

**Before the
Federal Communications Commission
Washington DC 20554**

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

COMMENTS OF VERIZON AND VERIZON WIRELESS

Michael Glover
Of Counsel

Edward Shakin
William H. Johnson
Verizon
1320 North Court House Road
9th Floor
Arlington, Virginia 22201
(703) 351-3060

March 30, 2011

John T. Scott, III
William D. Wallace
Verizon Wireless
1300 I Street, NW
Suite 400 West
Washington, DC 20005
(202) 589-3740

TABLE OF CONTENTS

| | Page |
|---|-------------|
| I. INTRODUCTION AND SUMMARY | 1 |
| II. THE COMMISSION MUST AVOID UNJUSTIFIED, BURDENSOME REPORTING OBLIGATIONS | 4 |
| III. THE COMMISSION ALREADY HAS ACCESS TO COMPREHENSIVE DATA CONCERNING THE BROADBAND MARKETPLACE, AND BURDENSOME, NEW REPORTING OBLIGATIONS ARE UNNECESSARY | 6 |
| A. <u>The Commission Already Has Access To Necessary Data For the Specific Categories Included in the NPRM.</u> | 6 |
| 1. Information Concerning Deployment | 8 |
| 2. Pricing Data | 17 |
| 3. Subscription Data | 20 |
| 4. Service Quality and Customer Satisfaction | 23 |
| 5. Ownership and Contact Information | 28 |
| B. <u>The Commission Should Streamline its Data Collection Processes and Provide Additional Flexibility for Providers.</u> | 29 |
| IV. APPROPRIATE PROTECTIONS FOR SENSITIVE DATA ARE ESSENTIAL | 31 |
| V. CONCLUSION | 33 |

**Before the
Federal Communications Commission
Washington DC 20554**

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

COMMENTS OF VERIZON¹ AND VERIZON WIRELESS

I. INTRODUCTION AND SUMMARY

As the Commission considers how to modernize and streamline its data reporting requirements for broadband and other communications services, two considerations should weigh heavily, each of which militates against creating burdensome, new data reporting obligations.

First, consistent with the directive recently issued by President Obama and endorsed by Chairman Genachowski, the Commission must be sensitive to the costs and other burdens

¹ In addition to Verizon Wireless, the Verizon companies participating in this filing are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

that result from mandating any additional reporting requirements. Such costs are ultimately borne by consumers. Accordingly, the Commission must ensure that reporting obligations are necessary, useful, and carried out in an efficient manner. For example, the Commission should consider existing third-party or publicly-available data sources and should coordinate with other federal agencies, including NTIA and the Census Bureau, to take advantage of the information in their possession and to avoid redundant data collection.

Second, the Commission must consider that it and other policymakers now have available to them a wealth of information concerning all aspects of the communications marketplace, particularly in light of a number of recent efforts already expanding the data collected by the federal government. As a result of hundreds of millions of dollars of federal funding and considerable effort on behalf of broadband providers and numerous other stakeholders – including the Commission, NTIA, and state-level broadband mapping entities – the inaugural edition of the national broadband map was released just last month.² That map, which will be updated semi-annually and is funded through at least 2015, provides detailed information concerning the broadband providers, technologies, and speeds available to consumers throughout the country. Together with the granular data required by the most recent revisions to the Form 477, the information now collected by the Census Bureau, and other existing data sources, the information available to policymakers and the public concerning broadband and other communications services has grown exponentially in just the last two years.

² See <http://broadbandmap.gov/>.

In light of these two considerations, the Commission has no need to adopt new reporting obligations, and instead it should consider reducing some of the existing obligations that are unnecessarily burdensome and/or that serve no purpose related to the Commission's statutory responsibilities. Unfortunately, the Commission's Notice of Proposed Rulemaking³ appears to take a different approach. Rather than focusing on opportunities to eliminate unnecessary reporting obligations and improve the efficiency of broadband data reporting, the thrust of the NPRM appears aimed at substantially increasing data reporting obligations in this competitive marketplace. Indeed, much of the NPRM is devoted to open-ended questions seeking ways to increase industry-wide data reporting obligations for almost any conceivable purpose, rather than seeking comment on concrete and targeted proposals needed to further the Commission's particular statutory responsibilities. This scattershot approach in the NPRM is inconsistent with both the recent statements of the President and the Chairman, and risks exceeding the Commission's authority and running afoul of the Paperwork Reduction Act.⁴

The Commission, in conjunction with NTIA and other policymakers should focus their attention on effectively processing, synthesizing, and analyzing existing data, which provide a detailed, granular view of the communications marketplace. Making better use of existing data sources will inevitably be more efficient than adopting new reporting obligations, particularly the reporting obligations suggested in the NPRM, some of which would seem to gather more data solely for the sake of having more data. Only after taking

³ *Modernizing the FCC Form 477 Data Program*, Notice of Proposed Rulemaking, WC Docket Nos. 11-10, 07-38, 08-190, 10-132; FCC 11-14 (Feb. 8, 2011) ("NPRM").

⁴ 44 U.S.C. § 3501 *et seq.*

those steps can intelligent and reasonable decisions be made concerning the need for still more data and whether the associated burdens could be justified.

Moreover, to the extent that the Commission at some point reasonably determines that it needs additional data for particular purposes, it should consider targeted data collections tailored to address those purposes rather than broad, recurring, industry-wide reporting obligations that seek to anticipate every conceivable type of data that could eventually be of theoretical use. For example, at least after initial broadband availability gaps are identified using the national broadband map, then certain reporting obligations would more appropriately be focused on just those providers that elect to participate in programs, like the NTIA and Rural Utilities Service (RUS) grant and loan programs or new universal service broadband support programs, aimed at filling such gaps.

Rather than shooting first with broad and burdensome new reporting requirements and asking questions later about what information was actually needed and from whom, the Commission instead should look to truly modernize and streamline its approach by finding ways to effectively work with existing data sources and other agencies, eliminating requirements that are of little practical utility or that are unnecessarily burdensome, and crafting any future data collection activities in a more targeted and deliberate manner.

