

Fire Department Mutual Aid

“At its core, mutual aid is a commitment to solidarity...”

Los Angeles City Fire Department

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What is Mutual Aid?

- Long-standing practice across jurisdictional boundaries
- Agencies reciprocate support
- Process predates legal authorities



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When is Mutual Aid Used?

- Incidents depleting local resources
 - Structure Fires
- Simultaneous Incidents
 - EMS
- Disasters
 - Wildfires
 - Gas explosions
 - Flooding

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Fire Department Responsibilities

- Based on 527 CMR 1.7.16
 - Fires, explosions, hazardous material incidents
 - Motor vehicle accidents, structural collapses
 - Mass casualty incidents and extrications
- Emergency Medical Services
 - Service Zone Plan
- Fire Prevention and Community Risk Reduction

Fire Department Principles

- Life Safety
- Incident Stabilization
- Property Conservation
- Societal Restoration/Return to Normalcy
- Business Continuity

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History

- 1678 - Boston Fire Department
 - First career fire department
- 1736 - Union Volunteer Fire Company
 - Organized by Benjamin Franklin in Philadelphia
- 1835 – Mutual Aid from Philadelphia to New York City
- 1871 – Great Chicago Fire
- Massachusetts Conflagrations
 - 1843 - Fall River
 - 1872 – Boston
 - 1889 - Lynn
 - 1892 - Hyannis
- 1950s Local Mutual Aid Agreements Started
 - Civil Defense Agencies
- Post 9/11
 - Extends to DPW and Law Enforcement

Principles of Mutual Aid

- Tiered
 - Incident are Handled at the lowest level with the fewest resources to effectively mitigate
- Statistically reciprocal
- No direct cost to participate
- No reimbursement for response
 - Exception for Bid Response
 - Exception for Billed Response
 - Federal Disaster Declaration
- Mutual reciprocity includes absorbing costs

Principles of Mutual Aid

- Agencies avoid unreasonable resource depletion
- Incident Command remains with the requesting agency
- Overhead, Logistics, Support remain with the requesting agency
- Shared expectation on response

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Principle of Self Help

- Exhausts resources before requesting mutual aid
- Automatic Aid Exception
 - "Line Box "
 - Geographic – Adjacent to Jurisdictional Boundaries
 - Expectation that the incident will exceed initial resources

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Types of Fire Departments

- Career
 - Only Full Time Personnel
 - Metropolitan/Suburban
 - EMS
- Combination
 - Full Time Personnel
 - Call or Volunteer Personnel
 - Suburban/Rural
- Call/Volunteer
 - Rural

Fire Department Deployment

- Companies
 - 2-3 Firefighters and Officer
 - Ambulance
 - 2 EMTs and/or Paramedics
 - 1 Company can complete 1 task at a time
- Cross Staffing
 - Same personnel staff more than one piece of apparatus
- Initial Responses
 - Fire Incidents
 - 1-7 Companies
 - "Alarms" are typically 2 engines and 1 ladder
 - EMS Incidents
 - 1-2 Companies

Fire Department Metrics

- Response Time and Distance
- Assembled Response Force
- Factors
 - Density
 - Social Vulnerability/Socio-Economics
 - Building/Housing Stock
 - Overall Incident Volume
 - Simultaneous Incidents
 - High Hazard Occupancies
 - Life Hazard

