographic level, and also reported as a percentage of total households. Broadband policy-making could then be based on data that depicts more accurately the state of deployment.
- Require broadband providers to provide customer counts for each

⁶ Id.

⁷ Id.

⁸ See NASUCA’s initial and reply comments submitted on May 16, 2007, and May 31, 2007, respectively, regarding broadband deployment in the Commission’s “Section 706” docket. *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, GN Docket No. 07-45, Notice of Inquiry, FCC 07-21 (rel. April 16, 2007) (“*Notice of Inquiry re Section 706*”).

geographic area on Form 477 instead of the current threshold of “at least one subscriber” for each area, a methodology that masks the true extent of broadband deployment.

- Collect data on broadband availability (i.e., the boundaries of broadband service providers’ territories) and the number of broadband subscribers in an area in order to allow for the calculation of a broadband take rate, which is a crucial factor for broadband policymaking.
- Explore and take advantage of the practical value of collaborations with states that are already gathering information on deployment gaps.
- Require separate reporting for residential and business services for all current and additional reporting requirements, so that broadband policy is based on the needs of all consumers.
- Collect pricing information on Form 477 that reflects non-introductory and non-promotional prices, i.e., the prices consumers face in the long term.
- The minimum speed reporting threshold should not be raised, in order to ensure that broadband policy-making takes into account those who are able to afford or have available only the slower service. The Commission should also adopt additional refinements to speed tier data collection that reflect changes in technology.
- Require all interconnection VoIP providers to report subscription and deployment data on Form 477. However, the Commission should collect data on the same geographic basis as it does for other broadband services. State-level data for VoIP providers is insufficient.
- Revise Form 477 requirements for wireless broadband reporting to reflect more accurately subscribership based on affirmative subscription to a data plan as opposed to the purchase of a broadband-capable handset. The current data may overestimate the extent to which consumers subscribe to wireless broadband services, because it includes, for example, one-time downloads, and customer purchase of a broadband capable handset but not a broadband service plan.

NASUCA recognizes that there are costs and burdens associated with enhanced data collection. Nevertheless, NASUCA anticipates that the benefits of adequate broadband

deployment data far outweigh the accompanying costs.⁹ NASUCA urges the Commission to reject any proposals that would replace -- rather than add to -- Form 477 data collection either: (1) by adopting an automated voluntary reporting system by households, or (2) by developing broadband deployment information based on representative areas. Instead, the Commission should focus on refining and expanding the current Form 477 data collection.

NASUCA also recognizes that Congress is considering legislation that entails improved broadband mapping and data collection, which may enhance federal and state policy makers' ability to design and to implement policies.¹⁰ NASUCA is hopeful, however, that the Commission will not await Congressional direction before the Commission modifies its own data collection system.

II. BACKGROUND

The Commission bases its broadband deployment analysis on three information sources: FCC Form 477 data; comments submitted in Section 706(b) inquiries; and "ancillary information" gathered by Staff from publicly available sources.¹¹ In the NPRM, the Commission cites significant improvements to the Form 477 reporting that have been made, including extending the data collection five years past original sunset, eliminating reporting thresholds for

⁹ It should be anticipated that much of this data would already be collected by carriers to develop, revise and implement their business plans.

¹⁰ On May 17, 2007, the U.S. House of Representatives Subcommittee on Telecommunications and the Internet of the Committee on Energy and Commerce held a legislative hearing on broadband mapping and data collection. Also, on May 24, 2007, U.S. Senate Committee on Commerce, Science, and Transportation Chairman Daniel K. Inouye introduced the "Broadband Data Improvement Act," "which seeks to improve the quality of federal broadband data collection and encourages state initiatives that promote broadband deployment." U.S. Senate Committee on Commerce, Science, and Transportation Press Release, "Inouye Introduces Broadband Data Improvement Act" (May 24, 2007). Among other things, the legislation directs broadband providers to report broadband availability and connections within a 9-digit zip code and directs the Census Bureau to include a question in its American Community Survey that assess levels of residential broadband (versus dial-up) subscribership).

