Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Deployment 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

FURTHER REPLY COMMENTS OF CONSUMERS UNION, CONSUMER FEDERATION OF AMERICA, FREE PRESS AND PUBLIC KNOWLEDGE

Gene Kimmelman
Vice President for Federal and International Policy
Consumers Union
1101 17th Street, NW Suite 500
Washington, DC 20036
202-462-6262

Mark Cooper
Director of Research
Consumer Federation of America
1424 16th Street, N.W. Suite 310
Washington, D.C. 20036
301-384-2204

Ben Scott
Policy Director
Free Press
501 Third Street, NW, Suite 875
Washington, DC 20001
202-265-1490

Gigi Sohn
President and Co-Founder
Public Knowledge
1875 Connecticut Ave., NW
Washington, DC 20009
202-518-0020

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Summary

In responding to the Commission’s request for comment on the creation of a “highly detailed map of broadband availability nationwide,” stakeholders adopted one of two viewpoints. Consumer groups and states requested the Commission move forward with its current timetable and produce a detailed map with granular data made available to the public. Providers and a closely aligned third party mapping entity urged the Commission to delay or discontinue its current interest in broadband availability mapping.

As we have detailed in previous comments in this docket, Section 706 of the 1996 Telecommunications Act directs the Commission to encourage the reasonable and timely deployment of advanced telecommunications capability. This directive cannot be adequately implemented without the collection of meaningful, detailed and accurate broadband deployment and adoption data. With its recently published Order and Further Notice of Proposed Rulemaking, the Commission has taken the initial steps needed to adhere to the directive of Section 706. But the Commission’s job it not yet done.

In this proceeding, many States from across the country have weighed in to urge the Commission to take on the leadership role Congress envisioned in the Act. We concur. By doing so, the Commission will generate further momentum for state deployment and demand-stimulation efforts. To carry out this role, the Commission must collect detailed availability data at the Census Block Group level. As a variety of states made clear, this data must be made publicly available. This will ensure accuracy and validity, as well as facilitate further research and analysis that will create a deep understanding of the broadband market, ultimately benefiting all stakeholders.
Network providers, along with Connected Nation, claim by adopting this leadership role the Commission will endanger state-level broadband mapping and deployment efforts -- in the very states that have pleaded for Commission action. Through a variety of illogical and unsubstantiated claims, these entities request the Commission delay or discontinue their collection of broadband availability information. Providers and Connected Nation claim the Commission would produce data far inferior to the efforts underway in five states. However, they fail to produce any evidence or meaningful arguments that support these claims, while simultaneously acknowledging many facts that counter such a claim. These entities also fail to recognize the clear benefits that would result from publicly available data, asserting the burdens to providers far outweigh any other consideration. The Commission should dismiss these arguments, which are directly disputed by the states themselves. In addition, the existing public availability of such information (in provider’s own Web sites as well as disclosed in other Commission forms) indicates that such claims of harms from disclosure are wholly without merit.

The Commission can adhere to its Section 706 mandate by moving forward with its expedited plan to collect nationwide broadband availability data, making the underlying data public, and producing visual aids or interactive maps based on this data. The fact that the states themselves are urging the Commission to act demonstrates the need for the Commission to reject the self-interested arguments of Connected Nation, Inc. and other private companies and instead comply with Section 706’s directive.
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I. This Further Notice of Proposed Rulemaking seeks input into the creation of a broadband availability map. The Telecommunications Act of 1996 tasked the Commission with encouraging the universal and timely deployment of advanced telecommunications capability. In order to comply with this directive, the Commission must gather detailed and accurate broadband market data. The Commission has shirked this responsibility for more than a decade. Fortunately, with the recent Form 477 Order, the Commission took an important first step in reversing the pattern of inaction and indifference.

Despite this positive action, the Form 477 Order did not take action on the issue of availability data, delaying the confrontation of this question to the current expedited proceeding. We believe the record demonstrates a clear and convincing need for very detailed availability information and the Commission should move forward with its plan
to “issue a responsive Order within 4 months.”\textsuperscript{1} We encourage the Commission to pay close attention to the comments in this proceeding offered by the states and consumer groups -- groups that do not stand to benefit financially from Commission inaction. The state governments and consumer groups urge the Commission to adopt a comprehensive mapping plan, while providers and their public-private proxies advocate for a patchwork of state efforts and further delay on the part of the Commission. While some of these public-private state efforts have provided a potentially valuable service during the long period of inaction at the Commission, federal leadership by an expert agency is essential and is mandated under the law.

