PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Response to this letter is due by January 31, 2014

December 24, 2013

To: Providers of Broadband Services in California

Subject: **Data Request in Compliance with the State Broadband Data and Development (SBBD) Grant Program and the Broadband Data Improvement Act (BDIA)**

On behalf of the State of California, the CPUC, its staff, and the NTIA, we thank you for your ongoing participation in NTIA's BDIA broadband inventory and mapping program. Another six months has transpired, and the time has come to update your broadband availability data. This data request initiates the ninth round of broadband data collection.

Changes to the Way We Process Your Data

More focus on the Validation process.

As part of our mapping grant, we are required to perform validation on the data we receive from broadband providers. NTIA has asked for more focus on validation, and has instructed us to modify the data we submit to the FCC to eliminate some un-validated areas. Accordingly, we will explain our validation process here.

We perform validation by using information from other databases to see where that data confirms availability. For example, one validation method we use for fixed technologies analyses FCC Form 477 data to see where customers are reported, and the speed tier combinations to which they subscribe. If there are customers reported to the FCC in a particular census tract, we consider all census blocks within that tract validated, either as to availability and/or maximum advertised speed (even though that can over-validate service at the block level within census tracts). With regard to speed, we look for at least one customer subscribing to the maximum advertised speed. If there is none, we say that, based on the tools we have, we are unable to validate the maximum advertised speed submitted to us. We refer to areas where we haven't been able to validate availability as "Red Zones," and areas where we haven't been able to validate speed as "Purple Zones."

A similar process is undertaken with other databases. We use a commercially available database containing the location and ISP information for over a million web-based purchases in the state. If we see an on-line transaction from a particular location and ISP, we consider the ISP's service validated in that census block.

For mobile services, we are using the results of the CPUC's mobile field testing as one validation data set. Mobile field testing results are based on a mobile application we developed. A consumer version of that application, CalSPEED, is currently available for free on Google Play. See our State Broadband Mapping website for additional details on our validation methodology. Test results show the actual quality of mobile service our testers were able to receive at 1200 points in the state. We have used statistical models to predict data throughput speeds between these 1200 points, and are now using the output of those models to validate AT&T, Verizon, T-Mobile and Sprint's submitted data.

And so on. If even one of these databases yields validation of speed and/or service availability, we consider the ISP's data to be valid. Only if none of the databases validates the data do we deem the block un-validated and color those areas as either Red of Purple Zones.

We've added the capability for map users to be able to view each provider's availability map as well as each provider's Red and Purple Zones. This visualization is useful in a number of ways. For example, it helps the CPUC and the public judge whether additional validation work needs to be done in the context of a grant application being filed for areas shown as "served" in providers' submissions, but which our initial validation process could not substantiate the presence or speed of service. It also informs the public what percentage of the provider's submitted service area we have been able to validate, both as to households and land area. We know that there is often about a year delay in our access to the most recently submitted FCC Form 477 data, so some amount of under validation of wireline areas is expected as customer data lags deployment data. On the other hand, extremely high un-validated percentages may raise the issue of whether the provider's data is a reliable reflection of service availability.

For the recently-completed 8th Round of data (submitted to us by July 31, 2013), we sent you .pdf Maps of the Red and Purple Zones for the data you provided us. In limited cases where we asked for more information in order that we may further validate those un-validated areas, but we did not receive any response or were still unable to validate Red and Purple Zones, we have removed the Red Zone areas from the final data we submitted to NTIA and the California Broadband map for the data submitted in response to this Data Request. In preparing your submission at the end of December in response to this Data Request, please review the .pdf maps we have sent you from your prior submission to double-check your data before sending it to us. We want to work to you to maximize your data's validation, so please feel free to contact us to discuss validation issues as they relate to your submission.

Data Format Change for Fixed Wireless

For this 9th Round of data collection, we have modified the tower data format for fixed wireless providers. We apologize for the format change, but it is necessary as we have switched to using EDX's Signal propagation software for RF propagation modeling. In addition, we have included a new tab in the Fixed Wireless Workbook Template titled "BB_Subscriber_Address". This data is confidential and will be used *only* as part of our validation process to validate a provider's service area.