¹¹ NPRM at ¶ 3.

small carriers, requiring technology-specific listing for zip code data, and requiring cable companies to state the extent to which cable subscribers had access to cable modem, among others.¹² However, in the *2004 Data Gathering Order*, the Commission rejected proposals to add VoIP-specific questions to Form 477.¹³ NASUCA supports the inclusion of those questions at this time.

The Commission states that a review of the Form 477 data shows that there has been “significant and steady progress in broadband deployment and availability nationwide.”¹⁴ For example, the FCC cites the fact that 99% of zip codes show at least one subscriber utilizing high-speed lines.¹⁵ Furthermore, high-speed lines in service grew by 52% between June 30, 2005 and June 30, 2006.¹⁶ However, excessive geographic aggregation masks gaps in deployment.

For example, a 2006 report by the U.S. General Accountability Office (“GAO”) found that broadband deployment is extensive, but that it is difficult to assess the extent of gaps, particularly in rural areas.¹⁷ The GAO recommended that the Commission examine the cost and burden associated with options for improving broadband deployment data collection.¹⁸

¹² *Id.*, at ¶ 4.

¹³ *Id.*, citing *Local Telephone Competition and Broadband Reporting*, WC Docket No. 04-141, Report and Order, 19 FCC Rcd 22340 (2004) (*2004 Data Gathering Order*).

¹⁴ *Id.*, at ¶ 5.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*, at ¶ 6, citing United States Government Accountability Office, *Broadband Deployment Is Extensive throughout the United States, but It Is Difficult to Assess the Extent of the Deployment Gaps in Rural Areas*, GAO-06-426 (May 2006) (“GAO Broadband Deployment Report”).

¹⁸ *Id.*, at ¶ 6.

The Commission states that interconnected VoIP subscribership “appears to have grown rapidly” since the *2004 Data Gathering Order*, estimating a total of 8 million subscribers as of September 2006.¹⁹ Of special interest to the Commission is the impact of VoIP growth on universal service: “[G]rowth of interconnected VoIP services is one of the changing market conditions that are placing under significant strain the existing system to preserve and advance universal service, which is a fundamental goal of communications policy in the United States.”²⁰

III. SUFFICIENCY OF CURRENTLY-AVAILABLE BROADBAND AND INTERCONNECTED VOIP DATA

The Commission states that despite the “robust statistics and more granular broadband data” reported on Form 477 beginning in September 2005, it is nonetheless considering improvements “particularly regarding data reflecting broadband deployment and availability in rural and other hard-to-serve areas.”²¹ However, as shown in comments submitted in response to the Commission’s *Notice of Inquiry re Section 706*, the “broadband deployment problem” is not limited to rural and hard-to-serve areas, but rather that suburbs, low-income neighborhoods, and other areas are not well-served, either.²² One reason for the erroneous assumption that only rural areas lack broadband deployment is the excessive aggregation of data whereby only one subscriber in a zip code is interpreted as showing full broadband deployment.

¹⁹ *Id.*, at ¶ 8. At footnote 28 the Commission cites Cable Digital News reporting 5.1 million VoIP subscribers at end of third quarter 2006 plus Telephia estimate of 2.9 million “pure play” (or “over the top”) VoIP households.

²⁰ *Id.*, citing Report and Order and Notice of Proposed Rulemaking in WC Docket No. 04-36 (2006).

²¹ *Id.*, at ¶ 9.

²² *See, e.g., Notice of Inquiry re Section 706*, NASUCA reply comments (May 31, 2007), at 6-7.

A. Broadband Deployment Data

The Commission is correct to question whether the required list of zip codes where providers have at least one subscriber is sufficient “to provide a truly accurate picture of the state of broadband deployment.”²³ As the Commission observes, it may be the case that there is one subscriber in a small town or location close to the facilities of a cable or telephone service provider, yet other customers within blocks of, or miles from, that customer do not have broadband available to them.²⁴ As is discussed above, the Commission should not assume that this situation only exists in rural areas. NASUCA addresses specific proposals below.

