INSTRUCTIONS FOR WIRELESS BROADBAND SERVICE PROVIDERS

Overview: Our first preference is that broadband providers submit their data in **the wireless file geodatabase provided on the CPUC website. We certainly understand, however, that many providers do not use GIS in the ordinary course of their business, and thus cannot perform their own geocoding/geomatching or submit data in file geodatabases.** Where a provider cannot deliver requested data via file geodatabases, data must be provided in **Excel files**. It is important that these record formats are followed exactly as described as they contain all the necessary information needed to complete the submission.

PROVIDERS WITH NO GIS CAPABILITY

Please provide data using the **Excel** templates provided on the CPUC website, and complete each in accordance with the corresponding instructions and record formats. Providers need to use the record formats titled: "Service Wireless" and "Wireless Antennas" for each antenna/frequency in use. If Google Earth "KMZ-files" are available, please include them in addition to the Excel spreadsheets. Our propagation model not only considers provider information, such as antennae heights, frequency, power, etc., but also geographic features such as topography and leaf cover. Please note that these alternate wireless record formats have been updated to provide for additional information we have determined is required to project coverage areas, such as the minimum and maximum height of antennae at the customer premises.

PROVIDERS WITH GIS CAPABILITY

Please provide data in the **file geodatabase** using the template provided on the CPUC website, in accordance with the corresponding instructions and record formats. **It is of the utmost importance that the provider adds geometry detailing their broadband availability area**, by loading a shapefile to the file Geodatabase.

OTHER BROADBAND DATA REQUIRED

In addition to broadband availability data, broadband providers must also provide other data sets.

Subscriber-Weighted Nominal Speed: Broadband providers must report "subscriber-weighted nominal speed" information by county for their entire service area. These data must be included in the file titled "Service Overview" in accordance with the corresponding record format.

Middle-Mile and Backbone Connection Points: There has been quite a bit of confusion regarding what exactly is meant by Middle Mile Connection points. Perhaps the best description is contained in the White House document from December 2009 titled Executive Office of the President National Economic Council Recovery Act Investments in Broadband: Leveraging Federal Dollars to Create Jobs and Connect America, a copy of this document is available at our website.

It describes Middle-Mile as follows:

"To get broadband service into homes and businesses, Internet service providers such as telephone, cable, and wireless companies must connect their local networks – known as the 'last mile' – to the Internet backbone. The 'middle mile' is the critical connection

between the Internet backbone and the last-mile local networks. When residents initiate a connection from their home, school or work, the information flows from the last-mile network segment to the middle-mile infrastructure, which then directs the flow of traffic to the backbone network through an interconnection point. An Internet backbone provider then continues the transmission to a distant endpoint."

Broadband providers must provide a list of connection points where the facilities provide connectivity between a broadband service provider's "last mile" network and another provider's network, including the Internet backbone. These data must be submitted via the file titled "Connection Point Middle-Mile."

In addition to the middle mile information we are asking you to provide answers to 3 key questions regarding middle-mile capacity as reflected in the record format. The answers to these questions will help policymakers pinpoint areas where additional subsidies for middle mile projects are warranted (such as from the California Advanced Services Fund, or from the federal government).

Maximum Advertised Downstream Speed and Maximum Advertised Upstream Speed:

The CPUC asks that you submit Maximum Advertised Downstream and Upstream speeds by census block in the file geodatabase or, when no GIS is available, Excel spreadsheets as discussed above. However, if reporting maximum advertised speeds by census block is not possible, the NTIA would like these speeds to be reported at the county level for each transmission technology type, in which case you should use the record format titled "Service Overview." For a list of County Codes in California, please use the table in the "Service Overview" record format on our website.