II. THE COMMISSION MUST AVOID UNJUSTIFIED, BURDENSOME REPORTING OBLIGATIONS

In this proceeding, the Commission should be guided by the President's and the Chairman's commitment to regulatory humility and to limiting the burdens associated with unnecessary regulation. As President Obama recognized in January, and Chairman Genachowski echoed just last month, the regulatory system should "promot[e] economic

growth, innovation, competitiveness, and job creation . . . [and] use the best, most innovative, and least burdensome tools for achieving regulatory ends.”⁵

To further those interests, the Commission and other federal agencies must “adopt a regulation only upon a reasoned determination that its benefits justify its costs” and “tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulation.” *Executive Order* § 1(b). In the case of “industries [that] face a significant number of regulatory requirements, some of which may be redundant, inconsistent or overlapping . . . [g]reater coordination across agencies could reduce these requirements, thus reducing costs and simplifying and harmonizing rules.” *Id.* § 3.

Similarly, as the Chairman has recognized, avoiding unnecessary and costly “red tape” and “remov[ing] barriers and eas[ing] the regulatory burden, where possible,” are important steps that the Commission can take to encourage broadband investment and deployment. *Genachowski Speech* at 2. Indeed, the Chairman specifically noted that “eliminat[ing] unnecessary data collection” can be one such step as part of the effort to avoid “needlessly hurting businesses and our national economy.” *Id.* at 3-4.

This recognition of the need to account for the costs and burdens of regulation is also reflected in the Paperwork Reduction Act. Before engaging in a data collection, the Commission is required to certify, among other things, that the collection “is necessary for the proper performance of the functions of the agency, including that the information has

⁵ President Barack Obama, Executive Order 13563 § 1, 76 FR 3821 (2011)(“*Executive Order*”); Chairman Genachowski, “Prepared Remarks of Chairman Julius Genachowski at the Broadband Acceleration Conference,” http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0209/DOC-304571A1.pdf, at 4 (Feb. 9, 2011)(“*Genachowski Speech*”).

practical utility” and that the “information is not unnecessarily duplicative of information otherwise reasonably accessible to the agency.” 44 U.S.C. § 3506(c)(3). The Commission also is required to certify that the collection “reduces to the extent practicable and appropriate the burden on persons who shall provide information to or for the agency.” *Id.*

In order to satisfy these standards in the context of this proceeding, the Commission must pay real attention to the burdens from reporting obligations that have escalated in their granularity every couple of years as well as the burdens that would flow from any new obligations. Rather than simply expanding requirements without regard to the “practical utility” of particular information, the availability of data from other agencies or public sources, and the costs on industry and consumers, the Commission should look to improve the efficiency and reduce the burdens of these data collections, consistent with the public interest. This approach to truly modernizing and streamlining data collections requires increased focus on using the variety of governmental and public data sources that now exist and crafting data collections narrowly tailored to filling gaps for specific purposes, while looking for opportunities to scrap any reporting obligations that are unnecessarily burdensome or that yield little practical benefit to the public.

III. THE COMMISSION ALREADY HAS ACCESS TO COMPREHENSIVE DATA CONCERNING THE BROADBAND MARKETPLACE, AND BURDENSOME, NEW REPORTING OBLIGATIONS ARE UNNECESSARY

A. The Commission Already Has Access To Necessary Data For the Specific Categories Included in the NPRM.

The NPRM seeks comment on the need for additional data for several specific categories of information. In light of the data already available to the Commission – including from the recently revised version of the Form 477, the NTIA broadband mapping program, the Census Bureau, and other third-party or public sources – no new reporting

requirements are needed for the Commission to fulfill its statutory duties, nor could any such requirements be justified in light of the directives of President Obama and Chairman Genachowski and the Paperwork Reduction Act.

The Commission already has access to voluminous data. In fact, less than three years ago the Commission substantially revised the Form 477 broadband data reporting process, and those revisions – which have been reflected in only four reports – provide the Commission with substantial granular data about the communications marketplace.⁶ The current Form 477 requires all broadband providers to report the number of broadband connections in service in each census tract as well as the speed tier associated with those connections and available technologies. Providers must also provide an estimated breakdown between residential and business customers at the census tract level. *Id.* ¶¶ 10-18. At the same time, the Commission increased to 72 the number of “speed tiers” that are tracked on the Form 477, and included both upload and download speeds in defining these tiers. *Id.* ¶¶ 19-22. And the Commission further amended the Form 477 to provide additional information about mobile wireless broadband services and VoIP services. *Id.* ¶¶ 23-31.

These revised requirements provide a wealth of information that the Commission is still learning how best to synthesize and assess, including where broadband services are offered, what services consumers subscribe to, and how the speeds of those services and technologies used to provide them evolve over time. Numerous other sources of information also are now available, including most notably the data collected for and depicted on the

⁶ See *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriber Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscriber Data*, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691 (2008).

national broadband map developed pursuant to NTIA's mapping program and the information collected by the Census Bureau concerning broadband adoption. In light of this voluminous data – largely of recent vintage – it would be premature and counterproductive to impose new reporting obligations at this time for any of the categories of information on which the NPRM seeks comment.

1. **Information Concerning Deployment**

Additional reports concerning the deployment of communications networks would be wholly redundant of the efforts already underway in conjunction with NTIA's broadband mapping program and could not be justified in light of the associated burdens.

Geographic Availability. Congress recognized the significance of gaining a better understanding of where broadband networks have been deployed. After considering the various alternative paths to gaining that information, Congress settled in the Broadband Data Improvement Act (BDIA) on a state-level, cooperative approach – conducted under the supervision of NTIA – to mapping broadband availability. Subsequently, Congress funded this effort with \$350 million as part of the American Recovery and Reinvestment Act. NTIA, in consultation with the Commission, funded and directed the state-level entities in collecting and processing these data.⁷ Through this program, a responsible entity in each state was required to assemble detailed information about broadband services, including availability, speed and technology, and then to provide this information to NTIA for use in the nationwide mapping program. Moreover, these entities will update this information twice annually for five years. This state-level approach – which Verizon has long supported –

⁷ NTIA, *State Broadband Data and Development Grant Program*, Notice of Funds Availability and Solicitation of Applications, 74 FR 32545 (2009).

allows for an entity with boots on the ground to ascertain information concerning available broadband in an efficient and accurate manner.