B. Wireless Broadband Data

The Commission proposes to modify the Form 477 reporting instructions for wireless broadband providers.²⁵ Currently, the Commission is unable to distinguish between month-to-month subscribers, long-term subscribers, and casual users of wireless broadband services.

We find that we are currently unable to determine from the reported data the number of subscribers who make regular use of a broadband Internet access service as part of their mobile service package. Moreover, we believe the current instructions make it likely that more and more mobile voice service subscribers will be reported as mobile broadband subscribers merely by virtue of purchasing a broadband-capable handset, rather than a specific Internet plan.²⁶

As noted by the Commission, many mobile data services are marketed and sold primarily as “add-ons” to mobile voice services.²⁷ The Commission’s proposals include:

²³ NPRM at ¶ 10.

²⁴ *Id.*

²⁵ *Id.*, at ¶ 11.

²⁶ *Id.*, at ¶ 12.

²⁷ *Id.*, at ¶ 13. Mobile data services include text and multimedia message capability, download of ringtone and games and other content, as well as website browsing capability. *Id.*

- Revising Form 477 requirements to require mobile wireless providers to report the number of month-to-month (or longer term) subscriptions for broadband Internet access designed to be used with laptop computers and PDAs (i.e. devices with their own browsers) separately,²⁸
- Requiring providers to report separately the number of subscribers that have a month-to-month or longer plan to support broadband-speed browsing of customized-for-mobile website,²⁹ and
- Requiring mobile wireless providers to report the number of unique mobile voice service subscribers who are not month-to-month (or longer term) but who made any downloads from their handset at broadband speeds during the reporting month.³⁰

The Commission's proposals are entirely appropriate given that it is otherwise difficult to determine whether mobile wireless broadband subscription numbers are inflated because of one-time downloads; a customer purchase of broadband-capable handset, but not a broadband service plan; or other reasons. The Commission seeks comments on making changes to instructions regarding the billing address of the end user.³¹ The concerns the Commission raises with respect to subscribers residing where there is no broadband Internet access service would be addressed more effectively by adopting the separate reporting requirements outlined by NASUCA above.

The Commission seeks comment regarding how to better determine the percentage of wireless broadband users who are residential customers. The Commission opines that the current 11% figure (the percentage of wireless broadband contracts that are residential in nature) seems too low given that broadband-capable handsets are "widely available and appear to be an

²⁸ Id., at ¶ 14.

²⁹ Id.

³⁰ Id.

³¹ Id., at ¶ 15.

increasingly popular consumer product.”³² Yet as the Commission noted, the current instructions and resulting data may overestimate subscribers by including in the universe of wireless broadband subscribers those consumers who merely purchase a broadband-capable handset, but not broadband service.³³

The Commission seeks comment on whether it should modify the instructions to require that broadband providers report all subscriptions not billed to a corporate customer account, non-corporate business customer account, or government or institutional account, as residential subscribers.³⁴ This approach should not be adopted. Making the default label “residential” if providers do not have sufficient information will certainly overstate residential subscriptions. Providers may not have the information necessary to determine whether a consumer’s usage relates to business or non-business purposes. For example, a small business owner or self-employed person might simply bill the service to their American Express credit card, but deduct the service as a business expense. Additionally, some employees are reimbursed for their mobile phone and/or mobile data expenses by their employers, but are personally responsible for the business relationship between the provider and themselves. Under the Commission’s proposal, these customers would be mis-identified.

At a minimum, the Commission should only consider this approach if it also adopts the changes it proposes in paragraph 14 (i.e., reporting broadband plan subscribers separately from subscribers who download content one time or only occasionally). The Commission may not be able to solve this problem unless providers are required to ask consumers to categorize

³² Id., at ¶ 16.

³³ Id., at ¶ 12-14.

³⁴ Id., at ¶ 16.

themselves as general or business users, which may bring up privacy concerns, administrative issues, and may not be particularly accurate. In addition, the lines are constantly blurring between residential and business use, and perhaps even more so for subscribers who do have wireless broadband services. Many of those consumers have wireless broadband for work purposes, but also rely on the service for other purposes.