\textbf{II. Discussion}

In our initial comments, we provided the Commission with a number of recommendations on the issue of broadband availability data. It is of critical importance that this data be collected in a detailed manner and made publicly available. We demonstrated that if the Commission desires to improve upon its current (and much maligned) ZIP code availability data, that this information must be collected at the Census Block Group level. The use of Census Tracts to replace ZIP codes as the geographic unit for the availability data would increase some aspects of analytical utility, but it would decrease the level of the data’s precision, especially in rural areas. In our initial comments, we also made it quite clear that any claims of confidentiality concerns offered by providers should be dismissed, given the information’s existing public availability. We also provided the Commission with numerous recommendations on the crafting of meaningful and end-user friendly interactive availability maps.

\textsuperscript{1} FNPRM \textsuperscript{\textregistered}35
A. State Governments Second the Consumer Groups’ Conclusions

States from across the country, including California, Illinois and Kentucky, weighed in during the initial comment period to support the Commission’s role in creating a detailed, nationwide broadband availability map. As they had during the original comment period, states acknowledged that the Commission possessed both the authority and the expertise to take on this responsibility. They further recognized that such an undertaking would be best performed at the federal level and urged the Commission to act quickly. Comments from the New Jersey Rate Council reflect this notion:

Rate Counsel reiterates its support for the Commission’s leadership in the design and implementation of a comprehensive, national broadband mapping program, and commends the Commission for moving with its broadband data collection efforts on an expedited timetable.

Even in states that have already undertaken mapping projects of their own, the Commission’s leadership was welcomed. The California Public Utility Commission states:

While California has engaged in its own data gathering and is creating its own broadband maps…the FCC’s broadband data gathering and national mapping will play a valuable role in ensuring that information regarding broadband services is collected, and maintained on a consistent nationwide basis.

State entities also recognized the benefits that the Commission’s completion of this mapping effort will provide. As California noted, the consistency created through

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2 California Public Utility Commission Further Comments; New Jersey Rate Council Further Comments; The People of the State of Illinois Further Comments; Public Utilities Commission and the Connect Maine Authority Further Comments; Kentucky Public Service Commission Further Comments; The American Public Power Association et al. Further Comments. See also local governments, National Association of Telecommunications Officers and Advisors Further Comments.

3 See Consumers Union et al. Further Comments at 9.

4 See i.e. The People of the State of Illinois Further Comments at 8-9; California Public Utility Commission Further Comments at 2; New Jersey Rate Council Further Comments at 5.

5 New Jersey Rate Council Further Comments at 5.

the creation of a standard, nationwide data collection process will be invaluable to both federal and state governments and the research community. This uniformity in data would allow for a variety of comparisons both between states and within the same state over time. A federal program would also alleviate difficulties that states have encountered in their attempts to collect this data. Furthermore, Commission action would permit states “to map other state resources along with broadband availability in order to support specific state initiatives”, in addition to enabling states to “add layers of data of particular interest to state policymakers.” Federal collection would also help shift scarce state resources towards the creation of deployment and demand gap programs.

State governments also emphasized the crucial importance of the Commission making its underlying data publicly available. The Kentucky Public Service Commission summarizes this position:

In order to have confidence in the information depicted by a mapping system, it is absolutely necessary to have confidence in the underlying data. The data must be readily verifiable and subject to independent scrutiny and analysis…Otherwise, the program will be a costly exercise in

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7 See also Maine Public Utilities Commission and the Connect Maine Authority Further Comments at 2; New Jersey Rate Council Further Comments at 8; Kentucky Public Service Commission Further Comments at 2.
8 See California Public Utility Commission Further Comments at 3. (“From the CPUC’s perspective, one of the main benefits of a national broadband mapping program would be to provide the uniformity necessary for making state-to-state comparisons.”)
9 Maine Public Utilities Commission and the Connect Maine Authority Further Comments at 2.
10 Id. at 12.
11 Id.
12 See Maine Public Utilities Commission and the Connect Maine Authority Further Comments at 2. (“CMA funding is very limited - less than $2 million a year. Thus, it is critical to CMA’s ability to fulfill its statutory obligations and the public policy objective of ubiquitous broadband that CMA funding be narrowly targeted to deploying services in areas that are truly unserved. If CMA had access to address-by-address data on availability of broadband in Maine, it could more quickly make decisions regarding which requests for its limited funds for projects in unserved areas should be funded. Access to accurate and complete data for a state could also be used to support the need for increased state funding of projects such as CMA.”)
futility and will be unable to support a national information resource that can be relied upon with confidence.\textsuperscript{13}

American Public Power Association et al. note the “exaggerated” concerns of providers in maintaining the confidentiality of such information.\textsuperscript{14} Many states second this notion.\textsuperscript{15} Indeed, the State of Illinois provides an apt analogy to describe the illogical nature of such concerns:

If a consumer wants to know if a certain type of store is available in the area, for example a Costco, a Home Depot, or a grocery store, the merchant would want the consumer to have that information available so that consumers could take their business to the store. It would be economically irrational for the merchant to not disclose where it has a store because if it discloses where its stores are located, competitors might open stores in unserved areas. The secretive store owner would lose local customers due to the lack of reliable and available information about where its services are available.\textsuperscript{16}

Even if legitimate confidentiality issues were raised, which they have not, the State of Illinois, among others, seconds the commenters in recognizing that “the public interest in mapping broadband availability and extending service to unserved areas must be recognized and accommodated.”\textsuperscript{17} Both consumer groups and states recognize the necessity of publicly available data. It is only a few self-interested providers who oppose the public availability of data. And as the Kentucky Public Service Commission reminds the Commission, “specific private interests are not always consistent, or even compatible, with broader public interests.”\textsuperscript{18}

\textsuperscript{13}Kentucky Public Service Commission Further Comments at 2, 4.
\textsuperscript{14}The American Public Power Association et al. Further Comments at 7.
\textsuperscript{15}National Association of Telecommunications Officers and Advisors Further Comments at 7; Kentucky Public Service Commission Further Comments; New Jersey Rate Council Further Comments at 13; American Library Association Further Comments at 2.
\textsuperscript{16}The People of the State of Illinois Further Comments at 10.
\textsuperscript{17}Id. at 2; Kentucky Public Service Commission Further Comments at 2; New Jersey Rate Council Further Comments at 13. See also BroadbandCensus.com Further Comments at 3.
\textsuperscript{18}Kentucky Public Service Commission Further Comments at 2.
The publicly available data must also be of sufficient granularity as to create a “highly detailed map of broadband availability nationwide.” Many states encouraged the Commission to do just that. While the level of granularity varied, they all urged the Commission to improve over their previous ZIP code methodology. As we explained in our initial comments, in order to accomplish this the Commission must gather data at the Census Block Group level. The Joint Comments of Maine and Massachusetts requested that the Commission go further and follow their tentative conclusion to collect address-by-address information. Given the clear mandate from Congress and the strong support of state governments, the Commission should move forward with collecting and distributing detailed broadband availability information.

B. Calls for the Commission to Abandon its Congressional Mandate Should be Dismissed

Network providers and a few entities submitted comments requesting that the Commission continue with the status quo -- a practice that does not fulfill the directives of Section 706 because it, according to the GAO, “overstates the level of competition to individual households.” We urge the Commission to reject these self-interested requests that run counter to the promotion of the public interest.

i. Subscribership Data at the Census Tract Level is No Substitute

Network providers and related entities such as Connected Nation suggest the Commission use the information collected in Form 477 to assess broadband availability

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19 FNPRM ¶34
20 Joint Comments of the Maine Public Utilities Commission and the Connect Maine Authority at 2.
in the United States. While this approach is appealing from an ease of implementation standpoint, it compounds the problems of the current ZIP code methodology that overstates the true level of deployment.

We encourage the Commission to compare the geographic and population sizes of Census Tracts, Census Block Groups, and ZIP Code Tabulation Areas. If it does, it will see (as show in our initial comments) that in rural areas, Census Tracts often encompass an entire county, while ZIP Codes and Census Block Groups are more granular. If the FCC uses non-zero subscribership in a Census Tract as a proxy for availability, it could very well pick up on the limited availability in the urbanized centers of rural counties, but miss the lack of deployment in the non-urbanized areas of these rural counties. Given the prevalence of geographically large counties and Census Tracts in the Western Mountain states, such a methodology would make matters even worse. Claims that sub-Census Tract information will not add additional insight are simply wrong.

The Commission should put great weight on the opinions of the agency that has the largest amount of experience in this area. The CPUC stated:

Alternately, if the FCC determines not to collect availability data at the street address level, the CPUC would recommend that the FCC use a census-based reporting area smaller than a census tract as the basis for reporting broadband availability data. Requiring reporting by Census Block Group would reduce the problem discussed above [referring to use of address-by-address data creating a large dataset]. Requiring reporting by Census Block would substantially reduce the overestimation bias, though it would still result in a very large number of records being submitted [ed. note: not substantially different from the use of ZIP codes, less than an order of magnitude].

