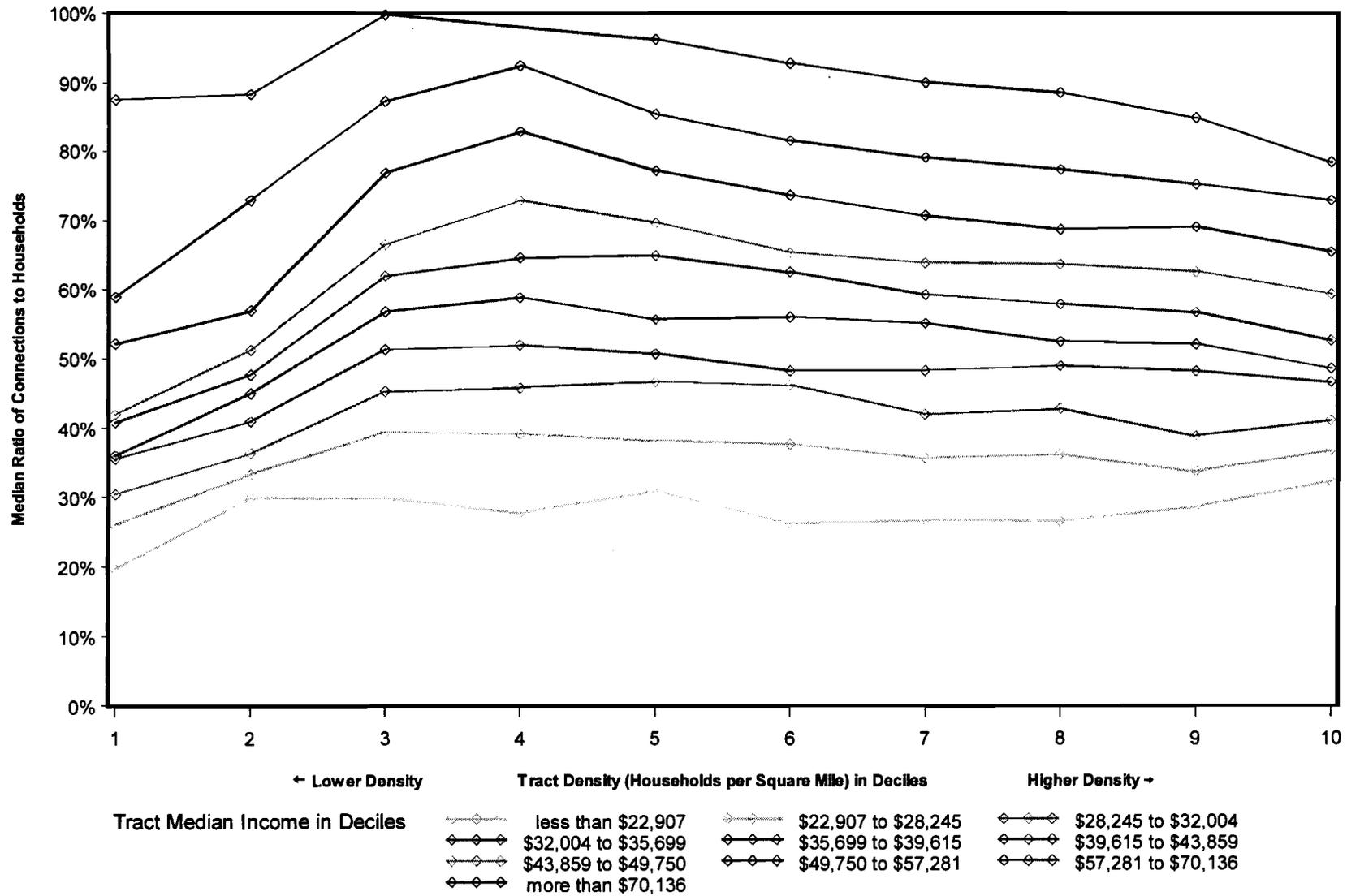


Chart 25
Median Ratios of Residential Fixed High-Speed Connections to Households by Income and Density
Tract Data as of December 31, 2008



Sources: FCC Form 477, Part VI; Geolytics 2009 Block-Level Estimates (Households in 2009); and Census 2000 (Median household income in 1999).

Technical Notes

General

Detailed information about FCC Form 477 reporting requirements is available at <http://www.fcc.gov/form477/>.

