BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	
Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership	WC Docket No. 07-38
International Comparison and Consumer Survey Requirements in the Broadband Data Improvement Act	GN Docket No. 09-47
A National Broadband Plan for Our Future	GN Docket No. 09-51

COMMENTS OF THE CALIFORNIA PUBLIC UTILITIES COMMISSION AND THE PEOPLE OF THE STATE OF CALIFORNIA ON PUBLIC NOTICE ON PROVIDING ELIGIBLE ENTITIES ACCESS TO AGGREGATE FORM 477 DATA AS REQUIRED BY THE BROADBAND DATA IMPROVEMENT ACT

HELEN M. MICKIEWICZ
505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-1319
Fax: (415) 703-4592
Email: *hmm@cpuc.ca.gov*
Attorney for the People
Of The State Of California And The
California Public Utilities Commission

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I. INTRODUCTION

The California Public Utilities Commission and the People of the State of California (California or CPUC) submit these comments in response to the Federal Communications Commission's (FCC or Commission) Public Notice released on July 17, 2009. In the Public Notice, the FCC seeks comment on how the Commission should implement Section 106(h)(1) and 106(h)(2) of the Broadband Data Improvement Act (BDIA).[1]

Section 106 of the BDIA directs the Secretary of Commerce to establish the State Broadband Data Program (Program) and to award a grant to one eligible entity in each state to develop and implement a statewide initiative to identify and track the adoption and availability of broadband services within the state. The Recovery Act[2] authorized appropriations for the grants and specifically directed that the Department of Commerce's National Telecommunications and Information Administration (NTIA) develop and maintain a comprehensive and interactive national broadband map. The BDIA and the Recovery Act require states to provide NTIA with information about broadband adoption and availability in the states to effectuate the map. The NTIA recently issued a Notice of Funds Availability in which it directs grant awardees to use the broadband-related data that they collect to develop statewide broadband maps to be linked to a Department of Commerce webpage, as well as to submit the data awardees collect to NTIA and the FCC for use in developing and maintaining the NTIA national broadband map.

In order to avoid duplication of data gathering and to facilitate state collection of data from broadband providers, in Section 106 (h) of the BDIA Congress directed the FCC to provide

[1] Broadband Data Improvement Act of 2008, Pub. L. No. 110-385, 122 Stat. 4097 (codified at 47 U.S.C. §§ 1301-04) (BDIA).
[2] The American Recovery and Reinvestment Act of 2009 (Recovery Act), Public Law No. 111-5 (Feb. 17, 2009).

to the states data its collects from broadband providers via Form 477. Sections 106(h) (1) and (2) of the BDIA provide as follows:

> ACCESS TO AGGREGATE DATA.—(1) IN GENERAL.—Subject to paragraph (2), the Commission shall provide eligible entities access, in electronic form, to aggregate data collected by the Commission based on the Form 477 submissions of broadband service providers.
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> (2) LIMITATION.—Notwithstanding any provision of Federal or State law to the contrary, an eligible entity shall treat any matter that is a trade secret, commercial or financial information, or privileged or confidential, as a record not subject to public disclosure except as otherwise mutually agreed to by the broadband service provider and the eligible entity. This paragraph applies only to information submitted by the Commission or a broadband provider to carry out the provisions of this title and shall not otherwise limit or affect the rules governing public disclosure of information collected by any Federal or State entity under any other Federal or State law or regulation.

The FCC seeks comment on how it should interpret the term "aggregate" in Section 106(h)(1). Particularly, the Commission asks to what extent does the adjective "aggregate" require the FCC to provide to eligible entities data that is more aggregated than the raw data Form 477 filers now submit. The Commission also seeks comment on whether the confidentiality provisions of section 106(h)(2) indicate that the FCC should provide access to data that is more disaggregated than the Form 477 filing-based data that it makes available to the public in various periodic statistical reports the Wireline Competition Bureau releases. More generally, the FCC seeks comment on how much the Commission should aggregate the data that it provides to eligible entities, and what factors it should consider in determining the appropriate level of aggregation.

The FCC also seeks comment on whether the confidentiality requirement in Sec.106 (h)(2) is self-effectuating, or is it necessary for the Commission to take measures to ensure eligible entities' compliance with section 106(h)(2).

California responds to these questions and provides its recommendations below.