SPRINGER BRIEFS IN FIRE

Robert Upson · Kathy A. Notarianni

Quantitative Evaluation of Fire and EMS Mobilization Times

Fire Department Metrics

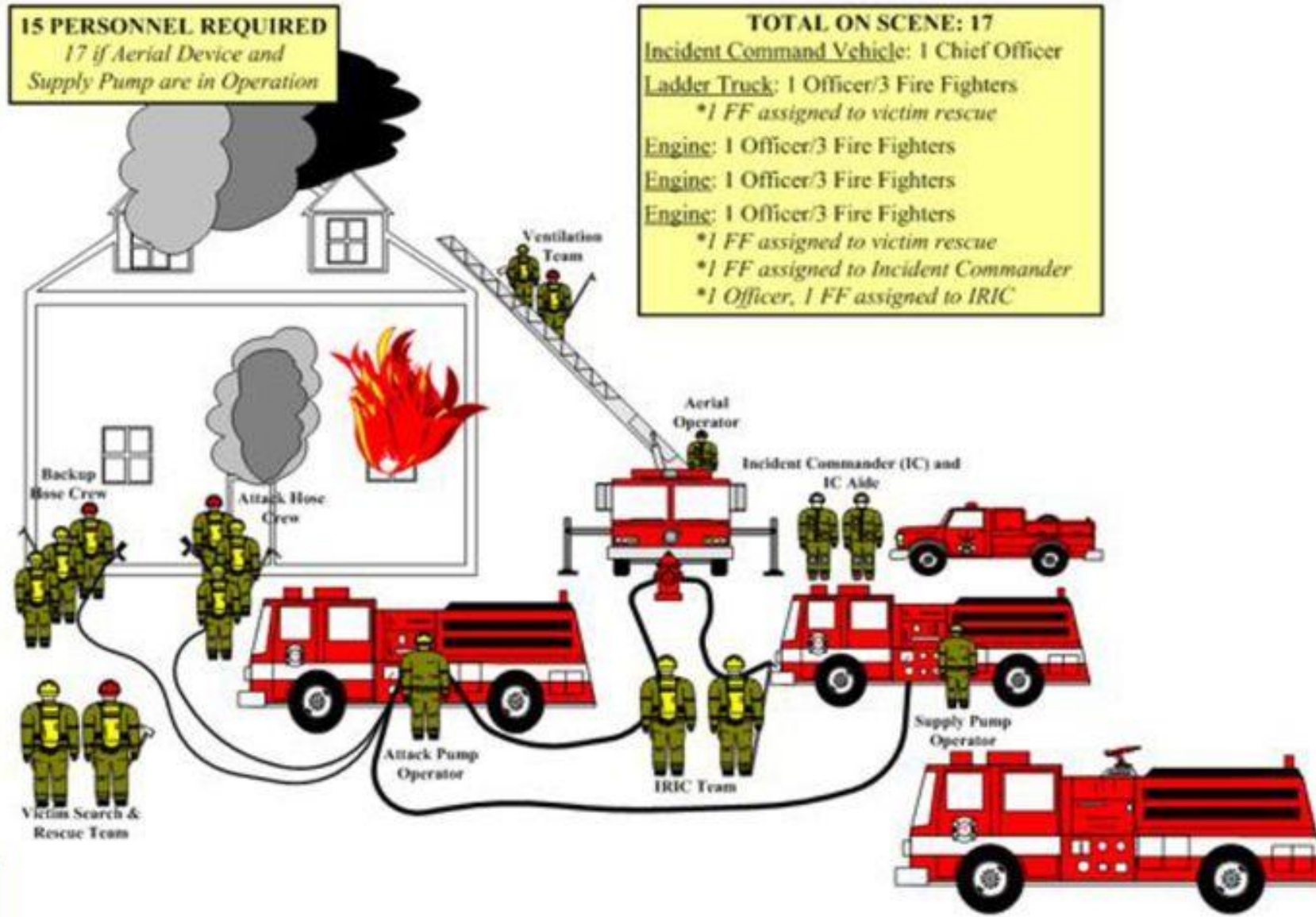
- National Fire Protection Association (NFPA)
 - Industry Standard/Best Practice
- Insurance Services Organization (ISO)
 - Public Protection Classification
- Center for Public Safety Excellence
 - Accreditation
- American Association of Insurance Services (AAIS)
 - FLAMES: Fire Loss and Mitigation Evaluation Score

Responding to Structure Fires

NFPA 1710 and 1720

- NFPA 1710 Career
 - 60 seconds to respond
 - 4 minutes for the first engine company to arrive
 - 8 minutes for the full first-alarm assignment (15-17 Firefighters) for at least 90 percent of all fire incidents
- NFPA 1720 Call/Volunteer
 - Suburban Zones
 - 10 staff to assemble an attack in 10 minutes, 80% of the time
 - Rural Zones
 - 6 staff to assemble an attack in 14 minutes, 80% of the time

NFPA 1710 Initial Full Alarm Assignment Deployed Within 8 Minutes



Insurance Services Organization

- Public Protection Classification
- Fire Suppression Rating Schedule
 - Class 1-10
 - Evaluates
 - Emergency Communications
 - Fire Department (Staffing – Including Automatic Aid)
 - Water Supply
 - Fire Prevention
 - Public Fire Safety Education Programs

Center for Public Safety Excellence

- Effective Response Force
 - Community Risk Assessment
 - Standards of Cover
 - Performance Metrics
 - Continuous Quality Improvement

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Emergency Medical Services

- Health Care System
 - Hospital Closures
 - "Wall Times"
 - Urgent Care Centers
- Simultaneous Calls
- ASHER Events