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22 Verizon and Verizon Wireless Further Comments at 4; Qwest Communications Further Comments at 3-4; CTIA Further Comments at 5; Frontier Communications Further Comments at 2-3; Windstream Communications Further Comments at 5; Connected Nation Further Comments at 28-29.
23 Consumers Union et al. Further Comments at 13-17.
24 Qwest Communications Further Comments at 6.
ii. Reporting Availability Data at the Census Block Group Level is in the Public Interest and Does not Require Significant Resources

While we firmly believe that collecting data on the Census Block Group level would be of great utility, the Commission tentatively concluded to do so on an address-by-address level. This conclusion was supported in the comments of certain states.  

Network providers unanimously reject this conclusion, claiming a heavy burden and the futility of such an exercise. Some assert they do not currently retain this information and would require spending significant resources to collect it. We reject many of these unsubstantiated assumptions.

While many large network providers admit they currently have the information the Commission is seeking to collect in database form, small providers urge the Commission to not require the same of them because they do not.  

Despite the fact that in improving Form 477 the Commission recognized and acted to reduce the potential for hardship on these small providers, nothing should prevent them from reporting information on the Census Block Group level. Connected Nation goes so far as to flatly state “these providers would be missed entirely by the Commission’s proposed approach” (we address many of the merit-free conclusions made by Connected Nation below).

Given the fact that providers would be required to report such information, the

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26 Joint Further Comments of the Maine Public Utilities Commission and the Connect Maine Authority at 2; New Jersey Rate Council Further Comments at 12.
27 CTIA Further Comments at 2, 5; AT&T Further Comments at 7-9; Verizon Further Comments at 12; Qwest Further Comments at 5; National Cable & Telecommunications Association Further Comments at 8; American Cable Association Further Comments at 3-4; Windstream Communications Further Comments at 2; Independent Telephone & Telecommunications Alliance Further Comments at 4; Frontier Communications Further Comments at 3; Texas Statewide Telephone Cooperative Further Comments at 3.
28 Independent Telephone & Telecommunications Alliance at 4; Texas Statewide Telephone Cooperative Further Comments at 3; Windstream Communications at 2-3; Frontier Communications Further Comments at 2-3.
29 See Report & Order ¶32
30 Connected Nation Further Comments at 23.
Commission should dismiss such assertions. Providers of all sizes keep records of the addresses where customers have subscribed for service. By simply converting this subscribership information to the Census Block Group (via commercially available software, or requesting the Commission make this conversion), providers can easily collect this information for the majority of their service area. For the infrequent occasions where service is available but not subscribed to by anyone in a particular CBG, providers need only identify those few areas and integrate that information into their CBG database. Indeed, providers large and small have submitted this information to the California Public Utility Commission.\footnote{See \url{http://www.cpuc.ca.gov/puc/hottopics/2telco/videofranchising.htm}.}

Furthermore, given the small service areas of such providers and their intimate knowledge of their areas of operation, we do not believe the Commission will be creating an overly large burden on providers of any size, particularly given the vast public interest benefits from collecting this data.

Another provider, Hughes Network, also sought exemption from the Commission’s reporting requirements. Hughes Network presents a unique case, as they provide Internet access through satellite. As they note, this medium allows for their service to be made available “to more than 99% of all U.S. residents.”\footnote{Hughes Network System Further Comments at 3.} Unfortunately, the latency of this service is vastly inferior in comparison to the services available from wireline and terrestrial wireless providers.\footnote{See generally \url{http://en.wikipedia.org/wiki/Broadband_Internet_access#Satellite_Internet}.} The Commission has recognized that current satellite connections do not meet the definition of “advanced services.”\footnote{See fifth 706 Report \textsection 24.} There are also other factors regarding satellite that should be taken into account that we have reviewed.

\begin{itemize}
\item \footnote{See \url{http://www.cpuc.ca.gov/puc/hottopics/2telco/videofranchising.htm}.}
\item \footnote{Hughes Network System Further Comments at 3.}
\item \footnote{See generally \url{http://en.wikipedia.org/wiki/Broadband_Internet_access#Satellite_Internet}.}
\item \footnote{See fifth 706 Report \textsection 24.}
\end{itemize}
in other proceedings.\textsuperscript{35} The goal of the Commission’s mapping program is to provide a visual aid that identifies where broadband services exist. We believe including satellite providers in any fashion will detract from this goal. However, if the Commission deems their inclusion is warranted, we believe they should be waived from the availability reporting requirements, given the unique nature of their service.

