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Shrewsbury Fire Department



Staffing & Resource Deployment Report FY 2011

The following report has been prepared for Shrewsbury Town Government, the Board of Selectmen, the Finance Committee and the citizens of the Town of Shrewsbury by
Fire Chief James M. Vuona, MPA.

Reviewed and Accepted by the Fire Captains of the Shrewsbury Fire Department.

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Fire Department Operations: Overview

I: Executive Summary

On the morning of May 17th, 2010, The Town of Shrewsbury swore in a new Fire Chief to assume the duties and responsibilities of this office. On evening of May 17th, 2010 Town Meeting approved a new fiscal 2011 budget. This approval resulted in the reduction of the fire department staffing level by one (1) position, as stated in FY11 Town Warrant “funding for (4) Captains and (31) Firefighters (reduction of 1)”. The Fire Chief was directed to prepare to work in FY 2011 with further reductions in staffing beginning July 1st, 2010. Let it be noted that the current staffing level **does not** meet any nationally recognized standards for apparatus manning or fire ground operations. (REF. NFPA 1500 – NFPA 1710 and 1720). It is the position of the office of the Fire Chief to oppose any staff reductions as it will adversely affect our ability to provide for public safety as defined in our mission statement.

This reduction in staffing may not seem to be a significant change in service levels to those unfamiliar with fire department operations. However, it represents a substantial downgrade in the fire departments ability to safely deliver effective fire and emergency response services to the Town of Shrewsbury. A recent U.S. Department of Commerce’s National Institute of Standards and Technology (NIST- April 28th, 2010) study demonstrated that the size of fire fighting crews and response times have a substantial effect on firefighters’ ability to protect life and property. Further, the study states “two-person crews **cannot** complete essential fireground tasks in time to rescue occupants without subjecting either firefighters or occupants to an increasingly hazardous atmosphere”.

In other words, the fire department is already understaffed. Further reductions in staffing levels only widen that gap and increase the public risk. We have significantly less manpower, supervision and staff positions than other communities of a similar demographic and/or population. We have no assistant or deputy fire chiefs, no dedicated fire prevention or training officers and no supervisors in outlying stations. Chief Robert Gaucher referred to the current fire department structure as a “bare bones operation” and was opposed to any staffing reductions, station closures or “removal of firefighters from the fire stations”. As an administrator of public safety, I am in full agreement with Chief Gaucher’s assessment of our current fire department operational structure. It is critical to the operation of this department to not work below eight (8) firefighters per shift.

The current financial climate has dictated tough choices for many fire departments and municipalities throughout the Commonwealth of Massachusetts (and beyond). This report outlines the operations of the Shrewsbury Fire Department, its mission, manpower, resource deployment, equipment, fiscal options and recommendations. Further, there will be discussion on how the fire department budget cuts affect public safety, essential services and the overall well being of the firefighters. In addition, there is potential for litigation in regards to violations of U.S. Homeland Security Presidential Directive #5 (NIMS-ICS). (REF: Donna Prince L. v. Waters). There could also be adverse grading on the towns Insurance Services Offices (ISO) Rating. A negative grading change would potentially increase insurance rates, particularly so on commercial properties. The focus of this document will be on minimizing budgetary shortfalls without a reduction in already low staffing levels.

II. The Mission

To begin we must first understand the mission and purpose of the Shrewsbury Fire Department. Our mission statement reads as follows; **“caring for the Town of Shrewsbury; residents, guests and property through promoting public education, fire prevention and inspection, as well as mitigating any emergency situation presented to us”**. With this simple statement we have identified our customer base and outlined “the fundamental and unique purpose of the organization” as defined by International Fire Service Training Association Chief Officer (Second Edition) text. In general, the mission of the fire service has always been to protect life and property. Emergency response priorities are **always** in this order; **life safety, incident stabilization and property conservation**. This also includes an officer’s first responsibility which is the protection of the people under his/her command.

The Town of Shrewsbury is a mostly residential community (near 90%) with a population of approximately 35,000 people. The average population growth rate has remained steady at just under 5% per year. Its average annual daily traffic (AADT) exceeds 640,000 vehicles per day, including over 82,000 commercial trucks. On a twenty-four (24) hour basis under our current configuration, we provide a compliment of eight (8) firefighters and one (1) Fire Captain. That is a total of nine (9) men on duty to provide for the educational, fire prevention, inspectional and emergency response needs of over a half million people per day. We are also expected to protect over 4.7 billion dollars in overall town assets. The Shrewsbury Fire Department not only serves a large population base, but also a substantial land area (nearly 21 sq. miles). We continue to strive to accomplish our mission, in spite of being understaffed and thinly distributed among three (3) fire stations.

In addition, we work to meet the goals and directives set forth by the U.S. Department of Homeland Security. That includes; U.S.H.S. Presidential Directives, The National Interagency Incident Management System (NIMS) and the Sixteen (16) Firefighter Life Safety Initiatives. The fire department must also adhere to the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) standard for respiratory protection. This standard is commonly referred to as the ‘Two-in/Two-out Regulation’ for firefighters operating in dangerous or life threatening atmospheres.

