The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization:
Colorado Governor's Office of Information Technology

Organization URL:
www.Colorado.gov/OIT

Project Name:
Colorado Statewide Interoperability Training Program

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

The Colorado Interoperability Training Program was designed to strengthen the humanitarian role public safety and first responders play in serving all citizens within Colorado. Public safety professionals daily are on the front lines of saving human lives and alleviating suffering. The delivery of essential services, providing community security, protecting property and ensuring life safety are activities carried out by diverse partners that require efficient and effective communications to perform their missions. The critical need for communications interoperability in everyday activities and disaster situations requires not only technological solutions but also education and training for the end users of that technology. This program delivers training to agencies and first responders across all levels of government, on multiple communications systems, across vendor/technology platforms and in geographically diverse locations across the state. This one-of-a kind instruction on how to communicate effectively across public safety agencies and how to operate complex radio equipment was not available previously to agencies in Colorado. The free training is available to users of any public safety communications system and ensures all agencies communicate effectively to ensure seamless delivery of the essential services required in their humanitarian life-saving role. Metrics used to measure the project's success include number of responders who have completed the course, implementation within agencies and analysis of communications assessments. In the first four months of implementation, over 1,037 responders completed the program, 300 trainers have received instruction in delivering the classroom curriculum, and two state and multiple local agencies have

incorporated the curriculum into their established academies. Colorado used the DHS Office of Emergency Communications National Emergency Communications Plan standardized assessment to measure communications capabilities and performance in relation to curriculum learning objectives. This assessment process demonstrated interoperable communications capabilities in 62 of 64 Colorado Counties.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

The Colorado Interoperability Training Program uses the Training Finder Real-Time Affiliate Integrated Network (TRAIN) to provide curriculum in an online environment. The Office of Information Technology (OIT) took the lead on this program because of the wide variety of technologies and systems being used to provide public safety voice communications for first responders. OIT is a partner in the most expansive public safety radio network in Colorado -- the Digital Trunked Radio System (DTRS) -- which has over 60,000 users, covers approximately 93% of state roadways and allows first responders and other participating agencies to talk across jurisdictional boundaries. This program not only addresses end-user training on DTRS but also other systems operating in VHF, UHF and 700/800 spectrums across Colorado. The primary challenge addressed by this program was the lack of training institutionalized or standardized across jurisdictions within Colorado. In looking at incidents across the state, at times communications failed because of insufficient training for first responders. The program provides a standard approach to training across agencies and ensures that all responders are on the same page when it comes to public safety communications. Making the training curriculum available in multiple formats, and free of charge, was key to implementation and usage. Providing no-cost online modules ensures that financial and time resources that are a barrier to first responders receiving training have been significantly reduced.

Please list the specific humanitarian benefits the project has yielded so far.

The primary and immediate benefits yielded by the Colorado Interoperability Training Program are the impacts on the life safety for the public safety and first responder personnel who use communications systems in Colorado. Multiple studies and after-action reports of first responder incidents across the country have indicated that improper use and lack of training on communications systems have led to delayed response to citizens, and injury or fatalities for responders who are providing the essential services, property protection and life-saving. The elimination of situations limiting or prohibiting responder communications is specifically addressed in the training curriculum. Ensuring priority access, quality of service, reliability and resiliency depends on properly training responders operating complex equipment to ensure their own safety and their humanitarian services are delivered to the citizens they serve. Since implementation of this program, Colorado has not experienced system issues or user obstacles that have hampered the use of communications equipment in emergencies prior to implementation. Student feedback and assessment has consistently ranked the course as "Excellent," with comments complimentary for development of a resource that previously was unavailable.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

One of the first agencies to adopt and institutionalize this training was the Colorado Department of Transportation (CDOT). Over the last decade, CDOT has migrated from VHF communications systems to a statewide Digital Trunked Radio System (DTRS). This transition took place with limited training for end users who were often operating on multiple systems in a hybrid approach

to communications. CDOT participated in the development of this program, and once it was released, they were early adopters. CDOT began by implementing a three-hour curriculum through their annual safety academy. By teaching interoperable communications to every employee in the agency over the course of a year, CDOT looks to provide a standard level of training to every employee using the DTRS. This standardization will improve safety, increase efficiency and maximize the effective potential of technology available to employees.