\textbf{iii. The Commission Should Dismiss Claims of Confidentiality}

As we note in detail above, a wide variety of states concur that the availability information collected by the Commission should be made publicly available. The public interest benefits of such an action vastly outweigh the claimed competitive harms. Furthermore, as detailed in our initial comments, this data is already available to any citizen willing to inquire with a service provider.\textsuperscript{36} Network providers continue to make vague assertions of the harms but consistently fail to provide concrete evidence to prove their assertions.\textsuperscript{37} Network providers must provide the Commission and interested parties with plausible and specific reasons to support their claims that release of such information would have negative competitive consequences. As the APPA notes:

\begin{quote}
[L]andline broadband providers…either know, or can easily find out, where each is deploying and marketing broadband in a given local market…the only parties that typically do not know where broadband is being deployed in a market are, ironically and unfortunately, potential subscribers and federal, state and local government policymakers.\textsuperscript{38}
\end{quote}

As NATOA proclaims “a free market relies on the smooth exchange of relevant information.”\textsuperscript{39} Providers face a steep burden of proof to prove that their claimed costs

\begin{footnotes}
\item[36] See Consumers Union et al. Further Comments at 17.
\item[37] See i.e. AT&T Further Comments at 12; Verizon Further Comments at 13; National Cable & Telecommunications Association Further Comments at 6-7.
\item[38] The American Public Power Association et al. Further Comments at 7.
\item[39] National Association of Telecommunications Officers and Advisors Further Comments at 7.
\end{footnotes}
outweigh the significant benefits of both detailed data and the accompanying visual aids. It is unfortunate that providers do not recognize the wide-ranging benefits that would result from a Commission decision to make the underlying data available to the public.

The wireless industry as a whole expressed considerable concern for the confidentiality of their availability data, with one carrier going so far as to state that the Commission should only provide aggregated information.\footnote{CTIA Further Comments at 6-7; Sprint Nextel Further Comments at 5.} Sprint claims “detailed information about the carriers’ nationwide coverage is not available.”\footnote{Sprint Nextel Further Comments at 4.} This claim flies in the face of reality, as an availability map on Sprint’s website has 12 different levels of zoom available, from a look at the entire US down to just a few city blocks.\footnote{See http://coverage.sprint.com/IMPACT.jsp?language=EN.}

Despite the fact that this information is provided in a detailed manner on the websites of all major wireless carriers, the industry should not concern itself with the details of the Commission’s mapping efforts. Until the wireless carriers cease their continued violations of the principles contained in the Commission’s 2005 Broadband Policy Statement, the Commission should not include their services in the collection of data or in the creation of a broadband availability map.

Some detractors of the Commission’s efforts expressed concern that, unlike in a public-private partnership model, the Commission would be subject to Freedom of Information Act requests that could jeopardize the secrecy of information that is already public.\footnote{Verizon Further Comments at 6; Texas Statewide Telephone Cooperative Further Comments at 4-5; Connected Nation Further Comments at 29-30.} Of course, we view these concerns as irrelevant given the clear benefits in publicly available data. Nonetheless, the unsuccessful effort of The Center for Public
Integrity to use FOIA to gain access to the underlying Form 477 data demonstrates the unlikelihood of this outcome.\textsuperscript{44}

\textsuperscript{44} See National Cable & Telecommunications Association Further Comments at 7.
iv. Attempts to Diminish the Commission’s Role in Broadband Data Collection by Connected Nation and Network Providers Should Be Dismissed. Connected Nation’s Claims of Programmatic Success are Based on Methodological Malpractice

Connected Nation, supported by many of the nation’s largest Internet providers, request that the Commission take a back seat to the patchwork of state mapping efforts taking place across the country.\textsuperscript{45} Connected Nation provides a detailed account of their programmatic activity, which includes both data collection and programs to increase deployment and stimulate demand. Connected Nation boasts of their program’s success through the use of extremely misleading and wholly incorrect data analysis, and completely ignores the impact of outside forces such as merger consent decrees. In praising their own efforts, they claim the impossibility of the Commission doing the same, let alone improving upon Connected Nation’s efforts. Connected Nation states unequivocally that if the Commission even attempts to do nationwide data collection the result will be the dissemination of data that is a dated, inaccurate and unverified and “a vastly inferior, static, dated, and woefully incomplete federal ‘map’,” not to mention thwarting the significant momentum existing for state mapping efforts.\textsuperscript{46} This is simply not the case.

Connected Nation, along with many providers, envision the Commission acting only as a “warehouse” of state mapping information, merely creating a “best practices” for states to use as a guide.\textsuperscript{47} This is akin to having a university basketball team’s tallest

\textsuperscript{45} AT&T Further Comments at 5-6; Verizon Further Comments at 5-6; National Cable & Telecommunications Association Further Comments at 5-6.
\textsuperscript{46} Connected Nation Further Comments at iii, 26, 30. See also AT&T Further Comments at 6; Verizon Further Comments at 7, 9-10; National Cable & Telecommunications Association Further Comments at 6.
\textsuperscript{47} Connected Nation Further Comments at 33-34. See also Verizon Further Comments at 5; National Cable & Telecommunications Association Further Comments at 6.
player act as the team statistician when the university’s board has expressly stated it is in the best interest of the school for that player to be the captain. Continuing with this analogy, Connected Nation is essentially claiming that by having this talented player in the game, the current high scorer will have fewer points. But Connected Nation overlooks the fact that: 1) they are the high scorer precisely because the tallest player has yet to play; and: 2) the rest of the team agrees with the university board; and: 3) an improved overall winning percentage will inevitably result.

