City of Oakland Response to Google Fiber RFI
SECTION 5. Facilities and Resources

The City of Oakland owns approximately 20 utility poles that are used for cell antenna sites. In order to provide an immediately available infrastructure for Google's fiber network, Oakland would leverage its partnership with IPN Networks.

PARTNERSHIP WITH IPN NETWORKS

The City of Oakland is partnering with IP Networks ("IPN") to implement an ultra-high speed fiber to the home (FTTH) network. IPN has established a unique relationship with the local utility, Pacific Gas and Electric Company ("PG&E") that allows IPN to install an advanced telecommunications network on the utility's embedded infrastructure. Through a unique resolution passed by the California Public Utility Committee ("CPUC") in 2000, IPN is licensed to leverage all PG&E assets including poles and conduit to install fiber. **IPN's fiber is installed SOLELY in the existing utility infrastructure.** This method of installation (see Question #6) offers several advantages, including:

1. No land disturbance: Because we are using 100% utility assets for installation there is no need for any new foundations for asset construction nor any plowing, trenching, boring, micro-trenching, rock saw, etc. The fiber is simply hung on the existing electrical distribution asset where there is distribution of electricity or pulled through existing underground conduit where the electrical lines run underground.

2. Existing Right-Of Way: IPN is able to leverage the local utility's telco ROW. In such cases, no additional ROW grants are required.

3. No Pole Access Issues: Per discussion above, IPN already has access to all poles. Therefore all the utility's poles are available for attachment today

4. No Conduit Access Issues: Again, per the overarching license agreement between IPN and the local utility (PG&E), IPN has access to all PG&E conduit for pulling fiber through. There is no need for trenching, etc. We simply enter through the manhole and pull the fiber through.

5. No significant environmental impact: Again, because we are using existing infrastructure, we foresee no significant environmental impact. In fact, during the CPUC review and approval of the IPN-PG&E agreements, the IPN worked extensively with the California Environmental Quality Act ("CEQA") staff to help refresh the actual CEQA processes and procedures helpful to industry while still keeping protection of California's environment at the forefront. As a consequence, there was formal resolution passed by the CPUC specific to IPN that gave IPN a Mitigated Negative Declaration for all projects that IPN operates in eight counties in California including Alameda County. This document can be viewed by going to the Additional Links section in Part 3 of this response.

Poles and Aerial Installations
The total overhead mileage for electrical distribution, and thus available to Google for fiber installation in the City of Oakland is approximately 547 miles which is hung across approximately 19,254 poles.

Conduits
The total underground conduit mileage for electrical distribution in the city of Oakland, and thus available to Google for fiber installation is approximately 304 miles.

ACCESS TO RADIO TOWER FACILITIES
The City of Oakland also has access to several sites that are currently used for Public Safety communications. See the map in the Additional Links section of this response.

APL SITE – Houses the City of Oakland 800MHZ radio system equipment
The tower is used for transmitting and receiving radio signals from the system.

SENECA SITE – Houses the City of Oakland 800MHZ radio system equipment
The tower is used for transmitting and receiving radio signals from the system.
The site is located on an EBMUD reservoir

GWIN SITE – Houses the City of Oakland 3 channel P25 system equipment. The tower is used strictly for Public Safety communications. The site is located on an EBMUD reservoir.

FIRE STATIONS – If needed attachments could be made to the building roofs. However, we are not sure if it would be feasible for the purposes of aerial fiber run.

PLANNED INSTALLATION OF EQUIPMENT FOR CONTROL OF TRAFFIC SIGNALS
The City of Oakland is currently planning for installation of citywide, 3” conduit for its Intelligent Transportation System (ITS).