III. Manpower and Current Staffing Level

Next, we must have a basic understanding of the Shrewsbury Fire Department itself, as it is currently constituted (FY 2010). The Shrewsbury Fire Department consists of a Fire Chief, part-time Secretary, thirty-two (32) Firefighters and four (4) Fire Captains. There are four (4) shifts of eight (8) firefighters and one (1) fire officer to provide 24 hour coverage to the town. The men work from three (3) fire stations strategically located throughout the town.

Fire Headquarters is located in the center of town at 11 Church Road. Headquarters serves the mostly residential north section of town and has quick access to Routes 140 and 290. Station 2 is located at 11 Harrington Avenue and serves the Route 9, Lake Quinsigamond area as well as the commercial business district. Station 2 also has quick access to Route 290. Station 3 is located at 20 Centech Boulevard and serves the south side of town along the Route 20 corridor from Worcester to Northboro. Two (2) firefighters are assigned to both Station 2 and Station 3. There is also a reserve force of twelve (12) on-call firefighters that respond to fires if available.

At full strength, four (4) firefighters and one (1) Captain are assigned to headquarters. One of the firefighters is assigned to headquarters as a fire dispatcher. However, other duties include; monitoring emergency radio transmissions, processing permit applications, data entry, public assistance as well as providing building security and maintenance functions. On nights, weekends and holidays and all other off hours, the fire dispatcher answers calls and notifies personnel of all light department (SELCO) emergencies. The fire department also handles emergency calls for the following municipal departments; public buildings, highway and water - sewer.

In the event of sickness, vacation or other time off, the shift is reduced from nine (9) men down to eight (8). Working below this level has been discontinued since 2004, due to population growth, the acceptance of the Shrewsbury Fire Department Strategic Plan (2002-2012) and the adoption of the federally mandated National Incident Management System (NIMS-2004). This is in accordance with U.S., Homeland Security Presidential Directive – # 5, *Management of Domestic Incidents*.

However, with the reduction in local aid and tough economic times, the Fire Chief's office has been tasked to consider options for working down to seven (7) men per shift. This configuration will place severe operational strain on the shift and its only officer. Additionally, it raises issues concerning both firefighter safety and public safety. Having a minimum complement of thirty-two (32) firefighters and four (4) Captains is critical to maintaining the basic emergency services that are currently being provided. Reductions below the aforementioned eight (8) Firefighters and one (1) Captain or nine (9) men per shift, represents a significant downgrade in the fire departments ability to safely provide emergency services to the town. More succinctly, 'working down' below eight (8) men per shift means critical minimum safety and staffing needs for fire stations and equipment cannot be maintained. Either stations will be closed or equipment will go out of service (unmanned) or in some cases both. Captains become workers and cannot supervise emergency operations. This creates a greater danger to firefighters and the general public.

Herein lies the problem; these shortfalls will leave the fire department incapable of safely responding and managing emergencies to the current acceptable level of service. Thus, there is a marked increase in the potential for injury, death and property loss. These potential losses leave the town exposed to potential litigation expenses. More importantly, it diminishes our ability to respond to and help the people we are sworn to protect.

IV. Resource Deployment and Equipment

In 2002, the Town of Shrewsbury made the long term commitment to provide a level of emergency service to the community by investing in new modern fire department facilities. The department has a new Fire Headquarters, a new Station 3 and a renovated Station 2. The Department has also been provided with excellent quality equipment over the years. The town has given the fire department the tools to deliver top notch emergency response service. We have also been provided with the capital resources to maintain the buildings and equipment to the best of our ability.

In the last several years there have been investments in new 'state of the art' fire apparatus (i.e.: Tower 1 and New Engine 3). These vehicles are equipped with the latest hydraulic rescue tools ('Jaws of Life'), foam systems, suppression systems and the best water application appliances available. The 2007 KME Tower 1 (ladder truck) is an extraordinary piece of fire fighting equipment. The New Engine 3 is a 2010 KME Custom Rescue Pumper which should be the standard prototype for the future. It is a multifunctional apparatus designed to mitigate the emergency response needs of today and the future. The total investment in these two (2) vehicles exceeded 1.2 million dollars.

It should be noted however, that these vehicles are much longer, taller and heavier than their predecessors. The apparatus is also far more complicated to operate than older more primitive models. Furthermore, these vehicles and apparatus can not operate on their own. They require highly trained and qualified personnel to operate them. These machines also need a minimum number of personnel to safely and effectively operate them.

The aerial apparatus (Tower 1) that we currently employ is far more sophisticated and complex in nature than old Aerial 1 it replaced. Tower 1 (49 ft. long and weighing 80,000 lbs.) requires more personnel to deploy, maneuver and effectively operate. Tower 1 weighs over three (3) times as much as vehicle it replaced. The new ladder truck is designed to respond with six (6) firefighters on it. In most cases we respond with half that amount; one (1) Captain, one (1) firefighter and one (1) driver/operator. Two (2) people (a Captain and a firefighter) cannot be expected to safely or effectively operate this vehicle in an emergency situation. It is confusing why the town has invested in these resources (buildings and apparatus) if they are not going to provide the personnel to staff them.