Wherever a number of providers is cited in this report, multiple Form 477 filers within a holding company structure count as one provider.

Form 477 collects information about Internet access connections in service to end-user locations that are advertised to deliver information to and/or from the end user – that is, in at least one direction – at transfer rates (“speeds”) above 200 kilobits per second (kbps). Information is collected about connections in 72 speed tiers defined by ranges of upstream speeds and downstream speeds. See report Table 8 for specifications of the speed tiers. Connections are further categorized by the technology employed by the part of the connection that terminates at the end-user location (see below). To provide continuity with published historical data, this particular report uses the term “high-speed” to describe all reported connections and, additionally, uses the term “advanced services” to describe the subset of connections with advertised speeds above 200 kbps both to and from the end user (but not necessarily the same speed in each direction). (Consistent with the Form 477 data collection orders, “broadband” and “high-speed” are synonyms when these Technical Notes are discussing particular elements of those orders.)

“End users” are residential, business, institutional, or government entities who use services for their own purposes and who do not resell such services to other entities. Facilities-based providers report information about connections they provide directly to their own end-user customers and also connections that they provide to Internet Service Providers for resale to end users. For Form 477 purposes, the facilities-based provider of a connection is the entity that owns the portion of the physical facility that terminates at the end-user location, obtains an unbundled network element (UNE), special access line, or other leased facility that terminates at the end-user location and provisions/equips it as broadband, or provisions/equips a broadband wireless channel to the end-user location over licensed spectrum or over spectrum that the provider uses on an unlicensed basis.

The mutually exclusive Form 477 technology categories are: asymmetric Digital Subscriber Line (“aDSL” in this report), symmetric Digital Subscriber Line (“sDSL”), other wireline, cable modem, optical fiber to the end-user premises (“FTTP”), satellite, fixed wireless (using licensed or unlicensed spectrum), mobile wireless (using licensed or unlicensed spectrum), electric power line, and all other (which is included to capture deployment of additional technologies over time). In the Form 477 data collection, aDSL-based services delivered over fiber-to-the-node architecture are reported in the aDSL category. The other wireline category comprises T1/DS1, T3/DS3, and other copper-based connections, not elsewhere categorized, that deliver *Internet access* service at the end-user location. Ethernet connections delivering Internet access service are reported in the other wireline category if the connection terminates over copper and in the FTTP category if the connection terminates over fiber. Connections deployed over hybrid fiber-coax (HFC) architecture are reported in the cable modem category. Wireless ISPs (“WISPs”) report in the fixed wireless category if providing service to dispersed, fixed end-user locations and report in the mobile wireless category if providing a commercial service that can be received at any location within a service footprint. Wireless local area networks (such as Wi-Fi hotspots) that only enable local distribution and sharing of a premises connection are not included, although the shared premises connection is included.

Numbers of connections presented in this report are not adjusted for the number of persons at a single end-user location who have access to, or who use, the Internet access services delivered over the connection to that location.

Numbers of residential connections are estimated based on the total connections and percentage-residential connections information reported on Form 477.

Census tracts

Starting with data as of December 31, 2008, facilities-based providers of fixed-location high-speed Internet access connections must report connection counts and percentage residential information at the census tract level of detail. Because of the inherent mobility of their service, facilities-based mobile wireless providers do not report subscriber counts by census tract. Instead, they report the census tracts in the state that best represent the areas where service is available over the provider's own network, for each of the speed tiers in which the provider offers service.

For the 2000 decennial census, the Census Bureau assigned a default census tract code of 000000 to some coastal and Great Lakes water and territorial sea. These default-code tracts are not included in the statistics presented in this report, which therefore summarize data for 66,287 census tracts.

According to GeoLytics, Inc. estimates for 2009, fewer than 200 census tracts have population but no households because the population resides in group living quarters. For the purpose of estimating residential subscribership rates by census tract, we assume these census tracts have no *residential* high-speed Internet access service because persons residing in group quarters would have Internet access over a business connection provided to the operator of the group quarters. Therefore, these census tracts are included in the "zero" column (*see*, for example, Table 12).

Tables 1 – 4 (December 2008 vs. June 2008)

See pp. 3-4 of this report for a discussion of the changed reporting requirements for mobile wireless providers.