II. DISCUSSION

A. The Term "Aggregate" Should Be Interpreted Narrowly to Mean All Data Collected Via Form 477 by State

The FCC seeks comment on how the term "aggregate" in Section 106(h)(1) of the BDIA should be interpreted. The CPUC urges the Commission to interpret the term "aggregate" narrowly to mean aggregation by state. In other words, the FCC should provide to each eligible entity in every state the raw data it receives on Forms 477 from all broadband providers operating within the entity's particular state. Any further aggregation would defeat the purposes of the BDIA.

In enacting the BDIA, Congress made this finding:

- Improving Federal data on the deployment and adoption of broadband service will assist in the development of broadband technology across all regions of the Nation.

- The Federal Government should also recognize and encourage complementary State efforts to improve the quality and usefulness of broadband data and should encourage and support the partnership of the public and private sectors in the continued growth of broadband services and information technology for the residents and businesses of the Nation.[3]

Two of the express purposes of the state mapping grants authorized under Section 106 of the BDIA, entitled "Encouraging State Initiatives To Improve Broadband," are "to ensure that all citizens and businesses in a State have access to affordable and reliable broadband service," and

[3] BDIA at §§102 (3) and (4)

"to establish and empower local grassroots technology teams in each State to plan for improved technology use across multiple community sectors."[4] To assure that all of these goals are met, the FCC must collect enough data about the current state of broadband availability to gain an understanding of where policy needs to be focused. Further, it is imperative that once collected, that data be shared with the entities that will be able to best utilize it.

State-specific raw Form 477 data is crucial for eligible entities to fulfill the requirements of the BDIA. Section 106(e) of the BDIA mandates that funds granted under the State Broadband Data and Development Grant Program be used for the following reasons:

> Section 106(e)(3): to identify barriers to the adoption by *individuals* and businesses of broadband service and related information technology services, including whether or not (a) the demand for such services is absent; and (b) the supply for such services is capable of meeting the demand for such services;
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> Section 106(e)(4): to identify the speeds of broadband connections made available to *individuals* and businesses within the State, and, at a minimum, to rely on the data rate benchmarks for broadband service utilized by the Commission to reflect different speed tiers, to promote greater consistency of data among the States;
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> Section 106(e)(8): to collect and analyze *detailed* market data concerning the use and demand for broadband service and related information technology services.
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> Section 106(e)(10): to create within each State a geographic inventory map of broadband service, including the data rate benchmarks for broadband service utilized by the Commission to reflect different speed tiers, which shall—
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> (A) identify gaps in such service through a method of geographic information system mapping of service availability based on the geographic boundaries of where service is available or unavailable among residential or business customers; and
> (B) provide a baseline assessment of statewide broadband deployment in terms of households with highspeed availability.[5]

[4] *Id* at §106(a) (1) and (3).
[5] Emphases added.

To meet these requirements, however, eligible entities must be able to perform detailed and accurate analysis to determine broadband penetration rates within their states. This kind of analysis requires both availability data and subscribership data, and it is these factors – these goals and purposes of BDIA – that the Commission should consider in determining the appropriate level of aggregation.

In the State Broadband Data and Development Grant Program**,** Notice of Funds Availability (NOFA), the NTIA set forth the requirement for collecting availability data at the street address level from broadband providers.[6] However, *subscribership* data is only collected by the FCC via Form 477. Therefore, it is imperative that the FCC require Form 477 data to be given to these eligible entities, and that the data be as detailed as possible to enable the necessary analysis for fulfilling the BDIA's requirements set forth above. For the data to be most useful, it should be aggregated only by state before given to eligible entities under the Act. Any eligible state entity, therefore, should be given access to its own pertinent Form 477 data in raw form, with the FCC performing no further aggregation.

The FCC further asks whether the confidentiality provisions of section 106(h)(2) require the Commission to provide access to data that in a form more disaggregated than the Form 477 filing-based data that the Commission currently makes available to the public in various periodic statistical reports the Wireline Competition Bureau releases. The answer, clearly, is "yes" – the state mapping grant awardees are subject to strict confidentiality requirements and should be given raw Form 477 data.

[6] State Broadband Data and Development Grant Program**,** Notice of Funds Availability (NOFA) and Solicitation of Applications, 74 Fed. Reg. 32,545, 32,565 (July 8, 2009**)** (State Broadband NOFA), at p. 32557.

