FIRE RESCUE & EMS SERVICE PLANNING REPORT

PREPARED FOR THE TOWN OF PHILIPSTOWN, NEW YORK

Town of Philipstown
Village of Cold Spring
Village of Nelsonville
North Highlands Fire District

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RFG Fire Rescue Consulting
Ron Graner, Public Safety Consultant
612 Redbud Terrace
RFG Fire Rescue Consulting
HTTP://FIRERESCUECONSULTING.COM
Phone: 770 345 0013 Cell 770 630 0104
Email: rgraner@aol.com
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Introduction
The Town of Philipstown, the Villages of Cold Spring, and Nelsonville and the North Highlands Fire District in their joint effort to assure their communities efficient, effective and safe delivery of fire rescue and Emergency Medical Services and in an effort to assure the ongoing strength of the volunteer service in Philipstown engaged Ron Graner, DBA, RFG Fire Rescue Consulting to undertake a Management and Operations Study of their fire rescue and EMS services.

This study was funded by a Local Government Efficiency Grant awarded by the New York State Department of State. The consultant was directed to provide his expertise in fire rescue and EMS to examine current conditions, analyze those findings and to provide strategic and specific recommendations in the areas of operations, management and administrative structure.

The goal of the project was to provide the greater community with options for the best solutions to achieve the desired improvements in efficiency, effectiveness and safety in the delivery of fire rescue and emergency medical services in Philipstown.

This report to the community about their Fire Rescue and EMS Services is presents our findings; the analysis of those findings; and our strategic and specific recommendations to address the issues found. This report is presented as a guide to aid in achievement of improvements in efficiency, effectiveness and safety. The driving force in this study is the question:

“What is in the public’s best interest?”
Executive Summary

The geography of this study includes the entire historic Town of Philipstown New York. Philipstown is the home of families who can trace their roots in the community back prior to the revolutionary war and families who have recently come to settle in one of the most picturesque areas in the world. Much of our nation’s early history occurred in and around this region. It was here that the British tried to sever the struggling founding of our nation by using the majestic Hudson as the dividing line and where Americans forged and placed the chain across the Hudson to defeat the efforts of the British. It was here that the weapons used to win the civil war were made, and it was just across the river in West Point, the United States Military Academy, where future leaders of this nation have trained since the 1700’s.

The primary economic generator for the town is tourism. Today the town is known worldwide for its scenic views of the majestic Hudson River, the beautiful views of the Hudson Valley and the US Military Academy at West Point and the mountains in the North Highlands. The historic Village of Cold Spring is the center of the economy for the tourism industry. People from all over the world arrive daily by car, train and boat to explore the charms of this 18th and 19th century village which has changed little in the past century. The protection of the historic buildings in the villages and hamlets and the life safety of all residents are the primary concerns for fire rescue services. Large areas of the township are rural and wild land spaces that require protection from fires due to the wildland interface of residents who have chosen to live in these rural areas.

There are numerous local hazard issues presenting significant challenges that demand fire rescue and EMS incident command coordination, resource management and staffing. The township has a transportation network of state highways, where heavy volumes of trucks carry all of the hazardous materials used in our society. Passenger vehicles share those, and local roadways are used by residents and tourists alike who are often distracted by the beauty of the region while driving. The township is served by an extremely high volume passenger rail service. Philipstown is also located within 20 miles of the Indian Point nuclear power plant which is one of the oldest nuclear plants in the nation. Each of these areas present potential emergency service demands on local fire rescue and EMS providers and incident command issues for the agencies and leaders of the greater community.

The investigation of fire rescue and EMS services in the Town of Philipstown revealed that this community has a core group of extremely hard working and dedicated volunteers who are willing and able to serve as volunteer firefighters, officers and to provide emergency medical services in the community. The majority of active volunteers have long term roots to the community. It is vital to the future safety of the community for all residents to recognize the value of those who serve as volunteers.

There was a repeated expression of feelings by active volunteers that many “new comers” do not understand that these services are provided for the community by their neighbors who voluntarily risk injury and death to serve their community. There were also several reports of “outsiders”, IE “newcomers”, and women not feeling welcome or “comfortable” in some of the fire stations. Fire rescue and EMS leaders must promptly address these concerns to avoid any potential of hostile work environment charges and all of the potential litigation costs that such
an action can bring. Moreover, it just makes good sense that an open and inviting environment can attract more volunteers to the service.

The lack of community knowledge and understanding about their fire rescue & EMS services highlights an obvious long term failure of fire rescue and EMS leaders to effectively educate the public about the services they are being provided with, and to seek the deeper involvement of the public across the community.

The administration of the delivery of fire rescue & EMS services to the small population of Philipstown is fragmented into six different agencies. There is clear evidence of too few people doing too many things in order for these agencies to continue service to the public.

There is a high level of positive activity and participation in the North Highlands fire district. This agency also appears to have an open communications with the public they serve as evidenced by the recent vote to approve funding for the current station.

In our attempts to conduct this investigation we discovered serious systemic negative issues in the leadership structures as they exist today. We observed repeated evidence of leadership failures of senior leaders in the Continental Village, Garrison and the Cold Spring fire departments and the Philipstown or Garrison EMS agencies. Both ambulance agencies chose not to participate in this study.

The leaders of each of those agencies have, in general, failed to develop open communications with the people they serve, and even have failed to communicate with and lead their own volunteers. A primary sign of this was the leaders’ continued failure to understand the importance of this study and to lead their members to participate in this study. It must be noted that in each agency there were leaders who expressed an understanding of the importance of this study and who wanted to provide input but they were restricted in their ability to do so.

Leaders in each of the agencies have an egocentric view of “their” local fire rescue and EMS services, and those leaders have demonstrated a long term failure to work and plan in harmony with neighboring companies. There has been an ongoing lack of inter-agency training efforts and a dangerous lack of joint practical incident management training, despite the fact that multiple agencies must work together in harmony for the successful mitigation of any major incident. It was repeatedly reported by volunteer firefighters that when they are at an emergency incident they “make it work” with other responders despite the difficulties in doing so due to poor communications and lack of joint training.

Each agency has leaders who have viewed operations, staffing, recruitment, retention, apparatus maintenance and purchasing and the many other facets of modern management as department oriented separate issues, rather than as inclusive community issues. This view of leaders has created an atmosphere that is not as effective, efficient, or safe as it should be for operations. This view creates potential negative safety impacts on the volunteers who serve the community.

The general public has not been kept informed about the services being provided for their tax dollars by department leaders. In fact members of the public have had to go to the extreme of taking legal steps to obtain what is rightfully public fiscal information from one of the agencies. The serious lack of ongoing communications between the taxpayers and the fire rescue and EMS services was highlighted as a negative in SWOT meetings and separately in comments
provided to me by members of the agencies and by members of the general public. Many of those who responded privately to me stated that they did not want to express the seriousness of the failure of their departments to communicate with the public and internally within their organizations in the open meetings for fear of reprisal from senior leaders in their agencies. The failures of leaders to communicate with the taxpayers and their elected officials was clearly evidenced by the leadership directed refusal to participate in this study and the overt public intimidation of department members who did want to participate in this tax payer funded study for the good of the greater community.

These egocentric department leadership failures are long term in nature with some going back for generations in the community. There still remain strong local feelings that one village is better than the other and/or that one hamlet or community is better than the other. The negative feelings towards others by leaders in the fire rescue services are systemic in the current governing structures and present a serious danger to the dedicated volunteers who serve, and want to serve, in the greater community.

The failures of some in leadership are certainly not, in my opinion, an overt act of disrespect to the community by department leaders. They are, in my opinion, more a result of a lack of understanding by these agency leaders about their real multi-level roles. Today fire-rescue and EMS leaders must be managers of personnel, finances, and operations and “political leaders” for their departments. The current leaders have a real lack of understanding of the true roles that leaders of fire rescue and EMS services must have today. It is imperative that every leader both assure the safety of their personnel and also constantly work to assure that the services being provided match the needs of the people being served. Leaders must also encourage the public to support those services, while doing the public relations necessary to keep the public continuously informed about the services being provided, the needs and costs of those services and the true value of those dedicated public servants who provide those services at the risk of their personal health and safety.

We generally strongly support the concept of neighborhood fire stations. We generally want to see local authorities maintain the character of local stations within each community wherever fiscally and operationally possible. We generally believe that each fire rescue and EMS station should be looked at as a community based response unit with identification to the community it serves. However, the fact in Philipstown is that the current egocentric leadership of the fire rescue and EMS agencies has created a severe negative impact on safety of present service delivery, and these issues must be addressed immediately by the elected officials of the Villages, the Town and by the general public.

- It is not common to include recommendations as part of an executive summary in a report. However in this study we find compelling reasons to present 4 key strategic recommendations in this executive summary. The reasoning and seriousness behind each of these recommendations will be documented in the body of the report.

Strategic Recommendation 1: Before any action can be taken to address the administration of the fire rescue and EMS services in Philipstown, it is imperative that the leaders of the current agencies and the elected leaders of the Town and the Villages immediately engage the services of trained skilled mediator(s) and counselor(s) to help the leaders and the members of each of the fire rescue and EMS agencies and all elected officials to understand and address the
dangerous issues that exist at every level of fire rescue and EMS services in Philipstown. Each party needs to understand their role and how the community as a whole needs to work together to address each of the issues noted in this report in a joint effort to assure safety, efficiency and effectiveness for the public and for the safety of the dedicated emergency responders in Philipstown.

Strategic Recommendation 2: We strongly recommend that in Philipstown the fragmented administrative organizational structure under which fire rescue and EMS services is currently being provided be changed for effectiveness and efficiency. Most importantly, the administrative structure must be changed for the safety of the people who risk their lives and safety to volunteer and for the safety of the greater community they serve.

Strategic Recommendation 3: We strongly recommend the dissolution of the current duplicative governing administrative structures of the existing agencies and the formation of a single Joint Fire District under the laws of New York State. This Joint District should also include a single Emergency Medical Service District under the same administrative structure. The Joint Fire District should conduct the strategic planning and management of all fire rescue and EMS services within the township to improve efficiency effectiveness and safety.

Strategic Recommendation 4: Every effort must be taken to encourage all active volunteers to work together with each other and with the greater community for the betterment of fire rescue & EMS services in the community as a whole.

The recommendations in this report are made to address and answer the question: “What is in the public’s best interest?”

To help readers’ to quickly reference of the Strategic, and Specific Recommendations and the Analysis of the findings in this study, we have included tables that contain these statements and the page numbers of those materials directly following this executive summary.
Strategic Recommendations Summary

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Strategic Recommendation 4: Every effort must be taken to encourage all active volunteers to work together with each other and with the greater community for the betterment of fire rescue & EMS services in the community as a whole.

