

This study was conducted through a partnership between the Center for Technology in Government at the University at Albany, State University of New York and Urban Logic, Inc., a New York City nonprofit organization closely involved in the response. The study was supported in part by a grant from the National Science Foundation Digital Government Research Program.

The research sought to understand the roles of information and technology in the response to the attack on the World Trade Center as well as the influence of the response on the subsequent work of both government agencies and private organizations. Available evidence about the response indicates that information and technology played critically important roles. Effective use of a variety of information technologies helped government agencies and their partners better cope with and respond to the multiple crises and ongoing recovery demands. At the same time, the severity of the situation was exacerbated by extensive damage to critical communications and computing infrastructure as well as the absence, loss, or inaccessibility of needed information. The short-term effects of the event and the long-term effects of the response are intertwined with policies, organizational designs, systems, and relationships among individuals and organizations.

Research into what government agencies and related organizations did, and the role of information and IT in the response, provides valuable lessons for improving crisis response and emergency management and planning. Equally important, the preparedness and interdependencies necessary for effective emergency response also generate human, organizational, and technological resources that may well benefit government operations, business activity, and community life in normal times. This report therefore covers seven topics.

- Information needs associated with the event and the response and recovery efforts
- The availability, quality, use, and management of information resources
- The nature, strengths, and weaknesses of information technology
- The role and effects of information policies
- The role and effects of previous plans and existing programs and procedures
- The nature and effectiveness of interorganizational coordination and collaboration
- Prospects for long-term improvements in government and community resilience and performance as a result of the entire experience

We used two data collection methods. Background and substantiating information came from the documentary record. We used news accounts, formal reports, testimony before governmental bodies, conference presentations, taped and television documentaries, and other similar material as sources. Our second, more direct data collection method was semi-structured interviews with key participants.

We began our interview process by contacting many individuals who worked at Pier 92, the "nerve center" of the response, rescue, and recovery effort. A cascading technique allowed us to identify additional interviewees both inside and outside government. Individual and group interviews were conducted in person and by telephone with government officials and other participants in New York City, Albany, Washington and other locations. In all, we interviewed 29 individuals between August 2002 and July 2003. The group comprised seven New York City officials, five New York State officials, five federal government officials, five representatives of nonprofit organizations, and seven private sector executives.

Our multidisciplinary research team allowed us to assess the data from a variety of perspectives and to integrate findings and analysis into a comprehensive understanding of the data and its implications. The complete research team, listed in Appendix A, represented the fields of Communication, Information Science, Management Science and Information Systems, Law, Organizational Behavior, Policy and Decision Sciences, Public Administration and Policy, Public Management, and Sociology.

Members of the research team

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