



City of Ann Arbor Fire Department

Quarterly Newsletter
April – August 2009

www.a2gov.org/fire

A note from the National Fire Protection Association

The fire service has many unique management needs. It requires: A distinct team spirit; a need for strong disciplinary influence for concerted and instant reaction on the fireground; a high quality of leadership from its officers; continuous training; an extremely wide range of technical competence; a labor/employer relationship not comparable to that in other occupations; and an ability to deal with the public under both minor and major crisis situations. The fire service is not profit oriented, and it has an obscure productivity pattern. It is a major consumer of tax dollars, uses costly equipment, is heavily dependent upon manpower, and at present, has no satisfactory means of measuring effectiveness of its operation relative to cost. Despite the complexity of these needs, the fire service has generally performed well for many years.





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Back to the basics



What is most important to you in life? Is it your family, friends, or maybe the family dog? Today's economy makes us all reflect about what is really important in life, and many experts agree, it's time to get back to the basics. To many families, this means that they rent a movie instead of going to see a movie or they make pizza instead of ordering out. In terms of your city services, what do you consider most important? What are the basic services you feel are vital to a community regardless of the economy?

As you know, over the past few years, the fire department has faced personnel reductions. These reductions resulted in the closing of a fire station and the elimination of two trucks from duty. The department, however, due to their dedication and hard work, still managed to maintain the same service level to the citizens of Ann Arbor. As further reductions are being considered in order to meet budget targets, one has to consider that there is a point where that scale will be tipped, a point where any more reductions will ultimately affect the service level provided. Some people say that it's worth it given the economic times and others may even say they don't care. How many people actually plan to have a heart attack or plan on their house going up in flames. No one wants to even think about this happening, but if it does happen to you, or your loved ones, every second matters. According to the American Heart Association, if a person is in cardiac arrest and a normal heart rhythm is not restored in minutes, the person will die. In fact, every minute that passes without defibrillation, the odds of survival drop 7 – 10 percent. There is no question that every second is vital to getting that heart beating again. According to the US Fire Service, medical calls have tripled since 1980.

How many personnel reductions can be made without affecting response time? The reality is that staff reductions result in less people available to respond to your emergency, which can result in increased response times. In the 2000/2001 fiscal year (FY), the department was budgeted for 127 full time employees (FTEs), in the upcoming 2011 FY, the department is budgeted for 80. That's nearly a 40 percent decrease! Is it reasonable to expect that the service level and response times will remain the same? Likely not.

When you or a family member is in need of medical attention, every second will feel like a minute and each minute will feel like an hour. The same goes for a fire. Imagine watching your house burn while you wait for firefighters to arrive. Standard response time, *assuming* standard staffing levels, is four minutes for the first crew to arrive. The response may take five minutes, maybe six, or possibly even more. Six minutes can seem like a lifetime, especially if loved ones are trapped inside. Fires can double in size every 30 seconds depending on the conditions of the building and its contents. So a response time increase of even just two minutes can make an incredible difference.

The odds are, at some point in your life, you will have to deal with a medical emergency, a fire, a motor vehicle accident, or some other type of emergency, where you'll need the fire department. You can count on one thing for certain, the members of the Ann Arbor Fire Department will do everything they can to protect your loved ones, your friends, your pets, and your personal belongings. They put their lives on the line every day to help protect yours. They believe you have the right to be protected and that the fire service is not a luxury item that should be scaled back during tough economic times, it's a basic service that citizens deserve.



Roles & responsibilities

The battalion chief (BC) is responsible for all personnel during their 24-hour shift. When there is a first call for a reported structure fire, the BC begins to think about roles and responsibilities and how much manpower will be required to attack the fire.

The responsibilities in a fire include:

1. Rescue : Primary search for victims
2. Protection: Protect surrounding buildings, apartments, vehicles
3. Containment : Contain fire to point of origin
4. Ventilation: Release heat and smoke
5. Overhaul: Find hidden fires that travel through pipes, walls, etc.
6. RIT: Rapid Intervention Team should someone be trapped
7. Safety Officer: Ensure firefighter safety
8. Other responsibilities: Back up hose lines, tagging hydrants to ensure good pressure, finding coverage for other emergency calls
9. Public Information Officer: Someone to speak to the media

Depending on the size of the fire and the amount of involvement, rescue efforts alone can utilize the entire 18 on-duty shift personnel. In a recent apartment fire, the BC initiated a call back for both off-duty shifts, expecting to get at least 25 additional personnel responding, but that response can take up to an hour and help was needed on this fire immediately, so he also initiated mutual aid from Pittsfield Township and City of Ypsilanti fire departments. It takes even more time for their response as they also have to call for mutual aid for someone to cover their areas while they help with Ann Arbor's fire.

When the first units arrive, they accessed the scene and made requests for things that needed to be done. For this incident, the first arriving lieutenant requested roof ventilation which releases heat and smoke from the building and increases visibility assisting with rescue efforts. It can take one or two crews to handle this assignment. The next two crews were needed to attack the fire in the upstairs unit and the fire in the lower unit. More crews were necessary to check the six other units for any people still inside as well as any fire extension. Someone is assigned to ensure utility shut off. Natural gas can ignite, and firefighters could be shocked if the electricity is not turned off.

