

DHS Science and Technology Directorate Project Responder 4

Soliciting direct feedback from first responders on their equipment and safety needs

Since 2004, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) and Homeland Security Studies and Analysis Institute (HSSAI) have led a series of facilitated discussions – called Project Responder – with first responders throughout the United States to identify existing response capability gaps. Discussions included more than 300 leaders and responders from many jurisdictions throughout law enforcement, emergency medical services, emergency management, the fire service and other related response agencies and disciplines.

Catastrophic incident response requires multi-jurisdictional coordination of staff, equipment, communications, tactics, regulations and priorities as well as sharing information and intelligence among many agencies and entities. This is difficult under normal circumstances and is exacerbated when an event is traumatic, the damage widespread and when threats endure. Such incidents exceed the resources of local jurisdictions, require regional or national mutual aid and entail long-term response and recovery operations

It is beyond the ability of local or state agencies alone to address all capability needs associated with catastrophic incident response. Outside support is necessary, which is why S&T and HSSAI work with local and state agencies to pinpoint the challenges faced by today's responders and align funding to address the highest priorities.

To date, three iterations of Project Responder have taken place. Building upon the success of Project Responder 3, Project Responder 4 (PR4) is now underway with four primary objectives:

- Identify enduring and emerging capability needs through a series of virtual and in-person meetings with emergency responders,
- Assess the state of science and technology to meet these needs through research and interviews with subject matter experts (SMEs),
- Identify potential technology solutions through a joint responder-technologist workshop and
- Develop roadmaps that illustrate a coherent technology path to address the high-priority needs.

Recommending solutions to fill critical capability gaps



Project Responder 4 provides S&T with a roadmap for first responder technology development efforts

There are gaps between what response agencies can currently do and what they feel is necessary for successful large-scale incident response. PR4 examines the state of science and technology for opportunities to address the most persistent and highest priority capability needs and will develop a plan to address those needs. DHS S&T, other government agencies and private industry partners will use this “roadmap” to guide development efforts that address specifically articulated operational needs.

This effort is unique in its dedication to capture the voice of emergency response agencies as they describe their greatest needs, with an ultimate goal of meeting the challenges of catastrophic incident response.

PR4 findings provide a guide for future development

PR4 roadmaps can be used by government agencies, academia and private industry partners to pursue targeted technology development opportunities to address high-priority emergency response needs. PR4 research findings will allow organizations at all levels to work together to develop and deploy the technologies needed to ensure faster and more effective emergency response.

During a March 2014 PR4 workshop, emergency responders described operational realities and needs and SMEs identified potential solutions. HSSAI assessed the findings from the discussions to create a new, high-level roadmap that will describe potential solutions for each capability gap in terms of purpose, payoffs, challenges and annual milestones and metrics. HSSAI will develop a final report containing the list of capability needs and the corresponding roadmaps for each. The final PR4 report was delivered to DHS S&T in 2014.