Armed with the information supplied by these state-level entities and in consultation with the Commission, the NTIA just last month released the first iteration of the nationwide map of broadband availability. See <http://www.broadbandmap.gov/>. This mapping program allows any person to type in an address and search for information concerning all available broadband services, including the identity of available providers, the technologies, and the speed offerings within their census block (or an even more granular level for geographically large census blocks).

While NTIA has acknowledged that this map is a work in progress and parties have identified imperfections in the initial data, the nationwide availability map marks an important milestone. The map – and the data that comprise it – can now be improved as the data and process are refined through subsequent reporting cycles and based on feedback from the public. As a result, ever-more-accurate and detailed information concerning the availability of broadband will be available to the Commission and other policymakers at least for the next several years.

With this substantial effort already well underway, it would be inappropriate for the Commission to add additional availability reporting obligations at this time. Such requirements would be inconsistent with the will of Congress – which already settled on a preferred approach for obtaining such data – and would ignore the tremendous resources already devoted to these efforts on the part of the federal government, state mapping entities, broadband providers, and other stakeholders. Additional requirements would create new and unjustified burdens for providers that already are actively working to provide data to state-

level broadband mapping entities. Such requirements could complicate, and potentially undermine, the work underway in the NTIA program by diverting resources that could be better spent on maintaining and improving these state-level mapping efforts.

Such requirements – seeking information already being collected under the auspices of the NTIA – also would be inconsistent with the directives of President Obama and Chairman Genachowski concerning the proper and efficient use of regulatory power, and would run afoul of the Paperwork Reduction Act. Duplicating the effort being expended in connection with the NTIA mapping program would have no practical utility and could not possibly be the “best, most innovative, and least burdensome tool[] for achieving regulatory ends.” *Genachowski Speech* at 4 (quoting *Executive Order*). Therefore, to the extent that the Commission requires broadband availability data, it should coordinate with NTIA and take full advantage of this important data source.

In the NPRM, the Commission notes that the NTIA mapping program is only funded through 2015 and therefore may not provide an ongoing source of data after that point. This fact, however, does not provide a basis for the Commission to create unnecessary data reporting obligations at this time. Indeed, given that 95 percent of homes already have access to broadband, and that the availability gap will continue to shrink over the coming years, the need for an ongoing, nationwide reporting process to gauge broadband availability beyond 2015 is far from clear. Instead, more tailored efforts – such as reporting requirements focused on any continuing gaps in availability or targeted to providers receiving funding to address those gaps – would be more appropriate than broad, industry-wide and nationwide reporting obligations. For example, if universal service funding, NTIA or RUS loans or grants, or any other federal funding is used for broadband deployment, then those

providers receiving funding could report to the Commission on the ongoing process of expanding broadband availability.

Although the Commission should not create any, additional reporting obligations at this time, to the extent that it decides to do so, it should ensure that those requirements are consistent with the type of data required by the NTIA mapping program. To do otherwise would result in duplication of effort, wasted resources, and the potential for confusion. So, for example, it would be inappropriate for the Commission to require data reporting at a level more granular than that required by NTIA – generally, the census block level – unless a provider voluntarily determined that a more granular level (such as address) would be less burdensome for it to produce.

Speeds. The Commission also should forego new reporting obligations reflecting “actual speeds,” or other performance characteristics of broadband networks or services, on the Form 477. As the Commission is well aware, the process for identifying such speeds and creating consistent and useful metrics is much more complicated than it may sound. Many factors, including circumstances outside of a provider’s control, make it difficult to track achieved broadband speeds. For broadband offered through shared delivery networks, achieved user speeds vary considerably depending on the level of upstream and downstream traffic and a customer’s distance from a central office. Features such as “speed boosts” also complicate the task of measuring and comparing the “actual speeds” offered over different technologies and by different providers. Specific to mobile wireless broadband service, achieved speeds depend upon factors such as the number of customers being served by the same cell site, the user’s distance from that site, the user’s location (*e.g.*, indoor v. outdoor), and battery power level. Achievable speeds at any given time and place also are affected by

factors completely unrelated to a provider's network, such as the congestion in the provider's network, speeds of backbone Internet providers, server performance for web-based transactions, the speeds of applications run by end users, and the time of day.

The Commission is in the process of grappling with these complex issues in other proceedings, and the outcome of those efforts should eventually result in speed information that will be useful to policymakers, consumers, and other stakeholders.⁸ Even if these efforts are successful, however, the Commission should wait until their conclusion to determine whether any types of metrics lend themselves to a Form 477 reporting obligation.

In the meantime, the Commission should maintain its focus on the advertised rates for available broadband services. These data illustrate the broadband speeds available to consumers without imposing new burdens on broadband providers. The Commission is already receiving significant amounts of information concerning available speeds across 72 different speed tiers as a result of its most recent revisions to the Form 477, and this information is already complemented by the speed information collected as part of the NTIA broadband mapping process. Rather than further complicate the process and impose additional expense associated with additional reporting on this topic, the Commission should rely on these existing data sources for purposes of assessing broadband speeds.

The Commission also seeks comment specifically on the collection of mobile broadband speed data. NPRM ¶ 59. As Verizon Wireless has explained, mobile broadband speeds must be tested and measured differently than fixed broadband speeds because “mobile

⁸ See *Comment Sought on Residential Fixed Broadband Services Testing and Measurement Solution*, Public Notice, 25 FCC Rcd 3836 (2010) (“Residential Fixed Broadband Measurement PN”); *Comment Sought on Measurement of Mobile Broadband Network Performance and Coverage*, Public Notice, 25 FCC Rcd 7069 (2010) (“Mobile Broadband Performance PN”).

and fixed devices and networks interact in significantly different ways that require distinct methodologies for measuring performance and coverage.”⁹ The Commission has already initiated a proceeding to determine whether and how to measure mobile broadband performance and coverage;¹⁰ it should allow that process to reach its conclusion before considering some new and duplicative data collection in the context of the Form 477.

