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Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

July 7, 2009

Re: Notice of *Ex Parte* Presentation

RE: GN Docket No. 09-40, GN Docket 09-51, WC Docket No. 07-38

Dear Ms. Dortch,

This ex parte presentation offers recommendations on a particular component of the Federal Communications Commission's (FCC) consultative role with the National Telecommunications and Information Administration (NTIA) in creating rules for the issuance of broadband grants pursuant to the American Recovery and Reinvestment Act, as well as the Commission's ongoing proceeding to craft a National Broadband Plan. It is pertinent to the FCC's Form 477 data collection from broadband Internet access providers and its utility in both the NTIA's grant program as well as the FCC's planning process. We recommend here that the FCC move quickly to publish an index of broadband data that will facilitate the grant programs administered by the NTIA.

In accordance with Section 1.1206(b) of the Commission's rules, this letter also serves to inform the Commission that on June 6, 2009 and June 7, 2009, respectively, Ben Scott of Free Press conveyed the facts and arguments presented here in telephone conversations with Scott Deutchman, legal advisor to Commissioner Michael Copps, and Colin Crowell, legal advisor to Chairman Julius Genachowski.

The NTIA recently released its guidelines for application to the Broadband Technology Opportunities Program (BTOP) for grants to expand broadband infrastructure in the United States.¹ Grant applicants are instructed to make an empirical showing that the proposed service area in which they seek funding to offer broadband qualifies as an *unserved* or *underserved* area. These terms are defined carefully in the guidelines. For the purposes of this presentation, we will focus on the definition of *underserved*—though the points made here hold for the unserved definition as well. To qualify, the applicant must demonstrate that the proposed funded service area is one or more contiguous census blocks and meets one or more of the following criteria:

"i) no more than 50 percent of the households in the proposed funded service area have access to facilities-based, terrestrial broadband service at greater than the minimum broadband transmission speed of 768 kbps downstream and 200 kbps upstream;

¹ Notice of Funds Available (NOFA) and solicitation of applications for the Broadband Initiatives Program and Broadband Technology Opportunities Program, July 2, 2009 (NOFA). Available at http://www.ntia.doc.gov/frnotices/2009/FR_BBNFOFA_090702.pdf

ii) no fixed or mobile broadband service provider advertises broadband transmission speeds of at least three megabits per second (“mbps”) downstream in the proposed funded service area; or

iii) the rate of broadband subscribership for the proposed funded service area is 40 percent of households or less.²

The BTOP guidelines stipulate that applicants must identify the Census Blocks within each proposed funded service area and document that the area qualifies under one or more of these criteria.³ It is not clear from the guidelines if documentation of qualifying thresholds from *each* Census Block is necessary. We are inclined to believe this was not intended because the small size of a Census Block would make such data infeasible to collect absent a pre-existing index available to all applicants.⁴

This brief explanation illustrates the problems. The average Census Tract contains approximately 4,000 persons -- roughly 1,600 households. The average Census Block Group contains approximately 1,500 persons -- roughly 600 households. And the typical Census Block contains approximately 40 persons -- roughly 16 households. If BTOP applicants are expected to make a showing that a Census Block qualifies as an underserved area based on the 40 percent subscription threshold, they will need to essentially conduct a full census of every household on a particular Block in order to produce data with a reasonable margin of error. For example, if a particular Block contains 20 households, a sampling of 10 of those households (with a full response from each) would produce a result that has a margin of error of plus or minus 22 percent. So if the survey produces a result of 40 percent of households subscribing to broadband, this would have a margin of error of plus or minus 9 percentage points. In other words, even after surveying half of the homes in the area, there is still no certainty as to whether or not the area qualifies as underserved. This problem is not really addressed by expanding the *survey* area to the Tract either. If a survey generates responses from 80 homes in a Tract of 1,600 households, the margin of error will still be plus or minus 10 percent. Survey data is likely most useful to the applicant and the NTIA if it is conducted across an entire proposed funded service area. However, the NTIA and FCC are right to focus on the underlying census units of measure to ground the analysis. And at the Tract level, there are other options for NTIA and FCC to consider – which we will return to in a moment.

