

# Bringing a Higher Level of Productivity to the Fire Service — Tales of Two Cities

**By Leonard Matarese, Kenneth Chelst, Frank Straub, and Robert Forezzi**

We all know that the fire service fills a critical need in all communities. Fire departments were organized at first around fire suppression activities, but during the past several decades the activities of typical fire departments have increased dramatically. At the same time, the number of fires occurring and the number of resultant fire deaths have decreased.

Much of this reduction is the direct result of the success of the fire service in implementing and enforcing more stringent fire codes, including the increased use of sprinklers in not only commercial but also residential properties. Legislation regarding the flammability of children's clothing and furniture also has contributed to this reduction in fires, as has greater public awareness of the importance of fire alarms.

As the call-for-service workload for working fires has decreased, many fire departments have taken on emergency medical services (EMS) that provide first responder or advanced life support capabilities, or both, and that often include ambulance transport. Since September 11, 2001, fire departments also have engaged in a wide range of antiterrorist and emergency management activities.

Even with the addition of EMS and emergency management activities—and even considering fire departments' nonsuppression activities like training and maintenance—all but the busiest of fire departments still have large blocks of uncommitted time. Fire departments are usually actively involved in uninterrupted duties for only 5 to 10 percent of duty time.

Those departments that do not perform EMS response have a far lower level of committed time. One department that does not provide EMS services was recently studied by ICMA Consulting Services and was found to be busy for approximately one hour each 24-hour day.

The call-for-service workload information usually seen by local government managers and elected officials rarely communicates clearly the actual demand for services. Workload data are often presented in aggregate form: the number of certain types of calls is one example.

When these data are further analyzed, the picture often changes dramatically. One city the ICMA team studied, for example, reported 161 fire calls within a 16-week period. As the workload was further refined, however, the reported 161 fires actually included 13 fires involving or in a structure and 29 not involving a structure.

False alarms also produce a distorted view of fire workload, particularly in communities that have not enacted legislation requiring alarm registration and penalties for numerous false alarms.

Local government managers have long attempted to find appropriate activities for firefighters during the periods of time when they await calls for service. Fire personnel, for example, have been assigned to lawn maintenance, hydrant inspections, and crossing-guard duties. One department that ICMA works with operates a printing shop in one of the fire stations, where it produced city forms and documents.

The most dramatic and often controversial use of firefighting personnel in nonsuppression duties is the establishment of public safety departments where some or all personnel are cross-trained as police officers and firefighters. ICMA has produced a number of reports concerning such merged agencies. Efforts to increase fire service productivity can be met with organized-labor opposition that spills over into the political arena.

This article focuses on the efforts of two fire departments; each has improved its agency's productivity by maximizing the services provided to the respective communities. This has occurred, in large part, because of the aggressive efforts of appointed and elected officials who have sought to establish operations that include constant review of activities focusing on measurement and continuous improvement. Both agencies are located in New York State, which has strong, pro-labor legislation in place.

## Albany, New York

Albany, with a population of just under 100,000, is the capital of New York State. As the seat of state government and the location of most government buildings as well as a number of colleges, universities, hospitals, hotels, businesses, a sporting arena, and nanotechnology and research complexes, the population swells to well over 200,000 on a typical business day. The city also comes alive on weekends and evenings with a year-around schedule of special events, arts, and music.

Albany has a diverse infrastructure of historic buildings, traditional row houses, and new construction. The state government complex—the Empire State Plaza—includes the 40-story Corning Tower, the tallest building in the state outside of New York City. Albany is also located along the Hudson River and includes a busy receiving and shipping port.

The city is served by the Albany Department of Fire and Emergency Services (AFD), a full-time career department composed of 260 firefighters and eight firehouses strategically located throughout the community. The department has eight engine companies (one of which is a paramedic engine), four ladder trucks, one heavy rescue, and three paramedic rigs. In 2006, it responded to nearly 19,000 calls. AFD also is charged with responding to all hazmat calls throughout the 523 square miles of Albany County.

The department performs the types of services typically found in fire agencies, including EMS, a dive team, CPR training for all city employees, use of automatic external defibrillators, and an Explorer program to expose youth to career opportunities in the fire service. This department was one of the first in the United States to provide both basic and advanced life support EMS. All firefighters are required to be emergency medical technicians upon appointment and paramedics within five years of appointment.

AFD has been able to assume additional responsibilities through a combination of solid elected official leadership from Mayor Gerald Jennings, professional management within the fire service, and the vision and leadership of local union officials who agreed to expand responsibilities of their membership. This has resulted in an exceptionally high recognition by the public and elected officials of how varied the contributions of the fire service are. As one former public safety official stated, “It’s hard for the city to say no to the firefighters since they have taken on so many additional responsibilities beyond the traditional roles of firefighters.”

