

NFPA Comments
on
Building and Fire Codes
& Practices

NIST Conference
on
World Trade Center Disaster
September 13-15, 2005



NIST Study

- Detailed technical analysis
- Improved safety of building occupants and emergency responders
- Enhanced building performance
- Increased effectiveness of emergency operations

NIST Recommendations

- NFPA submitted detailed comments
- Address recommendations through:
 - Codes and standards operations
 - Public education and training
 - Research Foundation
 - Membership sections
 - Advisory committees

NIST Recommendations

- Address a broad range of subjects that could impact numerous NFPA documents
- Origins of many prior to 9-11
- Better understanding of threats, physical phenomenon and human behavior
- Requires cooperation by many groups for meaningful implementation

NIST Recommendations

- Interdependence
- Priorities
- Research agenda needed

NIST Recommendations

- 9-11 presents one data point
- Other events need to be examined
- Do not indicate that current methods are flawed or inadequate
- Call for improvements and more technical basis for code provisions

High Rise Building Safety Advisory Committee

- Establish broader agenda
- Help prioritize NIST's and other recommendations
- Next editions of:
 - NFPA 1 – Uniform Fire Code
 - NFPA 101 – Life Safety Code
 - NFPA 5000 – Building Construction & Safety Code
 - Design & installation standards
 - Fire test standards
 - Emergency responder protocols & equipment



Specific Threats/Hazards

- Risk and hazard analysis
- NFPA in support of these concepts for:
 - Development of future codes and standards
 - Building design and assessment
 - Emergency response plans
- Greater availability and understanding of tools and concepts
- Must maintain prescriptive and performance-based design options

NFPA's Efforts

- Performance-based design options initiated in 1993
- Guide for the Evaluation of Fire Risk Assessments
- Provisions for wider stairs
- Increased sprinkler protection
- Stair decent devices
- Enhanced structural fire resistance

NFPA's Efforts

- New project on Fire Exposures for Engineering Design of Structural Fire Resistance
- Emergency escape devices
- Use of elevators for evacuation
- Address broader applications of building construction, safety and security.
- Human behavior

NFPA's Efforts

- Leadership in Life Safety Design (LLSD)
- Initiative to exceed minimum building code requirements
- Articulate risk/hazard

NFPA's Efforts

- NFPA 1600, Standard on Disaster/Emergency Management and Business Continuity
- Homeland security
- Multi-hazard mitigation

NFPA's Efforts

- Timely response
- Continue to work with NIST and others
- Identify and facilitate research efforts
- Specific code proposals