

# On-Demand Emergency Notification System Using GPS-Equipped Devices

**R**esearchers at the University of South Florida have developed an emergency locator system which provides emergency information to people on their mobile device.

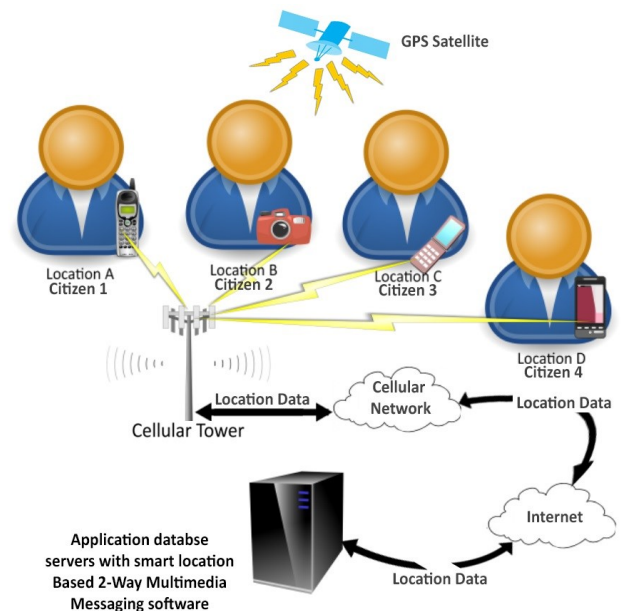
Recently, catastrophic hurricanes have become a normal summer event in parts of the United States and around the world. Hurricanes often force mandatory or voluntary evacuations over large areas of land. As the weather becomes more severe, officials order certain zones to evacuate successively. Often, people are unaware of their specific evacuation zone classification. While online mapping tools are available to determine the zone based on location, these tools are not always easy to use and may be unavailable in the event of an oncoming hurricane. Additionally, tourists who are unfamiliar with the area may not be aware of their current address. This highlights the need for an improved system to identify a threat based on the physical location of an individual, as well as an efficient way to provide instructions to secure the individual's safety.

Researchers at USF have developed an emergency locator system for mobile devices. This system uses GPS and location based system (LBS) technology to determine the exact location of the user. Next, the application will provide the information relating to the specific user's evacuation zone and evacuation instructions back to the user. The system is scalable to handle large numbers of users, and can be used without an individual having prior knowledge of their current location. The Evacuation Zone Finder may be a life saving tool for people in areas affected by hurricanes.

### ADVANTAGES:

- User friendly mobile device application
- Automatically tracks the location
- High accuracy location can be obtained
- Inexpensive

### *A Mobile Application for Emergency Evacuation Information*



### *A Block Diagram of the Emergency Locator System*