Strategic Recommendation 5: Centralization of all administrative functions should take place ASAP to reduce costs and time demands, to assure that all required records are being properly maintained and the assure that training and operational practices comply with county, state and federal regulations.

Strategic Recommendation 6: The Cold Spring Fire Company should preplan for incidents in each of the primary tourist areas of the village including main street, the river front structures and all other significant homes and buildings. The agency should conduct regular multi company table top and full scale drills to refine those plans.

Strategic Recommendation 7: Providing facilities for volunteers to bunk in and live at every fire rescue and EMS station should be a priority in the effort to increase staffing and staff readiness.

Strategic Recommendation 8: The community leaders should identify members of the community with special expertise in fund raising to develop and operate ongoing modern cost effective fund raising activities for the benefit of the departments. These efforts should be done voluntarily as these residents contribution to the volunteer efforts for community benefit.

Strategic Recommendation 9: The town should examine the opportunity to initiate charge backs
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Strategic Recommendation 10: A vital first step in any effort to improve the efficiency effectiveness and safety of fire rescue and EMS services in Philipstown is for the leaders of the agencies and local elected officials from all layers of government to engage the services of skilled and trained mediators who can help all resolve the relational issues between the public in the community, elected officials and the leadership of fire rescue and EMS services so that Jointly each will do what will be in the best interests of the public and in the best interests of the safety of the emergency responders in the community..........................................................66

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activity for FY2007 for middle management and command and general staff. All federal, state, local, tribal, private sector and non-governmental personnel with a direct role in emergency management and response must be NIMS and ICS trained. This includes all emergency services related disciplines such as EMS, hospitals, public health, fire service, law enforcement, public works/utilities, skilled support personnel, and other emergency management response, support and volunteer personnel.

Strategic Recommendation 22: Due to the current staffing, cost and training issues noted at each SWOT meeting, leadership must examine the list of services both expected by and/or currently being offered to the public. There must be a determination as to which services can no longer be provided due to staffing and cost issues.

Strategic Recommendation 23: To reduce costs of providing fire flows adequate for protection of the historic villages there is a need to examine less expensive alternatives for providing those adequate fire flows rather than upgrading the entire potable water system, unless the system has other issues that must be addressed.

Strategic Recommendation 24: A unified recruitment, retention, training and staff readiness program should be immediately developed and instituted across the township.

Strategic Recommendation 25: Space and facilities for teaching and practicing the skills needed for fire rescue and EMS should be located within Philipstown. Recommend a review of the current North Highlands station property as a potential location for a common fire rescue ems training facility.

Strategic Recommendation 26: A merger of the current multiple layer governances of fire rescue and EMS services in Philipstown will provide a unified administrative structure that will address each of the issues noted in this report and also provide the governing mechanism that will control future costs through better planning. This administrative change can also be set up to maintain current station and community identities while simultaneously improving cost control, responder training, safety and volunteer response availability.

Strategic Recommendation 27: We strongly recommend the formation of a single Joint Fire District under the laws of New York State for the administration and operation of local fire rescue services. This district shall also include a single emergency medical service district under the same administrative leadership as currently required by NYS.

Strategic Recommendation 28: We recommend that the Commissioners of the Joint Fire District be appointed in joint agreement by the elected officials of the Town of Philipstown and the Villages of Cold Spring and Nelsonville following public solicitation for residents interested in serving who have no ties to the fire rescue or EMS services but who do have a background of education and experience that will serve to assure an efficient and effective organization.

Strategic Recommendation 29: The Commissioners of the Joint Fire District shall be comprised of five (5) members. Three members with no ties to the fire rescue and Ems services shall be directly appointed by joint agreement of the elected officials of the Town of Philipstown and the Villages of Cold Spring and Nelsonville. Two commissioners shall be selected and appointed by the Town and Village elected officials from a single list of candidates presented to the elected officials by the six fire rescue & EMS agencies in the township. As members leave the
commission the same proportion of membership shall be maintained in making new appointments. ................................................................. 100

Strategic Recommendation 30: The fire rescue and EMS Joint Fire district Commissioner Candidates from the fire rescue and EMS agencies must be, and remain, certified as interior firefighter, Company Officer and Chief Officers or as Ambulance Corps Captain as detailed in the Putnam County Mutual Aid Plan 2010. Each must have successfully completed the NIMS / ICS (ICS100 & ICS 700, 200 AND ICS 300) Incident Command Systems Training and each must meet all of the Mutual Aid Plan requirements to serve as minimum requirements to serve as commissioners of the joint district. .................................................................................. 100

Strategic Recommendation 31: The Joint Fire District Commissioners shall select and appoint a Fire / EMS Chief officer who meets all of the requirements of the County Mutual aid Plan as Chief of Operations and Training for the entire district. This chief officer shall work with the chiefs of each station to assure that all responders meet the requirements for their duties as outlined in the Mutual Aid plan, State and Federal requirements and NFPA fitness requirements. This Chief shall assure joint training between all of the stations and companies; Monitor staffing availability and response; Work with members of each station to prepare the operational budget request for the district commission consideration, and do other duties as may be required by the commission for the efficiency effectiveness and safety of the Joint District............................................. 100

Strategic Recommendation 32: The most important step in review of this study and in development of strategic planning for fire rescue and EMS services is for the community and community leaders to reach out and to assure all active volunteers that they each are a vital part of this system and that the community needs them to continue to serve as volunteers. .......... 101

Strategic Recommendation 33: The community and community leaders must work closely with current active volunteers to co-develop plans to demonstrate to every volunteer that their input is and will continue to be valued in the greater community. ............................................................... 101

Strategic Recommendation 34: The primary functions of the Joint Fire District Commission shall be to address the issues in this report; to work with the broader community and the active volunteer transition management team to help them address the issues in this report and to operate the Joint district in a way that will address the primary question: What is in the best interests of the public being served.” .......................................................... 102

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Strategic Recommendation 39: The town, villages and agencies should all work together to identify residents who are not currently associated with the fire rescue Ems services or local governments who have special knowledge skills and abilities that can be utilized to mediate current areas of conflict and to help develop and administer a modern fire rescue & EMS service organization for the community. ................................................................. 104

Strategic Recommendation 40: Residents who do not currently have any ties to current leadership in the agencies or local elected governments who have been identified as having specific knowledge skills and abilities should be selected to mediate current areas of conflict and to help develop and administer a modern fire rescue & EMS service organization for the community. ................................................................. 104

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Strategic Recommendation 45: Local residents with Technology expertise should be utilized to review existing communications and record keeping and be part of the team designated to design and implement systems that will assure that all stations apparatus and personnel have the technology required to perform the duties required effectively efficiently and safely. ............... 105

Strategic Recommendation 46: All reasonable efforts should be initiated to assure that all technology is effective for its intended use. Previous sections of this report laid out specific recommendations for accomplishing this mission including working with BES to address the needs and solutions. The community should solicit the pro bono assistance of residents with the technological knowledge skills and abilities required to address all technology issues. ............... 105

Strategic Recommendation 47: Effective Response Force: It is important to establish standards for effective response force for each type of incident and incident location. Agencies need to continuously evaluate a jurisdiction’s potential “worst case” service demand scenarios, based upon structural and life hazard risks, and the ability of the responding agencies to successfully control and extinguish a fire in those properties safely and efficiently with the equipment and
staffing available. .................................................................................................................. 106

Strategic Recommendation 48: As strategic and specific planning for fire rescue and EMS services is undertaken in the community those doing such planning should be mindful of current laws and codes to assure that their work products are compliant with NFPA, OSHA and NY State codes and laws as they apply to each situation. ................................................................. 107

Strategic Recommendation 49: The mistrust demonstrated toward elected officials by some leaders in the current fire rescue and Ems services must be replaced with cooperation between all parties to assure that every citizen in the community and every volunteer serving the community are assured that the fire rescue & EMS services are efficient, effective and safe. The deep seated feeling must be identified and worked through with the assistance of professional experienced in bringing people together for a common good................................................................. 116

Strategic Recommendation 50: We strongly recommend that the elected officials in the village and the town immediately begin the process of rebuilding the community’s fire rescue and EMS service delivery system as outlined in this report. ....................................................................................... 116

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Strategic Recommendation 55: The accountability issues noted in this report should be required as minimum standards for receipt of tax funds as a part of the town’s efforts to assure the total community that these leaders are addressing the primary question of this study: “What is in the public’s best interest?” ....................................................................................... 118

Strategic Recommendation 56: Any strategic planning effort to improve efficiency effectiveness and safety in the delivery of fire rescue and EMS services in Philipstown must address each of the findings in this report to be successful................................................................. 118
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Specific Recommendation 1: As a function of its contracts with each agency, the town should require each agency to provide volunteer availability and response information for every member on a regular basis. This information should be provided, along with incident response data which shows the actual number of responders to each incident. .................................................. 45

Specific Recommendation 2: Based upon the future review of staff readiness surveys immediate action should be taken to assure adequate staffing of fire rescue EMS services in the town. ...... 45

Specific Recommendation 3: Centralization of administrative functions will require integration and upgrades to the existing computer systems to assure that all locations are connected via a network. In the long run utilizing local resident capabilities to establish this network will enable cost saving and better records management ............................................................... 46

Specific Recommendation 4: The problem of transmission of run data from North Highlands to NYS OFPC should be addressed immediately by both agencies to assure proper record transmission as required ............................................................... 55

Specific Recommendation 5: The Town should engage the services of a forensic auditor to examine all of the assets, liabilities, income and expenses of each fire rescue and EMS agency and each of the supplemental support groups that may exist to generate and manage funds for the current agencies. Those fiscal reports should be examined separately and in summary or joint total with recommendations for cost containment and savings made upon the total findings ...... 57

Specific Recommendation 6: It is important when reviewing the tax cost figures to remember that in Philipstown these companies respond to the largest geographical area in the county. It is important in planning the number of stations required to look at stations and station locations independently of administrative structures ............................................................... 57

Specific Recommendation 7: Station response districts reviews are needed to show how many homes are located inside the travel distance of 5 miles which has been determined by ISO as the maximum travel distance to be in a “protected” response area for better home insurance rates. 57

Specific Recommendation 8: The County GIS office should obtain: ESRI’s ArcGIS software ArcInfo level, to do the distance analysis (and travel-time analysis), and/or ESRI’s Network Analyst extension that would show travel distances software that will enable the county to support planning efforts of many types ............................................................... 73

Specific Recommendation 9: The County Attorney should review FOIL with management at BES to identify dispatch protocols and other relative information regarding capabilities fire rescue & EMS services that can and should be released to the public officials in the county’s local governments upon request to assure that taxpayers can have a clear view of the services they are paying for and can expect to be able to serve them in an emergency ............................................. 75