B. Eligible Entities Must Be Given Timely Access Form 477 Data

The FCC currently releases Form 477 data to the states but not until after the data has been "scrubbed." This usually means that states do not gain access to the Form 477 data for up to a year after the FCC receives the information. That delay diminishes the value of the data in a rapidly-changing environment. Indeed, in many cases, the data is obsolete by the time the FCC provides it to the states. It is vital that eligible entities have timely access to raw Form 477 data in order to perform their tasks as the BDIA and the FCC's National Broadband plan require.

Consequently, the CPUC urges the Commission to provide to states and state-designated mapping entities, who so request them, copies of the latest Form 477 submissions by wireline and wireless broadband service providers from their states. California also recommends that the FCC require broadband infrastructure and service providers to *simultaneously* file future Form 477 reports with *both* the FCC and the respective state utility commissions and state mapping authorities.

NTIA is requiring state mapping entities to provide a substantially complete set of availability data by the preferred date of November 1, 2009 and no later than February 1, 2010. These deadlines are intended to allow NTAI to comply with the Recovery Act's deadline for completing a publicly-accessible national broadband map by February 17, 2011. The NOFA states that "insofar as awardees are unwilling or unable to obtain requested data, NTIA reserves the right to request that the FCC exercise its authority to compel data production from any broadband service provider subject to its jurisdiction."[7] Given the short timeframes set forth in the NOFA, California recommends that the FCC not wait until an eligible entity actually needs the data. Rather, California recommends that the Commission direct broadband providers at the

[7] State Broadband NOFA, at 74 Fed. Reg. p. 32555.

outset to comply with eligible entities' requests for broadband data collection. This FCC action would allow for quick assessment of gaps in broadband availability and service throughout the country as well as to save the administrative resources and time necessary to submit such requests to the FCC via NTIA.

C. The Confidentiality Safeguards Set Forth in the BDIA Are Self-Effectuating

The FCC seeks comment on the BDIA's confidentiality safeguards. Specifically, the Public Notice asks "whether [section 106(h)(2)] is self-effectuating or whether the Commission should take any measures to ensure eligible entities' compliance with section 106(h)(2)." The CPUC contends that this section is self-effectuating. The FCC need not take any further action to protect the confidentiality of Form 477 data provided to eligible entities.

Relevant language in the BDIA states that "an eligible entity shall treat any matter that is a trade secret, commercial or financial information, or privileged or confidential, as a record not subject to public disclosure".[8] This language plainly requires that, as a condition of receiving grant money under the State Broadband Data Program, eligible entities must hold in the strictest confidence any data broadband providers submit. Further, the program's grant process requires applicants to submit information regarding the methods the applicant intends to employ to ensure protection of collected data.[9] It is abundantly clear that the confidentiality provisions of the BDIA apply, and applicants must comply with those provisions, during the grant application process.

[8] BDIA, § 106(h)(2).
[9] State Broadband NOFA, at p. 32552.

Furthermore, the FCC already has confidentiality safeguards in place for entities that are granted access to Form 477 data.[10] The CPUC considers the confidentiality requirements of the BDIA, paired with the FCC's own confidentiality protections, sufficient to protect sensitive information. The FCC need not waste precious administrative resources creating additional safeguards when more than adequate safeguards already exist.

Should the FCC feel compelled to further aggregate data provided to eligible entities to protect providers' confidential data, we recommend following the language of the NOFA. This would require that data only be aggregated to remove information that would single out an individual provider. The NOFA states as follows:

> [I]f the applicable broadband service provider so chooses, the provider's identity will also be available, [sic] otherwise the map will simply display that an anonymous provider utilizing a particular type of technology is providing service to a location. Furthermore, to the extent possible, the service areas of individual providers will be aggregated with other providers of the same technology type.[11]

This limited aggregation will still allow eligible entities to fulfill the requirements of the BDIA data while assuring anonymity of individual providers.

D. The FCC Should Revise its Form 477 Data Collection Method Prospectively

The CPUC has urged the FCC on several occasions to reform its Form 477. Data currently collected by the FCC via Form 477 is not extensive enough, nor collected at a small enough level of granularity, to allow for the most accurate mapping and thorough broadband

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[10] *In the Matter of Local Competition and Broadband Reporting*, CC Docket No. 99-301, *Report and Order* (rel. March 30, 2000) (Broadband Reporting Order) ¶ 95. Under FCC rules, State Commissions can receive confidential Form 477 data so long as the state has "appropriate protections in place."

