## Fiber to the Home: "Fiber on Fire" Conference Remarks of Gigi B. Sohn, Counselor to the Chairman Office of Chairman Tom Wheeler Anaheim, California June 30, 2015

Good morning. It's great to be here in sunny Southern California. Although considering the drought out here, you might want to consider dropping the "on fire" from your conference title!

I want to thank my friend Heather Gold for inviting me to speak with all of you today. This conference brings together all the players in the fiber ecosystem and I'm excited to have a platform in front of an audience with diverse roles working towards a common goal—deploying fiber to the home.

Fiber is the backbone of our Internet, but for many of you, it is also the backbone of your livelihood. I know how important it is that you have the flexibility to invest, innovate, and deploy these next-generation networks. And whether that means the FCC advances competition, breaks down barriers, or simply gets out of the way, we are committed to promoting deployment. That's what I want to talk about today.

But before I get into the FCC's role and what we have been doing to promote and incentivize the build out of fiber networks, I want to touch on why fiber deployment is so valuable.

We need high-speed broadband and fiber is one proven way to achieve that goal. Fast broadband connections, like those accessible through all-fiber connections, are driving new industries. We've already seen the explosive benefits of the mobile apps economy made possible by our mobile broadband networks and the underlying fiber connections.

New industries that will need faster fixed connections are already taking hold in the burgeoning Internet of Things. Companies are building smart refrigerators and other appliances that are being incorporated into fully connected smart homes, with energy management devices, all of which can be managed with smart phones when you're hundreds of miles away on vacation. At home, a typical family of four already needs a network that can handle 7 connected devices. Consumer demand for reliably fast Internet will continue to increase dramatically as more devices are connected. Companies too, are taking advantage of the Internet of Things. The water industry, for example, is starting to incorporate smart sensors into municipal water systems to identify and send the location of leaking pipes.

Amazing innovations like these, which require a robust broadband network, are already happening today. We can't even imagine the industries that will take shape in the future. But no matter what innovations may develop, one thing's for certain—fiber is a critical ingredient to fulfilling the promise of the Internet.

If we allow fiber and other technologies to develop unconstrained by bandwidth, consumers and our economy will reap the benefits. These new technologies will create new jobs and new ways for people to access the job market. Time and again I have heard stories of young Americans staying in their home towns or even moving back to start their adult lives—and in some cases, their businesses—just because high-speed networks were deployed. Existing businesses are moving facilities to cities with Internet speeds that allow them to compete more effectively in today's market.

Last Friday I was proud to speak at the fiber lighting in Westminster, Maryland. Even before the first customer was served by the network, the city started realizing benefits, like the relocation of a women's fashion clothing company from Manhattan to take advantage of the new network. Westminster is also exploring the opportunity of starting an incubator. And this is in a city of just 10,000 residents!

In short, fiber networks lead to an influx of business, people, resources, jobs, and consequently, economic growth.

But the benefits don't stop there. Fast broadband connections enable solutions to almost all of our shared challenges. On top of the economic benefits, broadband enhances healthcare, education, energy use, environmental protection, public safety, transportation, civic engagement, you name it. And because fiber networks are "future-proof," we will continue to get these benefits long into the future.

Together, the benefits that flow from fast broadband connections will have broader implications for competition. And I'm not talking about competition between service providers—yeah, that's important too—but I'm talking about competition in the global economy. Just as fast, fair, and open broadband connections are essential for every American to participate fully in today's society, they are essential to ensuring America's continued ability to compete in the global market.

But as this audience well knows, the US has a ways to go before we can boast about being a world leader in ubiquitous high-speed broadband. The US ranks 15th in the world in fiber broadband deployment according to a recent Broadband Communities study. Now I may be a New York Mets fan, but like every American, I still want to be in first place. I know that we can do better, and that's why the FCC supports the efforts of the people in this room working to speed deployment of all-fiber networks to help us move up in the ranks.

It's not hard to see that current networks are not up to the task to meet the needs of today's Internet users. 1 in 6 Americans don't have access to 25 megabit broadband; it's 1 in 2 in rural areas. That speed, my boss likes to say, is "table stakes" for the public's ability to make full use of the Internet-based technologies of today. And that's why, in our last Broadband Progress Report, we changed the baseline speed for broadband from 4 megabits down and 1 up to 25 megabits down and 3 up.

But in a crowd like this, even 25 megabits is a snail's pace. You were already talking about ultra-fast broadband speeds delivered by fiber in 2001 when the Fiber to the Home Council was first formed. We want to see speeds grow to 50 megabits per second, 100, and eventually even 1 gigabit per second.

I already mentioned global competition, but deployment of broadband at those speeds spurs another type of competition we like to talk about at the FCC—competition in the US broadband market. I rarely get pushback when I say that meaningful competition in this market is lacking. And competition is the most effective tool for driving deployment of next generation networks.

All jokes aside, when I learned the theme of this conference, "Fiber on Fire," I thought it was fitting that I would be here. That's because when it comes to fiber deployment, the FCC is fired up to ensure that Americans have a fast and vibrant Internet ecosystem.

We view ourselves as the public's representative in the Internet revolution. In fact, Congress said it's our job to maximize the benefits of communications networks for the American people. We take that role very seriously.

To that end, we are working to help lift barriers to broadband deployment. We know you are facing some significant barriers. Right now there is no easy way to figure out what infrastructure currently exists, and even when you do know what infrastructure could be used to ease deployment, you're faced with bureaucratic delays.