C. Speed Tiers

The Commission asks whether it should refine the speed tier information it currently collects on Form 477 by splitting the current tier “200 kbps to less than 2.5 mbps” into two tiers: “greater than 200 kbps and less than 1.0 mbps,” and “1.0 mbps to less than 2.5 mbps.”³⁵ NASUCA encourages the Commission to make this change in reporting requirements, and more. However, NASUCA notes that the entire first tier (the slower connection speed) may become less relevant in the future. The Commission should divide the 1.0 mbps-2.5 mbps tier into two groups. Of course, as technology improves, the Commission will find that some of the higher tiers need additional refinement as well. The Commission should also divide the tier, “greater than or equal to 2.5 mbps and less than 10 mbps,” into two groups.

The Commission asks whether it should change the current measurement of broadband speeds, whether it should raise the minimum reporting threshold, and whether the definition should allow for different upstream and downstream speeds.³⁶ The Commission should not raise the minimum reporting threshold. It is vital for effective policy design that the Commission know how many consumers subscribe to broadband service at various speeds. The Commission

³⁵ Id., at ¶ 18.

³⁶ Id., at ¶ 19.

needs to know not only how many consumers are able to purchase top-tier service, but also how many are able to get only slower broadband service, or no broadband service at all.

The Commission asks, “Do services with downstream connection speeds only slightly greater than 200 kbps continue to be an important stepping stone for broadband adoption by households, including households in rural and other hard-to-serve areas?”³⁷ NASUCA suggests that the answer to this question depends on the take rate and the difference in prices between the lower service quality and the higher service quality products. If the price difference between “starter” broadband and a higher speed connection is large, then the slower connection is less likely to act as a stepping stone. NASUCA suggests that enhanced data collecting might assist the Commission in answering this question.

The Commission seeks comment on whether and how it could adopt a system whereby speed tiers on Form 477 would automatically adjust upwards to reflect technological changes.³⁸ Specifically, the Commission seeks comment on:

- What information does the Commission need to adopt such a system?³⁹
- Would bandwidth requirements of services and applications provide useful guidance?⁴⁰
- Is there general industry consensus re the bandwidth requirements of common applications such as distance learning, telemedicine, movie downloads, high definition TV?⁴¹

³⁷ Id.

³⁸ Id., at ¶ 20.

³⁹ Id.

⁴⁰ Id.

⁴¹ Id.

NASUCA recognizes the need for data collection methodology to evolve as technology evolves but posits that such a determination is premature. NASUCA recommends that the Commission defer deliberation on this point until a future proceeding. As long as there are customers subscribing to the slower speeds, however, it might be better to create new higher tiers rather than simply shifting everything upwards.

D. Interconnected VoIP Subscriberhip Data

Interconnected VoIP providers that are not LECs are not required to report on Form 477.⁴² The Commission is seeking comment on how it can modify Form 477 to collect information on the number of VoIP subscribers in “the least burdensome manner.”⁴³ Although the Commission should attempt to minimize the costs and burdens associated with data collection and reporting, the primary goal should not be to minimize burdens. The primary goal of the Commission should be to gather the data necessary for effective policy design.

The Commission specifically seeks comment on whether the following data should be collected from all retail and wholesale providers of interconnected VoIP service:

- The number of interconnected VoIP subscribers in service for whom the filer is the service retailer,
- The percentage of retail interconnected VoIP subscribers who are residential, as opposed to business, end users, and,
- The percentage of retail interconnected VoIP subscribers who receive that service over a broadband connection provided by the filer (or by the filer’s affiliate).

Although the three areas of data collection would be useful to the Commission, the Commission’s proposal to collect the information on a state-level basis renders the data

⁴² Id.

⁴³ Id., at ¶ 22.

practically useless for identifying the status of service availability in particular areas within the state.⁴⁴ As stated above in these comments, greater geographic precision is essential.