[11] State Broadband NOFA, at p. 32564.

analysis.[12] Using current Form 477 data collected by census tract will overestimate the areas where broadband is available. This overestimation will cause substantial problems in the implementation of the BDIA and the FCC's National Broadband Plan.

To assure that such an overestimation does not occur, the FCC should revise the scope of the its data collection under Form 477 to reflect the requirements of the recent State Broadband Data and Development Grant Program**,** Notice of Funds Availability (NOFA). The NOFA requires carriers to provide detailed broadband availability data at the street address level, pursuant to the BDIA.[13] The CPUC proposes that Form 477 be revised to collect availability as well as subscribership data, and all other broadband data, at the street address level.[14] Collecting availability data, in addition to subscribership, speed, and technology data at the street-address level is imperative for states to accurately determine unserved areas and areas with low adoption rates.

As Representative Edward Markey (MA) noted during House floor debate on S.1492 (BDIA):

> [A] concomitant goal of this legislative effort from the beginning was to improve the quantity and quality of broadband data collected by and available to the Federal Communications Commission. When we began this effort, the FCC's available data was woefully inadequate with respect to broadband deployment, availability, speed, price and other metrics. Worse, the data collected was in a form that often misrepresented the reality of broadband deployment in the country. The FCC took action this year to improve the data it collects but it did not go far enough in my opinion. This legislation also does not go far enough and certainly is not as thorough and complete with respect to the

[12] Reply Comments of The California Public Utilities Commission And The People Of The State Of California on Notice Of Inquiry On Development Of A National Broadband Plan, *In the Matter of a National Broadband Plan for Our Future*, GN Docket No. 09-51, July 21, 2009 (CPUC Reply Comments) at p. 8.
[13] State Broadband NOFA, at p. 32557.
[14] Comments of The California Public Utilities Commission And The People Of The State Of California on Notice Of Inquiry On Development Of A National Broadband Plan, *In the Matter of a National Broadband Plan for Our Future*, GN Docket No. 09-51, June 8, 2009 (CPUC Comments) at pp. 31-33.

> collection and reporting of data as the House-passed bill. Yet it does represent additional progress. *Obviously nothing in this bill is designed or should be construed to in any way limit the ability of the FCC to collect better and more accurate data, or to utilize such data internally, or to publicly report such data in a way that is conducive to wise policymaking or otherwise consistent with its precedents for making non-proprietary data public*.[15]

California agrees with this statement and reiterates the need for even more granular data collection, beyond the FCC's recently adopted method of collecting by census tract.

As we explained in our Reply Comments in the National Broadband proceeding,[16] when pinpointing funding and policy for broadband deployment projects, it is imperative to know the exact locations where broadband is available, where there are subscribers, at what speeds it is available, and where infrastructure build out is needed. The CPUC believes that in order to truly determine these factors, data must be presented at the smallest level of granularity possible. Our experience indicates that the optimal level of granularity is at the street address level.

Using a level of granularity larger than the street address level will unavoidably lead to overestimation of broadband availability and service. When data is collected at the census tract level, for example, it vastly overestimates the areas where broadband is being used.[17] Data collected by census tract does not give any indication of where within a census tract (some of which are as big as 8007 sq. miles in California[18]) broadband is available or at what speed.[19] This overestimation can lead to misappropriated funds and wasted hours devoted to conjecture

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[15] 154 Cong. Rec. H10621(daily ed. Sept. 29, 2008) (statement of Rep. Markey), referring to *In The Matter Of Development Of Nationwide Broadband Data To Evaluate Reasonable And Timely Deployment Of Advanced Services To All Americans, Improvement Of Wireless Broadband Subscribership Data, And Development Of Data On Interconnected Voice Over Internet Protocol (VoIP) Subscribership*, Report And Order And Further Notice Of Proposed Rulemaking (WC Docket No. 07-38), 23 FCC Rcd 9691 (Rel. June 2008).[emphsis added]

[16] CPUC Reply Comments, at pp. 11-12.

[17] See CPUC Comments, at p. 36.

[18] Tract in San Bernardino County.