Specific Recommendation 10: The County should review 9-1-1 office records capture and retention capabilities with the CAD vendor, to assure that all records are being properly captured and can be provided for review and analysis on a regular basis by the taxpayers’ representatives ............................................................... 76

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to export CAD records to EXCEL, or another readily available spreadsheet format, that can be readily used by customers of the 9-1-1 center for data review and analysis on a regular basis. ... 76

Specific Recommendation 12: Philipstown should establish a policy that requires interior certified members of all fire rescue and active members of EMS agencies to use the Iamresponding program and to sign on as on or off duty as well as responding to incidents. This data should be part of the tools used to track the agencies’ ability to provide emergency response to the community when needed. ........................................................................................................... 77

Specific Recommendation 13: Every Emergency agency should, on a regular basis, utilize the data directly from the county dispatch office to monitor call process times by that office and response times for all responding units to emergency incidents. ........................................................................................................... 77

Specific Recommendation 14: To assure accuracy of data in the records management systems of every public safety agency it is important that every records management system directly communicate with the County CAD system for automatic download of dispatch data and times. This will also reduce the time required within each agency for completing incident after action reports........................................................................................................................................ 79

Specific Recommendation 15: The County 9-1-1 office should be required to provide dispatch call processing and unit arrival data in MS Excel format to its customers, every emergency response agency in the county, on a regular basis. Analysis of this data will allow each agency to monitor its own response time benchmarks and baselines and to also monitor the services of the 9-1-1 office. Call process times are a vital part of determining success of emergency response units. ........................................................................................................................................ 79

Specific Recommendation 16: Each agency in Philipstown should do an internal analysis of their own training records to determine that all active volunteers are trained at the state required minimums. The agencies should then coordinate through the Putnam County Emergency Services Bureau to assure that all records at that office and the State OFPC are accurate. ........... 80

Specific Recommendation 17: There is a need to have a state law mandating that every community and public safety agency report NIMS and ICS training for every person that will lead or respond to emergency incident. The OFPC would appear to be the agency that would collect and maintain that data. ........................................................................................................................................ 81

Specific Recommendation 18: Each agency should do an internal analysis of their own Officer, Safety and ICS training records to determine that all active volunteers are trained at the federal, state, and county required minimums for the roles they are filling. The agencies should then coordinate through the Putnam County Emergency Services Bureau to assure that all records at that office and the State OFPC are accurate. ........................................................................................................................................ 81

Specific Recommendation 19: All agencies must assure that their standard operating policies and practices reflect NIMS and ICS at every incident. It is incumbent upon the elected leadership in the community to assure that this is done as a matter of public safety. ........................................................................................................... 84

Specific Recommendation 20: The Town should, as part of its annual review of services contracted for by the town, require proof of compliance with each of the standards defined in the Putnam County Mutual Aid Plan from every fire rescue and EMS agency and district. ........... 85
Specific Recommendation 21: The Town should specifically review the NIMS / ICS procedures and identify the agency members with the certified levels of training required to perform each of the supervisory and command duties in the systems. ................................................................. 85

Specific Recommendation 22: The Town should require proof that every emergency incident in the township is being managed from the arrival of the first units on scene, with commanders properly trained in and using NIMS and ICS as appropriate to assure responder safety............. 85

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Specific Recommendation 24: If services are eliminated that information should be given to the county emergency communications division for revision of dispatch procedures. These notices should also include information regarding where citizens can locate private companies that may be able to assist citizens for a fee when the fire rescue services can no longer provide those services. ................................................................. 87

Specific Recommendation 25: The issues of volunteer recruitment and retention and all other personnel issues must be addressed immediately and fully within the greater community, utilizing the potential expertise for human resource development that exists among the residents of Philipstown. ................................................................. 91

Specific Recommendation 26: Every fire station should have the facilities that will encourage members to want to be at those stations, including bunking facilities for both overnight and long term residency for responders. ................................................................. 92

Specific Recommendation 27: Every member should review their own personal conduct to assure that they are open and welcoming to all members and potential members. ............... 92

Specific Recommendation 28: We strongly support the concept of neighborhood fire stations. It is important for the Joint Fire District Commission to maintain local station identity within the community wherever fiscally and operationally possible as community based response units with identification to the communities each serves. ................................................................. 101

Specific Recommendation 29: To accomplish the formation of a Joint Fire district a series of specific legal steps must be taken simultaneously for this improvement plan to be successful. The process must follow the laws of NYS Specifically: NYS Town law Article 11 A JOINT FIRE DISTRICTS IN TOWNS AND VILLAGES ................................................................. 101

Specific Recommendation 30: It is very important that the town seek and maintain legal guidance throughout this process from its local attorneys. The Town board and villages should engage their attorneys to review and draw up the legal documents required for the dissolution of the current governing structures and for the creation of a new Joint Fire District as the governing body under the guidelines established by NYS................................................................. 101

Specific Recommendation 31: Every effort must be taken to assure that current active volunteers continue to serve and that they are included as active participants in every effort to plan for the future. ................................................................. 101

Specific Recommendation 32: Elected leaders in the community and the leaders of the emergency services should jointly select a trained relationship mediator and a business
organizational professional/mediator and work with those experts to address the very serious
issues noted in this report for the betterment of the services and the safety of the community. 101

Specific Recommendation 33: It is vital for the safety of responders and the community that
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Specific Recommendation 34: Rank and file active volunteers and the active volunteer
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advisors to determine how the property being paid for by the original entity tax payers will be
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Specific Recommendation 38: The exodus of young people from local communities in every part
of NYS is a serious concern. The high cost of living, housing and lack of high paying local jobs
are all driving influences in that exodus. Philipstown has all the elements that cause young
people to seek opportunities outside of the region. This exodus may have long term negative
effects on recruitment and retention of volunteers in the community. ................................... 106

Specific Recommendation 39: The greater Philipstown area certainly has residents who are
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part of the elected officials or political leaders in the community. Every effort should be taken to
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Analyses of Findings Summary

Analysis 1: The number of agencies administrating fire rescue and EMS service delivery to this population base appears to be excessive. ................................................................. 36

Analysis 2: The North Highlands Fire District staffing analysis was conducted on the total membership numbers provided. It is important to note that of that total number of members reported only 65% of those were currently medically certified for duty and only 50% of the total membership were certified for interior firefighting. 31% of the total members reported not being available some days of the week and approximately 28% of the total members reported not being available during normal business hours between 06:00 & 18:00 which is consistent with the 31% of the total members who reported that they travel outside of the district for work or school. ..... 41

Analysis 3: The NHFD is to be commended for providing their staffing information for this study. Their honest presentation of the facts surrounding their staffing provides the agency and the community with information that will aid strategic planning to develop ways to address staffing issues. ................................................................. 41

Analysis 4: The 10 year continuous downhill slide of volunteer members in the Cold Spring fire company reflects trends that are nationwide. Today the agency is providing service with a membership that is only 63% of what it was just 10 years ago. This highlights the needs shown in this report to monitor staffing capabilities and to improve volunteer recruitment and retention. ........................................................................................................ 42

Analysis 5: The Continental Village fire department staffing analysis was conducted based on the number of members who reported that they were certified to perform interior firefighting duties. The information was taken from materials that members provided. ......................... 44

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Analysis 7: Although the agencies did not provide a detailed response to our efforts to evaluate staff readiness, it was quickly evident in every SWOT meeting and in our community observations that there are acknowledged serious deficiencies in staff availability especially during day time work week hours................................................................. 45

Analysis 8: As a commuter bedroom community Philipstown has a high percentage of residents who board trains or travel by car to out of town for employment. This exodus leaves emergency service delivery to a mixture of retirees, students and the few people who are employed locally and who are able to leave their places of employment or business to respond when needed. This is a serious issue that must be addressed promptly from a community wide perspective. ............ 45

Analysis 9: It is our impression that the failure of agency leadership to assure that every one of their active members respond to the staff readiness survey for this project is a clear indication that these leaders are fully aware of deficiencies in their staffing and that they fear the
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Analysis 10: The process of gathering information for this report from the agencies was delayed several times over a four month period at the request of the agencies. These delays were due to the agencies claims that they did not have the time or people available to complete the study information surveys. Since the information requested was information that every fire rescue and EMS agency should have readily available in their records management system, the inability to find people with the time to provide this information is a clear demonstration of administrative staffing issues and the stress that those who are in leadership roles are under to accomplish all that must be done to properly administer their agencies. ................................................................. 46

Analysis 11: The current administrative structure of six (6) agencies providing fire rescue and EMS service in a community of fewer than 10,000 people with all administrative functions being separately performed by each agency with no coordination of effort and no clear understanding of the cost of such duplication of effort for all taxpayers demonstrates a system that is unnecessarily inefficient and ineffective in terms of total costs to the community. ..................... 46

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Analysis 15: The fact that members of the Garrison FC do spend over night staffing their station as needed indicates the need for the agency to provide bunk room / living space for its volunteers in an ongoing effort to assure proper response times................................................................. 53

Analysis 16: Assuring that the insulation foam used in the Garrison fire station meets all applicable state codes for fire and health safety is important to all that may occupy that space and to those who depend on the apparatus and equipment stored in that space for emergency response.................................................................................................................................. 53

Analysis 17: It was observed that the Garrison Ambulance station is located only a few hundred yards from the Route 9 Garrison fire company station. The cost of maintaining 2 separate facilities so close to each other points to areas where consolidation would save money in utility costs and station maintenance ........................................................................................................ 54

Analysis 18: The calls for service reports published by the county demonstrate that Philipstown has the largest number of fire rescue agencies of any township in Putnam County while serving the smallest population base in the county. The administrative cost of multiple agencies generally exceeds the cost of providing those same services in a consolidated district even in areas served by volunteers. .................................................................................................................................. 55
Analysis 19: Budget section 600 shows that 54% of the NHFD budget is for principle and interest payment of the loans for the new fire station and a Seagrave apparatus. Once these loans are paid off the budget will be reduced by 46%.

Analysis 20: In the review of the NHFD budget we questioned the amount in line 409 for legal services. We were informed that until this current year, 2011 line 409 included both legal and accounting fees. The figures in this account line includes the retainer for the district lawyer, audit and accountant fees plus the cost of legal ads, election clerks for commissioner elections in December and a truck bond vote.

Analysis 21: State insurance records indicate that at the end of 2009 Continental Village FD had a balance of $58,528 in their 2% foreign insurance account.

Analysis 22: State insurance records indicate that at the end of 2009 the Garrison fire company had a balance of $29,621 in their 2% foreign insurance account.