Charts 17-18, Tables 11-12 and 21-22 (ratios above 100%)

Possible explanations of ratios above 100% include (1) geocoding misallocations in this first collection of data for census tracts (an unfamiliar geography for many filers), with unresolved service locations attributed to a single census tract; (2) proper allocation of connections to the county level by some filers, but improper allocation of all connections to a single tract in the county; (3) possible overestimation of residential connections in service plans for which the customer base is primarily residential; and (4) connections at seasonally or occasionally occupied housing units, such as vacation homes, while the household is counted elsewhere. The numbers of households in census tracts that were used to generate the estimated ratios are themselves estimates (for 2009, from GeoLytics, Inc.), which could have an independent effect.

Maps showing number of providers by census tract

Readers of previous reports in this series may note certain differences in the provider-count maps in this report as compared to the previous maps, which showed the number of providers by 5-digit geographical ZIP Code. The ZIP Code-based maps counted (at the holding company level) each provider with any fixed-location connections (wired, terrestrial fixed wireless, or satellite) reported for the ZIP Code and also any mobile wireless service provider who listed the ZIP Code as part of its broadband service area. By contrast, in this report we provide separate maps for providers (counted at the holding company level) of fixed-location connections and for mobile wireless providers. Second, in this report we present an entirely new map showing the number of providers that reported any *residential* fixed-location connections, thereby excluding any providers of exclusively business fixed-location connections in the census tract.

Maps showing residential subscribership rates by census tract

The two maps based on estimated high-speed Internet access connections per 1,000 households (that is, estimated household subscribership, or *adoption*, rates) are entirely new and are not comparable to the ZIP Code-based maps in earlier reports in this series. These maps present information that could not be presented in earlier reports because *numbers* of connections were never reported for individual ZIP Codes. Readers should note that these particular maps (1) exclude all connections identified as business connections and (2) necessarily exclude residential mobile wireless connections (which are reported for the state but not for individual census tracts).

Customer Response

Publication: *High-Speed Services for Internet Access: Status as of December 31, 2008*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis and Technology Division of the FCC's Wireline Competition Bureau.

1. Please check the category that best describes you:

- press
- current telecommunications carrier
- potential telecommunications carrier
- business customer evaluating vendors/service options
- consultant, law firm, lobbyist
- other business customer
- academic/student
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- other federal government employee
- state or local government employee
- Other (please specify)

2. Please rate the report: Excellent Good Satisfactory Poor No opinion

- | | | | | | |
|----------------------|-----|-----|-----|-----|-----|
| Data accuracy | () | () | () | () | () |
| Data presentation | () | () | () | () | () |
| Timeliness of data | () | () | () | () | () |
| Completeness of data | () | () | () | () | () |
| Text clarity | () | () | () | () | () |
| Completeness of text | () | () | () | () | () |

3. Overall, how do you rate this report? Excellent Good Satisfactory Poor No opinion

- | | | | | | |
|--|-----|-----|-----|-----|-----|
| | () | () | () | () | () |
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4. How can this report be improved?

5. May we contact you to discuss possible improvements?

Name:

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To discuss the information in this report, contact: 202-418-0940 or for users of TTY equipment, call 202-418-0484		
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202-418-0520		FCC/WCB/IATD, Mail Stop 1600 F Washington, DC 20554

**STATEMENT OF
CHAIRMAN JULIUS GENACHOWSKI**

Re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report

Broadband is critical 21st century infrastructure, to which every American household and small business must have access to maximize our nation's economic growth, catalyze investment, spur job creation, and ensure our global competitiveness. Accordingly, Congress has instructed the FCC to periodically determine whether broadband is being deployed in a reasonable and timely fashion to all Americans.

The report we release today uses new data and improved analysis to take an honest look at the current state of broadband in America. Consistent with the findings of the National Broadband Plan, the report points out the great broadband successes in the United States, including as many as 290 million Americans who have gained access to broadband over the past decade. But the statute requires more. It requires the agency to reach a conclusion about whether all—not some, not most—Americans are being served in a reasonable and timely fashion. In other words, it requires a conclusion about whether the United States is on the road to achieving truly universal broadband availability, of the kind that our country achieved in the previous century with respect to traditional telephone service.

On Congress's question of universality—whether all Americans are on track to being served—the best available data shows that between 14 and 24 million Americans live in areas where they cannot get broadband. These are mostly expensive-to-serve areas with low population density. Without substantial reforms to the agency's universal service programs, these areas will continue to be unserved, denied access to the transformative power of broadband.