Every state agency that has commented in this proceeding recognized the important leadership role the Commission has to play in this space and Congress long ago mandated that they do so.

In our initial comments, we cautioned the FCC against assuming the success of public-private partnerships given the lack of analysis in this area. The numbers provided in Connected Nation’s comments explaining their success further justify this caution.

Connected Nation repeats meaningless comparisons it has made elsewhere, stating “adoption rates in Kentucky grew from 24% of households subscribing to broadband services in 2005 to 44% at the end of 2007. This represents a growth rate of 83%, which compares favorably with the national average growth rate of 57%.

Broadband demand grew particularly fast in rural counties in Kentucky, registering an adoption growth rate of 106% during the same period.”\textsuperscript{48} They also state, “In just the first six months of the Connected Tennessee program, home broadband adoption has doubled the national growth rate. Rural areas have seen the most significant increases, as home broadband adoption increased by 37% over a six-month period.”\textsuperscript{49}

\textsuperscript{48} Connected Nation Further Comments at 6.
\textsuperscript{49} Id. at 7.
It is almost unfathomable that Connected Nation misses or ignores the underlying flaw in this presentation. Of course the rural areas have seen the most significant percentage increases, because those are the areas starting from the lowest levels of adoption! We explained why this is a meaningless approach in our initial comments, but we will illustrate this in several additional ways here to ensure that the Commission does not buy into this methodological malpractice.

When examining a subject area that is maturing towards a saturation point (such as technology adoption), subjects with lower adoption rates almost always have larger percent increases in growth from time A to time B, when compared to subjects with higher adoption rates. For example, consider subject X, who moves from 10 percent adoption in time A to 15 percent adoption in time B. This is a 50 percent increase, and a 5-percentage point increase. Compare this to subject Z, who moves from 30 percent adoption in time A to 40 percent adoption in time B. Subject Z has improved 10-percentage points and undergone a 33 percent increase. By Connected Nation’s logic, subject X is “outperforming” subject Z because X experienced a 50 percent increase while Z only experienced a 33 percent increase. This despite the fact that the absolute size of subject Z’s growth was twice that of subject X’s!

Here’s another example. According to the U.S. Census Bureau, the percent of urban broadband households went from 10.78 percent in 2001 to 53.76 percent in 2007, a 399 percent increase. During this same time, the percentage of rural homes with broadband went from 5.92 percent to 38.78 percent, a 555 percent increase. The national household level broadband adoption rate during this time went from 9.58 percent to 50.79 percent, a 430 percent increase. Thus, according to Connected Nation’s logic, the rural

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50 Consumers Union et al. Further Comments at 6-7, n. 4.
areas of the United States are vastly outperforming the “national average” and vastly
outperforming the urban areas! This is of course completely absurd, but it is the exact
methodological basis for Connected Nation’s claims of programmatic success.

We can use international broadband data to provide yet another example of the
meaningless nature of Connected Nation’s claims. Table 1 provides a list of the 30
OECD nations, and their 2001 and 2006 broadband penetration levels.

**Table I: Changes in Broadband Penetration, OECD, 2001-2006**

<table>
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<th>Country</th>
<th>Total Broadband Penetration (OECD)</th>
<th>Percent Change 2001-2006</th>
</tr>
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<tr>
<td></td>
<td>Dec 2001</td>
<td>Dec 2006</td>
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<tr>
<td>Ireland</td>
<td>0.0</td>
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If we use Connected Nation’s approach to program evaluation, then the world should seek to emulate the broadband policies of nations like Greece and Turkey, who over the 2001-2006 time period saw \textit{infinite} percent increases in broadband adoption! Or we should hold up as amazing successes countries like Poland, who despite having the fourth lowest level of broadband adoption in 2006, saw an amazing 6,818 percent increase in broadband penetration from 2001 to 2006, a full 10-times higher than current world broadband leader Denmark.