Analysis 23: State insurance records indicate that at the end of 2009 the Cold Spring fire company had a balance of $0.00 in their 2% foreign insurance account.

Analysis 24: The failure of some department leaders to respond to repeated requests for detailed information and cooperate in this study was apparently due to their failure to understand the importance of keeping the public informed about the services that they are funding and which they will depend upon in an emergency.

Analysis 25: The serious lack of ongoing communications between the taxpayers and the fire rescue and EMS services was highlighted as negatives in SWOT meetings and separately in comments provided by members of the agencies and by members of the general public.

Analysis 26: There were several reports of “outsiders” and women not feeling welcome or “comfortable” in some fire stations. The failure of leadership to promptly address these concerns could lead to hostile work environment charges and all of the potential costs that such an action can bring.

Analysis 27: The egocentric leadership issues are long term in nature with some going back for generations in the community. There still remain strong local feelings that one village is better than the other and/or that one hamlet or community is better than the other. These negative feelings towards others by leaders in the fire rescue services are systemic in the current governing structures and can be a serious danger to the volunteers who serve in the greater community.

Analysis 28: The failures in leadership are evidence of a lack of understanding by these agency leaders about their real multi-level roles as both departmental managers of personnel, finances, and operations and as “political leaders” within and external to their agencies.

Analysis 29: There appears to be a lack of understanding among some of the current fire rescue and EMS “leaders” that as leaders they are responsible for assuring both the safety of their personnel and also constantly working to assure that the services being provided match the needs of the people being served and the public’s ability to support those services.

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untrue rumors about community fire rescue and EMS services to cause undue fear in the public is
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safety of public officials and attendees at a public meeting is a dangerous indication of the failure
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threatening statements towards them at a public meeting was clear proof of the elected officials’
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process even at a risk to their own safety............................................................................... 70

Analysis 39: Town officials arranged for me to meet with the Commissioner of Emergency
Services, and managers of the technical services of the county. On 4/05/11 we personally
observed that the county does not currently have much of the modern technology capabilities that
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Putnam County government. However it must be noted that it was also observed in our site visit
and meeting that the lack of technical capabilities at the County level did nothing to diminish the
strong desires of County BES management and staff to try to assure high levels of service to the
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Analysis 44: Every local government must understand that every action they take and every service they provide is directly related to the land that comprises that government’s jurisdiction. GIS is the tool that can assure proper planning and management of every local government service. ................................................................. 73

Analysis 45: GIS services are services that governments can readily contract out to private providers to get the full GIS support needed for all planning efforts. However, keeping and supporting GIS as an “in-house service” is also an important tool in governments’ efforts to provide consistency and inter agency coordination in planning efforts.................................. 73

Analysis 46: A general review of the general response district map provided by the county shows that the boundary for the Cold Spring fire department should optimally be extended into part of the area previously covered by Garrison station 2. ................................................................................. 74

Analysis 47: It is important for the public and for their elected officials in their planning and review efforts to know what agency and apparatus is dispatched to each call type. It is important for the public and their elected officials to know what agencies will be dispatched when automatic aid is preplanned and mutual aid is needed. ................................................................................. 75

Analysis 48: We observed that Putnam County has invested in a 9-1-1 computer aided dispatch system that appears to comply with the records retention laws of NYS. However, capture of data is manual in this system data capture depends upon busy dispatchers to enter key strokes for almost every action. Manual capture of this data historically has inaccuracies due to the other immediate action demands that dispatchers must perform in assuring that proper notifications are made. Good practices in emergency communications systems incorporate automatic capture of times relative to dispatch and arrival of emergency units, utilizing in-unit acknowledgement units liked to the CAD system. ......................................................................................... 75

Analysis 49: We confirmed that the county 9-1-1 CAD system is not designed to provide some of the dispatch record data in a format that could be easily analyzed by customers of the BES service. ......................................................................................... 75

Analysis 50: While at the 9-1-1 center we observed that the computer screen maps for a dispatch made during our visit showed the location of water sources; dry hydrants; static sources such as ponds and pools; and public water supply hydrants. When we inquired if this information was available for locations in Philipstown we were told that the county BES had purchased GPS units and asked each agency in the county to use them to identify their local water sources. We were informed that the fire rescue agencies in Philipstown had not availed themselves of that ability.
Analysis 51: It was observed while at the county emergency communications center that none of the agencies in Philipstown had any person logged on as “on duty” and available in the IamResponding system. This failure to utilize an available tool inhibits agency management ability to monitor and analyze member availability.

Analysis 52: The run report PDF files show the call received times, the time each was sent to the dispatcher and the dispatch times for each call. The reports also show the arrival time of the first unit on scene. The reports do not show what unit is the first to arrive or the time that it takes to have all the dispatched units arrive so that the arrival of an “Effective Response Force” can be examined. Note: Effective Response Force is the total apparatus and staffing preplanned as needed to mitigate a specific type of incident and specific locations.

Analysis 53: The review of the first 50 dispatch records for the Cold Spring Fire Department in 2010 provided an indication that the county does not meet NFPA code 1221 standards of call process times for 90% of calls being processed in under 60 seconds and 99% of all calls being processed within 90 seconds.

Analysis 54: Observations of 9-1-1 office work flow and technical capabilities show that the call process times reported are inaccurate. We have concluded this is due primarily to CAD system technical and operational issues at the county 9-1-1 center.

Analysis 55: Meeting the nationally recognized and NFPA code standards for call process times is a service objective that every emergency communications center management must continuously review and address through continuing review of staff training, performance reviews and technology capabilities.

Analysis 56: It is vital to have accurate dispatch records to properly evaluate service capabilities in a community. Extended call process times create a clear danger to the public and emergency responders. Delays in dispatch to fire rescue and EMS emergencies can never be made up in response times. Every fire and EMS emergency continues to worsen until responders actually arrive on scene and begin remediation actions to control the emergency.

Analysis 57: The inability of the NYS OFPC to supply information regarding the number of members in each department who meet NY State required minimum training requirements indicates that there may be a records management issue at OFPC or that the agencies are not providing this required data to OFPC.

Analysis 58: We recognize that the inability of OFPC to provide training information may be reflective of current state budget cuts which result in reduced service capabilities for state agencies.

Analysis 59: It is inconceivable that the fire rescue and EMS agencies in Philipstown would assume liability for active responders who are not in compliance with NYS minimum training requirements. We can only assume that this is a record keeping issue.

Analysis 60: The lack of response from the OFPC to provide data on compliance with NIMS ICS training by agency members indicates a serious problem with accuracy of records. We believe that this is due to lack of state mandates that agencies provide this data to the state.
Analysis 61: As part of our investigation we have received comments of concern that some officers are elected to their roles without the training and experience that is required to assure safe operations at incidents. It was reported on one staffing report that a person serving as a deputy chief is not a certified interior firefighter. These are red flag issues of serious concern.  

Analysis 62: The lack of qualifications of field commanders can be an inherent weakness in any organization that utilizes elections as a basis for the selection of command officers. This is, or can become, a safety issue and it must be addressed promptly. ........................................ 81

Analysis 63: Putnam County BES provided the requested the individual training reports for the fire department members for the years 2007 – 2010 to the town................................................................. 82

Analysis 64: North Highlands Fire district had 18 members take training from 2007 – 2010. Cold Spring had 16 members take training from 2007 - 2010; Garrison had 19 members take training from 2007 - 2010; Continental village had 29 members take training from 2007 – 2010. ........................................................................ 82

Analysis 65: The relatively small number of members who have had training outside of their agencies may reflect a low number of active volunteers who are prepared to serve the community or the low number of members receiving training outside of their own departments may reflect the egocentric position of department leadership................................................................. 82

Analysis 66: The low number of volunteers who took training classes offered by the county and the state appears to be consistent from year to year. This low number presents an immediate red flag regarding the ability of these agencies to staff units with properly trained personnel in the event of emergencies in the community...................................................... 82

Analysis 67: The low number of members in each department who appear to meet Federal, State and County required minimum training requirements for NIMS, incident command, safety and officer positions indicates that this is a serious issue of safety at every incident if the ICS, NIMS training records are correct........................................................................ 83

Analysis 68: Review of training class titles for the years 2007 – 2010 in each department indicates that most members do not comply with legal training mandates of the federal, state or the county for NIMS, National Incident Management System, ICS training. This safety issue was also raised in the local SWOT meetings by active volunteer responders. ........................................ 83

Analysis 69: We have presented the Putnam County Bureau of Emergency Services / Mutual Aid Plan / January 2010 in the appendix of this report and will provide a copy on the CD provided to community leaders. ........................................................................ 84

Analysis 70: The BES Putnam County Mutual Aid Plan is a well written and comprehensive directive that each of the fire rescue and EMS agencies in Philipstown has subscribed to. The Mutual Aid Plan clearly defines each of the aspects that are demanded in mutual aid. It is an important factor for safety at every incident that these same standards are maintained at every incident even when mutual aid is not needed, because proper ICS begins with the arrival of the first responder on scene for safety at the incident. It is unfortunate that the agencies in Philipstown have not provided proof of their qualifications to operate within the training requirements of this plan........................................................................ 85
Analysis 71: The SWOT meeting expression of services currently being provided by fire rescue and EMS agencies indicates the expectations of those being served........................................87

Analysis 72: The SWOT meeting responders providing the services understand that they may need to those services to meet community expectations..................................................87

Analysis 73: Each service provided to the public requires staffing, training and equipment for safe completion of the mission..........................................................................................87

Analysis 74: Examination of the services being provided to public indicates that there may be some services being provided that would be better delivered by private businesses with charges for services provided billed to users rather than to expect all taxpayers to pay for those services. .................................................................87

Analysis 75: The primary review of strengths in the SWOT is that each group acknowledged the commitment and value of the volunteers who serve the community and their long time dedication to the community. ........................................................................................................88

Analysis 76: Each SWOT meeting group recognized that there has been a long term investment in good equipment..................................................................................................................88

Analysis 77: Review of the primary weaknesses in SWOT shows recognition that each of the strengths can rapidly become a weakness with a failure to continuously work to keep each strong..................................................................................89

Analysis 78: There is a general recognition of the negative aspects of poor community relations and the resulting diminishment of public support........................................................................89

Analysis 79: The SWOT meeting identified lack of training facilities and training between agencies is a red flag for safety of volunteers and the community. .........................................................89

Analysis 80: The SWOT meeting identified weakness of water supply availability has been a long term issue for many years and is actively being reviewed by local authorities in the villages. ........................................................................89

Analysis 81: The primary SWOT meeting identified weaknesses regarding staffing, and more specifically the lack of staffing by time of day and type of incident, should be of great concern to the community.....................................................................................................89

Analysis 82: All three SWOT meeting groups recognized that each of the opportunities reflects the need to address the weaknesses they observed. ........................................................................90

Analysis 83: There was a clear sense of willingness among attendees in each meeting to take advantage of the noted opportunities and to address issues to assure public safety for the greater community. .................................................................................90

Analysis 84: There was wide recognition of SWOT threats that unfunded state and federal mandates can have a negative impact on the future of service delivery and also a general understanding that many mandates are an important part of safety for emergency responders. . .91

Analysis 85: There were comments that women and outsiders not feeling welcome in some stations may create a hostile work place and recognition that leaders have not properly addressed this issue with all members. .................................................................................91
Analysis 86: There was recognition in SWOT meetings that there are clear dangers to the safety of firefighters responding to modern light weight construction buildings that do not have sprinkler systems. 

