



Testimony of Jeffrey K. Holewinski before the Committee on Finance and the Committee on Economic, Capital and Technology Development of the Chicago City Council:

“It has been brought to my attention that the City of Chicago desires to install a wireless digital infrastructure, which will serve the City as well as its citizens. It is proposed that this wireless infrastructure be based on the 802.11x protocol, more commonly known as Wi-Fi. Having designed and worked with high-speed Wi-Fi networks in the past few years, I think installing a Citywide Wi-Fi network has many benefits.

The most obvious benefit is that the citizens of Chicago could utilize the network for more affordable broadband Internet access. The City itself can also benefit from the network. For example, after the network is installed, the City could install IP based cameras anywhere in Chicago and they would be instantly accessible by anyone given viewing permissions. This is an effective method for surveillance. My company, Ace Internet Solutions, has installed a Wi-Fi network and wireless camera system in the Kedzie Tract portion of Alderaman Burke’s Ward. The Chicago Police used this system when conducting the drag racing busts in the summer of 2003. Similarly, the City could enable all emergency vehicles with mobile transmitters giving them instant access to all city resources anywhere within city limits. City ambulances could have cameras installed so that hospital emergency rooms could actually see the patient while in transport.

Installing a Citywide wireless infrastructure, while challenging, can be done. Advances in the topologies of wireless networks make multi-point networks very appealing. Multi-point to multi-point networks can be configured in a mesh topology. A mesh network has significantly higher reliability and faster speeds. Ace Internet Solutions will be testing a mesh network early this summer in the Ravenswood Corridor section of the 47th Ward. We are hoping to prove the benefits of such a system. The City would need to install a mesh backbone, for example, one tower in every Ward. The Ward towers could then communicate with repeaters installed in local neighborhoods throughout Chicago. All end users would then communicate with these locally installed repeaters. I have heard the City’s estimate of \$18 million to have such a system installed. I think that while a system could certainly be installed for \$18 million, a more realistic approach would be a few million dollars higher due to the size of the City and the complexity of the proposed network.”

Ace Internet Solutions, Inc. is a technology and telecommunications company located on Chicago’s southwest side. Ace’s line of services include: High-speed wireless broadband, IP based surveillance over the Internet, Web design and hosting, Design and manufacture of high-speed custom automated manufacturing systems, Inventory control systems, Asset tracking, Bar coding and RFID. Ace Internet Solutions is headed by President and Owner Jeffrey Holewinski.