V. Staffing Options: FY 2011

My recommendations are listed in descending order as follows: Option A (most desirable) through Option F (least desirable). These recommendations are based on the simple risk management principles accepted across the country and within the fire service. They are based on the following priorities; Life Safety, Incident Stabilization and Property Conservation.

Option A:

**36 Fire Personnel: 9 per shift – back fill to 8 per shift
(Current Service Level)**

Synopsis:

Though our current ranks are lean (below all recognized standards), we have adapted to our situation. We have safely, effectively and consistently delivered a high level of emergency response and risk management service to the community. By being proactive through education and prevention efforts, we are successfully meeting the demands of the community and protecting our assets. We are effectively mitigating the emergency response needs of the Town of Shrewsbury – despite our understaffing issues.

Pros:

- Maintains highest level of service currently provided to town.
- Maintains highest number of available emergency responders.
- Current supervisory staff maintained.
- Incident Management System maintained.
- Supports Fire Prevention effort.
- Supports Public Education effort.

Cons:

- Requires increase in revenue to sustain.

Recommendation: **Highly Recommended**

V. Staffing Options: FY 2011 (continued)

Option B:

**36 Authorized Fire Personnel: Working down to 32 Fire Personnel
8 per shift - back fill to 8 per shift**

Synopsis:

This configuration maintains the present level of service for approximately 80% of the time. The lowered level of service, response and liability for the town is negligible. Money saved through cost control measures and the reduction of positions and benefits through attrition would be used to pay overtime to maintain a minimum safe staffing level. Barring unforeseen circumstances, FY11 budget projections should fit within the existing appropriation amount approved by town meeting. I believe this is what town meeting members thought they had voted for, not additionally reduced unsafe staffing levels.

Pros:

- Maintains a minimum level of staffing (8 per shift) for emergency response to the town.
- Maintains a high level of safety for emergency responders.
- All services and apparatus maintained.
- Supervisory staff maintained.
- Incident Management System maintained.
- Supports Fire Prevention efforts.
- Supports Public Education efforts.
- Town saves money in salaries and benefits to off set overtime expenses.
- Minimal political ramifications.
- Fiscally responsible.

Cons:

- Potentially requires increased revenue to sustain service level currently provided near 80% of the time.
- Fewer personnel on duty 20% of the time.
- There will be a moderate increase in the potential injury to firefighters and to the general public.
- Moderate increase in liability exposure to town.
- Potential Insurance Rate Increase (ISO Rating)

Recommendation: Acceptable Short-Term Option

V. Staffing Options: FY 2011 (continued)

Options C -F:

**32 Fire Personnel: Working down to 28 Fire Personnel
8 per shift - working down to 7 per shift**

Synopsis: General Overview

As life safety is the primary concern in the risk management equation, these options represent the greatest risk for injury and death to the firefighters and the public at large. Going back to working seven (7) personnel per shift will set the fire department back to the levels of the early 1970's. In 1970, the population of Shrewsbury was 19,000 people, today it is nearly 35,000. The deployment back then was five (5) fire personnel at HQ, two (2) firefighters at Station 2 and one (1) firefighter at Station 3.

There is no possible configuration of seven (7) fire personnel that can adequately protect the Town of Shrewsbury in 2010. If the town chooses to dictate seven (7) men per shift – they will be acting against the recommendation of the office of the Fire Chief. Any combination of seven (7) per shift poses a significant downgrade in safety and service to the townspeople. This simply can not be done without sacrificing public safety. As Fire Chief and a sworn administrator of public safety, I feel it is my duty to oppose these options as an unacceptable risk and a danger to the community.

Pros:

- Fits budget projection.
- Potential savings in utilities.

Cons:

- Fire Stations closed or fire personnel removed.
- Public safety compromised.
- Injuries and risk to fire personnel increased.
- Apparatus and/or Rescue equipment placed Out of Service.
- Headquarters Station routinely abandoned in emergencies.
- Frequent recall of off-duty personnel.
- No one to answer emergency phones at Fire HQ.
- No one to monitor emergency radio transmissions.
- Supervision decreased and at times eliminated.
- Incident Management System compromised.
- Non-compliance with U.S.H.S. NIMS – Presidential Directive #5.
- Fire Prevention and inspection activity curtailed.
- Public Education / Station tours - Discontinued (or as Staffing Allows).
- Public Use of the Fire Station Classroom – Eliminated/Reduced
- Potential increase in insurance rates (ISO Rating)

Recommendation: Not Recommended / Unsafe / Poor Risk Management

V. Staffing Options: FY 2011 (continued)

Option C:

Close Station 3 (Centech Blvd.) on a per shift basis 32 Fire Personnel - back fill to 7 per shift

Synopsis:

Station 3 (Centech Blvd.) currently represents approximately 18% of the fire departments overall call volume (9% medical calls, 9% non-medical). The ambulance may potentially be moved to this location to help cover medical response during to this area. This fire station is remotely located in the slowest response district in town. If we want to save money and go by the numbers it makes sense to close this station as needed to fit the budgetary constraints. However, closing stations or “removing firefighters” from fire stations is unpopular with the public and a waste of the town’s investments; i.e. Engine 3 and the Centech fire station.