As difficult as it would be to include speed data on the Form 477, it would be even more complicated and burdensome to include additional factors – such as “contention ratios” – potentially affecting speed. As described by the NPRM, a “contention ratio” would show the “ratio of the potential maximum bandwidth to the actual bandwidth available,” thereby reflecting the likelihood of congestion at peak times. NPRM ¶ 59. Putting aside the challenges in determining which facilities are devoted to which subscribers and which services, a “contention ratio” would mean nothing to the typical consumer and little, if anything, to most policymakers. Indeed, given the different technologies used to provide broadband, and many variables that would go into determining a “contention ratio,” the resulting data are unlikely to be of any practical use or relevance. The laborious task of ascertaining contention ratio data, presumably at a central office or even more granular level such as a remote terminal or a neighborhood cable node, moreover, would do nothing to advance broadband availability and would place unjustified burdens on providers. Requiring providers to collect and report granular data about the architecture of their broadband networks – such as having telephone providers identify and describe the broadband capacity

⁹ Comments of Verizon Wireless on Measurement of Mobile Broadband Network Performance and Coverage, CG Dkt. No. 09-158, at 9 (July 8, 2010)(“Verizon Wireless Mobile Broadband Performance Comments”).

¹⁰ See Mobile Broadband Performance PN.

of every trunk in every central office – also would drain significant time and resources better devoted to expanding broadband service.

Voice Availability. Finally, the Commission asks about the need to collect additional information concerning the availability of voice services, including over wireline and wireless networks. *See* NPRM ¶¶ 50-52. Given the admittedly “high” level of availability of these services, *id.* ¶ 50, and the availability of third-party data depicting coverage for wireless voice services, *id.* ¶ 51, there is no basis to expand reporting obligations specifically targeted at the availability of voice networks. To the extent that any data are needed, they should be sought in a targeted way for the small areas where there could be a problem, rather than through a broad and burdensome new reporting obligation.

With regard to mobile voice services, in particular, the available third-party data are adequate for the Commission’s purposes. The Commission has used American Roamer data for years in the context of its Wireless Industry Competition Reports to track and report on deployment and coverage of wireless voice networks.¹¹ American Roamer collects the data from carriers, and so, if the Commission were to request similar information from carriers directly, it would likely receive similar data sets.

There is no evidence that the data sets from American Roamer do not reliably depict wireless carrier investment in network infrastructure and coverage. Wireless carriers are motivated to provide accurate data on coverage, because if they were to overstate their voice coverage, such exaggeration could lead to consumer dissatisfaction and/or challenges from competitors regarding their advertising.

¹¹ *See, e.g., Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Fourteenth Report, 25 FCC Rcd 11407, ¶ 40 & passim* (2010)(“Fourteenth CMRS Report”).

The Commission expresses concern that the American Roamer data may not be sufficiently granular because they do not “account for factors such as signal strength, bit rate, or in-building coverage,” and thus “may convey a false sense of consistency across geographic areas and service providers.” NPRM ¶ 51. However, as an initial matter, there are no standards in the wireless industry to depict such factors across the various spectrum bands and wireless technologies.¹² Moreover, it is not at all clear how useful such data would be to the Commission or consumers, and the NPRM offers no insight into how such data could be put to some use. In any event, signal strength, bit rate and in-building coverage are all factors that can vary in the same location depending upon the conditions under which individual callers make calls. Actual availability of the network depends on various external factors that cannot be readily depicted, including the number of users in the geographic area, the type of device any one user has deployed, the weather conditions, and seasonal changes in foliage. Furthermore, producing maps that provide the same level of accuracy for indoor coverage is virtually impossible because the availability of the signal indoors varies with the spectrum in use, the structural materials of the building, and the location of the user inside the building. Attempting to take these factors into account and provide a depiction based on them could just as easily lead to a “false sense of consistency” as less complex coverage maps.

Spectrum Usage. The Commission also asks whether it should collect data on “spectrum bands used for mobile voice network deployment in specific geographic areas.”¹³

¹² See Verizon Wireless Mobile Broadband Performance Comments, at 14.

¹³ The Commission has asked about collecting similar information in the context of wireless license renewal applications. As Verizon Wireless explained in that context, collecting detailed information on spectrum usage is extremely burdensome with no apparent utility. Comments of Verizon Wireless, *Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95*,

See NPRM ¶¶ 52, 63, 79. But the Commission already collects deployment data in the form of its spectrum license build-out requirements to satisfy its Title III obligations to monitor spectrum usage. There is no need to collect more data in the context of the Form 477 report. Such data would be irrelevant to consumers because wireless carriers seamlessly integrate the use of multiple spectrum bands for the provision of voice service. Consumers are concerned where service is available not whether it is provided on cellular, PCS, AWS, 700 MHz, or some other spectrum band. Depiction of such spectrum layers could mislead consumers into thinking that they should expect variation based on spectrum, when, in fact, wireless providers work hard to make sure that the user experience is seamless across all spectrum bands in use.

If the purpose of such data collection is to create a spectrum inventory, the Commission should start any such initiative by reforming its Universal Licensing System (ULS) to determine what information it really needs. The Commission has already identified spectrum suitable for broadband, including the cellular, PCS, AWS and 700 MHz bands, and adopted flexible rules to permit broadband services. If there is a need for a spectrum inventory, the Commission should focus on determining what other bands can be allocated for broadband services. The future of mobile services would be aided by putting resources into making additional spectrum available, rather than by classifying existing spectrum usage.