So, taking account of the millions of Americans who, despite years of waiting, still have little prospect of getting broadband deployed to their homes, we must conclude that broadband is not being deployed to all Americans in a reasonable and timely fashion. Fortunately, the National Broadband Plan has charted a course to accelerate broadband investment and help ensure that all Americans can connect to the vital infrastructure of the 21st century. These policies include reforming the Universal Service Fund to support broadband through public-private partnerships, without increasing the projected size of the Fund; unleashing additional spectrum to enable build out of mobile broadband networks; removing red tape and barriers to infrastructure investment; and collecting better data on broadband availability, penetration, pricing, and performance to help policymakers and consumers alike.

As a unanimous Commission held in its Joint Statement on Broadband earlier this year: "Working to make sure that America has world-leading high-speed broadband networks—both wired and wireless—lies at the very core of the FCC's mission in the 21st century." As numerous studies show, America is behind where it needs to be on broadband to maintain its global competitiveness and drive economic growth. Today's report is a reminder that we must move swiftly to implement the recommendations of the National Broadband Plan. I look forward to working with my colleagues to fulfill our responsibility.

**STATEMENT OF
COMMISSIONER MICHAEL J. COPPS**

Re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report

The sixth time is the charm. At last—a section 706 Report where broadband is really broadband, where zip codes are not surrogates for subscribers, and where the documented failure to connect millions upon millions of Americans disproves previous FCC findings that broadband is being reasonably and timely deployed. I am pleased to support the Broadband Deployment Report that we issue today.

Pursuant to section 706 of the Telecommunications Act of 1996, as amended by the Broadband Data Improvement Act—now section 1302(b) of Title 47 of the United States Code—the Commission is tasked with determining whether advanced telecommunications capability is being made available to *all* Americans in a reasonable and timely fashion. With that statutory mandate, Congress recognized how critical access to broadband is to the well-being of our country. Last year, Congress and the Administration reaffirmed the importance of broadband by charging the FCC to develop a national strategy for deployment and adoption. For all of the challenges this country faces—whether it's job creation, education, energy, climate change and the environment, international competitiveness, health care or equal opportunity—there is no solution that does not have a broadband component to it.

So while this may technically be the Sixth Report, it is—in my opinion—the first really credible effort by the Commission to deliver a report based on data of the quality and granularity needed to be truly responsive to Congress. With this Report, we have a much more comprehensive view of where our country stands when it comes to broadband availability, and we have measures for assessing our progress nationally and as compared with our global competitors.

By relying on an inadequate and unrefined approach to data collection for the previous five reports, the Commission seriously defaulted on its statutory responsibility. Going down the same old path here would have done a further injustice to this country's reinigorated commitment to broadband. In early data collection exercises, the Commission used information from service providers that simply reported on which zip codes had at least one subscriber to broadband service at a speed of 200 kbps or higher. I still fail to see how anyone ever viewed this approach as indicative of anything useful. The false impression left by that approach was that everyone in a zip code was fully connected to high-speed broadband when all we really knew was that one person or business somewhere—perhaps on the very fringe of a zip code—subscribed to a minimum-speed service. That told us nothing about the extent to which broadband was available within a zip code or the quality of that service. Even though the majority of the Commission recognized the limited usefulness of the data in previous reports, it nonetheless concluded that the information was accurate enough to make a judgment about the state of broadband deployment for all Americans. As such, it found that the percentage of zip codes with at least one broadband subscriber—97% of the zip codes—adequately reflected the percentage of the population with access to broadband, and found, therefore, that all broadband was being deployed to all Americans in a reasonable and timely fashion.

Good data is a prerequisite to good policy choices. The five preceding reports lacked such data and the results were ... poor policy choices. This is even clearer now than it was at the time of those reports, given the depth of data we that has been mined as part of the lengthy, fact-driven process that resulted in the National Broadband Plan, including input collected from the newly-revised FCC Form 477

requiring providers to report broadband subscribership by Census Tract instead of zip code. The National Broadband Plan observed that in the United States today there are digital divides when it comes to access to high-quality, value-laden, affordable broadband, between the haves and have-nots, between those living in big cities and those living in rural areas or on tribal lands, between the able-bodied and persons with disabilities. Today's Report sadly confirms the existence of those digital divides. With these data-reliant observations, how could the Commission possibly continue to conclude that all is well and good when it comes to broadband deployment to *all* Americans? With our heads in the sand for so many years, is it any surprise other nations catapulted ahead of the United States in the broadband race?