What the above examples indicate is that the \textit{percent} change (not \textit{percentage point} change) in broadband adoption is a completely meaningless statistic. A large value of percent change by low-performing states or countries is completely unremarkable. In fact, as Table-II shows, an individual state’s percent change in broadband penetration can almost be entirely explained by its starting penetration level. Using fractional polynomial regression, a full 92 percent of the variation in percent change can be explained by the starting penetration level!
But even if we ignore for the moment the bogus nature of Connected Nation’s data, we must focus on the possibility that outside forces other than the non-profit’s are responsible for changes in Kentucky and Tennessee. In their comments, Connected Nation states “Kentucky increased from an estimated 60% of households passed in the state of Kentucky prior to the beginning of the program, to 95% at the end of 2007.”\(^5\) FCC data indicates that the percent of ILEC lines that were DSL-capable in the state of Kentucky went from 60 percent in June of 2005 to 87 percent in June of 2007. But in December of 2006, as a part of it’s consent decree to merge with BellSouth, AT&T

\(^5\) Connected Nation Further Comments at 6.
committed to 100 percent DSL availability in the entire BellSouth territory.\textsuperscript{52} Thus, it is quite possible that much of the improvements seen in Kentucky and Tennessee (former Bell South territory) are due to AT&T’s commitments, and \textbf{not} to Connected Nation’s mapping and demand stimulation efforts.

We must state clearly that we have no inherent opposition to the Connected Nation programmatic model, which may or may not be as successful as they claim it to be. We just believe their use of completely misleading and meaningless data to claim success for the explicit purpose of discouraging the Commission from fulfilling its own statutory obligations is beyond the pale.

Similarly, Connected Nation’s other comments that are designed to derail the Commission’s actions are also indefensible. Connected Nation claims that their data collection is superior to the Commission’s because it is “continuously updated.”\textsuperscript{53} But in other proceedings Connected Nation revealed that their data is updated quarterly, not continuously.\textsuperscript{54} In their comments Connected Nation writes, “[a]t best, the Commission would only be able to generate a dated, unverified, static national broadband map.”\textsuperscript{55} Well, yes, the FCC’s data would be semi-annual, while Connected Nation’s would be quarterly. But this is a hypothetical point. Keep in mind, in order to get 50 states worth of data, Connected Nation, and not some other entity, would have to win contracts in all 50 states to

\textsuperscript{52} Federal Communication Commission, Memorandum Opinion and Order, In the Matter of AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Released: March 26, 2007, Appendix F, Promoting Accessibility of Broadband Service.

\textsuperscript{53} Connected Nation Further Comments at 5.

\textsuperscript{54} For example, “Maps are updated quarterly to keep consumers, government officials, and the private sector abreast of the progress made and continued opportunities for further capacity build-out.” See Comments of Connected Nation, In the Matter of High-Cost Universal Service Support, April 17, 2008, WC Docket 05-337, p. 8, Available at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519893781. Also, “Connected Nation’s mapping strategy involves building relationships and maintaining continuous contact with all broadband providers to ensure new deployments are added to the map each quarter.” See Comments of Connected Nation, In the Matter of High-Cost Universal Service Support, April 17, 2008, WC Docket 05-337, p. 24.

\textsuperscript{55} Connected Nation Further Comments at 26.
conduct mapping, a process that is not likely to happen before the FCC could implement its own mapping effort. But this huge practical consideration aside, the case for a quarterly, proprietary, unverified, un-audited, voluntary reporting effort being superior to a semi-annual, non-proprietary, verified, audited, and compulsory reporting effort has not been made. We, and many others, prefer the latter method to the former.

Connected Nations also asserts its superiority because “the data the Commission proposes to collect would almost immediately be dated”, further stating:

if the information the Commission proposes to collect through Section IV(B) in the Further Notice is collected in a similar manner as the current FCC Form 477, the information collected would be two months old by the time it was reported to the Commission, and if the Commission takes the same amount of time to generate its maps as it does to create its semiannual High-Speed Services for Internet Access Reports, the maps would 7-10 months out of date.

This criticism ignores one of the key purposes of the need to collect this data -- to have detailed and accurate information reported periodically to establish trends and enable the analysis of changes occurring in the marketplace. In this proceeding, we, among others, have been very vocal critics of the Commission’s data collection practices. But not once did we or other critics complain about the semi-annual reporting process. It is a perfectly adequate interval for fulfilling the Section 706 directive. Again, the Commission could move forward with this order and have data from the entire nation reported by spring of 2009. It is completely unlikely that Connected Nation will have managed to secure contracts in all 50 states, DC, Puerto Rico, The Virgin Islands, Guam, and The Northern Mariana Islands and complete its data gathering process by that time.