Also, as noted above with respect mobile voice network deployment, there is no need to collect data on the spectrum already in use for mobile broadband deployment. Mobile

and 101 To Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services, WT Dkt. No. 10-112, at 2 (Aug. 6, 2010).

operators build their broadband networks to use the spectrum available in their licensed geographic areas, and manage those networks as an integrated whole. The Commission's existing Form 477 data, as well as the NTIA state mapping data, depict ranges of coverage and coverage by speed tier for individual mobile broadband providers. Accordingly, there is no need to initiate some new data collection focused on how individual spectrum licenses are used.

2. Pricing Data

The Commission should not modify Form 477 to require that broadband providers report the various subscription prices offered for their broadband services. NPRM ¶¶ 66-76. The specific prices that consumers pay vary based on factors such as promotions, bundled discounts, term commitments, and the unique circumstances of prospective customers. Moreover, prices reported by broadband providers in their biannual Form 477 filings would be of little value because broadband prices change quickly and repeatedly throughout the year. Other parties, including private analysts, are in a better position to collect data regarding the prices that customers pay for broadband service and in fact already provide reports on exactly that information.¹⁴ There is no reason for the Commission to duplicate this effort and require price reporting on these competitive services. Moreover, the reports of private analysts show that overall prices for broadband services have dropped in the intensely

¹⁴ See, e.g., www.broadband.com (providing searchable map that includes broadband pricing); Jonathan Atkin, et al., RBC Capital Markets Wireless Update, at 4-5, 13-24 (March 1, 2011); Simon Flannery, et al., Morgan Stanley Research North America, at 2 (Nov. 3, 2010); John C. Hodulik, et al., UBS Investment Research: Telecommunications, at 24-28, 30 (March 15, 2011); HSBC Global Research, Global Telecoms, Media & Technology, "SuperFrequonomics," at 19, 21-24 (Sept. 2010); David W. Barden, et al., Bank of America Merrill Lynch Wireline & Wireless Telecom Services, "Battle for the Bundle: Cable Keeps the Pressure on Telco," at Tables 5-8 (July 20, 2010).

competitive broadband marketplace, thereby making it unnecessary for the Commission to conduct a comprehensive analysis of broadband prices. With the existing robust competition for broadband services, the Commission should not force broadband providers to expend significant financial resources and personnel to report on constantly varying subscription prices.

Requiring broadband providers to report prices would also be bad policy. As the Commission has recognized previously, such tariff-like requirements are not only unnecessary in a competitive marketplace, they are affirmatively harmful. By mandating that broadband providers “provide advance notice of changes in their prices, terms, and conditions of service for these services,” a tariffing regime allows competitors “to counter innovative product and service offerings even before they are made available to the public.” *Petition of the Embarq Local Operating Companies for Forbearance Under 47 U.S.C. § 160(c) from Application of Computer Inquiry and Certain Title II Common-Carriage Requirements; Petition of the Frontier and Citizens ILECs for Forbearance Under Section 47 U.S.C. § 160(c) from Title II and Computer Inquiry Rules with Respect to Their Broadband Services*, Memorandum Opinion and Order, 22 FCC Rcd 19478, ¶ 32 (2007).

While the Commission should reject price reporting entirely, requirements that would obligate broadband providers to manipulate pricing data solely to derive comparisons for reporting purposes are particularly inappropriate. For example, the complex process suggested in the NPRM of extrapolating an “average effective price” for broadband and other services within bundled offerings would be a burdensome, and likely useless, exercise. *See* NPRM ¶ 72. So too would the calculation of a contrived “price per Megabit” metric, which would ignore the realities of what matters for consumers and create false comparisons about

the value of different types of services. For example, notwithstanding their relative “prices per Megabit,” many consumers may well prefer a somewhat slower and cheaper service with a price per Megabit of \$1, over an extremely high-end, but more expensive, service with a price per Megabit of 50 cents.

More generally, such proposals calling for the reporting of manipulated “pricing” information that bears no relationship to the way service actually is sold to customers in the marketplace are unnecessary. Because broadband services are competitive and are not subject to retail rate regulation – and because consumers have different opinions on what makes a broadband service “valuable” – the Commission should decline to adopt broadband pricing reporting requirements.

Due to the variety of offers and pricing plans available and the dynamism of broadband pricing, consumers and third-party data sources – rather than providers – are the best sources of information on pricing and, in particular, its impact on broadband demand and adoption. To the extent that there is particularized need for pricing information in the context of certain services or consumers – such as if there were a Lifeline-type program for broadband – then the Commission should limit its reporting obligation to those providers participating in those programs and rely on existing third-party and public sources for purposes of comparison.

Wireless Pricing. The Commission also questions how to collect geographic pricing data specifically in the context of wireless services. NPRM ¶ 75. Again, the Commission has identified no need to collect such data. Indeed, the Commission already collects and analyzes pricing trends in its Wireless Industry Competition Reports.¹⁵ The complexity of

¹⁵ See, e.g., Fourteenth CMRS Report, ¶¶ 87-103.

this data would make it extremely burdensome to collect from individual carriers, and ultimately, in the fiercely competitive wireless industry, hopelessly out-of-date by the time it could be analyzed.

Moreover, since wireless service generally is personal service, each member of a household, or each corporate employee, may have one or more individual lines of service, but pricing for those lines of service may be based on account-level rates and discounts. Adding to the complexity are offerings based on device type (smartphone vs. notebook vs. aircards) and postpaid vs. prepaid lines of service. The Commission offers no insight into how pricing data would be used or useful. Accordingly, the Commission should continue to seek input on general pricing trends, if at all, only in the context of the Wireless Industry Competition Reports, but it should not attempt to impose an industry-wide data collection in the context of Form 477.

3. **Subscription Data**

The NPRM seeks comment on whether and how to alter the current collection of subscribership data for voice or broadband services. Given the detailed subscribership data already collected by the Commission, it should not add to current reporting obligations, but instead should consider eliminating aspects of its data collection that are unnecessary.

Voice Subscribership. As the NPRM suggests, the Commission already collects considerable data concerning voice subscribership, some of which now serve little purpose. For example, several of the current data reporting requirements – including information concerning presubscribed long distance and UNE-Platform – are no longer necessary (if they ever were), and the Commission should streamline the Form 477 by eliminating the requests for such information. *See* NPRM ¶ 77.