The fire service in Albany dramatically enhances its productivity beyond that of a traditional fire department in the area of code enforcement and building inspections, which is considered to be a major function of the agency. The department, which is responsible for all city code enforcement, includes the codes and buildings division, which is staffed by 30 civilian employees.

In 1996, Albany enacted legislation to require all rental properties, including single-family dwellings that are rented, to be licensed and inspected every 30 months; approximately 30,000 buildings are covered by the ordinance. To accomplish such large numbers of inspections affordably, AFD uses on-duty fire companies. Although some fire departments do conduct company fire inspection of public gathering places such as theaters and shopping centers, the Albany approach to inspections is far more comprehensive than that of the typical fire department.

All firefighters are state certified as code compliance technicians (CCT), permitting them to enforce all safety, building, and fire codes. The department has certified in-house code enforcement trainers, and the state of New York administers the CCT examination. Each day, the Buildings and Inspections Division transmits by computer the required inspections for the day to each of the fire stations.

Fire companies then conduct inspections between fire and EMS calls for service. While on an inspection, companies can interrupt their inspections for emergency responses and then return to the inspection after completing the high-priority call. Between 17,000 and 20,000 inspections are performed annually by department personnel.

Code enforcement not only keeps residents safe; it also enhances the quality of life and gives firefighters knowledge of existing structures. In addition to the inspections of rental property, all nightclubs and off-campus college areas are inspected by code enforcement’s Quality of Life Task Force, which includes a fire department code officer, a building inspector, and a police officer.

These unannounced inspections check for blocked exits, overcrowding, and other life safety hazards. The fire department also is beginning a New York State–mandated commercial inspection program that covers all public assemblies.

The department has recently expanded its efforts by instituting a vacant-building initiative that includes identifying, inventorying, and inspecting all vacant and abandoned structures. Each building is marked with its address, and those sites too hazardous to enter are noted and placed in the computer-aided dispatch (CAD) system to ensure firefighter safety.

A new initiative recently established is the preplanning for possible fire responses for targeted, hazardous buildings. Preplans include placing apparatus; calculating gallons per minute needed; and checking all fire alarm, sprinkler, and standpipe systems. Simultaneously, firefighters check for code violations.

In addition to its other roles, the department is part of the Citizens Protective Services Team that addresses the needs of citizens at risk. The team consists of members of the fire department, the Albany police department, and social and community service agencies. AFD leads the program because, in the majority of cases, it is either the fire service or the police who discover people at risk and then activates the team to provide additional services.

Along with the American Red Cross of Northeastern New York, the department is partnering to prepare Albany’s citizens for emergency situations with the Get Ready–Be Safe program. As part of the program, department members work with neighborhood associations and other community groups to reach Albany’s citizens to teach them how to prepare for fires, power outages, extreme weather, flooding, hazardous waste accidents, terrorism and violence, and pandemic disease.

Simply put, the Albany Department of Fire and Emergency Services has greatly enhanced the agency's productivity by taking on roles far beyond those considered to be traditional fire department responsibilities.

## White Plains, New York

White Plains set up a volunteer fire department in 1851 after several buildings were destroyed by a fire. In 1916, when the village of White Plains became an incorporated city and the department of public safety was established, the fire and police departments were brought together under a single commissioner. The commissioner provided administrative, budgetary, and disciplinary oversight to the department; however, the fire and police bureaus functioned autonomously.

In July 2002, one of this article's coauthors, Frank Straub, was appointed the public safety commissioner in White Plains, replacing his predecessor who had led the department for 30 years. Although fire and police personnel were generally highly qualified and displayed a solid work ethic, they were constrained by senior managers who were resistant to change, comfortable with the status quo, and risk averse.

Despite the city's rapid growth and the post-9/11 domestic preparedness issues, the department persisted in familiar behavior. Performance was low, morale was poor, and tension between labor and management was apparent. Clearly, the department's mind-set and business practices had to change.

During the new commissioner's first year, efforts focused on breaking down barriers, building trust, establishing credibility, identifying key personnel, and mobilizing support for change. Early in the second year, weekly "CompStat" meetings were started; they included both police and fire management personnel. The CompStat approach has been well documented for police departments, but it has rarely been used in the fire service; and it has been used even less frequently in a combined setting with police counterparts.

The White Plains Fire Prevention Bureau, like other public agencies, had been gathering information but was not using it to inform strategic planning or daily operations. A new management team began studying the data that were collected, determining which data were needed, and deciding how the data could be used to inform decision making and operations.

Now, during their weekly meetings, the department's executive, senior, and operations commanders use statistical data to assess the department's performance and operations, identify emerging trends and challenges, devise and implement strategies, and assess their results. Over time, CompStat meetings became the foundation for fire and police collaboration, problem solving, department-wide learning, improved operations, performance, and accountability.

CompStat was the catalyst for change, and it continues to drive critical thinking and innovation in the department. It has brought the expertise of fire and police personnel to the forefront and has been used to address the challenges of a growing city and the ever-expanding demands of public safety. During the past five years, both the Fire Prevention Bureau and the Police Bureau have achieved significant individual and collaborative results. For example, serious crime is down 40 percent and structure fires are down 17 percent.