To remedy the negative findings of the Report, the next step—as mandated by statute—is for the Commission to take immediate action to accelerate deployment of such capability through the removal of barriers to infrastructure investment and the promotion of competition in the market. Fortunately, through the recommendations of the National Broadband Plan, we have a sound path available to us. The findings of today's Report summon us to implement those recommendations and thereby address our statutory responsibilities. This Commission stands poised to move forward on such a path. As with all great infrastructure challenges this country has faced, we must move forward in a collaborative effort, where the Commission and industry, along with consumers, are working together for an America with ubiquitous, affordable, high-speed, value-laden broadband. While there is no doubt that broadband deployment and adoption have grown significantly over the last decade, we still have a long way to go to ensure that all Americans have broadband access.

While I support today's Report as one that is light years ahead of its prior iterations, there is still room for improvement. We must strive to make future reports even more detailed and thorough, particularly as broadband mapping information becomes available pursuant to the Broadband Data Improvement Act. In addition, it is critical that the United States understand, track and compare its approaches to broadband with those of our global competitors even more deeply than we do here. To that end, I hope to see a more in-depth global dimension to future reports. I am confident that the course we start down with today's Report will lead us to just such an outcome.

I commend everyone at the Commission—and they are many—who contributed their expertise and analysis to the production of this much-improved Report.

**DISSENTING STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL**

Re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report

Section 706 of the Telecommunications Act of 1996 requires that the FCC determine whether “advanced telecommunications capability is being *deployed* to all Americans in a reasonable and timely fashion.” In all previous reports dating back to 1999, the FCC has answered “yes” to that question. In this Report, however, the answer is “no” for the first time. This 180 degree reversal is unsettling considering that since the issuance of the Commission’s first Section 706 Report, America has made impressive improvements in developing and deploying broadband infrastructure and services. In fact, referencing findings from the National Broadband Plan, this Report even states that “95% of the U.S. population lives in housing units with access to terrestrial, fixed broadband infrastructure capable of supporting actual download speeds of at least 4 Mbps.” I am concerned that this Report fails to provide sufficient justification as to why the Commission is reversing course from previous reports.

Instead of focusing on the great strides that America has made in broadband *deployment*, as the Act requires, this Report emphasizes subscribership. Collecting granular data, including subscribership numbers, is important. But, subscribership data does not equate to the “*availability*” of broadband, which is what Congress requires the Commission to assess under Section 706. In many instances the Report confuses the facts by substituting the terms “deployment” and “subscribership” as if they were synonymous and interchangeable. They are not. “Deployment” and “subscribership” are two distinct concepts with different attributes and areas for improvement. Our task is to focus on Congress’ explicit directive to analyze deployment progress for purposes of the Section 706 Report. Today, however, the majority is sidelining the deployment figure of 95 percent in favor of a seemingly smaller subscribership number. It is only reasonable to question the rationale behind this confusing pivot.

The plain language of Section 706 was written with a deregulatory bent, but I am concerned that regulating with a light touch is not what this current Report will be used for in the future. In Section 706(b), Congress stated that “[i]f the Commission’s determination is negative, it shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.” Today’s Report concludes that the Commission will meet this statutory requirement by addressing the National Broadband Plan’s proposals. It is unclear where that conclusion will lead, however. As a result of proceedings recently initiated by the Commission – such as the Notice of Inquiry asking whether the Commission should regulate 21st Century broadband Internet access services under old common carrier rules – I question whether this Report will be used to justify additional regulation, contrary to the Act’s goal of “removing barriers to infrastructure investment.”

The Commission should focus its resources and energy on connecting the 7 million households that currently do not have access to high-speed Internet. Although broadband has proliferated across America faster than any other transformative modern technology, the small percentage of Americans who do not have access to it deserve our highest priority. Not only does connecting the unserved make for sound public policy, it is also Congress’ mandate to us as explicitly called for in the Act. Reforming our Universal Service subsidy program coupled with opening windows of opportunity for the construction of new delivery platforms, such as wireless broadband, can be accomplished without contorting data and

conclusions or laying a predicate for more regulation. Doing the latter only undermines the pursuit of our Congressional directives.

