



The GCN Awards

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Crisis, urgency drive winning technology programs

“Great emergencies and crises show us how much greater our vital resources are than we had supposed,” said William James, the American philosopher and psychologist.

Indeed, in America’s 21st century, the principle James espoused in the 19th century is still apropos.

The stories behind GCN’s 10 award-winning technology programs in the following pages convey a palpable sense of urgency, going a long way toward dispelling the common perception of government as a slow-moving behemoth. To one extent or another, each program was driven by—or found application in—crisis, war and disaster: the terrorist attacks of Sept. 11, 2001, wars in Afghanistan and Iraq, the loss of the space shuttle Columbia, the hurricanes Katrina and Rita.

And each of the programs applies different technologies but, collectively, they serve to demonstrate the rich fruits of teamwork and collaboration in government.

Several of the technologies have been put to use in the aftermath of Katrina.

The Army’s Radio Frequency In-Transit Visibility program, for example, which uses radio frequency identification to tag and capture data about shipping containers, is being used by relief officials to track supplies in hurricane-ravaged Alabama, Louisiana and Mississippi.

Health Resources and Services Administration officials are using a geospatial data warehouse, which combines data from disparate resources to map and correlate health resources and needy populations, to quickly produce maps of areas devastated by Katrina and display the status of their resources.

The Army’s Battlefield Medical Information System-Tactical, a tool incorporating a handheld device that lets medical personnel retrieve and send medical data electronically, has been deployed on the Gulf Coast as well as in Afghanistan and Iraq.

Good medicine

Elsewhere on the medical front, Defense Department officials are rolling out the Composite Health Care System II, a sophisticated, patient-centric medical information tool, to replace a cumbersome, outdated legacy system. When the new system, which eventually will be used by more than 30,000 providers at 139 military treatment facilities, hit some snags last year, officials convened a “war room” to sort out the problems and get the program on track.

The events of 9/11 (and more recently, hurricanes Katrina and Rita) demonstrated that gaps in communications interoperability stymie first responders in emergency situations and disasters. To address the problem, the Justice Department’s Wireless Management Office in 2003 launched its High-Risk Metropolitan Areas Interoperability Assistance Project: the 25 Cities Project. The result was a small step—one official called it a modest effort toward interoperability—but a gigantic leap in the effort to get federal, state and local officials to work together on solving the problem.

The need to share information about terrorist threats gained urgency after 9/11 and propelled the development of the Joint Protection Enterprise Network, which began under the aegis of the Joint Chiefs of Staff as Project Protect America. Later renamed JPEN, it was developed at SPAWAR-San Diego for nationwide use.

Security concerns also prompted officials at the Joint Force Command in Suffolk, Va., to build what is possibly the government's most secure wireless LAN. Five layers of security protect the data that flows over the Joint Experimentation Directorate's networks.

Race against time

It was the loss of the shuttle Columbia in 2003 that led NASA officials to set a goal of building a supercomputer in 120 days. Before NASA launched the next shuttle, officials needed to analyze why the Columbia's tiles failed, which would take a new supercomputer. The doubters said it was impossible for NASA's Advanced Supercomputing Division to build one that quickly. But working around the clock, the NASA team got the job done.

Urgency also is a factor for the IRS as it migrates to a modern electronic filing system from an ancient mainframe system running Cobol. The fear is that longtime Cobol programmers will leave before the new system is finished. "We have no choice but to finish this," an IRS official said. Last January, the IRS launched the first iteration of the new e-filing system.

Technology crises also affect local government, even the city of Beverly Hills, Calif., which had been struggling with an impoverished IT infrastructure. To remedy the situation, the officials built a new infrastructure and a central business application that lets all of the city's departments, including police and fire, share information.

A team of GCN editors chose the 10 winners from 132 highly qualified entries, carefully weighing them on the basis of overall accomplishments, innovative use of technology, and the benefits of the program to agency mission and constituencies.

The awards will be presented tomorrow night at the GCN Awards Gala in Washington.