[19] Collecting data by census block groups results in overestimation, as well. *See* CPUC Comments at p. 36.

that could hinder the goals of a national broadband mapping program by obscuring the actual availability of broadband.

The following maps illustrate the overestimation that occurs when data is mapped by census tract and street address level data. Map 1 shows a census geography comparison of San Diego County using wireline broadband subscribership data collected by street address.[20] Map 2 shows the same broadband subscribership data when mapped using data collected by census tract.[21] Note the differences in the broadband service areas represented in each of these maps (the area shaded yellow). According to the data collected by street address, approximately 874,302 households are served by wireline broadband in San Diego County. However, according to data collected by census tract, approximately 1,065,328 households are served. Collecting data by census tract rather than address results in overestimating households served by 22%. One can see that more granularity provides a truer picture of the *actual* areas of broadband deployment.

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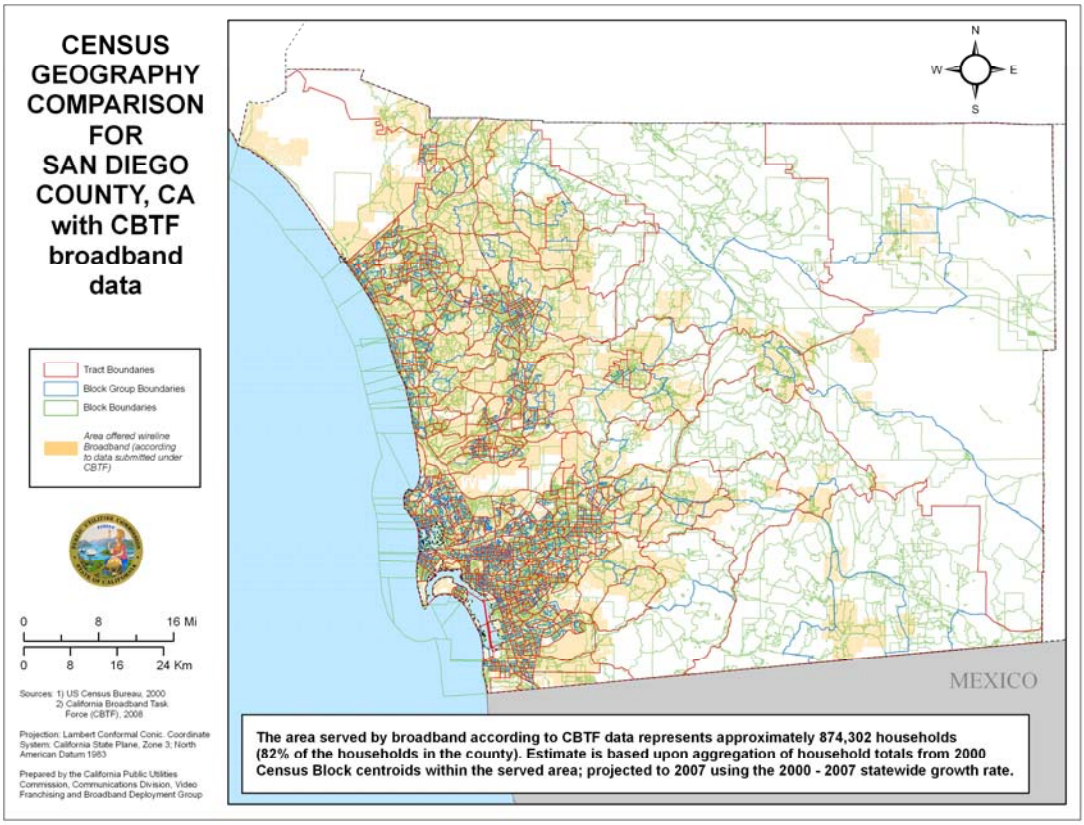
[20] Exec. Order No. S-23-06, Expanding Broadband Access and Usage in California (2006).
[21] Census tract data is collected as part of the Digital Infrastructure and Video Competition Act of 2006. Video franchise holders throughout the state of California must report data regarding their video and broadband services on an annual basis.