56 The FCC has an officer of the companies submitting a Form 477 report sign a certification statement on the accuracy of the information contained within the form under penalty of “fine or imprisonment under the Communications Act, 47 U.S.C. 220(e).” See Section V, http://www.fcc.gov/Forms/Form477/477instr.pdf.
57 Connected Nation Further Comments at 26.
58 Id. at 26-27. [Footnotes omitted]
Connected Nation claims that “small firms like wireless Internet Service Providers…would be missed entirely by the Commission’s proposed approach.” The entity also states “the Commission’s proposed approach would generate static, incomplete, and even possibly inaccurate maps of broadband availability.” These charges are completely without merit, misleading, and appear to be designed to protect Connected Nation’s own business model. We remind the Commission that it can require reporting, unlike Connected Nation who relies on “constructive dialogue” to conduct its mapping effort. Furthermore, there is a need for consistent nationwide data -- something that only the Commission can provide. Indeed, as the Commission notes, an October 2007 ex parte from Connected Nation recognized the value in a “comprehensive national data set which is consistent across states.”

At the heart of Connected Nation’s concern is that it believes Commission action would kill state broadband deployment efforts. Connected Nations states:

*[T]he federal approach would essentially occupy the field and effectively halt state and local government initiatives to map broadband infrastructure in their own communities. The result would be counterproductive and would hinder the very demand-stimulation programs that the federal mapping program is ostensibly designed to help.*

Currently, there is strong momentum behind comprehensive and integrated mapping and demand-stimulation programs along the lines of ConnectKentucky and similar projects in other states. That momentum can be stalled and halted in its tracks if the federal government steps in and attempts to take over the broadband availability mapping process.

The Commission’s proposed federal program would displace state-level mapping initiatives with the promise of “broadband maps” that would be available, at the very earliest, in late 2009. In a time of tight state budgets, the promise of new federal broadband maps could make funding for state-level

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59 Id. at 23.
60 Id. at 24.
62 Connected Nation Further Comments at 9.
63 FNPRM ¶35 n. 122
64 Connected Nation Further Comments at 30; AT&T Further Comments at 6.
65 Connected Nation Further Comments at 24.
66 Id. at 30.
mapping and demand-side stimulation programs difficult. What is worse is that at the end of the day, the federal maps would be of little use, because they would only contain dated and incomplete information.  

These comments again reveal that Connected Nation is more worried about their own organization’s future than they are of achieving their stated goals. As states commenting in this proceeding recognized, FCC action will likely result in *more* money for state-level deployment and demand efforts. The CPUC anticipates that any national mapping program the FCC undertakes would supplement, but not replace, the mapping programs undertaken by the states and various public-private partnerships.  

It is puzzling to us why Connected Nation is choosing to block Commission action instead of embracing it. With the Commission taking on the mapping duties, Connected Nation would be free to concentrate on their demand-stimulation effort. However, there is the real possibility that Commission mapping will make demand stimulation efforts proposed by other (non-mapping) non-profits seem more attractive to state legislators, creating the potential for competitors to Connected Nation to thrive in this space.  

In summary, Connected Nation’s program design could be the panacea that they claim it to be, but to date no data exists to suggest that this is actually the case. Indeed, much of the increases in broadband availability seen in Kentucky could be due to AT&T’s fulfillment of its commitments of the AT&T-SBC merger consent decree, and not the efforts of the public-private partnership. We simply don’t know, and neither does Connected Nation. But even if the program is a success, there is no reason why it cannot continue its efforts in the face of Commission mapping efforts. Indeed, if their demand-stimulation efforts are very effective, then the additional funding freed up by Commission mapping should enable them to do even more of this work. It will also free

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67 Id. at 36.
68 California Public Utility Commission Further Comments at 12.
up funding to go to other groups who may have alternative methods that are equally as promising as Connected Nation’s, but who lack colorful maps to sway state legislators.

III. Conclusion

The Commission has an opportunity to not only live up to its Congressional mandate but also provide an invaluable resource to state and local policymakers as well as researchers, private businesses and consumers. The Commission should heed the calls of states from across the country and enable interested parties to foster deployment to unserved and underserved areas through the use of detailed, nationwide data. We also urge the Commission to dismiss the claims and reject the conclusions of those who seek to diminish the Commission’s role in fulfilling their Congressional mandate. We look forward to providing further comment on the availability, structure and utility of the underlying database of information in the non-expedited comment cycle. We believe there is substantial agreement in the record that availability information should be collected at the Census Block Group level and made publicly available. The Commission must play the role of leader, not follower.
Respectfully submitted,

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PUBLIC KNOWLEDGE

By:___________
S. Derek Turner
Adam Lynn
501 Third Street NW,
Suite 875
Washington, DC 20001
202-265-1490
dturner@freepress.net

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