Analysis 87: The idea of “consolidation” is seen as a threat by some and others see the failure to collaborate and spreading people and work expectations to thin and the current governing structures as more dangerous threats. 

Analysis 88: There are recognized staffing threats across all agencies. There is clear recognition that the status quo for recruitment, retention and utilization of volunteers is an immediate danger to the future survival of the fire rescue and EMS services in Philipstown. 

Analysis 89: The goals expressed by all SWOT meeting attendees and after the SWOT meetings are a clear reflection that the community and the volunteers in this community all see the potential to successfully continue to serve and to strengthen the services provided to the residents of Philipstown. 

Analysis 90: There was general acknowledgement that some fire stations do not currently have the facilities that are expected and needed to attract volunteers. 

Analysis 91: It was clear in every conversation that failure to address the serious issues found in this study is not an option for the community or for those who are active volunteers serving the community. 

Analysis 92: Each group in the SWOT meetings fully understands the potential dangers of failing to address the issues. 

Analysis 93: The comments made by members of the emergency services and the public speak for themselves. Each of the comments is a genuine reflection of concern for community safety and for the safety of the volunteers who serve this community. 

Analysis 94: There has been fear expressed that volunteers will quit serving if there are changes to “their” departments. We reject that assumption. After viewing the dedication of the current active volunteers in the community we strongly believe that if the active volunteers are kept involved in the change process and if civic leaders assure that the process will be designed to improve responder safety, training and operations that the current volunteers will become strong supporters of beneficial changes for the good of the total community. 

Analysis 95: Review of the current issues surrounding fire rescue and EMS service delivery in the Town of Philipstown clearly indicated that the current system has many problems at the managerial and civic leadership levels. The primary issue is that some of those leaders have not come together to work at addressing “what is in the public’s best interests”. 

Analysis 96: A Joint Fire District is political entity with a governing body, administrative officers, and expenditure limitations. A joint fire district is dependent on the town or towns as a means to its initial creation, extension and dissolution. A joint fire district has the power both to incur indebtedness and to levy taxes. Joint fire district taxes are assessed, levied, and collected at the same time and in the same manner as town taxes. Joint fire districts are created by the town board and the board(s) of trustees of a village(s) with direct citizen involvement in the process. Contemporaneously with the establishment of the joint district, the town board and the village boards of trustees of each participating municipality shall, by local law, dissolve any existing
fire, fire alarm or fire protection districts contained within the joint fire district. A Joint Fire District, with appointed officials dedicated solely to the provision of effective and efficient fire rescue and EMS services, will increase efficiency, improve effectiveness, enhance and expand services, reduce costs, establish mechanisms that will produce cost avoidance, improve coordination of regional planning, eliminate artificial boundaries, and standardize services and programs while improving safety for the public and emergency responders. ........................................ 99

Analysis 97: We have come to the conclusion that in Philipstown the administrative organizational structure under which fire rescue and EMS services is provided from six (6) individual departments must be changed for the safety of the people who risk their lives and safety to volunteer and for the safety of the community they serve. ........................................ 99

Analysis 98: The Attorney General of New York State in 1991 issued an informal view that that the determination whether commissioners of a joint fire district are to be elected or appointed must be made at the time of establishment of the district as may be determined by resolution adopted at the meeting for the establishment of the district........................................... 100

Analysis 99: It appears that many individual active volunteer members of each agency are more than willing to meet and work together to help plan for the betterment of their services. ........ 101

Analysis 100: The value to the community of all the active and dedicated volunteers cannot be over emphasized. Every effort must be made to engage all active volunteers in all planning efforts for the fire rescue and EMS services in Philipstown............................................. 101

Analysis 101: Review of current technology and planning / implementation of technology improvements should be conducted using community identified available specialized expertise. ........................................................................................................ 105

Analysis 102: The failure to actively develop policies and procedures that reflect the importance of joint training for automatic and mutual aid and the practice those policies and procedures together is a direct danger to the safety of all responders and to the community. .................. 106

Analysis 103: Improvement in ISO classification rating has direct positive impacts on the cost of fire insurance of home owners. ........................................................................................................ 108

Analysis 104: As a minimum, those in leadership roles in the fire rescue and EMS agencies must be re-educated about their roles in leadership in their departments. They must relearn that they will be held accountable to the public they serve. If the current fire rescue and EMS leaders cannot refocus on the greater community needs, their replacement with community leaders who will do what is in the public’s best interests should be considered................................. 118
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The Study Process
To assure that this study provided a comprehensive overview of service delivery, we explored a wide scope of issues to ascertain the current operational status and capabilities of the fire rescue and EMS services in Philipstown. Our areas of exploration included but were not limited to: Effectiveness; Efficiency; Safety; Organization; Leadership; Finances; Infrastructure; Strengths; Weaknesses; Opportunities; Threats; Public Perceptions; and Volunteer Responder Perceptions of their risks and roles. It was also important to have an understanding of the greater community of Philipstown.

Information Received from Philipstown Fire Rescue & EMS Agencies
- Contact information was received for each agency from the town and/or from the agencies

Cold Spring Fire Company
Contact: Chief Christopher Tobin
- Chief Tobin provided the information which is included in this report.

North Highlands Fire District
Contacts: Chief Pat Schere, Commissioner Thomas Knapp
- The district provided detailed information which is included in this report.

Continental Village Fire
Contact: Chief Charlie Valt
- Agency did not participate in this study and provided no access to their facilities. The agency provided none of the survey information which was repeatedly requested by the town and this consultant.
  - On 4/18/2011 just as the report was being finalized a member of the Continental Village fire department board of directors sent an email with the staffing surveys that were requested from each agency

Garrison Fire
Contact: Chief Joseph Surace
- The agency Chief provided no information for this study.
  - In late March we received an email from the President of the Garrison Fire Company. The President offered to help with the efforts to gather information. The President gave me a tour of the Route 9 station on 4/4/2011 and told me that he would attempt to gather the information requested in the survey forms. He did provide information regarding the number of current and interior firefighter certified members and the foam used for insulation of the station’s apparatus bays.
Garrison Ambulance
Contact: Acting Captain Derek Tudor
- Agency contact did not participate and provided no access to their facilities.

Philipstown Ambulance
Contact: Capt. John Egger
- Agency contact did not participate and provided no access to their facilities.

Community
The geography of this study includes the entire historic Town of Philipstown New York. Transportation in Philipstown includes major highways, the Hudson River which is a major shipping and pleasure craft waterway and the railroad which operates both Amtrak service through the town and Metro North local commuter passenger rail service. Philipstown is a township located in the western part of Putnam County, New York. The Philipstown's main population centers are the Villages of Cold Spring, and Nelsonville and the hamlet of Garrison. The town has a total area of 51.5 square miles, of which, 48.8 square miles is land and 2.7 square miles (5.22%) is water. The western border is the Hudson River. The north town line is Dutchess County, and the south town line is Westchester County. As of the census of 2000, there were 9,422 people residing in the town. For every 100 females there were 94.1 males. For every 100 females age 18 and over, there were 93.5 males.¹

The Town of Philipstown is isolated from the rest of Putnam County physically by terrain. Some would also argue that the isolation is also by mind set. The town has preserved its rural atmosphere at a time when the rest of the county has grown rapidly. Within the township long term community resident differences have created independence and isolation within the villages and hamlets of the town. The isolation of the town and its communities has created a long standing condition where leaders in each of the agencies have an egocentric view of “their” local fire rescue and EMS services. While this egocentric way of looking at emergency response has provided the community with fire rescue and EMS services for many years, today, the administration of public safety services must be viewed from a greater perspective to be successful and responsive to the public being served.

Beyond the high fire and life risk hazards from the historic structures in the community and the new larger homes, there is a lack of public water service in the community. The loss of historic structures in the community would have a severe negative impact on tourism. There are also several local hazard issues that present significant challenges that demand fire rescue and EMS incident command coordination, resource management and staffing. The township has a transportation network of state highways where heavy volumes of trucks carry all of the hazardous materials used in our society. Passenger vehicles share those and local roadways used by residents and tourists alike who are often distracted by the beauty of the region. The township is served by an extremely high passenger volume passenger rail service. There is heavy commercial shipping and recreational boating traffic on the Hudson River. Philipstown is also located within 20 miles of the Indian Point Nuclear power plant which is one of the oldest

¹ Population information taken from Wikipedia the on line encyclopedia
nuclear plants in the nation. This plant has an excellent safety record but it has been seen as a potential danger since its development in the late 1950’s. The potential for radiation leaks presents a high risk hazard for the surrounding area. Each present potential emergency service demands on local fire rescue and EMS providers, and incident command issues for the agencies and leaders of the greater community.

As seen in figure 2 below, most of Philipstown is located in Emergency Response Planning areas that could be affected by radiation leaks at Indian Point. In that planning it is vital that all responders and local leaders be properly trained for their roles in management of the emergency. This same training is also vital for the safe management of every emergency incident in the community.

Figure 1 Map of Philipstown
The County has the following planning information on their web site regarding Indian Point Nuclear plant.

Figure 2: Indian Point Emergency Response planning area map

It must be noted that the discussion regarding the comments about the nuclear power plant at Indian Point were placed into this report as it was being formed in early January 2011. The current tragedy in Japan highlights the importance of being properly prepared to successfully manage such an incident from the standpoint of governmental leaders and all emergency services.
Populations served by Fire Rescue and EMS

The current multi jurisdiction administrative structures were established many years ago to serve specific populations that were scattered and isolated from each other. These structures are a holdover from the days when distance determined all activities and every hamlet and village needed to stand on its own for survival. These antiquated structures of governing in NYS are a primary reason that the state has established grants to examine efficiency and effectiveness in local governments in an effort to reduce the high individual tax burden on New York State residents. Taxpayers throughout New York State are demanding more accountability from those who serve the public at every level, and they want lower costs.