Pros:

- Meets budget projection.
- Remaining available companies staffed at a higher level.
- Safer and more effective initial response.
- Potential reduction in injuries to firefighters and the public.
- Supervisory staff maintained.
- Incident Management System maintained.
- NIMS Compliant.
- Least adverse affect on community for delivering emergency services.
- Saves money in the short term.

Cons:

- Increased response times.
- Fewer personnel available to perform required tasks at fires and emergencies.
- Frequent recall of off duty personnel (Overtime costs).
- Less apparatus available to respond to calls for service.
- New Engine 3 – Out of Service / No Manpower.
- Inability to respond to more than two (2) simultaneous calls.
- Potential increase in insurance rates (ISO Rating).
- Potential for litigation.
- Potential political ramifications.

Recommendation: Not Recommended

V. Staffing Options: FY 2011 (continued)

**Option D:
Close Station 2 (Harrington Ave.) on a per shift basis
32 Fire Personnel - back fill to 7 per shift**

Synopsis:

Station 2 is the busiest station for non-medical calls. That is; Fires, Motor Vehicle Accidents, Alarms, Hazardous Materials Response, Water and Ice Rescue. This station also responds to nearly 40% of the towns total medical calls. This is a very busy station in a densely populated, high traffic area. Engine 2 has rapid access to Route 290 where many of our most serious automobile crashes occur.

It is also in the heart of the commercial business district of town. The elderly high-rise at 36 North Quinsigamond Avenue is less than two (2) minutes from the station. The hovercraft is garaged at Station 2 and responds to water and ice emergencies on Lake Quinsigamond and several area ponds. Because of traffic issues it is very difficult to respond into this geographic area for outside of the immediate area. Closing this station or “removing firefighters” is a very risky and dangerous proposition.

Pros:

- Fits budget projection.
- Remaining available companies staffed at a higher level and more effective for emergency response.
- Potential reduction in injuries to firefighters.
- Supervisory staff maintained.
- Incident Management System maintained.
- NIMS Compliant.
- Saves money in the short term.

Cons:

- Engine 2 – Out of Service/ No Manpower.
- Less apparatus available to respond to calls for service.
- Increased response times.
- Difficult area to access due to heavy traffic.
- Fewer personnel available to perform required tasks at fires and emergencies.
- Frequent recall of off duty personnel (Overtime costs).
- Business district unprotected.
- Hovercraft – Out of service or responding from distant location.
- Water and Ice Rescue – limited or delayed.
- Route 290 – auto accident response eliminated or delayed.
- Inability to respond to more than two (2) simultaneous calls.
- Potential increased insurance rates (ISO Rating).
- Potential for litigation.
- Potential political ramifications.

Recommendation: Not Recommended (Poor Risk Management)

V. Staffing Options: FY 2011 (continued)

Option E: Redeploy Station 3 Personnel 32 Fire Personnel - back fill to 7 per shift

Synopsis:

As previously stated, Station 3 (Centech Blvd.) currently represents approximately 18% of the fire departments overall call volume. During the dayshift Engine 3 personnel would be redeployed to fire headquarters to assist short staffed crew with daily operations. This would include inspections, equipment maintenance, public education, station tours, building maintenance and response. The ambulance could be relocated to Station 3 during the daytime hours to help reduce overall response times on medical runs. On the nightshift Engine 3 would return to Station 3 and provide fire protection to the south end of town when people are most likely to be at home and/or sleeping. Fire headquarters would be staffed with a Captain and two (2) firefighters at night, Tower 1 would be placed out of service until sufficient manpower is recalled to safely operate and deploy it.

Pros:

- Fits budget projection.
- Stations remain open during evening hours.
- Engine 3 remains in service.
- Less utilized equipment and staff more effectively deployed (dayshift).
- Station 3 staffed during the evening hours when fires are most likely to occur and when people are most likely to be at home sleeping.
- Helps support public education and fire prevention efforts.
- Gives Captain increased flexibility and equipment options.
- Saves money in the short term.

Cons:

- Increased response times during dayshifts.
- Fewer total personnel (7 per shift) available to perform required tasks for fires and other emergencies.
- Tower 1 – Out of Service (insufficient personnel to safely operate during nightshifts).
- Less equipment available to respond to calls for service.
- Frequent recall of off duty personnel (Overtime costs).
- Supervision decreased and often times eliminated.
- Incident Management System compromised.
- Non-compliant with NIMS – Presidential Directive #5.
- Ineligibility for federal grants and funding.
- Increased exposure to liability for town.
- Potential increase in insurance rates (ISO Rating).
- Potential political ramifications.