To be clear, we believe these threshold requirements are admirable means to target unserved and underserved areas. However, to make the data showings feasible, uniform and accurate for all applicants, the BTOP program would greatly benefit from a common, as well as accurate and reliable source of data on broadband subscribership, availability and speed. Luckily, the FCC has data that could produce exactly this kind of an index. Its value will be extraordinary. The example above illustrates the potential futility and wasted resources that will stem from requiring applicants to conduct their own Block-level surveys to determine eligibility -- especially in light of the fact that the Commission is in possession of a full accounting of all broadband lines in each Census Tract.

² See NOFA, 109.

³ See NOFA, 112-113.

⁴ We note that while collecting subscribership data at a fine granularity becomes somewhat burdensome and impractical for *individual* parties that are potential BTOP and BIA applicants, is entirely appropriate for the Commission to collect and possess data from providers at the most granular geographic level possible, since Form 477 is essentially a census of all lines.

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Because the NOFA guidelines discuss *areas* made up of Census Blocks, it could be assumed that the NTIA will not require block-level data, and would accept Tract-level information. If this is indeed the case, then there is absolutely no reason why any applicant should have to take on the task of collecting Tract-level data given that the Commission is in possession of such information.

For this reason, we believe that the FCC has an enormously valuable role to play in assisting both grantees and the NTIA in evaluating whether the unserved and underserved thresholds have been met. In fact, we believe the FCC's role in providing an index of data at the Census Tract level will be a central facilitator of the BTOP program. It is a point we have emphasized with the Commission several times in the last six months.⁵

In 2008, the FCC adopted a Report and Order changing the rules regarding the data collected from Internet service providers.⁶ Among those rule changes was a requirement that mandated facilities-based broadband ISPs to report to the Commission the number high-speed lines in every Census Tract within the ISP's service footprint -- further broken down by technology type, speed, and whether or not the line is a residential or business line. The first data submission under the new rules occurred in March of this year. Of course, processing this data into a usable form for policy analysis will take time. But the FCC is now faced with a great opportunity to put this data to good use to facilitate both grant applications and review by the NTIA. Indeed, the paramount need to have the broadband stimulus effort be successful compels the Commission to make use of the data by releasing it publicly, if at all possible, prior to the opening of the first BTOP application window on July 14, 2009.

As we have described above, one of the principal hurdles that potential grant applicants will need to clear is making the showing that their proposed funded service areas qualify under the rules as either unserved or underserved. To do so, they will need to compile data about the proposed funded service area down to a very granular level. Under the NOFA guidelines, an index of Census Tract data published by the FCC could serve to make these showings. Although this information is not exactly the percentage of adoption—it is the number of residential and business connections in a Census Tract reported by speed—with a small amount of manipulation it could serve as a useful and reasonably accurate proxy for the availability, speed and subscribership information required of BTOP applicants.

⁵ Ex Parte of Free Press, In the Matter of *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscription Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Feb. 6, 2009; Free Press Opposition to Request for Extension of Time, In the Matter of *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscription Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Feb. 10, 2009; Ex Parte of Free Press, In the Matter of *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscription Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, March 6, 2009; and Comments of Free Press, In the Matter of *Comment Procedures Established Regarding the Commission's Consultative Role in the Broadband Provisions of the Recovery Act*, GN Docket No. 09-40, April 13, 2009, pp. 4-5, 7-8.

⁶ In the Matter of *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscription Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Report and Order, 23 FCC Rcd 9691, 9695, para. 10 (2008).