The chart below clearly demonstrates the number of fire rescue and EMS agencies serving in Putnam County and Philipstown. Each agency is a cost center for its operations and administration.

Figure 3: Populations served in each township

<table>
<thead>
<tr>
<th>Township</th>
<th>Fire Departments serving</th>
<th>Population</th>
<th>Ranking</th>
<th>Size Sq. Miles</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philipstown</td>
<td>Cold Spring, Continental Village, Garrison, North Highlands</td>
<td>9,422</td>
<td>6</td>
<td>51.5</td>
<td>1</td>
</tr>
<tr>
<td>Carmel</td>
<td>Carmel, Mahopac, Mahopac Falls</td>
<td>36,465</td>
<td>1</td>
<td>46.7</td>
<td>2</td>
</tr>
<tr>
<td>Kent</td>
<td>Kent, Lake Carmel</td>
<td>14,000</td>
<td>3</td>
<td>43.2</td>
<td>3</td>
</tr>
<tr>
<td>Patterson</td>
<td>Patterson</td>
<td>11,306</td>
<td>4</td>
<td>32.9</td>
<td>6</td>
</tr>
<tr>
<td>Putnam Valley</td>
<td>Putnam Valley</td>
<td>10,680</td>
<td>5</td>
<td>40</td>
<td>4</td>
</tr>
<tr>
<td>Southeast</td>
<td>Brewster, Putnam Lake</td>
<td>17,316</td>
<td>2</td>
<td>35</td>
<td>5</td>
</tr>
</tbody>
</table>

Analysis 1: The number of agencies administrating fire rescue and EMS service delivery to this population base appears to be excessive.

Current Volunteer Staffing Overview

The investigation of fire rescue and EMS services in the Town of Philipstown revealed that this community has a core group of extremely hard working and dedicated individuals who are willing and able to serve as volunteer firefighters, and to provide emergency medical services in the community. There is a high level of positive activity and participation in the North Highlands fire district. There are individuals in every department who contribute great amounts of time and energy to this community with what they perceive to be little understanding or appreciation from those they serve. There is clear evidence of too few people doing too many things in order to continue service to the public.

When we examine staffing for fire rescue and EMS services it is vital to look at all of the tasks that demand staffing for both operational and an administrative functions.

- What knowledge skills and abilities are required to successfully perform each task and how efficiently is each task being performed?
- Who is available to perform each task when it is required to be performed?
- What operational tasks does the community expect service for and what staffing is available to provide those services safely and effectively 24/7?
- What are the safety issues to our responders caused by insufficient staffing at incidents?
- What are the administrative functions in each agency that are being performed by every agency?
- Where can centralization of those tasks reduce demands for staff at the administrative level?
- What tasks can be more effective and efficient if handled centrally?
- What functions are not being performed due to lack of staff?
- What is the total available pool of people in the community who might have special knowledge skills and abilities that could be tapped to improve each of the issues facing the fire rescue EMS services within the township?

There is census information that there are more females in the community than males. Yet it appears that the number of females in the fire rescue services does not reflect their proportion in the community. This is not uncommon but it does indicate that efforts must be made to improve recruitment and retention of females as volunteers in fire rescue and EMS.

Throughout our local meetings and observations we heard that there was a lack of participation by “newcomers” in the local fire rescue services. However at the meeting for the public a great number of people raised their hands when asked how many had moved to the area in the last 20 years. Therefore we can conclude that these “new comers” do have an interest in the services being provided and the costs of those services. They appear to be reaching out to be included in this process.

**Operational staffing**

As stated above and which cannot go without repeating:
- **We found that in every agency there are volunteers who are extremely dedicated to serving the people in Philipstown. Those active volunteers readily acknowledge that there are serious issues in the delivery system that need to be addressed for their safety and for the safety of the community.**

We requested from each agency that each member complete a staff readiness form. When we did not receive these surveys from the agencies, we prepared a consolidated staff survey to enable the agencies leaders to provide this information.

In any emergency service planning effort it is very important for the community to know and understand the staffing capabilities of their fire rescue and EMS services.
**Figure 4: Consolidated volunteer staffing survey**

<table>
<thead>
<tr>
<th>Personnel Review:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department:</td>
</tr>
<tr>
<td>Station #</td>
</tr>
<tr>
<td>Number of Active Members:</td>
</tr>
<tr>
<td>This report was reviewed for accuracy by rank.</td>
</tr>
</tbody>
</table>

Please report the **TOTAL number of ACTIVE** Responder members in each category below:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Total Active Responders - Number of each</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefighter/EMT</td>
<td></td>
</tr>
<tr>
<td>Company Officer</td>
<td></td>
</tr>
<tr>
<td>Chief Officer</td>
<td></td>
</tr>
<tr>
<td>Fire Police</td>
<td></td>
</tr>
<tr>
<td>Career Staff</td>
<td></td>
</tr>
<tr>
<td>Sex Female</td>
<td></td>
</tr>
<tr>
<td>Sex Male</td>
<td></td>
</tr>
</tbody>
</table>

Rank by Age:

| Firefighter/EMT       | 18–21 | 22–29 | 30–39 | 40–49 | 50–59 | 60+ |
| Company Officer       |       |       |       |       |       |     |
| Chief Officer         |       |       |       |       |       |     |
| Fire Police           |       |       |       |       |       |     |
| Career Staff          |       |       |       |       |       |     |

Number of members who passed Medical Fitness for Duty Physical Examination within past 12 months by age:

| Firefighter/EMT       | 18–21 | 22–29 | 30–39 | 40–49 | 50–59 | 60+ |
| Company Officer       |       |       |       |       |       |     |
| Chief Officer         |       |       |       |       |       |     |
| Fire Police           |       |       |       |       |       |     |
| Career Staff          |       |       |       |       |       |     |

Currently Certified for Interior firefighting By age:

<table>
<thead>
<tr>
<th>Availability to Department By age:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of members available to respond immediately in the district for all calls including during normal school or work hours:</td>
</tr>
<tr>
<td>Number of members who live in the township?</td>
</tr>
<tr>
<td>Number of members who work or go to school in the township?</td>
</tr>
<tr>
<td>Number of members who travel outside of the town for work or school?</td>
</tr>
<tr>
<td>Number of members who are normally unavailable by day of week due to being out of the district for school or work: By age:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Weds</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–21</td>
<td>22–29</td>
<td>30–39</td>
<td>40–49</td>
<td>50–59</td>
<td>60+</td>
<td></td>
</tr>
</tbody>
</table>

This study was funded by a Local Government Efficiency Grant awarded by the New York State Department of State Contract No. T-098832

RFG Fire Rescue Consulting. [HTTP://FIRERESCUECONSULTING.COM](HTTP://FIRERESCUECONSULTING.COM)

Phone: 770 630 0104  Fax 888 315 7356  Email: rgraner@aol.com
The North Highlands Fire District provided a consolidated staffing report for this study.

Cold Spring Fire Company provided an overview of its membership for the past 10 years which provided a good overview of volunteer staffing trends.

Continental Village fire department sent staffing surveys for this report on 4/18 just as the report was being finalized.

Garrison Fire Company provided the number of members and members certified for interior firefighting.

Neither Garrison nor Philipstown Ambulance provided any information for this study.

All of the materials provided by the agencies are included in the staffing section of this report.

<table>
<thead>
<tr>
<th>Number of members who are normally unavailable by Hours of the day due to being out of the district for school or work and unavailable to respond immediately to all calls By age</th>
<th>18 – 21</th>
<th>22 – 29</th>
<th>30 – 39</th>
<th>40 – 49</th>
<th>50 – 59</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000 – 0600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0600 – 1200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200 – 1800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1800 – 2100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2100 – 0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of members who are town or village employees Emergency Medical Services (EMS) NYSDH Certification By age</th>
<th>Certified First Responder (CFR)</th>
<th>Emergency Medical Technician (EMT)</th>
<th>Advanced Emergency Medical Technician - Intermediate (AEMT-I)</th>
<th>Advanced Emergency Medical Technician - Critical Care (AEMT-CC)</th>
<th>Advanced Emergency Medical Technician - Paramedic (AEMT-P)</th>
<th>Total Hours of Training provided to members by department</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>22 – 29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2009</td>
</tr>
<tr>
<td>30 – 39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2008</td>
</tr>
</tbody>
</table>
North Highlands Fire District staffing

Figure 5: North Highlands fire district staffing overview:

<table>
<thead>
<tr>
<th>Department: North Highlands Fire District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station #</td>
</tr>
<tr>
<td>Number of Active Members: 50</td>
</tr>
</tbody>
</table>

This report was reviewed for accuracy by rank.

Please report the TOTAL number of ACTIVE Responder members in each category below.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Total Active Responder Number of each</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefighter / EMT</td>
<td>50</td>
</tr>
<tr>
<td>Company Officer</td>
<td>4</td>
</tr>
<tr>
<td>Chief Officer</td>
<td>3</td>
</tr>
<tr>
<td>Fire Police</td>
<td>0</td>
</tr>
<tr>
<td>Career Staff</td>
<td>0</td>
</tr>
<tr>
<td>Sex Female</td>
<td>9</td>
</tr>
<tr>
<td>Sex Male</td>
<td>36</td>
</tr>
</tbody>
</table>

Rank by Age: 18 – 21 | 22 – 29 | 30 – 39 | 40 – 49 | 50 – 59 | 60+ | Totals
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefighter / EMT</td>
<td>17</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Company Officer</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chief Officer</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fire Police</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Career Staff</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Number of members who passed Medical Fitness for Duty Physical Examination within past 12 months by age

<table>
<thead>
<tr>
<th>18 – 21</th>
<th>22 – 29</th>
<th>30 – 39</th>
<th>40 – 49</th>
<th>50 – 59</th>
<th>60+</th>
<th>Totals</th>
<th>Percent of total members medically certified for duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>34</td>
<td>65%</td>
</tr>
</tbody>
</table>

Currently Certified for Interior firefighting By age

<table>
<thead>
<tr>
<th>18 – 21</th>
<th>22 – 29</th>
<th>30 – 39</th>
<th>40 – 49</th>
<th>50 – 59</th>
<th>60+</th>
<th>Percent of total members certified for interior firefighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>26 %</td>
</tr>
</tbody>
</table>

Currently Certified SCAB

<table>
<thead>
<tr>
<th>18 – 21</th>
<th>22 – 29</th>
<th>30 – 39</th>
<th>40 – 49</th>
<th>50 – 59</th>
<th>60+</th>
<th>Percent of total members available</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>27 %</td>
</tr>
</tbody>
</table>

Availability to Department By age:

<table>
<thead>
<tr>
<th>18 – 21</th>
<th>22 – 29</th>
<th>30 – 39</th>
<th>40 – 49</th>
<th>50 – 59</th>
<th>60+</th>
<th>Percent of total members available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of members available to respond immediately in the district for all calls including during normal school or work hours: 3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Number of members who live in the township? 4</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Number of members who work or go to school in the township? 4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Number of members who travel outside of the town for work or school? 2</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>16</td>
</tr>
</tbody>
</table>
Analysis 2: The North Highlands Fire District staffing analysis was conducted on the total membership numbers provided. It is important to note that of that total number of members reported only 65% of those were currently medically certified for duty and only 50% of the total membership were certified for interior firefighting. 31% of the total members reported not being available some days of the week and approximately 28% of the total members reported not being available during normal business hours between 06:00 & 18:00 which is consistent with the 31% of the total members who reported that they travel outside of the district for work or school.

