

Craig Moffett
Additional Questions for the Record
Following testimony on July 22, 2015
“Promoting Broadband Infrastructure Investment”

September 29, 2015

Questions from Chairman Walden

Cable and telecommunications carriers pay a different rate for use of utility poles – with cable paying less than telecom, often giving rise litigation over rates paid by the attachers. Given that track record, should the FCC standardize the rate for all broadband providers across the board for all providers of broadband? How should the FCC go about doing so?

It is hard to argue *against* the idea of standardized pole attachment rates, not only for reasons of cost but also for reasons of expedience. Anything that lowers the cost and reduces uncertainty and delay in deploying broadband would have a beneficial impact. With that said, however, in my experience pole attachment rates have never been cited as a significant impediment to earning a sufficient return on investment in broadband facilities. The costs of pole attachment are material but ultimately almost never determinative of economic viability.

I understand that you have roughly estimated the cost of deployment for Google Fiber in Kansas City to be something along the lines of \$2000 to \$2200 per household. You also estimated (a while back) that Verizon’s cost per household in its FiOS buildout to be somewhere along \$4000 per household. Can you explain in plain terms what the difference is here? Why did it cost Verizon more?

There are three broad drivers of Google’s lower costs per connected household versus Verizon’s. First, the costs of certain elements of fiber deployment have fallen in the intervening five years. The costs of the electronic elements in the network, including the ONT (Optical Networking Terminal) have fallen. And more importantly, the invention of so-called “bendable fiber” has enabled lower labor costs, as fiber can now be installed more quickly. Second, and perhaps more importantly, Google has received significant subsidies from local authorities in Kansas City, including access to pre-existing conduit, and in some cases pre-existing fiber, but also including tax breaks, free office space, streamlined rights of way, and preferred access to facilities. Third, and perhaps most importantly of all, Google has been permitted to pre-screen communities to target only those where demand is the highest. This so-called “demand aggregation” has been criticized as the equivalent of “redlining,” but it has inarguably resulted in lower cost, inasmuch as it ensures that shared costs – including the cost of the fiber passings – are amortized over the largest possible number of subscribers. Verizon FiOS did not enjoy any analogous benefit.

Question from Congressman Gus Bilirakis

Mr. Moffett, in the same regard, is the implementation of a streamlined process to contract and site broadband facilities on federal land an alternative that would be more economically beneficial to all providers and help increase wireless reach in rural areas.

As I observed in the first question above from Chairman Walden, anything that lowers the cost and expedites deployment would be beneficial to the deployment of broadband facilities, particularly wireless. Recently adopted rules to expedite tower siting should be particularly helpful in this regard. It is important to recall, however, that each wireless tower not only needs a permit for the tower itself, it also requires electrical power and a wired, often fiber, connection, referred to as backhaul. These connections require their own rights of way, and in rural markets these may often have to traverse Federal lands. Expediting that process could streamline deployment. That said, as noted also noted in the first response to Chairman Walden above, rights of way are only one cost, and typically not among the most important ones, in the total cost of deployment.