A community’s communications infrastructure is key to effective fire mitigation

ISO’s Fire Suppression Rating Schedule (FSRS), revised 2012, is the manual we use in reviewing the firefighting capabilities of individual communities. The schedule measures the major elements of a community’s fire suppression system and develops a numerical grading, a Public Protection Classification (PPC™). We assign a PPC from 1 to 10, with Class 1 representing the best public protection and Class 10 indicating no recognized protection. We have extensive information on more than 47,000 fire protection areas and more than 32,000 unique water systems.

A community’s PPC depends on its fire department, water supply, emergency communications systems, and community risk reduction efforts. In our last issue of OnLocation, we looked at water supply. In this issue, we’ll be addressing emergency communications systems. Ten of the approximately 105.5 credit points are based on the emergency communications system. The review focuses on the community’s emergency reporting and dispatch facilities and the emergency personnel handling and dispatching fire alarms.

Determining PPC

ISO assesses a property’s distance to the legal first-responding fire station and to a recognized hydrant or other effective water source.

Fire Department
ISO assesses a fire department’s ability to launch an effective initial attack on first alarm. We evaluate station distribution, equipment, pumping capacity, personnel, and training.

Water Supply
ISO reviews the distribution, maintenance, and condition of hydrants, pumps, storage, and filtration. We assess the available water supply against the amount needed to suppress fires.

Community Risk Reduction
ISO evaluates a community’s risk reduction status by examining three distinct areas: fire prevention, public fire safety education, and fire investigation capabilities.

Communications Infrastructure
ISO evaluates the capability of the emergency communications systems to handle effective receipt and dispatch of alarms to fire departments.

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Part 2 of PPC Series
All 9-1-1 centers are not alike
Have you ever wondered how similar or different 9-1-1 centers really are in the areas where you write insurance coverage? Not all 9-1-1 centers are equal, even though they may appear to be. Some centers have basic 9-1-1. Others have Enhanced 9-1-1, which automatically displays the telephone number and physical address for the person reporting the emergency.

For locations that also use computer-aided dispatch (CAD) systems, the Enhanced 9-1-1 information automatically prepopulates the address field of the dispatch computer. That avoids errors in the spelling of a street name or in the characterization of the address. For example, Buford Street, Buford Lane, Buford Boulevard, and so forth all could be at different locations in the jurisdiction. Such automation decreases human errors and the risk of a delayed or incorrectly dispatched response. And that translates into reduced risk for insurers.

Other factors play a role in the effectiveness and reliability of 9-1-1 centers. Consider the fact that many home and business owners are abandoning the wired telephones of the past in favor of cell phones or Voice over Internet Protocol (VoIP) systems as their primary telephone systems. It’s critical to know whether the 9-1-1 Public Safety Answering Point (PSAP) in a customer’s jurisdiction is adequately equipped to handle those technologies. That information will help you accurately assess system capabilities when determining premiums for property risks.

In establishing the PPC for an area, we have specially trained field representatives who personally visit each dispatch center to observe and evaluate the capabilities of the PSAP to handle new and emerging technologies.

Emergency dispatch circuits and alarms
Our field representatives verify several other key elements for effective emergency communications systems:
• call receipt and call dispatch performance criteria based on National Fire Protection Association (NFPA) 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems
• number of on-duty dispatchers
• presence of backup power generators
• use of geographic information systems (GIS) and computer-aided dispatch (CAD) systems
• training and certification of call takers and dispatchers

All of those factors affect the PPC that we calculate for a community.

Equally critical to emergency communication capabilities is how the communications system transmits or relays an alarm to first responders. Our field representatives actually observe and evaluate those capabilities at the 9-1-1 dispatch centers in a jurisdiction before determining what credits should apply to the PPC. Through their extensive training and experience and actual site visits and observations, the field representatives accurately assess emergency communication capabilities, far exceeding what we could determine by merely forwarding a survey to the PSAP regarding its capabilities.

Since we calculate PPC based on combined evaluations of a community’s fire department, water supply, and communications infrastructure, it’s easy to see why communities across the country recognize PPC as the gold standard for measuring public fire suppression.

While PPC is a critical component, insurers must also evaluate construction, occupancy, hazards, exposures, building code enforcement, and private fire protection to develop fire insurance premiums for individual properties.

Joe Frantantaro, manager, Community Hazard Mitigation Services, Verisk Insurance Solutions – Commercial Property, is a certified fire officer and fire service instructor with more than 30 years of experience in emergency services. He was the project manager who developed the revised Fire Suppression Rating Schedule (FSRS) and participates in numerous public speaking engagements.
This article originally appeared in the Winter 2011 edition of OnLocation and has been modified for republication. We've updated the article to focus on the revised FSRS, which has gained widespread acceptance but may not have been adopted by all states at the time of this reprint.