With the knowledge of the number of *fixed* lines in a Census Tract that exceed 768kbps, an applicant (or the Commission) can calculate a reasonable household subscribership figure for a Tract by dividing the number of qualifying fixed lines by the estimated number of households. (We say fixed lines, because to ensure reasonable accuracy and avoid overestimations of household subscribership, this calculation must not include any reported mobile wireless connections).⁷ This household penetration information will also be useful for the availability criteria (50 or 90 percent availability of 768kbps service). If a Tract's penetration level is substantially below the national average for Tracts with similar economic and geographic characteristics, then that Tract is a likely candidate for low-availability of qualifying service.⁸

While Census Tracts are not a perfect proxy for the character of every underlying Census Block, the Tract data will provide applicants and the NTIA with a very good demonstration of whether a proposed funded service area qualifies as unserved or undeserved. Even in the likely event that the proposed funded service area does not conform exactly to Tract boundaries, this data will reach a standard of reasonableness that should be sufficient in the first instance. The final decision on what weight to give to applications that only submit Tract-based data is left to NTIA. Even if the agency places minimal value on such data, it will be useful to potential applicants for the purpose of identifying areas that are worth spending resources on to collect more detailed data.

We recommend that the Commission immediately explore the feasibility of quickly publishing the raw subscriber counts for all Census Tracts. This information should at a minimum include for each Tract the total number of residential lines, excluding mobile wireless lines, which are classified by the Commission as "Broadband Tier 1 lines". Ideally, in order to provide potential applicants with the most detailed data, the Commission should publicly release the raw line counts for each Tract, broken down by technology, speed tier, and residential versus business line. Applicants would use these line counts to calculate Census Tract-level household penetration figures, using Census Bureau information on the number of occupied households in each Tract. However, if the Commission is unwilling or unable at this time to publish the raw line counts, it instead should publish its own estimate of household fixed-broadband penetration for each Census Tract.

⁷ As we have noted in numerous other comments to the Commission, all available data suggests that mobile wireless connections are purchased by consumers as a complementary or additional service to their fixed broadband service. There is no evidence to suggest that any non-insignificant proportion of U.S. households are using 3G mobile services as their sole household Internet connection. To include these lines in a household penetration calculation would vastly overstate the level of household penetration in a particular area (indeed, it could lead to nonsensical results that show greater than 100 percent penetration). Furthermore, it is not clear that 3G connections that are reported to the Commission as "Broadband Tier I" connection are indeed capable of delivering to end users speeds that exceed 768kbps for any acceptable period of time. It is also not clear if many of the current 3G services are complying with the FCC's *Internet Policy Statement*, and should be counted at all. See e.g. Comments of Free Press, *In the Matter of A National Broadband Plan For Our Future*, GN Docket No. 09-51, June 8 (2009) pp. 104-105 (*Free Press Broadband Plan NOI Comments*). See also Comments of The Wireless Communications Association International, Inc., *In the Matter of A National Broadband Plan For Our Future*, GN Docket No. 09-51, June 8 (2009) pp. 40-41.

⁸ The imperfections of using subscribership data as a proxy for *availability* data are why we have repeatedly urged the Commission to complete its work on Form 477 Reform. See e.g. Ex Parte of Free Press, *In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscription Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, September. 16, 2008.

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This information would provide a very useful proxy that could help guide NTIA grant applicants on which areas to target, and would also be useful information for the NTIA in evaluating applications that do not report detailed Census Block-level data. This data would save both the applicant and the NTIA the trouble of compiling and verifying an independent data sample. And it would guard against disputes at the NTIA between applicants and other ISPs over whether or not the standard had been met. More broadly, this type of situation is exactly the reason the Commission chose to collect broadband data using Census units – so that the data would be maximally useful across the government, industry and society.

We hope the Commission will proceed with this recommendation with all deliberate speed. The application deadline for the first round of BTOP grants at NTIA is August 14, 2009. Time is short and the utility of this data would be very valuable for all involved in this program to maximize the number and quality of applications competing for public resources to build broadband infrastructure.

Most sincerely,

/s
Ben Scott
Policy Director
Free Press

/s
Derek Turner
Research Director
Free Press