One example of this collaboration is a multiagency Safe Housing Task Force to ensure safe housing for all city residents and to address quality-of-life issues through coordinated enforcement of building and fire codes. Task force members include the fire, police, building, and law departments; community development; the assessor's office, and the human rights office. To date, the task force has responded to 112 incidents, issued 1,006 violations, collected \$115,800 in court fines, and handed out or installed 151 smoke detectors.

## Prevention

Fire prevention is a critical component of most fire department operations. In White Plains, the Fire Prevention Bureau and the building department meet regularly to review building plans and, upon request, provide information to architects and contractors concerning code requirements. Site, sprinkler, detection, and suppression plans are reviewed; buildings inspected; and equipment tests performed to ensure compliance with state and local fire and building codes.

Currently, 307 building "preplans" are on file. The deputy fire chief on duty carries a hard copy of the preplans in his vehicle, and they are available in the CAD system. Within the coming year, preplans will be available on mobile data terminals (MDTs) being installed in all fire vehicles and apparatus.

Each of the bureau's four groups is assigned to develop building preplans and enter the data into the CAD system. In addition to building preplans, MDTs will also provide incident command protocols, computer-aided management of emergency operations (Cameo), ALOHA and MARPLOT software for hazmat response, and fire codes.

The fire bureau has one cause-and-origin investigator assigned to each of its four groups, one of whom is the supervising senior investigator. One investigator is assigned to fire prevention, and two others are adjunct investigators.

The department engages in a unique community outreach effort that can be seen as the fire service equivalent of some law enforcement community policing efforts. In April 2006, a fire lieutenant proposed the creation of a juvenile fire setter

intervention program. This program provides early identification of fire-setting behavior, assesses the risk of repeat behavior, and uses education to prevent future occurrences.

Through the National Fire Academy, the lieutenant received certification as an intervention specialist and formed a partnership with the Westchester Jewish Community Services of Hartsdale, a nonprofit organization whose mental health professionals provide advice regarding the program's methodology, procedure, and practice. The White Plains Fire Prevention Bureau is the only fire department in the county that has a formal juvenile fire setter intervention program. Since its inception, the program has assisted 16 residents and nine children living outside the city.

There has also been a major commitment to increased training, particularly specialized technical training. Fifty firefighters have been certified to the technician level as defined in the National Fire Protection Association 1670 Standard for Operations and Training for Technical Search and Rescue Incidents (2004), and these firefighters staff the bureau's Technical Rescue Unit, which operates around the clock. The rescue unit will be certified at a FEMA level after it completes the heavy rigging and swift water rescue training courses next fall.

One hundred and eleven firefighters have been certified to the New York State hazardous materials technician–basic level. Four have been certified to advanced hazardous materials technician, and 20 have completed Department of Homeland Security COBRA technical emergency response training in Anniston, Alabama.

The Westchester County career chiefs created the Westchester Special Operations Task Force to respond to hazardous materials, weapons of mass destruction, and technical rescue emergencies. Currently, six squad units have been trained and equipped to provide support and decontamination operations during a hazmat-WMD emergency.

The squads are designed to support the Westchester County fire department and Yonkers fire department hazmat response teams. The White Plains squad will respond with its hazmat-WMD response vehicle staffed with a lieutenant and five firefighters.

The White Plains Fire Prevention Bureau uses the Passport Accountability System developed by the Seattle fire department to set standards of responsibility for all participants on the fire ground. The system is used to identify firefighters and to track their movements during a fire incident within the “span of control” guidelines required by the incident command system (ICS). White Plains was the first Westchester County department to integrate the system, including plain language radio communications, ICS terminology, positions, and incident planning, into its daily operations.

All fire personnel are also trained to ICS 100, 200, and 700. Deputy chiefs are trained to ICS 300 level; the fire chief and deputy chief for special operations are trained to ICS 400 and 800 levels.

Today, the bureau's 170 firefighters, assigned to seven fire stations, provide a full range of prevention, suppression, rescue, and emergency medical services to the city in collaboration with the Police Bureau and contract EMS provider. CompStat has played an important role in transforming a department organized around separate disciplines and cultures into one that is organized and managed for results and rewards risk taking and initiative. CompStat has also provided a catalyst for continuous learning, collaboration, and cooperation as well as restructuring to remove impediments to high performance.

## Tap Resources

The fire departments in Albany and White Plains demonstrate that looking beyond the traditional roles of the fire service and seeking cooperative ventures with law enforcement and other agencies lead to significant opportunities to greatly enhance fire service productivity. In addition, public safety and firefighter safety can be enhanced.

Managers seeking additional resources to address the increasing demands placed upon our communities may want to explore the large and often untapped resources in their existing fire departments.

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