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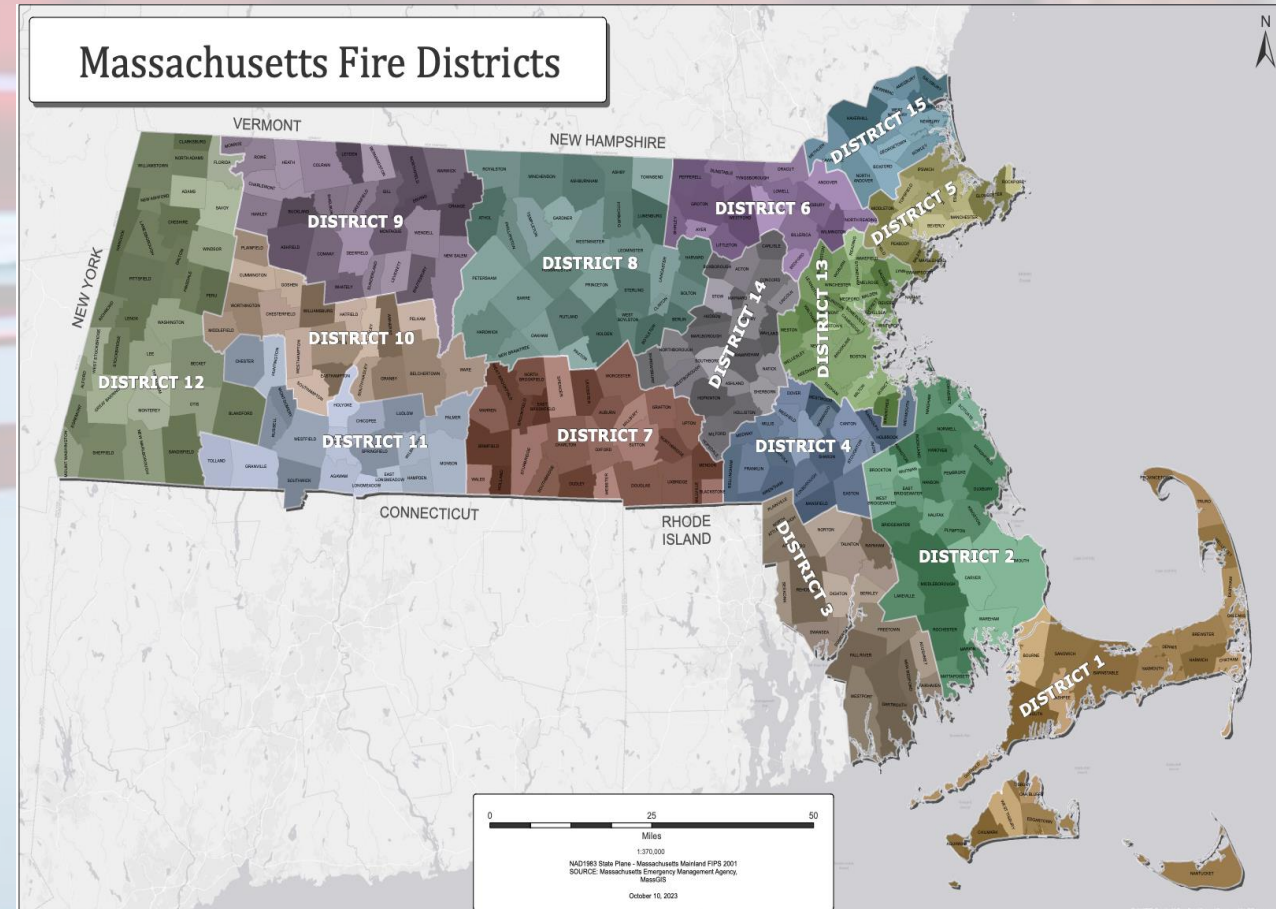


Types of Mutual Aid Structures

- Local Automatic Aid
- Local Mutual Aid
- Regional
 - County or Fire District
- State
 - Fire Mobilization
- Interstate
 - Cross Border (Local)
 - Prior to Declaration
 - After Declaration

Statewide Fire Mobilization

- 15 Fire Districts
- District to District Response
- Strike Teams or Task Forces
- Planned Events or Unplanned Emergencies



Interstate Mutual Aid

- National Response Framework
 - Tiered, Scalable, Flexible
 - NIMS Compliant
- Emergency Management Assistance Compact
 - State to State Request
 - Monetary Bid

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Other Systems and Opportunitites

- Hazardous Materials Response
- Shared Service Agreements
- Regionalization
- Dropped Borders



