

Memo

Date: April 4, 2006
To: William T. Lichter - Village Manager
From: George E. Seagraves - Fire Chief
Regarding: Public Safety Radio Amplification System Ordinance

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Please place before the Board of Trustees an ordinance ensuring adequate public safety radio operations within both new and existing buildings. We presently have buildings in town that due to their size or construction type, severely limit our radio usage inside of them. The interior density and mass of these larger structures significantly impedes radio wave penetration and subsequently reduces our ability to communicate via radio within them and to the outside. This poses an extremely dangerous situation for police officers and fire fighters.

Looking forward, buildings like the new convention center will also certainly pose great challenges for interior fire and police communications without an integrated radio amplification system. This ordinance is intended to ensure that all public safety personnel can communicate via radio in and around buildings in the Village of Lombard.

There are essentially two ways to ensure radio communications in larger buildings. First, a proprietary radio system can be installed throughout the building. Second, a Bi-Directional Amplification system (BDA) can be installed. A BDA system consists of an antenna and amplifier system that is installed only in areas of the building that do not support radio communication. A BDA system supports the use of a wide range of existing and future radio equipment. A BDA system is far less expensive to purchase and maintain, does not create a reliance on specific radio vendors, allows for greater location flexibility and allows all emergency responders to communicate both in and outside of the structure with radios we regularly use.

This ordinance is very similar to ordinances currently adopted or in the process of adoption in neighboring Elmhurst, Schaumburg, Hoffman Estates, and Wheeling. Schaumburg and Wheeling are both currently building convention centers and like Lombard, are all being built by Walsh Construction. Prompted by recent governmental reports such as the 911 Commission findings and the investigation of the Cook County Building fire many large cities including Chicago, New York City and Boston now have to meet current requirements for radio coverage inside high-rise buildings. Smaller communities in the country such as ours have also recently created similar requirements in their new building codes.

In brief, the ordinance requires that building owners, when required, provide radio amplification in portions of their buildings that radio signals cannot penetrate. Additionally, It is the responsibility of the building owner to maintain and keep in operation any required amplification system. Building owners will be required to commission a third party agency to test systems annually much in the same way they do for their fire alarm system(s). The cost for radio amplification systems is dependant upon the level of amplification needed, the size of the building, the type of equipment installed, and where and when the equipment is installed. Special consideration regarding installation time lines and coverage requirements will be given to building owners that are required to retrofit a system.

- c. *Deputy Police Chief Dane Cuny*
Battalion Chief Mike Kalina
Battalion Chief Chuck Ralis
Battalion Chief Mike Torrence
Jerry Howell, Fire Marshal
Brian Stuart, Deputy Coordinator E.C.C.
Ted Klioris, Building Inspection Supervisor