

The City of Chicago's Police Department: When Information Is a Matter of Life or Death

by
Judith Sparrow
TOP Program Officer

Some of the most promising efforts to use information technologies involve emergency responders, either police or fire fighters. Information is most valuable when it is in the right hands at the right time. For public safety agencies, developing an information integration system, and providing it in a real-time format, regardless of organizational boundaries, is critical to the safety of first responders and the citizens they serve.



The Chicago Police Department, in partnership with the Chicago Office of Emergency Communications, the Chicago Fire Department and Motorola, is using TOP funds to wirelessly extend public safety officials' IT infrastructure. Once operational, the Greenhouse Project will be capable of relaying information to first responders about 48 times faster than the current standard. The system will simultaneously relay everything from live video and voice to high speed, packet-based data, thus reducing radio

frequency congestion and increasing interoperability – two main objectives for better spectrum management and efficiency.

Greenhouse will give the front-line officers real-time access to information while they are on the job. For example, a policeman stops a vehicle for a violation, not knowing who he is approaching or not knowing very much about the scene he is entering. In some instances, police may have a wanted person in custody and not know it. But, what if a current mug shot or finger prints could be sent to the police car in real time?

The same is true for responding fire vehicles, which could fight fires better if they could see the floor plans of the burning building and the progress of the fire.

Both police and fire companies often need to take command of an incident response from a remote location. Real time video from police and fire trucks and other responding vehicles would make this possible to make quicker and more accurate decisions during emergencies.



Applications performed at a user's desktop computer can be accessed wirelessly in the field, or two-way video conferencing between headquarters and the squad car or fire truck is possible. Police officers can access mug shots and finger prints instantly for positive identification. Fire companies can have instant access to water and sewer line plans as they respond. Pictures of missing children and adults can be distributed to vehicles in the field. Robbery videos from store surveillance cameras could be distributed immediately. Live videos of police pursuits or fires

could be delivered to headquarters instantaneously. Reports and criminal history information could be made accessible on site.

These are a few of the potential uses of the system to strengthen the quality of public safety in Chicago. The system is called “Greenhouse” to reflect the many new ideas and advances, both technical and operational, which are evolving. While wide-band systems such as the Greenhouse Project provide wide area coverage at much greater data speeds, emerging broadband systems will provide an even greater multi-media capacity at an incident scene.