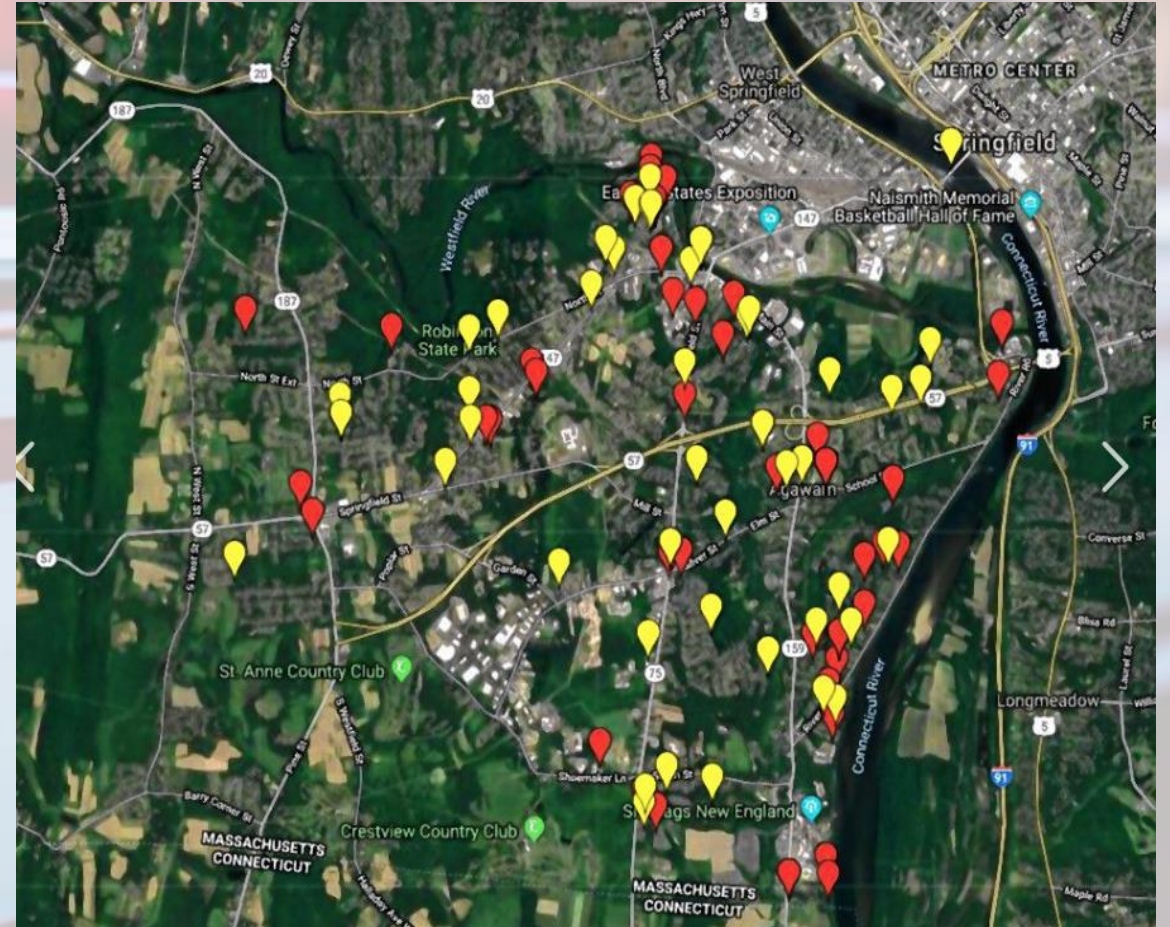
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Case Studies

- Merrimac Valley Gas Explosion
 - Multiple Operational Periods
- North Attleboro Flood
 - Local Mutual Aid
 - Single Structural Task Force
- Brockton Hospital Fire
 - Fire and Hospital Evacuation
 - Regional Coverage

Merrimac Valley Gas Explosions

- September 13, 2018
- 40 Home Explosions
- 80 Fires
- Multiple Operational Periods



Brockton Hospital Fire

- February 7, 2023
- 10 Alarm Structure Fire
- Fire Mobilization for Ambulance Task Forces
- 162 Patients Evacuated
- 60 Agencies Responded
- Hazardous Materials Response



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North Attleboro Floods

- Substantial Flooding Evening of September 13, 2023
- Significant Firefighter Injury
- 200 Homes Damaged
- People Trapped in Homes
- Local Mutual Aid Exhausted
- Fire Mobilization Structural Task Force

