MSAG Community Definitions

NENA

The official NENA-accepted definition of "Community" for MSAG and E9-1-1 purposes is a postal-valid zip code delivery area. The community of a given resident is thus determined to be equivalent to the post office where that resident receives mail through a rural route or would receive mail if he set up rural delivery.

Community Definition Purpose

The sole purpose of the community definition field is to further enhance the 9-1-1 system by giving the dispatcher and emergency responders more information about the resident's location.

Local Differences

Although NENA has set forth an official definition of Community for E9-1-1 purposes, telephone companies and database providers still differ on the use of these community definitions. Some require that the community code correspond to their tax collection geography for each town or city. Others require that the zip code delivery area be used as the community. Still others let the county make community code decisions. These decisions should not be arbitrary, for many residents consider themselves part of a community or town, whether or not it is incorporated, and will describe themselves as living in "Davis," despite the fact that Davis has no corporate boundaries, mayor, post office or city council.

Despite these differences, the official NENA position on community definition is that a community must be a valid zip code delivery area. The USPS website serves as a checklist for valid postal community names. Community is defined in the MSAG for each segment of each road in the county. The community description field is transmitted with the ALI database information to the PSAP with each 9-1-1 call.

Challenges of Building an MSAG based on Postal Communities

Zip code boundaries are not clean and unique boundaries. Routes criss-cross, and two or more post offices may deliver mail to homes on the same road, or even the same section of a longer road. Mailbox location is not uniquely

determined by house location. Residents who live side by side may have mailboxes on different roads and be in different zip code delivery areas.

These problems are inherent in rural delivery, and large telephone companies as a rule do not understand rural delivery practices.

MSAGs with communities based on zip code deliveries must have roads broken at every zip code boundary. A single road segment may need to be broken into four or five pieces. Fortunately, this is likely to happen only in a handful of locations across the county.

It is important to educate the client that this system will require a large amount of MSAG maintenance work from the county. If resident A moves into resident B's old home, resident A may elect to move the mailbox and change her zip code. This move will trigger an MSAG error when the new telephone number is loaded (because the zip code reported by the new resident for that existing address will not match what is in the MSAG), and the county will have to fill out a form and resolve the error.

E-911 and Zip Code Communities

NENA has established the zip code community rule in an effort to force standards. Unfortunately, this standard in many cases does not help emergency response. Known communities may not have post offices. Thus, a small town of "Odessa" which gets its mail from neighboring "Peyton" will have a forced community definition of Peyton. However, anyone looking for a resident in Odessa will refer to the community as "Odessa" and not "Peyton."