Beyond eliminating unneeded reporting requirements, however, the Commission generally should reject proposals to significantly ratchet up the reporting obligations for voice services, given the high level of competition and the lack of any real need for additional granularity. Although the NPRM notes that additional information could sometimes be useful for purposes of assessing the level of competition, or for certain other discrete purposes, the Commission should craft targeted data collections on an as-needed basis rather than imposing burdensome, ongoing new requirements on all providers in this competitive marketplace.

For the same reason, there is no justification for the Commission to change the geographic level for reporting voice subscribership to a more granular level. Particularly as more consumers rely on mobile services, over-the-top VoIP services, and other competitive alternatives, the relevance of (and ease of tracking) subscriber location continues to diminish. In the absence of a demonstrated need for heightened geographic granularity for these intensely competitive services, the associated burdens cannot be justified.

Broadband Subscribership. As a result of the most recent revisions to the Form 477, the Commission already obtains voluminous and granular subscribership data from broadband providers, including subscriber counts by speed tier at the census tract level. These data are more than adequate for any identified purpose, and the Commission should not pile onto these already burdensome reporting obligations. Drilling down to the census block level or even to the address-level would serve no identified purpose to any meaningful degree, but doing so would dramatically increase the volume of data that providers would be required to produce and the burdens associated with collecting and reporting this data. In addition, given the sensitivity associated with the location of subscribers – both from the

standpoint of a subscriber's privacy and the provider's legitimate competitive concerns – requiring still more granular data reporting would threaten harm both to consumers and competition.

Instead of increasing the level of detail for broadband subscribership, the Commission should take this opportunity to streamline the process. For example, as the NPRM notes, providers currently report subscribership data over 72 different speed tiers. *See* NPRM ¶ 88. This level of slicing-and-dicing of subscriber data serves little purpose and unnecessarily complicates the handling and analysis of data. Therefore, the Commission should significantly reduce the number of speed tiers to a more manageable and useful level.

Wireless Subscription. As the Commission notes, NPRM ¶ 79, the relationship between wireless subscribers and availability is not the same as for fixed services. A single subscriber may have multiple wireless devices, lines and telephone numbers, and could use different names for each line. Similarly, a single account may have multiple lines and subscribers (e.g., on a family share plan), not necessarily all would have the same name. Subscribers to prepaid services could change devices and telephone numbers several times during any reporting period. And, neither subscriber level nor account level billing addresses may reflect where the mobile service is actually used.

Currently, the Commission collects information on the number of subscribers with wireless broadband devices and subscriptions that allow them to access the Internet content of their choice (Form 477 Part I.A), the number of mobile telephony subscribers (Part III), and the number of subscribers with broadband capable devices (Part I.B). While perhaps not perfect, the first and second are reasonable proxies for the level of mobile subscriptions. The third should be eliminated because it is not analogous to the fixed broadband data collected

in Part I.B for percentage of houses in the provider's service area that *could* obtain broadband service. Any consumer within a wireless broadband provider's service area in theory could obtain wireless broadband service by obtaining a broadband capable device and appropriate subscription. The number of subscribers with a broadband capable device is irrelevant to the number to consumers that could obtain mobile broadband service.

The Commission offers no explanation why it might want to collect data separately on the use of prepaid service or non-traditional devices. NPRM ¶ 79. From the point of view of wireless telephony connections or broadband subscriptions, there is no relevant distinction between prepaid or postpaid service. Non-traditional devices, like Kindles, wireless monitors, or telemetry systems represent an innovative and growing segment of the wireless industry. But, the distribution of non-traditional devices offer no additional information on deployment, availability or adoption because non-traditional devices take advantage of the same investment and construction for, and would be used in, the same coverage areas as mobile telephony or mobile broadband and, if they are consumer devices, they are not typically the only service line that a consumer might have. Accordingly, expanding the Form 477 collections to include separate reporting on such devices will lead to increased burden on reporting carriers without any benefit to the Commission's review of broadband deployment.

4. **Service Quality and Customer Satisfaction**

The Commission should not expend resources and impose additional burdens on providers to collect service quality and customer satisfaction data given the ready availability of such information through multiple existing sources.¹⁶ The creation of a Commission-

¹⁶ See Verizon Wireless Mobile Broadband Performance Comments at 17-18.

mandated superstructure – along the lines of the antiquated ARMIS framework that previously applied to a subset of providers offering traditional voice services – would provide little, if any, useful information to policymakers or consumers and could not be justified in light of the attendant burdens.

Data on service quality and customer satisfaction are already being collected by a variety of third parties who provide this information in various formats to consumers and policymakers. In addition to related information already discussed above – including coverage information from American Roamer or availability data now reflected on the NTIA map – groups such as Nielsen, J.D. Power, Consumer Reports, PC World, and various regional and local organizations routinely review and provide information concerning providers’ service quality and customer satisfaction.¹⁷

These sources provide an existing, useful source for information concerning service quality and customer satisfaction on which consumers already rely. In fact, these sources already informing consumers’ decisions stand in stark contrast to the old ARMIS reporting regime. There is no evidence that ARMIS data provided any practical benefits to consumers (who likely did not even know that they existed), and such data were rarely used by policymakers. Instead of relying on such data, and consistent with the practices of consumers, the Commission too has used third-party and other public information sources for years, such as in developing its Wireless Industry Competition Reports.

