

Fire and Property Loss Investigations



- Suppression system failures
- Sprinkler system piping failures and leakage losses
- Fire detection and alarm system failures
- Fire and explosion investigations
- Origin and cause investigations
- Litigation support
- Expert testimony
- Fact and opinion analysis
- Laboratory testing and analysis
- Fire growth, fire effects, heat transfer, and evacuation modeling
- 3-D modeling and rendering
- Accident reconstruction
- Fracture mechanics assessment and fitness for service
- Nonlinear finite element analysis
- Design and code compliance review
- Difficult access and drone surveys

Losses from fires, explosions, and fire protection system failures affect all types of properties, including single-family homes, businesses, and warehouses. WJE performs thorough loss investigations with in-house experts in fire protection engineering, building construction, structural engineering, mechanical engineering, metallurgical engineering, and electrical engineering. A highly experienced team can be promptly assembled to conduct an on-site investigation and assist with evidence collection. Additionally, our Janney Technical Center laboratory is available to examine and analyze evidence.

Loss investigations are routinely undertaken by WJE staff when fire protection system failures result in significant property damage and unprotected facility downtime. These incidents include sprinkler leakage losses and piping failures as well as fire suppression, detection, and alarm system failures.

WJE's fire protection engineers are experienced in investigating the origin and cause of fires and explosions in residential, commercial, governmental, and industrial incidents. Our team of certified fire and explosion investigators have the technical expertise and forensic tools to analyze fire protection system failures and building and fire code violations that contribute to losses.

In the event of a loss, WJE's experts will inspect and document the scene, collect evidence and data, interview witnesses, review reports prepared by others, and prepare an engineering analysis for use in determining the origin and cause of the event.

With WJE offices located throughout the United States, local staff can quickly coordinate to provide the expertise and continuity necessary to meet clients' needs.