Recommendation: Not Recommended (Unsafe to Personnel / Poor Risk Management)

V. Staffing Options: FY 2011 (continued)

Option F: Reduced Staffing at Fire Headquarters 32 Fire Personnel - back fill to 7 per shift

Synopsis:

This configuration of reduced staff at headquarters is the poorest of options for many reasons. First and foremost, it restricts the Fire Captain's ability to direct an emergency incident as he must become a hands-on worker. It does not allow him to account for the safety of the men under his supervision. It also leaves a shortfall of men to perform essential tasks required at a fire. There would not be enough personnel to operate equipment. Tower 1 would be placed 'Out of Service' due to insufficient personnel to safely or effectively operate the apparatus. Shortfalls in manpower would require frequent recalls of off duty personnel and trigger contractual overtime costs (3 Hr. Min. OT Call Back).

In the past this configuration resulted in the abandonment of fire headquarters. This leaves no one at the HQ Station to monitor emergency transmissions, answer fire alarm telephone calls or the 911 phone. Fire Prevention and inspection services are severely restricted as the Captain is 'married' to the truck. Fire education and tours of the HQ Station would be restricted or discontinued. This option represents the greatest risk to firefighters and the community as reduced staffing at headquarters severely handicaps the fire departments ability to supervise and manage any emergency incident.

Pros:

- Meets budget projection.
- Stations stay open.

Cons:

- Fire personnel and public safety compromised.
- Injury potential to fire personnel increased.
- Tower 1 – Out of service / lack of staffing.
- Station abandoned in emergencies.
- Frequent recall of off duty personnel.
- No one to answer emergency phones at Fire HQ.
- No one to monitor emergency radio transmissions.
- Supervision decreased and often times eliminated.
- Incident Management System compromised.
- Non-compliant with NIMS - Presidential Directive #5.
- Ineligibility for grants and funding.
- Fire prevention and inspection activity curtailed.
- Public education / Station tours – Reduced/Discontinued.
- Public Use of the Fire Station Classroom – Eliminated/Reduced.
- Potential increase in insurance rates (ISO Rating).

Recommendation: Not Recommended (Unsafe to Personnel / Poor Risk Management)

VI. Historical Perspective

In 2010, the calls for service are steadily increasing. When I joined the Fire Department in 1993, we were responding to less than 1500 calls per year. The annual runs are now approaching 3500 calls per year (55% increase). The town has grown substantially and that has put a greater demand on the day to day emergency and non-emergency services provided by the fire department. The population growth and increase in calls for service are outstripping our resources. On many occasions we are responding to multiple calls for service at the same time. Further reductions in staffing will force the only officer on shift to become involved as a hands-on worker (firefighter). At that point he ceases to be a supervisor and cannot provide for the safety of his crew or the general public. The Incident Management System (as prescribed by the Federal Government – U.S.H.S. Presidential Directive #5) is no longer operationally or functionally intact. This presents the opportunity for injury and negligence on the part of the town. It will also preclude the town from receiving grant money and federal funding.

Working down to 28 men (Captain and six (6) firefighters) on duty per shift will bring this department down to the levels of the early 1970's. The secretary has been reduced to a part-time position. In 1975, the fire department was supplemented with a 25 person 'on-call' fire group. It was mostly made up of town employees from other departments that were allowed to respond to fires and other emergencies. As of today, we have 12 'on-call' firefighters of which two (2) work for the town. Neither town employee is allowed to leave his current position to assist the fire department during times of emergency.

If we reduce the current minimum staffing below eight (8) per shift, we will have the smallest fire department configuration in forty (40) years. The 1975 State Census reported the population of Shrewsbury was 21,965 people. The Fire Department responded to 1206 calls for service, of which 261 were medical calls. In 1975 the Fire Department was staffed with 28 Firefighters and 4 Captains. The Town Valuation in 1975 was 163 million dollars, today it is over 4.7 billion dollars.

In 2010, (35 years later) the population in Shrewsbury (by the U.S. Census) is expected to reach or surpass 35,000 people. In the past two (2) years (2008 and 2009) the Fire Department responded to an average of 3,311 calls for service per year. Of those calls, over 2,100 per year were medical calls. Over the past five years, the fire department medical call volume has increased at an average of approximately 10 percent per year. In addition, we are still experiencing and promoting growth for the town. The town is in the process of adding a hotel, an apartment complex, assisted living facilities and other commercial businesses. Permits for new housing start ups are also on the rise. We must accept the fact that; Shrewsbury is no longer a small town, but rather it is akin to a small city. Shrewsbury is the largest town in Worcester County and continues to expand. At the same time, we are being told that the fire department must contract. Again; the town grows – but the fire department shrinks. The emergency response system is being designed for failure.

During his presentation to the finance committee, Chief Robert Gaucher referenced the 1976 Town Report. He quoted then Fire Chief Lawrence Kershaw who stated “Eventually **someone is going to get hurt because of lack of help.** The town has provided the tools (the men have the expertise to do the job), **now we need the help** to utilize the tools provided.” Never has that statement been more true than today. We can only hope we do not suffer a catastrophic loss and the inevitable litigation that would follow if we fail to deliver the essential (and expected) emergency response services.