Analysis 3: The NHFD is to be commended for providing their staffing information for this study. Their honest presentation of the facts surrounding their staffing provides the agency and the community with information that will aid strategic planning to develop ways to address staffing issues.
Cold Spring Fire Company staffing

The Cold Spring fire company did not provide the comprehensive overview of its membership as shown above. The agency did submit the total membership for each of the past 10 years. There is no way to analyze how many of those members and medically certified for interior firefighting duties or the age range of the total membership which is an important factor in the examination of staffing capabilities.

Figure 6: Cold Spring fire company volunteer membership over past 10 years

<table>
<thead>
<tr>
<th>Staffing history Number of active volunteers and career staff</th>
<th>Volunteer Members</th>
<th>Percent of 2001 membership still active each year since 2001</th>
<th>Career staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>65</td>
<td>100%</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>63</td>
<td>97%</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>60</td>
<td>92%</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>55</td>
<td>85%</td>
<td>0</td>
</tr>
<tr>
<td>2005</td>
<td>53</td>
<td>82%</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>50</td>
<td>77%</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>49</td>
<td>75%</td>
<td>0</td>
</tr>
<tr>
<td>2008</td>
<td>47</td>
<td>72%</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>45</td>
<td>69%</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>41</td>
<td>63%</td>
<td>0</td>
</tr>
</tbody>
</table>

Analysis 4: The 10 year continuous downhill slide of volunteer members in the Cold Spring fire company reflects trends that are nationwide. Today the agency is providing service with a membership that is only 63% of what it was just 10 years ago. This highlights the needs shown in this report to monitor staffing capabilities and to improve volunteer recruitment and retention.
Continental Village Fire Company staffing

Figure 7: Continental Village fire department staffing overview:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18 - 21</th>
<th>22 - 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
<th>Total members reported</th>
<th>% of total members NOT certified for interior firefighting duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total reported by age</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>11</td>
<td>11</td>
<td>7</td>
<td>6</td>
<td>49%</td>
</tr>
<tr>
<td>Not certified interior FF</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>27%</td>
</tr>
<tr>
<td>Total interior FF</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>28</td>
<td>51%</td>
</tr>
</tbody>
</table>

Number of members who reported passing Medical Fitness for Duty Physical Examination within past 12 months by age:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>18 - 21</th>
<th>22 - 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
<th>Total members certified for interior firefighting duties</th>
<th>% of members who reported passing Medical Fitness for Duty Physical Examination within past 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>21</td>
<td>38%</td>
</tr>
</tbody>
</table>

Currently Certified for Interior firefighting by age:

<table>
<thead>
<tr>
<th></th>
<th>18 - 21</th>
<th>22 - 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
<th>Total members certified for interior firefighting duties</th>
<th>% of members Currently Certified for Interior firefighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently Certified SCBA</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>27</td>
<td>51%</td>
</tr>
</tbody>
</table>

% of members Currently Certified for Interior firefighting by age:

<table>
<thead>
<tr>
<th></th>
<th>18 - 21</th>
<th>22 - 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
<th>Total available members certified for interior firefighting duties</th>
<th>% of total available members certified for interior firefighting duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available</td>
<td>11%</td>
<td>15%</td>
<td>21%</td>
<td>25%</td>
<td>13%</td>
<td>4%</td>
<td>39%</td>
<td></td>
</tr>
</tbody>
</table>

Availability of firefighters by age:

<table>
<thead>
<tr>
<th></th>
<th>18 - 21</th>
<th>22 - 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
<th>Total available members certified for interior firefighting duties</th>
<th>% of total available members certified for interior firefighting duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>11</td>
<td>39%</td>
<td></td>
</tr>
</tbody>
</table>
Analysis 5: The Continental Village fire department staffing analysis was conducted based on the number of members who reported that they were certified to perform interior firefighting duties. *The information was taken from materials that members provided.*

Analysis 6: It is important to note that of that total number of The Continental Village fire department staffing members reported, only 38% of those were currently medically certified for duty and only 51% of the total membership were certified for interior firefighting. Over 50% of the members certified for interior firefighting reported not being available weekdays and approximately 50% of the total members reported not being available during normal business
hours between 06:00 & 18:00 which is lower than the 79% of the total members who reported that they travel outside of the district for work or school.

**Garrison Fire Company staffing**

The Garrison fire company reported that they currently have approximately 44 active members, 25 of which are rated as Interior Firefighters. The availability and age of these members was not provided.

**Response Staffing Summary**

Analysis 7: Although the agencies did not provide a detailed response to our efforts to evaluate staff readiness, it was quickly evident in every SWOT meeting and in our community observations that there are acknowledged serious deficiencies in staff availability especially during day time work week hours.

Analysis 8: As a commuter bedroom community Philipstown has a high percentage of residents who board trains or travel by car to out of town for employment. This exodus leaves emergency service delivery to a mixture of retirees, students and the few people who are employed locally and who are able to leave their places of employment or business to respond when needed. This is a serious issue that must be addressed promptly from a community wide perspective.

Analysis 9: It is our impression that the failure of agency leadership to assure that every one of their active members respond to the staff readiness survey for this project is a clear indication that these leaders are fully aware of deficiencies in their staffing and that they fear the community becoming aware of those staffing deficiencies.

**Specific Recommendation 1:** As a function of its contracts with each agency, the town should require each agency to provide volunteer availability and response information for every member on a regular basis. This information should be provided, along with incident response data which shows the actual number of responders to each incident.

**Specific Recommendation 2:** Based upon the future review of staff readiness surveys immediate action should be taken to assure adequate staffing of fire rescue EMS services in the town.
**Administrative staffing demands**

Currently each agency has a separate administrative structure that provides the staffing required for administration of their agency. These people are responsible for management of the costs of all managerial, administrative and operational functions that every agency has. Each agency conducts its own financial management including providing costly financial audits to the state of NY. Each agency must separately record and track member training, medical fitness, certifications, and compliance with the many regulations required by law. Each agency must have administrative personnel conversant with current laws and regulations.

Analysis 10: The process of gathering information for this report from the agencies was delayed several times over a four month period at the request of the agencies. These delays were due to the agencies claims that they did not have the time or people available to complete the study information surveys. Since the information requested was information that every fire rescue and EMS agency should have readily available in their records management system, the inability to find people with the time to provide this information is a clear demonstration of administrative staffing issues and the stress that those who are in leadership roles are under to accomplish all that must be done to properly administer their agencies.

Analysis 11: The current administrative structure of six (6) agencies providing fire rescue and EMS service in a community of fewer than 10,000 people with all administrative functions being separately performed by each agency with no coordination of effort and no clear understanding of the cost of such duplication of effort for all taxpayers demonstrates a system that is unnecessarily inefficient and ineffective in terms of total costs to the community.

Strategic Recommendation 5: Centralization of all administrative functions should take place ASAP to reduce costs and time demands, to assure that all required records are being properly maintained and the assure that training and operational practices comply with county, state and federal regulations.

Specific Recommendation 3: Centralization of administrative functions will require integration and upgrades to the existing computer systems to assure that all locations are connected via a network. In the long run utilizing local resident capabilities to establish this network will enable cost saving and better records management.
Facilities and Equipment

Fire Stations & Apparatus Observations:

During the site visit we had the opportunity to see the interiors of the Cold Spring, Garrison and North Highlands fire stations and the exterior of the Continental Village fire department and the Philipstown and Garrison ambulance stations.

North Highlands

The North Highlands station is a modern new facility with space for many functions of the department and the community. The space contains a well-equipped administrative office and an internal training space and appears to have adequate storage space for all of the materials and supplies required for operations of the department. The only negative issue that we feel must be addressed is the lack of bunking or living space for volunteers. The apparatus floor is spacious for the amount of equipment.

Figure 8: NHFD station details

<table>
<thead>
<tr>
<th>Station</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparatus can enter from front and rear doors</td>
<td>2 out of 5</td>
<td></td>
</tr>
<tr>
<td>Vehicle exhaust system</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>PPE Gear storage area</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>PPE Cleaning facilities/equipment</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Designated Equipment cleaning area</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Designated EMS equipment cleaning area</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area Meds and EMS equipment</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area Personnel Protective Equipment supplies</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area other emergency supplies</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area non emergency supplies IE cleaning/housekeeping supplies</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Number of Active Volunteer Firefighters / EMTs</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Number of Career Firefighters / EMTs</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Is Station normally staffed full or part time</td>
<td>Yes</td>
<td>x</td>
</tr>
<tr>
<td>If yes, during what hours is station staffed?</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Is there a scheduled time Volunteers staff the station (bunk in)</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>If yes, during what hours is station staffed with volunteers?</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>On duty staffing per unit include Career and/or volunteer</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Facilities provided in this station</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>Training room</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Officers’ room</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kitchen</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bunk Room</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Restrooms male</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Restrooms female</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Restrooms Common</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Restrooms Public</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Shower area Males</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Shower area Females</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Shower area Joint use area</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Recreation areas</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Community use room</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Figure 9: NHFD Apparatus

| Apparatus / Vehicles assigned to station Including vehicles assigned as take home vehicles: Type (Engine, Truck, Rescue, Ambulance, Chiefs vehicle, Command post, etc.), Unit Number, Year manufactured, Manufacturer, Status 1 Front line - 2 Reserve - 3 Historic, Current Odometer reading, Maintenance performed by Dept., Village, Town, Outside contractor, Maintenance performed by Certified Technician. |
|-------------------------------------------------|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Command Vehicle                                 | 21-1-1                                          | 2000            | Chevy           | 1               | 145000          | Outside         | yes             |
| Engine                                          | 21-3-1                                          | 2003            | Seagrave        | 1               | 5383            | Outside         | yes             |
| Brush                                            | 21-3-1                                          | 1999            | Ford            | 1               | 5341            | Outside         | yes             |
| Tanker                                          | 21-4-1                                          | 1999            | Mack            | 1               | 8512            | Outside         | yes             |
| Engine/Rescue                                    | 21-6-1                                          | 1994            | Saulbury        | 1               | 9703            | Outside         | yes             |
Cold Spring Fire Company

The Cold Spring fire station is a former auto repair facility that has a great room that is available to the community for meetings and events. There is a kitchen, office and front entry room used as a TV room. This station has changed little over the years and does not offer facilities for volunteers to bunk at the station or other facilities that would encourage active members to remain for long periods. The station seems to be lacking in adequate storage space and the apparatus floor is crowded with equipment needed for response. Apparatus in this station appeared to be clean and ready for immediate response.

