Woodbridge's Reverse 911 System Improves Security and Readiness
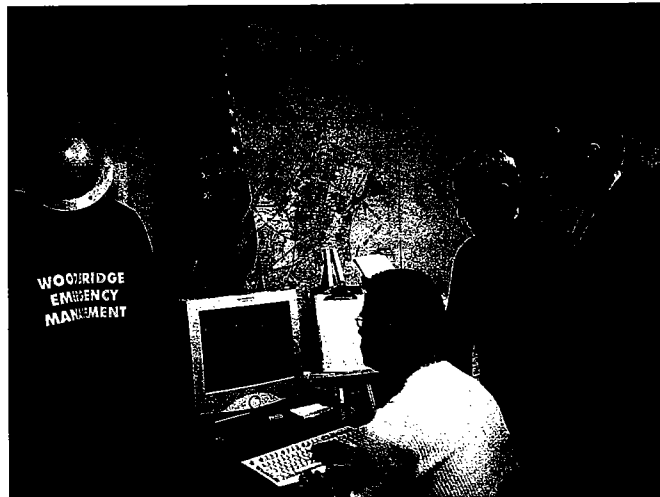
Frank G. Pelzman
Mayor
Woodbridge Township

In these uncertain times, municipal administrators face a unique challenge: they want the citizens within their charge to both be secure and feel secure. Our Office of Emergency Management officials in Woodbridge Township believe they have met that challenge with their innovative use of a ground-breaking "Reverse 911" public alert system.

In May, 2001, Woodbridge was the first municipality in Middlesex County to implement the Reverse 911® Inter-active Community Notification System created by Sigma Communications, Inc. of Indianapolis. The Microsoft Windows-derived database software enables public safety officials to mobilize phone lines for rapidly communicating urgent information to citizens in a precisely-targeted geographic area.

Using Reverse 911, our police, fire, HAZMAT or any emergency response department can deliver calls to thousands of people in a very short time. If an emergency situation occurs, we can get the word out to every township household with a phone, thereby saving precious minutes and possibly lives.

Woodbridge is a perfect proving ground for innovations in public safety communication. The densely populated township of 100,000 residents is bounded by numerous industrial and chemical facilities, borders the heavily trafficked Arthur Kill waterway and is located at the cross-

(photo Beth Schreier)

Programming for an Emergency (l-r) *Woodbridge Township OEM Director Walter Hanks, Mayor Frank G. Pelzman, Chief Information Officer Michael D. Esolda outline parameters for a Reverse 911 effort.*

him that traditional notification methods were not enough. He realized that besides spreading word via newspapers, radio, television and officers on foot, we needed a way to notify more citizens more quickly during emergencies. Reverse 911 is turning out to be the solution.

The Reverse 911 system uses state-of-the-art GIS (Geographic Information Systems) mapping technology to create a targeted geo-dimensional calling zone. According to Michael D. Esolda, our Chief Information Officer, it can pinpoint the houses in one block or send out to every phone line in the entire township – 32,000 households, except for those with unlisted numbers, who we are adding to

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roads of the Garden State Parkway and New Jersey Turnpike just 30 miles from the heart of Manhattan.

Councilman Charles Kenny led the effort to bring Reverse 911 to Woodbridge, sponsoring the ordinance approving the Township's purchase of the system in the fall of 2000. A captain in the Woodbridge Fire Department, Kenny's 19-year public safety experience convinced

a separate database.

The parameters are set by computer and can be created at a moment's notice with a computer mouse, transforming a once onerous task into a simple point-click-call operation. A message is left on voicemail or answering machine or can be heard by anyone picking up the phone or listening on speaker. There is a TTY/TDD option for the

hearing-impaired, and Reverse 911 can be programmed to broadcast in languages other than English. It can deliver voice messages and text messages to wireless receivers such as digital pagers.

