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## INFORMATION TECHNOLOGY AGENCY

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REF: EXE-243-13

September 5, 2013

Honorable Members of the City Council City of Los Angeles Room 395, City Hall Los Angeles, CA 90012

Attention: Innovation, Technology and General Services Committee

Subject: USE OF CITY FIBER FOR BUSINESS OR HOME USE (CF NO. 13-0627)

Dear Councilmembers:

Pursuant to City Council Motion (Wesson/Busciano), Council File 13-0627, the Department of Water and Power (DWP) and Information Technology Agency (ITA) are submitting the following report back regarding the use of City Fiber for Business and Home Use and providing findings and recommendations.

## **BACKGROUND**

In an effort to aid in providing adequate access to high speed internet services to residents and businesses in the City of Los Angeles, Council asked the Department of Water and Power (DWP) and the Information Technology Agency (ITA) to report on the feasibility of leasing excess fiber optic capacity for the purpose of building an open architecture network to provide fiber to the home (FTTH) and/or fiber to the business (FTTB) connectivity.

DWP is estimating that there is approximately 30% fiber optic capacity that is unused. Much of the unused fiber is located between LADWP electric power substations throughout Los Angeles. The breakdown of the fiber in use today is as follows:

In use or reserved for LADWP (SCADA Networks)	40%
Reserved for redundancy and contingencies	25%
City of LA Networks	<1%
Commercial	5%





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The LADWP fiber network was originally constructed to support the power grid and water systems via the LADWP Supervisory Control And Data Acquisition (SCADA) networks or other internal DWP networks, and this use is today the largest single use of the fiber network.

LADWP currently has an FTTB business and leases their fiber at a monthly commercial rate that varies based on the type of service as well as distance of the fiber run in the case of "dark fiber" service. Dark fiber provides exclusive use of the physical fiber to the customer and the customer provides all equipment to run data on the fiber. The vast majority of DWP fiber leases are dark fiber as it is the least demanding for ongoing management and maintenance. Fiber lease rate discounts for all types of service are offered for LA City government, Education, other Government customers, guaranteed term length and high volume leases. The fiber leasing business at DWP is a low velocity business with a small support staff. It aims to provide fiber connections as a side benefit from DWP operations to LA businesses to help moderate the costs and increase the availability of high speed fiber connectivity. LADWP does not provide Internet service and is not looking at moving into that business. LADWP has currently engaged an outside telecommunications consulting firm to make recommendations on the future direction of their fiber business and to help update their strategic plan for fiber.

LADWP is currently not considering a FTTH strategy for meter reading or getting into an industry where they do not have the core competency or capacity to deliver. The LADWP direction for meter-reading functionality is wireless, due to the cost and availability already in place. All of the carriers have stopped providing FTTH projects due to costs. Verizon has stated that their cost to provide FTTH is \$1600 per household and the rates for this service will take years to recoup the construction costs alone. Instead Verizon is investing into 4G, where the revenue margin is attainable over a shorter period of time. Using Verizon's cost model, to interconnect over 1,000,000 facilities would cost more than \$1.6 Billion with no guaranteed revenue recovery. Looking at the major FTTH projects to date, the primary revenue source was the provision of cable television services, with lesser revenue from internet and telephone service. With the changes and uncertainty going forward in the market for delivery of programming content, the risk of being able to recover this investment has increased.

## RECOMMENDATION

To address low income access to affordable broadband, the recommendation is to develop an RFP that could include either a City wide Broadband/WiFi coverage or FTTH solution with the City as an anchor tenant and see if any private sector companies respond.

Should you have any questions or require additional information, please contact me at (213) 978-3311 or Matt Lampe at LADWP at (213) 367-2553.

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Respectfully submitted,

Steve Reneker General Manager

cc: Honorable Eric Garcetti, Mayor

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Information Technology Policy Committee