IV. PROPOSALS FOR REFINING COMMISSION ANALYSIS OF BROADBAND DEPLOYMENT AND AVAILABILITY

The Commission is seeking comments on several proposals to increase its understanding of broadband deployment and availability. As an initial matter, the Commission notes that these include approaches that minimize the burdens on filers but “may yield commensurately modest analytic benefits.”⁴⁵ Conversely, the Commission offers more detailed approaches for obtaining information that it suggests may “prove to be costly to data reporters or impractical.”⁴⁶ The Commission seeks detailed quantification of direct and indirect costs associated with the alternatives. NASUCA urges the Commission to examine such estimates carefully, and to seek supporting assumptions and documents for possible hyperbolic statements that the costs are insurmountable.

The Commission determined in the *2004 Data Collection Order* that the benefits derived from requiring small entities to report broadband data outweighed the reporting burdens.⁴⁷ However, the Commission did not adopt certain options it is now considering because of concerns regarding the reporting burden of smaller carriers. The Commission asks whether it

⁴⁴ Id. The Commission did not explain the apparent inconsistency between its state-level proposal and its statement at ¶ 10 that “[i]deally, we would have information about the choices that a customer faces on a house-by-house and business-by-business basis.” Furthermore, in paragraph 27 of the NPRM the Commission states, “[A]ny methodology based on a 5-digit Zip Code aggregation will continue to yield results that do not accurately depict broadband availability in particular, localized areas with a Zip Code.”

⁴⁵ Id., at ¶ 23.

⁴⁶ Id.

⁴⁷ Id., at ¶ 24.

should exempt some carriers from any additional reporting requirements it adopts as a result of this proceeding.⁴⁸ Although NASUCA recognizes that smaller entities may face reporting burdens, the broadband data limitations described in above and detailed in the *706 Inquiry* (GN Docket No. 07-45) suggest that the Commission requires data particularly in places that may be served by smaller entities.

A. Additional Analysis of Current Broadband Subscribership Data

The Commission asks whether it should analyze more carefully the broadband subscribership data it currently collects to “identify more precisely the areas where broadband is not available, particularly to households,” citing the *GAO Broadband Deployment Report*.⁴⁹ More careful analysis of deployment data is indeed essential. The Commission suggests that 12% of 5-digit zip codes have no providers of facilities-based, wired, primarily residential, high-speed Internet.⁵⁰ The Commission appears to be working on the assumption that only this sub-set of households, i.e. the 12%, needs additional analysis. However, as stated previously, the presence of one provider in a zip code provides no information about the ability of all or even most households in that zip code to subscribe to broadband services (i.e., broadband may not be deployed throughout a zip code). As noted by the Commission, GAO’s work with ConnectKentucky analyzing Form 477 data showed that the Form 477 data “may overstate the

⁴⁸ Id.

⁴⁹ Id., at ¶ 25.

⁵⁰ “Primarily residential” is defined as a provider that provides greater than 50% of its lines to residential consumers (for that particular technology and state). NPRM, at footnote 53.

availability and competitive deployment of nonsatellite broadband.”⁵¹

The Commission asks whether it should “explore collaborations” such as the ConnectKentucky/GAO work to troubleshoot data or prepare “discrete state or region-specific” reports. While such an approach will be useful, NASUCA is again concerned that the Commission is limiting its analysis to rural and hard-to-serve areas when evidence suggests that there is still a larger data problem even in suburban and urban areas. In addition, several separate studies may lead to difficulties in making comparisons across studies. However, to the extent that organizations such as ConnectKentucky have developed methods of gathering deployment data in extremely granular detail, such collaborations might assist the Commission in developing a more accurate portrait of broadband deployment nationwide.

For example, Connected Nation, Inc., in its comments in proceeding 07-45, highlighted its efforts in Kentucky, noting that it was able to achieve participation from industry to create a coverage map at most basic level -- that of deployment itself. ConnectKentucky, the Kentucky affiliate of Connected Nation, has worked with providers across the state to produce a comprehensive GIS map of broadband service statewide. This model is unique in that it maps broadband deployment not according to any geographic unit, but according to the deployment itself. This mapping at the deployment level pinpoints the most granular gaps in service, and allows for effective strategic planning and policy to address them.