Therefore, I respectfully dissent.

**STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN**

Re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report

Access to broadband at home is no longer a convenience, it is a necessity. Without broadband, it is more difficult for citizens to participate in our economy, communicate with others, and obtain access to critical information that is available only online. Most parents cannot search for employment without using the Internet, and children who use the Internet during the school day often need access to it at home to complete their homework, research term papers, and apply to college. Yet our most recent data indicates that 14 to 24 million Americans lack access to broadband in their homes. For those Americans who lack access, it does not matter to them that 95% of Americans have access. What matters to them is that *they* do not have access in *their homes*. Not long ago, one mother shared her experience on broadband.gov and expressed frustration that not less than half a mile away, her neighbors have broadband. They can work from home when needed. Their children can access the Internet to improve their educational experience from home. As a nation, we should not be content when a segment of our population is left behind. Indeed, Section 706 contemplates that *all* Americans obtain the benefits of broadband.

Accordingly, I believe that it is appropriate for the Commission to conclude that broadband has not been deployed in a reasonable and timely fashion to all Americans, especially given the additional broadband availability data from the National Broadband Plan that we rely upon in this Sixth Report. In addition, I believe that where companies have had a business case to offer broadband service, they have done so. Nonetheless, there are many geographic areas in the U.S. where broadband still is not available because it is not economical for the private sector to deploy broadband and offer service. In order to remedy the lack of broadband availability, it is appropriate that the Commission fully consider the recommendations made in the National Broadband Plan to encourage broadband deployment, including for example, comprehensive reform of the universal service fund.

Universal availability, however, will be in vain unless we have universal adoption of broadband as well. Nearly 93 million Americans have not adopted broadband at home. Cost is the most cited reason for not subscribing to broadband service. The National Broadband Plan made a number of recommendations on how to make broadband affordable for all Americans, no matter where they live or what their income may be. Other commonly cited barriers to adoption include digital literacy and relevancy. I support the development of a Digital Literacy Corps – a group that will be dedicated to ensuring all Americans recognize the many benefits of broadband and are comfortable with digital technology. I am committed to doing my part in addressing these issues as expeditiously as possible so we can achieve an America where every citizen has access to and has adopted broadband.

**DISSENTING STATEMENT OF
COMMISSIONER MEREDITH A. BAKER**

Re: Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act; A National Broadband Plan for Our Future, GN Docket Nos. 09-137, 09-51, Sixth Broadband Deployment Report

The Commission's obligation under section 706 is to evaluate broadband infrastructure deployment. By every possible metric, wired, wireless, and satellite companies continue to pour billions of dollars into our nation's broadband network. From 2003 to 2009, under a consistent minimal regulatory framework, broadband providers have invested \$27 billion annually in networks and infrastructure.¹ Each year networks go further and faster. The National Broadband Plan found that 95 percent of the U.S. population has access to a 4 Mbps/1 Mbps terrestrial broadband service, and 80 percent have choice of broadband offerings.²

In every prior Section 706 Report, the Commission concluded that broadband deployment was timely and reasonable. In a striking departure from that decade of consistent Commission findings, the Commission has changed course by concluding that broadband deployment now is not reasonable and timely. I cannot support this decision. Broadband infrastructure deployment and investment are a remarkable and continuing success story, and I am troubled by giving such significant efforts a failing grade.

The goal encapsulated by section 706 is universal broadband availability. Nowhere in section 706 does it require that goal to be reached definitively in 2010. Rather, the question is whether network providers continue to make demonstrable progress towards that goal. All evidence suggests that answer be made in the affirmative. A finding of timely and reasonable need not—nor should it be—a congratulatory one. Nor is it a finding that the government has no role to promote broadband deployment in areas in which market forces will not likely result in deployment. Chairman Kennard explained that a finding of timely and reasonable does not “let[] us off the hook” from our oversight role.³ He explained, “[w]e must always be looking for ways to remove barriers to investment and promote competition.”⁴ I agree, and believe that the same rationale and approach applies equally to this Report. Broadband deployment continues to be timely and reasonable, but the job is far from complete.

Moreover, I have a number of concerns with the manner in which the Commission reached this inopportune decision. First, the Report focuses almost exclusively on terrestrial broadband options. Section 706 is not technology specific, yet this Report limits its findings to terrestrial solutions even when

¹ Robert W. Crandall & Hal J. Singer, *The Economic Impact of Broadband Investment*, at 2 (Feb. 23, 2010) (available at <http://www.broadbandforamerica.com/press-releases/broadband-america-study-shows-importance-investment-0>) (last visited July 20, 2010).

