

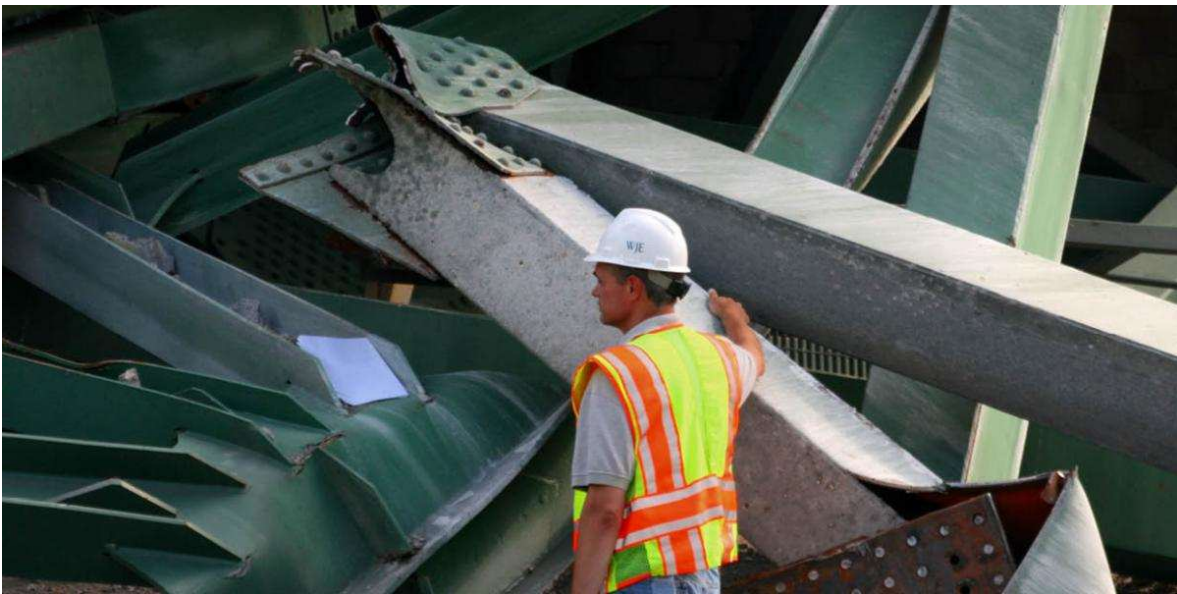
Collapse!

Aftermath and Investigation

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Abstract

WJE has investigated virtually every major structural collapse in the United States since the 1970s, frequently arriving on-site within 24 hours of a failure or natural disaster. Though every event is unique, the immediate aftermath and subsequent investigation often follow a similar sequence: from rescue and recovery, media relations, and preservation of key evidence to documentation of conditions at the site, procurement and testing of construction materials, and structural analyses.

Mr. Gary Klein will draw on decades of personal experience to explain primary considerations during the aftermath of a collapse and describe key steps during the investigation. He will share personal insights and lessons learned from their investigation of the Kansas City Hyatt Regency Hotel walkway collapses (1981), Koror-Babeldaob Bridge collapse (Republic of Palau, 1996), World Trade Center attack (New York, 2001), I-35W Bridge collapse (Minneapolis, 2007), and Champlain Towers Condominiums collapse (Surfside, Florida, 2021).

By the end of the seminar, you will be able to:

- Explain primary considerations in the aftermath of a collapse
- Describe key steps in a collapse investigation
- Discern the interests and roles of government agencies, involved non-government parties, media, and the general public
- Summarize the aftermath and investigation of several highly significant collapses



Gary Klein joined WJE in 1979 and has since investigated hundreds of concrete, steel, and wood structures. Most assignments have involved deterioration, distress, or failure of buildings and bridges. Mr. Klein's experience also includes the investigation of parking structures, tunnels, transit structures, stadiums, piers, environmental facilities, and wind turbines. Many of these studies have included repair design and construction observation services. Mr. Klein has provided expert testimony in connection with many collapse and structural investigation projects. From 1973 to 1979, Mr. Klein worked at the Chicago firms of McDonough Engineering, Inc., and HNTB. While with these firms, he was responsible for structural design and plan preparation for new bridge and tunnel construction, as well as investigation and rehabilitation of existing structures.