We recently addressed similar barriers in our "wireless infrastructure" order. In that decision we took steps to promote the deployment of wireless infrastructure, recognizing that it is the physical foundation that supports all wireless communications. Specifically, we streamlined and eliminated reviews of infrastructure siting, thus reducing certain costs and delays associated with facility siting and construction. In the short term that order will indirectly help the fiber community as wireless companies build out networks and fiber providers lay the backbone.

In addition, our Open Internet Order eased access for competitors to utility poles and other conduits necessary to broadband deployment. We followed that up with a public notice in May seeking information on how to better align the costs of using poles and conduits.

Barriers to the use of infrastructure aren't the only challenges, however. For example, many apartments and other buildings don't have fiber wiring in the premises to take advantage of the wiring you lay to the premises.

I'm sure most of you learned that the FCC is not afraid to take action to promote broadband deployment when we addressed some state restrictions on community broadband. The cities of Chattanooga, Tennessee and Wilson, North Carolina wanted to expand their fiber broadband services to areas that were receiving substandard service or no service at all from existing providers. However, these expansions were prevented by state laws.

Understandably, the cities didn't like that much. And I can tell you that the people that were dealing with the substandard service didn't like it either. So the Electric Power Board, or EPB, of Chattanooga and the City of Wilson filed petitions with the FCC asking us to preempt their state laws. Ultimately the FCC found that parts of these laws are barriers to broadband deployment under Section 706 of the Telecommunications Act of 1996, and, therefore, we could pre-empt them.

Now the FCC respects the important role of state governments in our federal system and we don't take preemption of state laws lightly. But when state laws directly conflict with Federal laws and policy, we are not afraid to take action. We have a legal mandate to promote broadband deployment and we used that authority to ensure these communities could reach consumers that need fast, fair, and open Internet at a reasonable price.

But I think what is even more exciting is what is happening across the country without the FCC's involvement. In cities and towns where incumbent broadband access providers have not stepped up to provide their customers with the reliably fast service they need at a reasonable price, community leaders are taking matters into their own hands. Some are partnering directly with private companies or creating public-private partnerships to facilitate deployment. Others are working with their public utility companies to deploy on their own. But no matter how they're doing it, everyone benefits.

Freedom to deploy leads to better service. You can see this in Leverett, Massachusetts, a town that lacked reliable phone and Internet service. Tired of their inferior conditions, Leverett partnered with Crocker Communications and their municipal light utility to bring gigabit service to their residents.

Freedom to deploy also promotes competition. When Google Fiber announced plans to bring 1 gigabit speeds to Austin, Texas, AT&T and regional carrier Grande followed suit with 1 gigabit fiber deployment of their own. Back in Chattanooga, Comcast plans to up the ante with a 2 gigabit offering to compete with EPB's one gigabit service. And when CenturyLink won a hand with its 1 gigabit deployment in the Twin Cities, Comcast went all in on the next round by announcing plans to deploy a 2 gigabit network.

Now, I'm not normally a betting woman, but I'm willing to bet that the residents of these communities are going to be the real winners. This competitive market will result in reasonable prices on fast, reliable Internet services. And the companies that hold their bets, in other words, that don't invest in the future of the Internet—are ultimately going to fold.

Longmont, Colorado is a great example of what happens when communities have the freedom to deploy. When Longmont's gigabit fiber network is fully deployed next year, the residents of that city will have the fastest speeds in the nation at the lowest price in the nation—just \$49.95 a month. Some of us are paying that same price for today's basic speeds. The good news is that this competition will also benefit the customers of the incumbents that must compete with higher quality service at lower prices.

But what may matter most is that the freedom to deploy strengthens the economies of the cities that build out fast broadband networks. After fiber was deployed in The Dalles, a tiny town in Oregon, Google took over a large industrial site and housed high-tech equipment to connect the rest of their network. When Eugene, Oregon began to lay fiber a local company that had been spending money out of state began reinvesting back home. And both Kansas Cities have seen an influx in startup business after Google Fiber launched there. From what I can tell, every city that has laid fiber has either brought in new businesses or kept businesses from leaving.

The economic effects are real and the cities that build out first will be ahead of the curve. That's why the FCC supports communities controlling their broadband futures.

But if our efforts to lift barriers are not enough and if the efforts of communities across the country don't reach far enough, rest assured, the FCC is taking more steps to incentivize fiber deployment. We need to make sure that all Americans will reap the benefits of fast broadband speeds.

In our Connect America Fund order last December, we guaranteed broadband providers more than \$10 billion over six years for broadband deployment to underserved areas. If the price cap providers don't take advantage of these funds, other providers will be able to take their place, including municipal systems and electric cooperatives that want to deploy fiber networks. This will strengthen the Internet ecosystem by ensuring that nearly 9 million more Americans will have access to modern connections.

We also took up fiber deployment in our E-Rate order. We modernized the program to support fiber deployment to and Wi-Fi within the nation's schools and libraries. Specifically, we increased flexibility on payment options for investments in broadband deployment including fiber; we equalized treatment of lit and dark fiber; allowed self-construction of high-speed broadband facilities where doing so is the most cost-effective option; and provided additional matching funds for construction of last-mile

facilities. These changes will particularly benefit schools in rural areas, 41% of which lack access to fast fiber connections, as compared to 31% in urban areas.

And last but not least, in a Notice of Inquiry that accompanied the Broadband Progress Report I referred to earlier, we asked for public comment on additional ways to bring faster broadband to all Americans.

Fiber is a critical part of our future and we need networks that are fast, fair, and open to take advantage of the amazing innovations that are being developed every day, not to mention the incredible inventions that we have yet to think up. Whether you're a fiber provider, manufacturer, community leader, or another player in the fiber ecosystem, the FCC applauds your efforts and is eager to work with you to build out the networks of the future for all Americans.

Thank you.