VI. Historical Perspective (continued)

In 1982, the town commissioned FIREPRO Incorporated, (of Wellesley, MA) to do a resource deployment study for the Shrewsbury Fire Department. The FIREPRO study recommended nine (9) firefighters on duty with a minimum of three (3) firefighters at Station 2. The study also recommended maintaining “a three (3) man attack team at headquarters” which did not include the dispatcher. Additionally, FIREPRO recommended the department be “supplemented with five (5) full-time town employees” that would “be permitted to initially respond when a telephone alarm for a fire reported in a building or a major fire incident”. That is a total of thirteen (13) firefighters and one (1) dispatcher to respond to a first alarm. In 1982, when the population was 22,000 people we were told we needed more firefighters on duty in our fire stations. In 2010, we are being asked to work with less than half that amount. That is a total of six (6) and one (1) fire dispatcher. We have no other town employees available to help us during daytime hours. **By current National Fire Protection Association (NFPA) standards we should have a compliment of fifty-two (52) firefighters. That equates to a minimum of thirteen (13) firefighters per shift.**

For many years the fire department has been asked to do more – with less. And for years it has done just that. The problem now is we have reached the point of doing less with less. The last time we worked down to seven (7) man shifts was in 2003. As pointed out in the Shrewsbury Fire Department Strategic Plan; 2002-2012, the configuration of working down to seven (7) men per shift was not working. We were not meeting minimum staffing or supervision needs for emergency operations or administrative duties. Fire Prevention was suffering from the short handedness of the operation. At the time, it was determined that we needed more firefighters. In 2003, the fire department responded to 2,453 calls for service. Five years later in 2008 we responded to 3,354 calls for service. An increase of over 900 calls for service or an increase of thirty-seven percent (37%).

The strategic plan also pointed out that Shrewsbury Fire Department’s Incident Command System was not meeting the national and federal standards. It is stated; the “Occupational Safety and Health Administration (OSHA), Superfund Awareness Reauthorization Act (SARA Title III), and the National Fire Protection Association (NFPA) all include formal incident command as an important part of the standards issued for fire departments to benchmark against”. Now more than ever, we are being held to the highest standards for incident management (U.S. Homeland Security – NIMS), yet we are being asked to do so - with less manpower.

In 2001, I was asked as a Union Representative to help create and implement a strategic plan for the future to protect the town. Now I am being asked to abandon or dismantle it. The system was breaking down in 2003 and a reduction in staffing all but guarantees it will break down again in the future.

Over the last several decades the hazards have increased; fires burn hotter and faster due to the abundance of synthetic fibers, plastics and other poly-carbons. Construction materials are lighter in weight, burn quicker and collapse faster. Fires, natural disasters, chemical spills, automobile accidents, terrorism and medical emergencies are all predictable events. We know these events are going to occur on a daily basis. The frequency of events is also increasing. The only parts we don’t know are; when, where and how severe are these events going to be.

VI. Historical Perspective (continued)

The question the town government has to answer is not; if these emergencies are going to occur? It is a given that they will. But rather, the bigger question is; when these emergencies do occur; does the town want to have the equipment and manpower available to mitigate these emergencies? By reducing staffing down to seven (7) per shift on the fire department - I can only conclude that the answer is **no**. What does not make sense to me is that we have invested our limited resources into the facilities and equipment to protect the town. Yet at the same time, we are not investing in our greatest assets – the firefighters who put their lives on the line for the community. This also has a ripple effect in the area of fire department morale. It creates a negative and difficult work environment. Firefighter safety (and public safety in general) is perceived as the lowest of priorities by the town government. In addition, we are setting up the fire department for failure and leaving the town exposed to tremendous loss and potential tragedy.

VII. Closing Statement

As an administrator of public safety and risk management specialist, I highly recommend Option A. However, I realize we are facing fiscal constraints. As Fire Chief, I regard Option B as a short-term solution that is financially feasible and fiscally responsible while still providing an acceptable level of service to the community. I believe this is the level of service the townspeople have come to expect. Further, I believe this is the level of service (8 per shift minimum) that elected officials voted to approve at town meeting.

In 1987, town meeting voted to authorize and fund the fire department to nine (9) men per shift. This motion was brought forth and supported unanimously by the board of selectman. However, the funding for the positions was eliminated through attrition over the following years. This decision was made in opposition to what town meeting had voted and approved over twenty (20) years ago. For FY11, I do not believe it was the intent of town meeting members to reduce the fire department down to seven (7) men per shift. It is certainly not in the best interests of safety for the residents or firefighters of the Town of Shrewsbury.

In regards to Option's C-F, I feel that it would be irresponsible on my part to recommend any of these options as I believe they represent unreasonable risk and danger to the community. Further, I believe the town would leave itself open to potential litigation or the prospect of unmitigated emergencies. In a nutshell, working down to seven (7) men per shift sets the stage for a disaster. Seven (7) firefighters per shift just does not work in 2010 and I fear this practice will eventually result in someone getting hurt or ultimately something worse.