Our OEM Director Walter Hanks tells us that the system can be further refined. We can create a list of individuals with common characteristics, a Neighborhood Crime Watch group or list of emergency personnel, for example. We can contact them immediately whenever necessary. Whatever the situation demands, we have the ability to adapt our notification strategy.

The real-life advantages Reverse 911 offers are apparent. Four years ago we had a train derailment with the threat of chemical contamination. To evacuate the 163 homes in the affected area, we had to go to each house, knock on each door and keep track of it. Now we can send a message through the Reverse 911 system and go only to the homes we did not make contact with, which may be less than a dozen. This is a tremendous saving of personnel and expense.

In addition, the system can be activated remotely from the scene of an emergency. This gives us a lot of flexibility. We can get printouts at the scene that tell us how many people have or have not been reached. Since the system runs out of our own in-house computer system, we never have to worry about being shut out or shut off at a critical time. Sigma also maintains a backup callout capacity in case the local system is compromised or unavailable.

The total cost to install the system was $35,000. Costs were kept down by the ability to hook into our network phone system using existing lines. The township is able to amend the system and performs monthly testing and drills to keep the system current and its operators prepared. Even with an annual service expenditure of $2,000 for software updates and system maintenance, this is a very cost-effective addition to our emergency communications network.

Getting Reverse 911 in place was a community-wide effort. Commission-

ers of the Township's Fire Districts contributed generously to the initial fundraising, as did the Woodbridge Township Community Advisory Panel. Established in 1996, the 40-member panel is a liaison promoting better communication between industry and residents that consists of students, homemakers, clergy, small business owners, municipal officials and representatives from Motiva, Amerada Hess, Pilot Chemical, PQ Corporation, Akzo Nobel Chemicals and other chemical companies that have storage and distribution facilities in

Woodbridge.

We believed community input was crucial to the success of implementing the system. The panel responded not only with helpful suggestions but with donations to get the system in place as quickly as possible.

Reverse 911 is currently used by several thousand U.S. communities, counties, commercial businesses and non-profit organizations. Besides large-scale emergencies ranging from hurricanes to HAZMAT crises,

Reverse 911 has also aided day-to-day law enforcement efforts such as alerting merchants to stolen checks and credit cards, warning pharmacists of stolen prescription pads, assisting in the capture of escaped convicts and broadcasting child kidnapping alerts.

The township has used the system to locate a missing child, bring home an Alzheimer's patient and to remind residents on snow emergency streets to move their vehicles.

Woodbridge public safety officials have found several innovative uses for the system, most notably assuring anxious citizens that an emergency was not in progress. The 2003 Port Mobil explosion in Staten Island occurred across the Arthur Kill and did not materially affect us here in Woodbridge. Yet, Woodbridge residents were flooding our 911 system with calls. With Reverse 911 we were able to inform people in Woodbridge that they did not have to evacuate or be excessively concerned.

The township has used the system to locate a missing child, bring home an Alzheimer's patient, provide accurate information about odor complaints and, during a snowstorm, remind residents on snow emergency streets to move their vehicles. We can issue public health alerts, such as letting people know when the township will spray for West Nile Virus. We can do regular senior citizen checkups that would entail sending out a call requesting a response; if the person does not answer, we can call back again or send someone to the site and investigate.

Reverse 911 helps to maintain a sense of unity in a very fragmented society. It can serve as an interactive survey tool, a voice bulletin board with community information on public meetings, road closings and community events. As we use it, I'm sure we'll discover additional ways it can benefit our citizens.

Our township's commitment to improving public safety via technology is not limited to Reverse 911. We have put laptop computers in our police cars, created a digital photo student I.D. program in our schools, adapted our township cable television station for emergency notification procedures. The value of feeling safe and secure in one's home, one's neighborhood, one's community cannot be over-estimated. Whether it is police, fire, emergency or any other area of public safety, we will continue to explore ways of increasing the efficiency of our response. Here in Woodbridge, Reverse 911 has been a cost-effective extension of our human and fiscal resources.▲