

**Testimony Before New York City Council
Technology in Government, Gale A. Brewer, Chair
Oversight – The Regulation and Use of the Unallocated Portion of Radio
Spectrum**

Monday Sept. 29, 2008 / Michael Lewis, Wireless Harlem Initiative

Good morning. My name is Michael Lewis and I am Founder of Wireless Harlem Initiative, a New York City non profit organization. Thank you for the opportunity to testify at today's public hearing regarding the FCC's plans to shut down analog broadcast frequency in 2009 and its potential impact on New York's residents and businesses.

I am here today to urge the City Council not to delay the FCC's introduction of new, unlicensed wireless spectrum, or TV White Spaces.

Intel Corp. Chairman Andy Grove laid out a new principle in the 1990s when he discussed a concept he learned during his time as president and CEO called strategic "Inflection Points." Mr. Grove observed this concept during his many years of stewardship of Intel when he put the company on its path to becoming the world's leading provider of microprocessors and helped usher in the personal computing era. He said that strategic Inflection Points represent moments in history when new developments in the marketplace represent an opportunity for fundamental change.

One could argue that we are at such a crossroads today with TV White Spaces or, more importantly, more and better wireless spectrum. The public benefit is very clear: for rural communities Wi Fi signals could cover greater distances and reach more households, and in larger cities like New York, Wi Fi signals over White Spaces could cover more people in densely populated areas using far fewer wireless radios than necessary today.

At the beginning of this year we started a program in partnership with The Children's Storefront in Harlem called Tech Saturdays where once a month we give refurbished computers to any family in Harlem that wants one. Since the beginning of this year our volunteer group has given away nearly 500 computers to families. While today we have the computers, in fact we are running out of space to store the PCs and Emacs we get from other schools, we also use license free software to install freely available word processing and educational programs; but the missing element for most families is still the broadband connection. This is primarily because the cost is out of reach.

But our organization isn't only hearing from these families in Harlem about broadband. We increasingly get multiple calls a week from students and small business owners; and more and more residents of Harlem email us and say they can afford broadband access, but for whatever reasons have been stalled in their efforts to get connected using today's carriers. With the introduction of better and more widely available spectrum, which is possible with TV White Spaces, more neighborhoods and small business owners would be able to get access, especially in spaces where there is difficulty in reaching customers, or when affordability is an issue, or for small business owners who have to spend resources in other areas.

This development with White Spaces shouldn't been seen as occurring at the expense of current telcos and cable providers; indeed, for many residents who cannot afford broadband connectivity or have never used it, Wi Fi over White Spaces could be a viable first option from community-based organizations like ours, and many others across New York. As more residents became familiar with download and upload speeds and as their broadband needs changed, they would have the option of moving up in price and speed.

Over the past several months we have tested off-the-shelf Mesh Networking equipment on a limited basis in a few Harlem neighborhoods and the Bronx. Mesh Networking represents the realization of low cost, easy-to-deploy broadband networks for rural and urban neighborhoods. During our tests, including several within 100 – 200 ft. feet of large and small churches using wireless microphones, no interference issues were reported. We have also tested Mesh Networking equipment on blocks where large camera crews were filming over several days and they informed us that no interference occurred with their equipment. The spectrum being freed up from TV White Spaces would be key for the spread of broadband access, using Mesh Networking equipment and other low cost access equipment, to more of New York's neighborhoods and small businesses.

I'll end by saying that today there is a great deal of positive public awareness being generated in radio and television commercials alerting residents that with the onset of DTV in February 2009, that many older televisions will not work. Our hope is that shortly after this shift takes place we will be able to explain to consumers and small businesses that the abandoned White Spaces channels also opened the door for more wireless broadband options for New York's neighborhoods and small businesses. This would be a crossroads moment which could change neighborhoods and support small businesses and have a positive impact on the lives of New Yorkers for years to come.

Thank you for this opportunity to be here today.