I am available to discuss these issues with any and all parties, individuals or stakeholders.

Respectfully,

James M. Vuona, MPA
Fire Chief
Town of Shrewsbury

Resources Cited

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Annual Average Daily Traffic (AADT)
<http://www.wordlingo.com>

Additional:

Numerous Shrewsbury Annual Town Reports and Warrants were referenced for population, financial and statistical data that contributed to this report. Information from Chief Robert L. Gaucher’s report to the finance committee was also used.

Appendix: Support Documentation

Shrewsbury Fire Department: Calls for Service 1998 - 2009

| Type of Call | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Building Fires | 78 | 85 | 76 | 71 | 106 | 95 |
| Building Alarms | 292 | 276 | 281 | 311 | 382 | 387 |
| Vehicle Fires | 51 | 62 | 43 | 29 | 24 | 67 |
| Vehicle Accidents | 282 | 336 | 308 | 217 | 245 | N/A |
| Medical response | 1237 | 1475 | 1640 | 1332 | 1425 | 1463 |
| Outside Fires | 46 | 84 | 51 | 72 | 44 | 36 |
| HazMat Incident | 42 | 33 | 28 | 77 | 66 | 83 |
| Complaints | 33 | 31 | 31 | 20 | 14 | 23 |
| Mutual Aid Given | 8 | 15 | 9 | 14 | 15 | 17 |
| Ice/Water Rescues | 10 | 9 | 10 | 13 | 25 | 7 |
| Bomb Threats | 1 | 4 | 2 | 3 | 0 | 2 |
| C O Alarms | 57 | 39 | 4 | 25 | 29 | 23 |
| Investigations/GI | 46 | 39 | 41 | 46 | 48 | 37 |
| All Others | 171 | 179 | 255 | 262 | 195 | 167 |
| Total Call Volume | 2354 | 2667 | 2779 | 2492 | 2618 | 2453 |

| Type of Call | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Building Fires | 69 | 65 | 66 | 73 | 60 | 86 |
| Building Alarms | 362 | 364 | 297 | 347 | 421 | 330 |
| Vehicle Fires | 22 | N/A | 18 | 16 | 23 | 16 |
| Vehicle Accidents | 223 | 183 | 165 | 210 | 191 | 165 |
| Medical response | 1395 | 1360 | 1501 | 1777 | 2070 | 2198 |
| Outside Fires | 40 | 40 | 53 | 52 | 64 | 58 |
| HazMat Incident | 82 | 36 | 69 | 23 | 59 | 19 |
| Complaints | 45 | 19 | 38 | 32 | 15 | 28 |
| Mutual Aid Given | 5 | 5 | 4 | 13 | 8 | 6 |
| Ice/Water Rescues | 9 | 2 | 4 | 15 | 6 | 8 |
| Bomb Threats | 0 | 0 | 1 | 0 | 0 | 0 |
| C O Alarms | 19 | 45 | 69 | 42 | 121 | 76 |
| Investigations/GI | 33 | 33 | 53 | 48 | 43 | 40 |
| All Others | 272 | 426 | 337 | 397 | 273 | 238 |
| Total Call Volume | 2576 | 2578 | 2675 | 3045 | 3354 | 3268 |

Footnote: In 1998 the Shrewsbury Fire Department responded to 2,354 calls for service. Ten years later in 2008 the fire department responded to 3,354 calls for service. That is an increase of 1000 calls or approximately 34%.

Appendix: Support Documentation (continued)

Shrewsbury Fire Department Incidents by Station Response District 2009

January 1, 2009 – December 31, 2009

| District | Number of Incidents | Percent of Total Incidents |
|---------------|---------------------|----------------------------|
| Headquarters | 1,460 | 44% |
| Station 2 | 1,236 | 38% |
| Station 3 | 572 | 18% |
| Total: | 3,268 | +/- 1% |

| District | Non-Medical Incidents | Percent of Total Incidents |
|---------------|-----------------------|----------------------------|
| Headquarters | 411 | 38% |
| Station 2 | 414 | 39% |
| Station 3 | 245 | 23% |
| Total: | 1,070 | +/- 1% |

Above is a break down of incidents in each station's district. In 2009, there were a total of 3,268 incidents. Of those 3,268 incidents, 2,198 were medical calls and 1,070 were non-medical calls. 44% of the total incidents were in Headquarters' district, 38% of the total incidents were in Station 2's district, 18% of the total incidents were in Station 3's district.

The percentage of incidents in each station's district differs greatly when comparing non-medical calls to medical emergency incidents. 39% of non-medical incidents were in Station 2's district, 38% of non-medical calls were in Headquarters' district, and 23% of non-medical incidents were in Station 3's district.

In conclusion, in 2009, the greatest number of total incidents was in Headquarters' district, followed by Station 2 and Station 3 respectively. However, **the greatest number of non-medical incidents was in Station 2's district**, followed by Headquarters and Station 3 respectively.