Please feel free to send any questions regarding this Data Request or your submissions to broadbandmapping@cpuc.ca.gov

Additional Technical Details

Pursuant to the NTIA's State Broadband Data and Development Grant Program Notice of Funds Availability, Docket No. 0660-ZA (July 8, 2009) (NOFA), the CPUC must collect data regarding the availability of broadband services, the technology used to provide them, the speeds at which broadband services are offered, and the location of certain broadband infrastructure. The CPUC is required to provide the data we collect to the NTIA twice yearly for the term of the Grant Program.

Entities that provide facilities-based broadband service on either a commercial or noncommercial basis within California are subject to this Request.

Three terms are important to pay attention to in determining whether your services should be reported. First, the NOFA defines broadband as follows:

> …two-way data transmission to and from the Internet with advertised speeds of **at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream** to end users, or providing sufficient capacity in a middle mile project to support the provision of broadband service to end users…

Second, the NOFA defines broadband service as being **"available"** when it can be installed, **in response to new requests for service, within a 10-day interval**. So, services which require facilities to be engineered and installed, such as those using DS3 access facilities, or require fiber to be built out to a customer's location, are **unlikely to be able to be provisioned within 10 days of an order**. Providers **should not indicate such broadband services are "available"** in their third round submissions.

Third, **only facilities-based** service is eligible for reporting at this time. So, if you are a pure reseller, please send an email to broadbandmapping@cpuc.ca.gov and tell us that, but send no data. We're working on a method of including resellers in the provider contact information which we will be giving to consumers, and probably will include them at some point in the future.

Accordingly, if you are facilities-based providers of broadband services that are provisioned in a 10-day service interval, you should be submitting data in response to this Request. The due date for your data is **Friday, January 31, 2014, but due to the large amount of data processing required, I strongly encourage you to submit your data before then. Data are to be submitted in the formats posted on the State Broadband Mapping Program website.** Please visit our web page and download the record formats, shapefiles and templates appropriate for your submission. For example, different formats are provided for wireline and wireless services. In addition, a choice of submission formats and templates is available tailored to whether a broadband provider has access to Geographic Information Systems (GIS) or does not.

Even if there has been no change in your situation since you last submitted data, we urge you to go through the process submission process again, as we've seen improvements in data quality with each submission over time. In addition, even if you haven't changed anything, please review the Red and Purple Zones associate with the previous round. If you have significant un-validated speed or availability areas, please contact us to discuss. If there has been no change in both the area where your broadband services are available, and in your maximum advertised speeds, you may send an e-mail to broadbandmapping@cpuc.ca.gov and let us know so that we will carry your prior submission forward. If there have been changes since your last submittal, please submit a **complete** set of data reflecting the service you now make available -- not just the changes.

Provider Map/Interactive Map for public use

Providers' contact information, including website and phone number, is included on our interactive broadband availability map, in order that people in areas you serve can easily contact you for more information or to order service. **If you do not wish to have contact information available to those who may wish to purchase service from you, please let us know in writing.**

Confidentiality of submitted data: Data submitted to the CPUC in response to this request will be protected under the confidentiality requirements set forth in Section 106 (h)(2) of the BDIA. This section states that, "[n]otwithstanding 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 entity." Further, the NOFA states that "[a]s a measure to protect the confidential or proprietary nature of the information received from broadband service providers and other organizations during the data collection phase, awardees may execute nondisclosure agreements (consistent with applicable law) that require awardees to 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 where mutually agreed upon by the information provider and the awardee, provided, however, that any such nondisclosure restriction a) will not restrict the providing of all data collected under this Program to NTIA, nor b) restrict NTIA's use of such data as contemplated under this Notice (including sharing such data with the FCC or other federal agencies). The Clarification makes clear that the NTIA expects awardees to enter into such agreements upon the request of the service provider. The CPUC believes that these provisions will protect the confidentiality of information that broadband providers submit pursuant to this request and intends to enter into a nondisclosure agreement with any provider that wishes to do so.

Please submit the requested data no later than **January 31, 2014** in accordance with the instructions on the State Broadband Mapping Program website.

If you have questions about this request, please submit them to broadbandmapping@cpuc.ca.gov.

Sincerely,

Michael Morris
California Public Utilities Commission