Even if the NPRM were to decide that some form of service quality or consumer satisfaction reporting were appropriate – which it is not – it should not require reporting of

¹⁷ See Comments of AT&T on Measurement of Mobile Broadband Network Performance and Coverage, CG Dkt. No. 09-158, at 18 (July 8, 2010); Comments of CTIA on Measurement of Mobile Broadband Network Performance and Coverage, CG Dkt. No. 09-158, at 12-14 (July 8, 2010).

detailed, technical measures such as speed, latency, or jitter. *See* NPRM ¶ 91. As noted above, these complex issues – for which industry standard reporting metrics do not yet exist – are difficult to quantify and would be even harder to report in a meaningful way on the Form 477. While some work is underway in ongoing Commission proceedings to address disclosure of some of these issues – particularly in the case of speed – it would be premature for the Commission to require reporting of these complex issues.¹⁸

In any event, existing and growing competition across the full range of communications services – not government reporting obligations – forces providers to address the full range of service quality issues and to strive to increase consumer satisfaction. In order to attract and retain customers, providers are investing heavily in their networks and in advanced technologies that better serve consumers. For example, the rapid expansion of 4G LTE, fiber, and DOCIS 3.0 technologies all have resulted in services available to consumers that are much faster and with lower latency than previous services. Moreover, service quality and coverage has become one of the important dimensions on which providers now compete, and dissatisfied consumers readily switch providers when they are unsatisfied. Given this state of affairs, industry-wide reporting obligations would serve no practical purpose.

Finally, the NPRM suggests that reporting obligations concerning service quality and customer satisfaction potentially could further public safety interests. As Verizon has explained in the separate proceedings dedicated to those issues,¹⁹ reporting obligations – such

¹⁸ *See, e.g.*, Residential Fixed Broadband Measurement PN; Mobile Broadband Performance PN.

¹⁹ *See, e.g.*, Comments of Verizon and Verizon Wireless, *Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission's Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and*

as outage reporting – would be ineffective in the context of today’s broadband networks. Providers spend billions of dollars each year to protect and maintain their broadband networks, including by building in redundancy and other protective measures to keep them up and running during public safety events. As a result, significant outages in the case of broadband networks are very rare. Moreover, a reporting obligation focused on broadband providers would provide little benefit to the extent it failed to capture the large range of other factors that can affect consumers’ experience. Indeed, as Verizon previously has explained, customer reports to Verizon’s support centers demonstrate the frequency with which customer-impacting issues are completely unrelated to the availability of the broadband network. Over a 12-week period last year, less than 3% of the customer reports to Verizon’s FiOS support centers that customers could not connect to the Internet were due to outages on Verizon’s broadband network. The vast majority of such reports were caused by other issues, such as failures in customer premises equipment, spyware, wireless signal strength, and PC network configuration.

In any event, other efforts are underway – and other data sources already exist – to address the public safety concerns raised by the Commission. Verizon, like many other communications companies, has a close working relationship with the federal agencies and governmental bodies that monitor broadband networks. For example, the National Coordinating Center for Telecommunications (NCC), a part of the National Communications System (NCS), facilitates the exchange among government and industry participants regarding vulnerability, threat, intrusion, and anomaly information affecting the

Interconnected Voice Over Internet Protocol Service Providers, ET Docket No. 04-35 (Aug. 2, 2010)

telecommunications structure, including broadband networks. Verizon has an employee on-site with NCC to enhance Verizon's ability to share relevant status information about its networks should a catastrophic event occur.

In addition, Verizon is engaged with the Communications Sector Coordinating Council (CSCC), which works to protect the United States' communications critical infrastructure and key resources from harm and to ensure that the communications networks and systems are secure, resilient, and rapidly restored after a natural or manmade disaster. The CSCC coordinates with the other 17 critical infrastructure sectors through the Partnership for Critical Infrastructure Security (PCIS) to address cross-sector issues and interdependencies. The PCIS provides senior-level cross-sector strategy coordination through partnership with the Department of Homeland Security and the sector-specific federal agencies.

In light of the already-established government resources devoted to understanding the availability of broadband networks, the Commission should work with these government bodies to obtain information directly from them during disasters and other large-scale events rather than expanding the Form 477 into additional areas.

With respect to outages of a smaller scale, there are other resources from which the Commission can obtain data to further its understanding of these outages. For instance, QuEST Forum, an association comprised of global communications service providers and suppliers, developed a quality management system for the communications industry known as TL 9000.²⁰ TL 9000 specifies measurements for companies to help evaluate the effectiveness of quality implementation and improvement programs and requires the

²⁰ See <http://tl9000.org/index.html>.

reporting of quality measurement data to a central repository. *Id.* Such quality measures include customer outages.²¹ On a periodic basis, aggregate data, both provider-specific and industry-wide, are reported. *Id.* Verizon and other broadband providers participate in this association.

Obtaining pertinent data regarding availability through these alternative avenues would benefit both consumers and providers. Consumers would potentially encounter shorter outages as providers could focus their efforts and resources on fixing the conditions that caused an outage, rather than worrying about making accurate, complete, and timely filings within specified windows. Moreover, broadband providers' resources could be used to add further protective measures to their networks – or even to further deploy broadband.

5. **Ownership and Contact Information.**

Finally, the NPRM asks whether providers should be required to submit ownership and contact information as part of the Form 477 process. While the NPRM asks whether such information could be helpful in identifying “waste, fraud, and abuse” or increasing accountability in the universal service program, or perhaps ensuring up-to-date contact information for network operation centers in the case of public safety events, there is no reason to conclude that the Form 477 would be the most efficient or effective means for serving those interests. For example, data related to universal service should be derived from data collections that are targeted only at those providers who receive such funding, not through a generic, industry-wide data collection.

Moreover, existing data sources can already address many these interests without adding complexity to the Form 477. For example, there is little reason to believe that

²¹ See <http://tl9000.org/sots/process.html>.

information buried in the Form 477 database would be a useful source of information for the Commission during public safety events – and certainly no reason to think that this would be more useful than existing sources such as the Disaster Information Reporting Center. *See* NPRM ¶ 103. Likewise, in the case of wireless spectrum licensees, the Commission already collects information on ownership and contacts in the context of licensing applications, and the Form 602, and already has substantial information on ownership and contacts for each individual licensee published in the ULS. There is no need for the Commission to seek additional information on spectrum licensees when it already has detailed information in ULS.

B. The Commission Should Streamline its Data Collection Processes and Provide Additional Flexibility for Providers.

The NPRM also seeks comment on various “general considerations” concerning the Form 477 data collection process. The Commission should act on those considerations that make data reporting requirements more efficient and flexible for providers – including the elimination of unnecessary reporting obligations – and should forego suggestions that would add to the current burdens of those who provide data.