Creation of the gap identification map was accomplished through a cooperative public private approach to data gathering whereby individual providers securely submitted proprietary deployment data to ConnectKentucky, which served as a data clearinghouse. The data was

⁵¹ NPRM at ¶ 26, citing *GAO Broadband Deployment Report*, at 17. Specifically, GAO found that while the FCC report showed that 96% of Kentucky households are in zip codes where broadband is available, ConnectKentucky’s more in-depth research found that only 77% of Kentucky households had access. NASUCA previously cited ConnectKentucky’s work in comments in the Section 706 proceeding. See *Notice of Inquiry re Section 706*, NASUCA initial comments (May 16, 2007), at 15-16 and 20.

then converted to represent collective broadband coverage and gaps in service. The result was a true picture of deployment across Kentucky.⁵²

The Commission asks whether it should focus on better utilizing its zip code data currently submitted on Form 477. The Commission states that “any methodology based on a 5-digit Zip Code aggregation will continue to yield results that do not accurately depict broadband availability in particular, localized areas within a Zip Code.”⁵³ Nevertheless, the Commission asks whether requiring filers to provide customer counts with Zip Code lists would be useful. Certainly, if the Commission fails to adopt more granular data collection, this would be a minimum requirement. However, NASUCA supports collecting data at a more granular level than the 5-digit zip code, and, at a minimum, at the level of a 9-digit zip code.

The Commission asks whether it should require all broadband providers to report the number of residential consumers served (rather than the current requirement to report the percentage of total broadband connections in service that are residential connections) and to provide the number of homes “passed” by their infrastructure.⁵⁴ NASUCA urges the Commission to make this reporting change. Especially where one household subscribes to more than one connection, the change will more accurately reflect the percentage of all American households, or households in a particular area, subscribing to broadband services. In addition, NASUCA supports Commission efforts to calculate “broadband uptake figures (i.e. the ratio between adoption and availability)”⁵⁵ as a method to gauge affordability and consumer demand. In defining “homes passed” for this analysis the Commission should ensure that providers are

⁵² *Notice of Inquiry re Section 706, ConnectKentucky Initial Comments*, at 5.

⁵³ NPRM at ¶ 27.

⁵⁴ *Id.*, at ¶ 28.

⁵⁵ *Id.*

only counting households that can currently receive the particular service in question. A provider may have deployed basic infrastructure to an area, but not yet offer service to all households for technical, business, or other reasons. “Homes passed” should be synonymous with homes to which service is currently available.

The Commission seeks comment on whether the Commission’s twice-yearly high-speed services report should include international data and comparisons.⁵⁶ To the extent that the Commission is simply summarizing data from publicly available reports such as the OECD and ITU report that the Commission cites, the Commission would do better to maintain focus on gaining accurate data on the state of broadband deployment in the United States. This proceeding should focus on gaining access to additional data for the United States that is not currently available to decision makers and the public.

B. Subscribers per 9-digit Zip Code

The Commission seeks comment on whether it should require providers to submit 9-digit zip codes and associated customer counts.⁵⁷ The Commission seeks input from providers as to the cost involved in mapping 9-digit zip codes to addresses and whether providers may already in fact have such data in their systems. NASUCA believes that such data should be fairly simple to provide. An individual can currently determine 9-digit zip codes for an address by using the USPS website. NASUCA strongly supports the addition of associated number counts by 9-digit zip code.

The Commission asks whether “there is significant value associated with simply requiring data filers to report lists of 9-digit Zip Codes where they have at least one customer,

⁵⁶ Id., at ¶ 30.

⁵⁷ Id., at ¶ 31.

but without requiring associated customer counts by Zip Code.”⁵⁸ Any move to more disaggregated data would be an improvement. However, the “broadband data problem” is two-fold: (1) data is reported on an aggregated basis (i.e., zip code instead of household or wire center) and (2) an entire area is deemed to have access to broadband even if just one customer receives the service. NASUCA urges the Commission to fix both problems by: (1) collecting data on a more granular basis and (2) requiring actual customer counts instead of a simplistic binary determination of deployment (i.e., one customer in an area equals broadband deployment throughout the area). If the Commission adopts a zip-code approach, it should adopt the 9 digit zip code as the unit of analysis and require customer counts at the 9-digit zip code level. Anything less will not significantly improve the Commission’s current data collection efforts.