Map 1


CENSUS GEOGRAPHY COMPARISON FOR SAN DIEGO COUNTY, CA with CBTF broadband data
Tract Boundaries
Block Group Boundaries
Block Boundaries
Area offered wireline Broadband (according to data submitted under CBTF)
0 8 16 Mi
0 8 16 24 Km
Sources: 1) US Census Bureau, 2000
2) California Broadband Task Force (CBTF), 2008
Projection: Lambert Conformal Conic. Coordinate System: California State Plane, Zone 3; North American Datum 1983
Prepared by the California Public Utilities Commission, Communications Division, Video Franchising and Broadband Deployment Group
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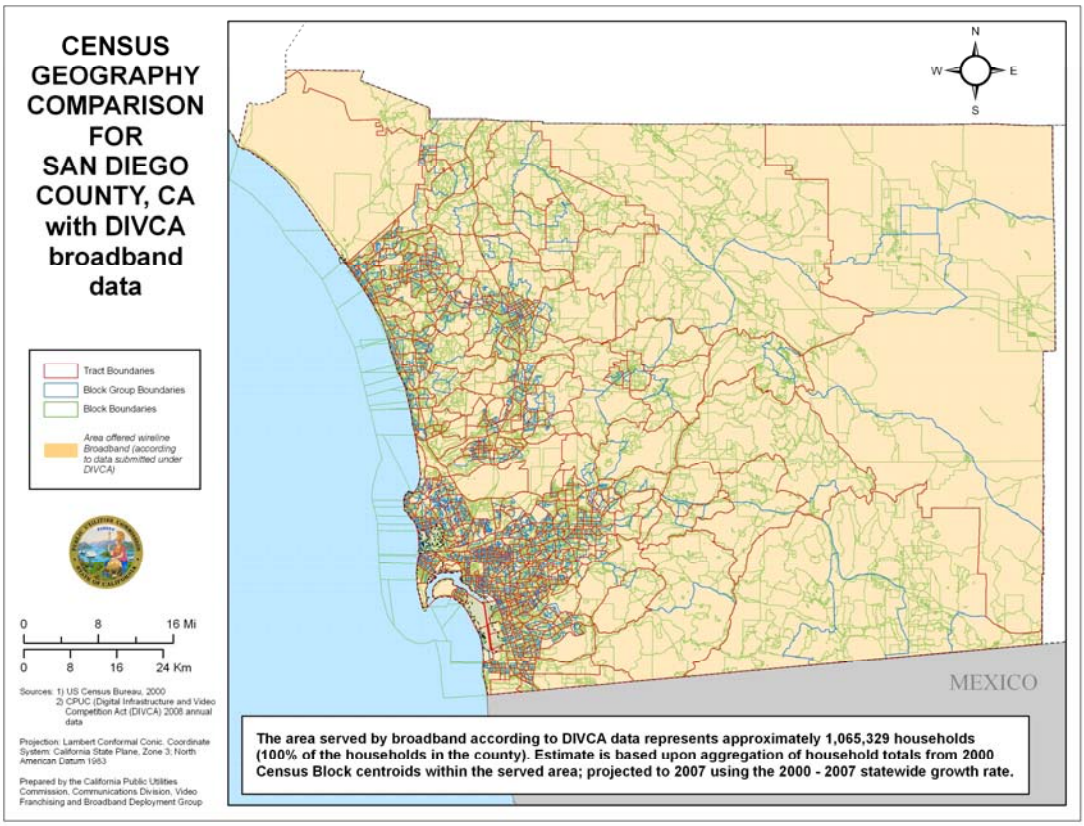
The area served by broadband according to CBTF data represents approximately 874,302 households (82% of the households in the county). Estimate is based upon aggregation of household totals from 2000 Census Block centroids within the served area; projected to 2007 using the 2000 - 2007 statewide growth rate.

Map 2



The CPUC urges the Commission to revise its current Form 477 data collection method to collect broadband data, including availability data, at the street address level, just as the NOFA requires. This is a necessary step as the FCC goes forward with the development and implementation of a national broadband plan.

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III. CONCLUSION

The CPUC offers these recommendations to the Commission on revisions to the Form 477 data collection process, and on the confidentiality provisions of the BIDA.

Respectfully submitted,

By: /s/ HELEN M. MICKIEWICZ

Helen M. Mickiewicz

505 Van Ness Avenue
San Francisco, CA 94102
Phone: (415) 703-1319
Fax: (415) 703-4592
Email: *hmm@cpuc.ca.gov*

Attorney for the People
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