Note: Due to shortfalls in our reporting software, I am unable to give a total number of runs for each company. Our software does not allow for tracking multiple company responses. For example: if Tower 1, Engine 2, Engine 3 and Car 30 respond to a fire in Headquarters' district, the computer only tracks this as an incident for Headquarters, where as a company also responded from Station 2 and Station 3.

Submitted by:
FF Adam Towner (ITM)
February 2010

Appendix: Support Documentation (continued)

Shrewsbury Fire Department Incidents by Station Response District 2008

January 1, 2008 – December 31, 2008

| District | Number of Incidents | Percent of Total Incidents |
|---------------|---------------------|----------------------------|
| Headquarters | 1415 | 42% |
| Station 2 | 1352 | 40% |
| Station 3 | 587 | 18% |
| Total: | 3354 | +/- 1% |

| District | Non-Medical Calls | Percent of Total Incidents |
|---------------|-------------------|----------------------------|
| Headquarters | 503 | 37% |
| Station 2 | 550 | 41% |
| Station 3 | 296 | 22% |
| Total: | 1349 | +/- 1% |

Submitted by:
FF Adam Towner (ITM)
February 14, 2009

This information was compiled for the late Chief Robert L. Gaucher's report to the finance committee in February of 2010.

Appendix: Support Documentation (continued)

Shrewsbury Fire Department Deployment Options, NFPA Standard & Equipment Deployment

| Option A – 9 per shift | Option B- 8 per shift | Option C- 7 per shift | Option D – 7 per shift |
|--|---|--|---|
| Headquarters | Headquarters | Headquarters | Headquarters |
| Captain Firefighter (Dispatcher) Firefighter Firefighter Firefighter (Swingman) | Captain Firefighter (Dispatcher) Firefighter Firefighter No Swingman | Captain Firefighter (Dispatcher) Firefighter Firefighter No Swingman | Captain Firefighter (Dispatcher) Firefighter Firefighter No Swingman |
| Lake Station (Sta. 2) | Lake Station (Sta. 2) | Lake Station (Sta. 2) | Lake Station (Sta. 2) |
| Two (2) Firefighters | Two (2) Firefighters | Three (3) Firefighters | Closed and/or Firefighters Removed E2 – Out of Service |
| Centech (Sta. 3) | Centech (Sta. 3) | Centech (Sta. 3) | Centech (Sta. 3) |
| Two (2) Firefighters | Two (2) Firefighters | Closed and/or Firefighters Removed E3 – Out of Service | Three (3) Firefighters |
| Option E – 7 per shift | Option F – 7 per shift | NFPA – 13 Per Shift National Standard | Vehicle & Equipment Deployment |
| Headquarters | Headquarters | Headquarters | Headquarters |
| Captain One (1) Firefighter One (1) FF - Dispatcher Tower-Out of Service | Captain One (1) Firefighter One (1) FF- Dispatcher Tower-Out of Service | Captain Three (3) Firefighters One (1) FF - Dispatcher | Tower 1 Engine 1 Rescue 1 C30-Command Vehicle M1 – Pickup Truck D-14 Com-Vehicle Engine 4 (Brush) |
| Lake Station (Sta. 2) | Lake Station (Sta. 2) | Lake Station (Sta. 2) | Lake Station (Sta. 2) |
| Two (2) Firefighter | Two (2) Firefighters | Lieutenant & Three (3) Firefighters | Engine 2 Hovercraft 1 UMASS - Ambulance |
| Centech (Sta. 3) | Centech (Sta. 3) | Centech (Sta. 3) | Centech (Sta. 3) |
| Two (2) Firefighters | Two (2) Firefighters | Lieutenant & Three (3) Firefighters | Engine 3 Light Tower Special Ops Trailer D14 – MCI Trailer |

Appendix: Support Documentation (continued)

16 Firefighter Life Safety Initiatives

1. Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.
2. Enhance the personal and organizational accountability for health and safety throughout the fire service.
3. Focus greater attention on the integration of risk management with incident management at all levels, including strategic, tactical, and planning responsibilities.
4. All firefighters must be empowered to stop unsafe practices.
5. Develop and implement national standards for training, qualifications, and certification (including regular recertification) that are equally applicable to all firefighters based on the duties they are expected to perform.
6. Develop and implement national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform.
7. Create a national research agenda and data collection system that relates to the initiatives.
8. Utilize available technology wherever it can produce higher levels of health and safety.
9. Thoroughly investigate all firefighter fatalities, injuries, and near misses.
10. Grant programs should support the implementation of safe practices and/or mandate safe practices as an eligibility requirement.
11. National standards for emergency response policies and procedures should be developed and championed.
12. National protocols for response to violent incidents should be developed and championed.
13. Firefighters and their families must have access to counseling and psychological support.
14. Public education must receive more resources and be championed as a critical fire and life safety program.
15. Advocacy must be strengthened for the enforcement of codes and the installation of home fire sprinklers.
16. Safety must be a primary consideration in the design of apparatus and equipment.