Unfortunately, the roof of the building collapsed within the first 10 minutes. Modern roof trusses carry heavier loads but are made with light-weight material, so they tend to fail quickly during fire, which causes roof and floor collapse and can entrap firefighters.

Assigning a RIT soon after arrival is important, and due to the roof collapse at this particular fire, there were no additional staff members available for this responsibility. Parts of the building had to be written off as unsaveable and the attack mode changed. This is a hard decision for a BC to make because it's someone's home that is being destroyed; all of their personal belongs are lost and cannot be recovered. Even if they aren't damaged by fire, they will be damaged by smoke and water. The departments cannot tarp and protect personal items as quickly as in the past because there are not enough personnel. It takes three to six personnel to move and use a full pressured fire attack hose. That's one to two crews for just one fire hose. A RIT team needs to consist of at least eight people to rescue a trapped firefighter. Firefighters also go through several air bottles during the fire battle and per standards; after two air bottles are used, they have to go through rehabilitation and hydrate for their safety before they can go back into the line of duty. This reduces staffing levels very quickly.

Although no one was injured at this fire, there were some close calls when the roof collapsed and there were some heartbreaking decisions made. Would it have made a difference to have had more personnel and therefore more fire trucks responding right away? Yes! It takes an incredibly long time to get the appropriate staffing levels necessary to fight a large fire through mutual aid and call backs. If there were initially two more fire trucks with six more crew members and an additional ladder truck, it would increase the chances for success of extinguishment, easing rescue efforts and allowing more personal property to be saved. Timing is everything when it comes to fires; you need a lot of people right away in order to have the best success. This is the amount of people required for the fire referenced.

Rescue	3 per apartment
Protection	3 - 6
Containment	9
Ventilation	9
Overhaul	3 per apartment
RIT	8 minimum
Safety Officer/Accountability	2
Public Information Officer	1
Utilities	3
Staging	1
Rehabilitation	1
Shuttle	1
Other	10

Total: 57



Offensive vs. Defensive

With football season here, you'll often hear terms such as offense and defense. The fire service also uses these terms. When operating in the offensive mode, firefighters push forward into the fire building and extinguish or contain the fire to its point of origin. In defensive, firefighting occurs outside of the building with the hope to contain or hold the fire in the building and prevent it from spreading to other buildings.

Similar to football offense, the team coordinates an attack with multiple players. If any player or fire fighter is not able to complete their assignment, the play fails. In the case of the fire service, if the play fails, the fire takes over the building. When the fire is turned over to the building, a defensive mode of firefighting occurs. Crews are assigned to evacuate the building and direct larger hose lines and water streams from large aerial ladders into the fire from the outside of the building. This happens when there are not enough players to operate at a safe level because the fires have become too big and the building becomes unsafe for offensive firefighting.

A recent example of this occurred in July on the south side of Ann Arbor. The caller reported a cardboard box on fire, and the boxes were located on a balcony of an apartment building. One minute and 30 seconds later, dispatch received multiple calls that the fire was spreading. The first fire truck arrived in four minutes to find heavy fire and smoke coming from the building. Crews attempted to attack the fire in an offensive mode. Other crews arrived three minutes later to assist with the offensive attack. The fire moved so quickly, an audible had to be called to change plays. The fire had extended into the attic space and caused the roof to collapse. Fire crews narrowly escaped and quickly changed to the defensive firefighting mode. This all happened in less than 10 minutes.

Both modes of operation require a lot of team members to be on the scene quickly! Both require a quick and timely coordination of all members to be successful. If any of the team members are missing or arriving late to the play, most likely it will fail and the outcome will be serious. Other factors to consider when planning the mode of attack are: response time (time of travel), weather (hot, cold), time of day, building occupancy and building construction. Old buildings last longer under fire, but fire travels fast into other areas because there are no firewalls/fire stops. New construction has firewalls/fire stops, but the building integrity is jeopardized more quickly because the materials used are lighter and smaller as compared to older construction and therefore tend to fail more quickly.

When fire fighters arrive, they use their experience and training to decide what mode or play to put into motion. An offensive mode is preferred because the outcome is usually better for the occupants/home owners. Occupants and their personal belongings have a better chance of survival when operating in this mode as compared to the defensive mode when the entire building or buildings are typically considered a loss.

Our goal here at the Ann Arbor Fire Department is the same as any football team and that is to WIN; to contain the fire; to minimize loss; and to prevent any injuries and go home safe at the end of the day.

Union Corner

Local 693 remains committed to the process of negotiation during difficult economic times. Our executive board is responsible for the well being of each and every member of our local and realizes the potential impact layoffs would have on our youngest members and their growing families. We also remain committed to the safety of our citizens. The devastating impact of layoffs and station closures would force our department to operate in a way that will put our citizens at greater risk should these cutbacks come to fruition. We will continue to work with the city to devise strategies to maintain our current staffing level that provides very basic service. We welcome the opportunity to have input and provide feedback to the city in an effort to protect citizen safety and the safety of our firefighters.

-Matthew Schroeder, President Local 693



The future of the fire department?