² FCC, Omnibus Broadband Initiative (OBI), *Connecting America: The National Broadband Plan*, GN Docket No. 09-51, at 20 (2010).

³ *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*, Separate Statement of Chairman William E. Kennard, Report, 14 FCC Rcd 2398 (1999).

⁴ *Id.*

discussing relatively low speeds of service easily reached by today's wireless and satellite offerings.⁵ The Commission should not make consumer judgments about the viability and utility of satellite and wireless solutions that provide clear facilities-based competition opportunities. Current technologies may not allow competition at higher speeds, but satellite broadband, 3G and 4G wireless solutions do provide a level of connectivity that is "broadband" to most consumers, as well as the additional functionality of mobility.

Second, I am troubled by our decision as a regulatory agency to decide a fixed definition of broadband speed as 4 Mbps downstream, 1 Mbps upstream. It is true that prior Section 706 Reports have focused on slower "first generation" broadband services, and a fresh look at broadband speed is appropriate. I would have preferred a more fulsome evaluation of broadband deployment based on the five tiers of broadband speeds adopted by the Commission to provide fuller context as to how broadband services are deployed and used across different speed tiers.⁶ I share concerns expressed in prior Section 706 Reports that our speed measurements should be "designed for data collection and as points of reference."⁷ We should not use our broadband speed measurements as "an ultimate goal," nor should it be used "to drive the market."⁸ I also have concerns with the merits of selecting 4 Mbps/1Mbps as the broadband speed with which to evaluate deployment. The National Broadband Plan reports that more than half of consumers that could purchase 4 Mbps/1 Mbps broadband have concluded that a slower offering is more than sufficient for their broadband needs.⁹ Even if we were to adopt a new higher speed, greater context as to how 4 Mbps-capable broadband networks have been deployed over time would greatly inform this analysis. We should not select a new speed and then judge the reasonableness of deployment based upon a snapshot of current conditions.

Third, the Commission should not adopt National Broadband Plan findings and recommendations without opportunity for notice and comment as well as Commission deliberation. The Plan's findings and recommendations relied upon in this Report may or may not be the correct ones, but we should not adopt the 4Mbps/1Mbps speed threshold as the definition of "broadband" without conducting our own due diligence. Indeed, the Technical Paper describing the model relied upon by the Plan has only recently been placed out for comment in the context of universal service reform.¹⁰ Regardless of the conclusion the Commission ultimately reaches in that context, this Report prematurely accepts the Model's results today in concluding deployment is not timely and reasonable.

Lastly, the Commission's finding of nationwide untimely and unreasonable deployment is overly broad. Our analysis should be significantly more granular to identify particular geographic areas or communities for which deployment has lagged. A more granular and focused analysis could help target commercial and community investment going forward and bring public attention to the affected communities.

⁵ *Sixth Broadband Deployment Report*, FCC 10-129, *supra*, at n.19 (detailing access to terrestrial 768 kbps services).

⁶ *Local Telephone Competition and Broadband Reporting*, Report and Order, 19 FCC Rcd 22340 (2004).

⁷ *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*, Third Report, 17 FCC Rcd 2844, para. 10 (2002).

⁸ *Id.*

⁹ *Sixth Broadband Deployment Report*, *supra*, at n.81.

¹⁰ *Connect America Fund; A National Broadband Plan for Our Future; High-Cost Universal Service Support*, Notice of Inquiry and Notice of Proposed Rulemaking, 25 FCC Rcd 6657, at App. C (2010).

The Commission should redouble its effort to promote and create incentives for private investment in networks and technologies that can drive broadband further and faster throughout the nation. I am troubled, however, by recent developments at the Commission that appear to be moving us in the opposite direction. Specifically, I have concerns that the proposals to shift broadband Internet access services to monopoly-era Title II requirements will undermine the regulatory certainty and stable foundation that has attracted capital to this sector to date, and will be necessary to fund tomorrow's broadband networks. The Commission should maintain the existing minimal regulatory approach under Title I and work proactively with carriers and investors to target actions to attract more capital and resources to support broadband networks, particularly in unserved and underserved communities.