C. Purchase of Commercial Databases or Services

The Commission seeks comment on the availability of commercial services that may provide data on broadband deployment or data-processing programs that could augment the Form 477 data.⁵⁹ It may be feasible for data-processing companies to calculate subscriber counts for 9-digit zip codes (or other geographic areas). Additionally, there may be economies of scope and scale involved in using a nationwide data-processing contract. The Commission raises confidentiality issues, but many industry associations collect confidential data without significant issues. Also, the Commission may benefit from purchasing appropriate geographic information system (“GIS”) software to facilitate data analysis and map creation. Also, the Commission could encourage large universities, which may have sophisticated data-mapping software and hardware, to contribute to this process.

⁵⁸ Id.

⁵⁹ Id., at ¶ 32.

D. Geocoded Information about Subscriber Locations

NASUCA supports efforts to identify areas of broadband deployment on a geographically smaller basis than the current zip code requirement. Geocoded information may provide the most useful information about broadband deployment.⁶⁰ NASUCA respectfully disagrees with the Commission’s statement that “[r]equiring subscriber counts by Zip Code could prove to be the least costly and most feasible change to our Form 477 data collection, i.e., to most efficiently produce additional information that would materially advance our understanding of broadband availability.”⁶¹ NASUCA agrees that requiring subscriber counts by zip code would not impose unreasonable costs, but the Commission should address both the binary nature of the current reporting (i.e., one subscriber equals deployment) and the excessive aggregation of data (i.e., at the zip code level).

E. Develop Automated System of Voluntary Reporting by Non-served Households

The Commission seeks input on the “feasibility and value” of adopting a self-reporting system whereby individuals without access to broadband could call or e-mail the FCC and identify their addresses and/or phone numbers. The Commission could then develop a database of precise local geographic areas without broadband availability.⁶²

While this type of information collection has some merit, such a project should not be undertaken in lieu of the data collection measure proposed above, but rather should supplement any other data collection methods. The Commission expresses concern that self-reporters may indicate that they have no broadband service options available when in fact they may not be

⁶⁰ Id., at ¶ 33.

⁶¹ Id.

⁶² Id., at ¶ 34.

aware of an option that is available. Such information may be valuable in and of itself: To the extent that self-reporters in certain areas consistently report no broadband options when in fact a particular technology is in place according to a provider, this result may give the Commission valuable information about demand for particular services and the perceived substitutability of different offerings. Furthermore, the self-reporting system may give the Commission information about where demand exists. The Commission would need to exercise careful judgment, however, about making conclusions that demand does not exist in the absence of self-reporters. A voluntary self-reporting system must be well publicized, but cannot be relied upon to be entirely accurate or to be a substitute for actual subscribership data.

F. Broadband-enabled Service Territory Report by Provider

The Commission asks whether requiring broadband providers to report information that shows the boundaries of their broadband service territories would be valuable.⁶³ As noted by the Commission, it is possible that broadband is available even in zip codes where no subscriptions are reported under current data collection methodologies. The Commission suggests that by requiring providers to report specific geographic boundaries and areas (sometimes just parts of zip codes) where they offer service, the Commission “could arrive at a far clearer understanding of the actual dynamics of broadband availability in discrete geographic areas and to different communities of users.”⁶⁴ NASUCA concurs with the Commission that the fact that ConnectKentucky has mapped broadband availability in Kentucky “suggests that providers can delineate their areas of broadband deployment at much finer levels of detail than the Zip Code

⁶³ Id., at ¶ 35.

⁶⁴ Id.

based data we now collection on Form 477.”⁶⁵ Ideally, the Commission would collect both data on subscription numbers and availability over the same geographic areas so that it could calculate a broadband take rate. Gaining information about both availability and subscription is important, but knowing the broadband take rate in areas where broadband has been deployed is also crucial for policymaking purposes.