As an initial matter, one of the best ways to streamline the Form 477 process is to ensure that it reaches no more broadly than is necessary, and does not duplicate existing data sources. So, for example, the Commission asks about the use of third-party data or public data as an alternative to reporting obligations. That approach would provide a superior, and far less burdensome, alternative in many instances. Some prime examples include data concerning third-party and/or public data concerning pricing and service quality, information concerning broadband adoption derived from the existing Form 477 or from Census Bureau

and third-party surveys, and the broadband availability data generated by state mapping entities pursuant to NTIA's broadband mapping program.

As suggested by the NPRM, the Commission also could alleviate some of the burdens of the reporting process by allowing providers additional flexibility in the manner in which they report data. It makes sense, for example, to allow (but not require) providers to file data on multiple states as a single file, if the provider finds it easier to do so. *See* NPRM ¶ 38. Likewise, to the extent a provider finds it preferable to provide data at some level of granularity other than the minimum required by the Commission, the Commission should be willing to accept the data in alternative forms. The Commission should not, however, mandate a more granular level for *all* providers just because that may be easier for some, given that the associated burdens and the interest in confidentiality of sensitive information will not be the same for all providers.

The Commission also asks about the benefits of changing the frequency of reporting from the current bi-annual cycle. In this regard, the Commission should consider making the reporting cycle annual, rather than every six months. Although the investment and deployment of broadband continues at a rapid pace, the fact that approximately 95 percent of Americans already have access to broadband and that two-thirds of homes have already adopted reduces the necessity for more frequent reporting obligations. In addition to reducing unnecessary burdens on Commission staff and providers, this step would also allow more time for the Commission and other policymakers and stakeholders to thoroughly and efficiently review and process the data, rather than rushing analysis in light of incoming data for the next reporting cycle.

Finally, the Commission asks about which entities should be subject to any reporting obligations. As noted above, as a general matter the Commission should consider more targeted data collection on an as-needed basis for particular purposes. In those contexts, the Commission could determine on an individualized basis the parties likely to be in possession of relevant information and target data requests accordingly. When the Commission finds it necessary to collect data on an industry-wide basis, however, such as on the Form 477, the Commission must ensure that any reporting obligations apply comprehensively to all providers. In the case of data concerning voice services, for example, the omission of information from facilities-based VoIP providers – such as cable – or from online voice service providers – including providers such as Skype and Google Voice – would result in a misleading picture of the marketplace.

IV. APPROPRIATE PROTECTIONS FOR SENSITIVE DATA ARE ESSENTIAL

Given the wealth of sensitive information that the Commission collects in the Form 477 process, it is essential that the Commission remain vigilant in protecting providers' competitively sensitive and confidential data in order to ensure that reporting requirements do not harm competition or threaten the security of communications networks. Therefore, the Commission should maintain its current approach to protecting confidential information, in responses to Form 477, including its support for requests for confidential treatment.

With each round of revisions ratcheting up the level of detail that has been required, providers' reasonable concerns regarding the sensitivity of data – from the standpoint of competitiveness, network security, and subscriber privacy – have become all the more significant. Therefore – as Congress, the Commission, NTIA and the courts already have found – any public reports or disclosures based on broadband providers' data, such as the

public version of broadband maps or reports based on the Form 477 filings, should not reflect the competitively sensitive or confidential information of broadband providers, including the specific boundaries of service territories of particular providers, the exact location and details of network infrastructure, the specific technology being used to provision service at specific locations, or specific providers' pricing information.

While some parties have consistently argued that providers' data is entitled to little protection, the arguments of these parties have already been definitively rejected by Congress in the BDIA. In the BDIA, Congress required any state-level broadband mapping initiatives to "enter into voluntary nondisclosure agreements as necessary to prevent the unauthorized disclosure of confidential and proprietary information provided by broadband service providers" and to protect from public disclosure "any matter that is a trade secret, commercial or financial information, or privileged or confidential." BDIA §§ 106(d)(2)(C), (h)(2).

Both the courts and the Commission have likewise consistently recognized the confidentiality of broadband providers' data. As the courts have recognized, disclosure of a provider's granular broadband data would likely cause competitive harm given the existing competition for broadband in most places. *See, e.g., Center for Public Integrity v. FCC*, 505 F. Supp. 2d 106 (D.D.C. 2007). Likewise, the Commission has acknowledged that providers could be harmed by release of the gathered data concerning broadband, as competitors could "take the data submitted and tailor market strategies to quash nascent competition, protect areas that are being subjected to increased competition, or deploy facilities to defend

strongholds.”²² Moreover, detailed disclosures concerning the location of broadband facilities would create risks to network integrity and security, and could facilitate the bad acts of any parties seeking to make mischief. For such reasons, the Commission and courts consistently have taken steps to protect such data. *Id.* Protecting competitively sensitive or confidential information will not undermine the usefulness or availability of broadband data to policymakers or the public, but is necessary to protect the competitive process, to promote speedy cooperation by broadband providers, and to protect broadband facilities. With the benefit of the resulting data, the Commission and other policymakers will obtain an accurate and useful understanding of both the successes and challenges of the U.S. broadband marketplace.

V. CONCLUSION

The Commission should streamline and improve its data collection processes, principally by coordinating more effectively with other agencies and taking full advantage of existing data sources. It should not adopt burdensome, new reporting obligations on providers that are redundant and serve little purposes.

²² See *Local Telephone Competition and Broadband Reporting*, Report and Order, 15 FCC Rcd 7717, ¶ 88 (2000).



Michael Glover
Of Counsel

Edward Shakin
William H. Johnson
Verizon
1320 North Court House Road
9th Floor
Arlington, Virginia 22201
(703) 351-3060

John T. Scott, III
William D. Wallace
Verizon Wireless
1300 I Street, NW
Suite 400 West
Washington, DC 20005
(202) 589-3740

March 30, 2011