



Oak Ridge National Laboratory

Disaster Mitigation and Recovery Kit (DMARK)



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Prevent, Protect, Respond, Recover

Homeland Security Challenge:

The Federal Emergency Management Agency (FEMA) issued the Preliminary Damage Assessment for Individual Assistance Operations Manual 9327.1-PR in March 2004. This document provides guidance to establish a single standardized process by which PDA information is gathered by Regional Offices, States, and local jurisdictions. It is not uncommon for the teams to have little or no training and to collect data in hardcopy format.

Research Project Solution:

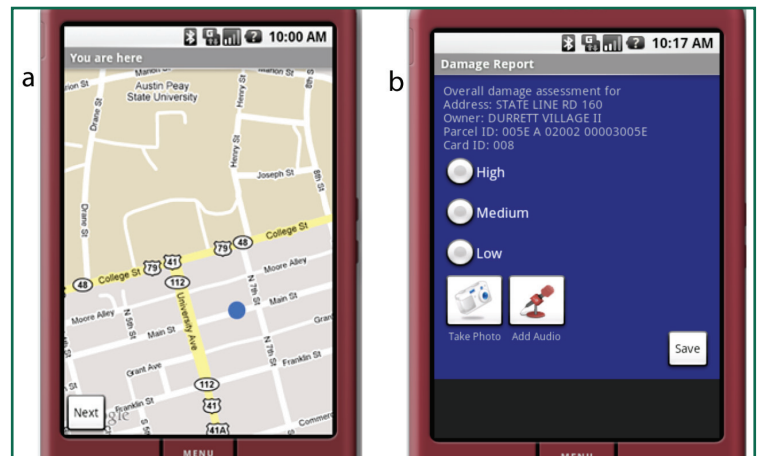
The Austin Peay State University GIS Center and ORNL in conjunction with EMA officials are working on the creation of a set of disaster mitigation and recovery tools. These tools would assist first responders in collecting and managing data for more rapid analysis and reporting. The Disaster Mitigation and Recovery Kit (DMARK) will contain tools to aid in the standardized collection of required data allowing communities to apply for various forms of aid after a natural or man-made disaster in a quicker and more comprehensive manner. The first tool will provide in field data acquisition using smart phone technologies to rapidly assess property damage and send this data to a collection server that will provide standardized reporting to Tennessee Emergency Management Agency and ultimately to the Federal Emergency Management Agency.

National Implications:

DMARK will provide a large step toward the creation of a standardized and efficient set of disaster information tools for local, state and federal information gathering practices. DMARK will provide communities the ability to acquire more information about its needs post-disaster and allow faster assistance from state and federal entities if needed. DMARK uses a single smart phone to replace over 10 items that are carried into the field by assessment officials. The use of a single device is expected to enhance the collection, distribution, and management of disaster information subsequently to support rapid response and recovery efforts.



DMARK Property Damage Assessor Smart Phone Application.



- a. DMARK GPS locates and gathers data online from server.
- b. DMARK uses picture and audio capture to enhance damage assessment reports.

www.serri.org

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