In discussing geographic mapping, the Commission suggests that there are some areas where broadband “is generally available” but where “site-specific factors may impede availability to individual households,” for example the presence of load coils and/or bridge taps.⁶⁶ From a consumer perspective, broadband is not available to those households and should not be counted as such. The Commission also notes that landscaping and climate conditions can determine availability of wireless broadband service at particular sites.⁶⁷ These are reasons that it is important to analyze broadband availability in much more granular detail than is currently done.

NASUCA recognizes that some broadband access providers may balk at revealing what they contend to be proprietary data. That same “proprietary” claim was made related to new and more detailed outage reporting requirements that went into effect in January 2005 and apply to virtually all providers. The objections were dispelled once it became clear that the Commission’s system did not allow carriers’ access to other specific carriers’ data and thus the data did not place any specific carriers’ competitive posture at risk. Because broadband is rapidly becoming an essential service, just like voice service, electricity, natural gas, and water, data on its deployment and availability to consumers is essential. NASUCA cautions that, to the

⁶⁵ Id.

⁶⁶ Id., at ¶ 36.

⁶⁷ Id., at footnote 68.

extent that deployment data is unavailable for outside analysis, its collection will be essentially useless to advocates, state decision makers, and consumers.

G. Extrapolating Nationwide Competitive Conditions from Conditions in Representative Areas

NASUCA does not support the Commission’s proposed option of substituting estimates of broadband availability based on representative areas for more granular, data.⁶⁸ First, the Commission should not concede that more granular data collection on a nationwide basis is unachievable. Second, this proposal will almost certainly remain bogged down in attempting to identify areas that would serve as “representative” areas. Further, NASUCA does not support the Commission’s proposal to select Kentucky areas to represent each of the types of areas, including urban, metropolitan, exurban, low-income, and rural (with the exception of tribal land, of which there are none in Kentucky).⁶⁹ Resources are better spent on the other data collection improvements highlighted in these comments.

The Commission asks, in the context of its extrapolation proposal, “whether collecting detailed information about deployment of two broadband technologies (i.e. cable modem and DSL) would be sufficient to inform broadband policy making.”⁷⁰ Such an approach seems to suggest that the Commission is conceding that the primary broadband options for many households still are just the ILECs and cable companies (where available). Although presently, broadband access is dominated by a duopoly consisting of telecommunications and cable companies, the Commission, nonetheless, should seek information about alternative technologies (e.g., fixed wireless), and actively encourage the development of these alternatives.

⁶⁸ Id., at ¶ 39-44.

⁶⁹ Id., at ¶ 43.

⁷⁰ Id., at ¶ 42.

The Commission seeks input on the collection of price information for broadband service options.⁷¹ Again, the Commission, in seeking input on whether it would be sufficient to collect pricing information for cable and DSL services only, appears to be conceding that competition, where it exists, is primarily between the cable companies and ILECs.⁷² NASUCA supports a modification of Form 477 to collect price information from all entities that report broadband connections via any technology.⁷³ Such pricing information should, at a minimum, provide non-introductory and/or non-promotional prices -- the prices that consumers face in the long term. Furthermore, pricing information should include, at a minimum, stand-alone prices for broadband services. In addition, residential and business pricing should be disaggregated.⁷⁴ NASUCA understands that each provider may provide several broadband services. It may be incumbent upon the Commission to require a provider to provide pricing information on its top five subscribed services, for instance. To the extent that prices vary by region, such variances should be reported.

V. CONCLUSION

NASUCA supports the Commission's endeavors to improve its collection and analysis of the information it needs to develop and maintain appropriate broadband policies. NASUCA urges the Commission to collaborate with states in its design and modification of data gathering policies. NASUCA also looks forward to reviewing the other comments filed in this docket, and

⁷¹ Id., at ¶ 45.

⁷² Id.

⁷³ Id., at ¶ 46.

⁷⁴ Id., at ¶ 45.

to submitting reply comments addressing those other comments. NASUCA is also filing comments today in the Commission's "broadband industry practices" docket, WC Docket No. 07-52.

Respectfully submitted,

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