Figure 10: Cold Spring station information

<table>
<thead>
<tr>
<th>Department</th>
<th>Cold Spring Fire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station #</td>
<td>13</td>
</tr>
<tr>
<td>Current ISO Rating</td>
<td>5</td>
</tr>
<tr>
<td>Website</td>
<td>coldspringfd</td>
</tr>
<tr>
<td>Person Completing this report, Name, Rank</td>
<td>Chief, Chris Tobin <a href="mailto:coldspringfd@optonline.net">coldspringfd@optonline.net</a></td>
</tr>
<tr>
<td>Email address</td>
<td></td>
</tr>
<tr>
<td>Phone Number</td>
<td>845-494-3702</td>
</tr>
<tr>
<td>Station Non-emergency Phone Number</td>
<td>845-265-1093</td>
</tr>
<tr>
<td>Street Address</td>
<td>154 Main Street</td>
</tr>
<tr>
<td>Mailing Address</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Cold Spring</td>
</tr>
<tr>
<td>Zip</td>
<td>10516</td>
</tr>
</tbody>
</table>

Department legal structure

Legal structure of department under state laws
Title of directing body
Size of governing body (# of people)
Current Budget - Operations
Current Budget - Capital
Current total value of cash and investments in reserve
Budget approved by
Strategic Plan approved by
Operational plans approved by
<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparatus can enter from front and rear doors</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Vehicle exhaust system</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PPE Gear storage area</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PPE Cleaning facilities/equipment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Designated Equipment cleaning area</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Designated EMS equipment cleaning area</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area Meds and EMS equipment</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area Personnel Protective Equipment supplies</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area other emergency supplies</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Logistics supply area non emergency supplies IE cleaning/housekeeping supplies</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Number of Active Volunteer Firefighters / EMTs:</td>
<td>41 FF's</td>
<td></td>
</tr>
<tr>
<td>Number of Career Firefighters / EMTs:</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Is Station normally staffed full or part time:</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>If yes, during what hours is station staffed?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a scheduled time Volunteers staff the station (bunk in)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>If yes, during what hours is station staffed with volunteers?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staffing on duty in station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On duty staffing per unit include Career and/or volunteer</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Facilities provided in this station</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training room</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Officers’ room:</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kitchen:</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bunk Room:</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Restrooms male</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Restrooms female:</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Restrooms Common</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Restrooms Public</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Shower area Males</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Shower area Females:</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Shower area Joint use area</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Recreation areas:</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Community use room</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Figure 11: Cold Spring records management system

<table>
<thead>
<tr>
<th>Records management system Manufacturer</th>
<th>Red Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
</tr>
<tr>
<td>Obtained year</td>
<td>2010</td>
</tr>
<tr>
<td>Owned</td>
<td>County Provided</td>
</tr>
<tr>
<td>Leased</td>
<td></td>
</tr>
<tr>
<td>Lease purchase</td>
<td></td>
</tr>
<tr>
<td>Amount owed on system as of date</td>
<td></td>
</tr>
<tr>
<td>Date lease complete</td>
<td></td>
</tr>
<tr>
<td>Current system service contract in place expires date</td>
<td>Yes No</td>
</tr>
<tr>
<td>System interfaces with directly with County dispatch office CAD system to input event times automatically</td>
<td>X</td>
</tr>
</tbody>
</table>

System Provides ability to track and report

| Response data | Call Process times at dispatch | Response times | Arrival times | Patient information | Incident details in text as well as in searchable formats | Staffing | Inspection reports | Investigation information | Hydrant records | Personnel records | Training records | Member recertification information | Requests for repairs | Requests for service | Maintenance records | Inventory records | Re Certification dates for apparatus and equipment | Other | X |

Figure 12: Cold Spring Apparatus

<table>
<thead>
<tr>
<th>Apparatus / Vehicles assigned to station Including vehicles assigned as take home vehicles: Types (Engine, Truck, Rescue, Ambulance, Chiefs vehicle, Command post, etc.,)</th>
<th>Unit Number</th>
<th>Year manufactured</th>
<th>Manufacturer</th>
<th>Status 1 - Front line - 2 Reserve - 3 Historic</th>
<th>Current Odometer reading</th>
<th>Maintenance performed by Dept., Village, Town, Outside contractor</th>
<th>Maintenance performed by Certified Technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiefs Vehicle</td>
<td>13.1.1</td>
<td>2006 Chevrolet</td>
<td>45,000</td>
<td>Outside Cont.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine/Rescue</td>
<td>13.2.2</td>
<td>2008 Smeal</td>
<td>Frontline</td>
<td>3,456 Outside Cont.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine 13.2.2</td>
<td>2008 Smeal</td>
<td>Frontline</td>
<td>9,545</td>
<td>Outside Cont.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brush Truck</td>
<td>13.3.1</td>
<td>2002 Chevrolet</td>
<td>4,561</td>
<td>Outside Cont.</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polaris Ranger</td>
<td>12.2.2</td>
<td>2005 Polaris</td>
<td>Outside Cont.</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclosed trailer</td>
<td>13.8.1</td>
<td>2005 Haulmark</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Cold Spring fire company does do some preplanning and has identified target hazards in the district.

**Figure 13: Cold Spring Target hazards**

<table>
<thead>
<tr>
<th>Address</th>
<th>Business name</th>
<th>Life Hazard Rating</th>
<th>Property Loss Hazard Rating</th>
<th>Per Preplan the following Effective Response Force is required ERF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off Indus Brook Rd</td>
<td>Audubon</td>
<td>Low</td>
<td>High</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>2231 Rte 9D</td>
<td>Chalet On the Hudson</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>1756 Rte 9D</td>
<td>Carolyn Leehey Pavilion</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Market Street</td>
<td>Constitution Island</td>
<td>Low</td>
<td>High</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Craigside Drive</td>
<td>Haldane annex</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Craigside Drive</td>
<td>Haldane Middle School</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Craigside Drive</td>
<td>Haldane High School</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Padding Ave</td>
<td>Hospital</td>
<td>Low</td>
<td>High</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Lane Gate Rd</td>
<td>Lane Gate Rd Residence</td>
<td>moderate</td>
<td>moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>2233 Rte 9D</td>
<td>Link's Residence</td>
<td>moderate</td>
<td>moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Grove St</td>
<td>Loretto Rest</td>
<td>Low</td>
<td>High</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Chestnut Street</td>
<td>The Nest</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Chestnut Street</td>
<td>M&amp;T Bank</td>
<td>moderate</td>
<td>moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Chestnut Street</td>
<td>Chestnut Ridge Apartments</td>
<td>High</td>
<td>High</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>The Boulevard</td>
<td>Forge Gate Apartments</td>
<td>moderate</td>
<td>moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
<tr>
<td>Fair Street and Northern ave</td>
<td>Springbrook Apartments</td>
<td>moderate</td>
<td>moderate</td>
<td>Engines: 1, Truck: 1, Ambulance: 1</td>
</tr>
</tbody>
</table>

Analysis 12: The list of high risk targets did not include the historic structures on Main Street and other village locations that are the driving factors of the tourist visits that drive the local economy. None of the target hazards identify the number of people required for incident mitigation or the fire flow that would be needed to combat a fire in each location.

Analysis 13: Water supply issues in the villages of Cold Spring and Nelsonville greatly impact the agencies ability to obtain the required fire flows for major structure fires. These conditions need to be planned for.

Strategic Recommendation 6: The Cold Spring Fire Company should preplan for incidents in each of the primary tourist areas of the village including main street, the river front structures and all other significant homes and buildings. The agency should conduct regular multi company table top and full scale drills to refine those plans.
**Continental Village**

The Continental Village station is fairly new and from external views it appears to have adequate space on two floors to serve the needs of the community and the department. We do not know if the structure currently has space for personnel bunking or live in accommodations. As could be seen through windows the apparatus appeared clean and ready to respond.

**Garrison Fire Company**

The Garrison fire company has two stations. The original station in the hamlet area near the train station has been removed from active service and all responses are made from the station on route 9. This location change increases response time for the hamlet area of Garrison.

Analysis 14: The closing of the station road Garrison fire station points out the need to analyze response patterns in the community to assure the closest units being dispatched to every emergency.

The Garrison fire company route 9 station is well maintained. The apparatus from the Garrison department appeared to be well maintained.

On 4/4/11 I was given a tour of this station by company president James Copeland. We observed a well-cared for facility. It was pointed out that in some cases members did staff the station overnight and that they use the recliner chairs in the lounge for sleeping.

Analysis 15: The fact that members of the Garrison FC do spend over night staffing their station as needed indicates the need for the agency to provide bunk room / living space for its volunteers in an ongoing effort to assure proper response times.

Strategic Recommendation 7: Providing facilities for volunteers to bunk in and live at every fire rescue and EMS station should be a priority in the effort to increase staffing and staff readiness.

It was observed that in an effort to reduce energy costs the walls and ceiling in the apparatus bay of the Garrison station had been sprayed with some form of insulating foam. I have raised the following safety issue questions with the agency. What type of spray foam has been used and is in place? Does this type of foam meet NYS codes for use in a public building? Are there plans to cover the foam with sheet rock or another product or another protection material? Has the material been properly protected by the paint or whatever was sprayed over the foam material under the NYS building codes to prevent fire spread and fumes from combustion? Has the fire marshal approved this installation and issued a CO for occupancy following this foam installation? We received the following information from the agency: “RE the foam product used: Our Truck Bays were insulated last Fall with Icynene foam covered with an ignition barrier coating, installed by Foamco. Icynene Spray Foam is a water-blown, environmentally friendly "green" product that meets NYS Building Code and is backed by Icynene’s limited lifetime warranty. The previous fiberglass insulation panels were coming loose and the work was categorized as a repair. No Building Permit was obtained.”

Analysis 16: Assuring that the insulation foam used in the Garrison fire station meets all applicable state codes for fire and health safety is important to all that may occupy that space and to those who depend on the apparatus and equipment stored in that space for emergency response.
Philipstown Ambulance
*Agency did not provide access to their facility or any information for this study*

Garrison Ambulance
*Agency did not provide access to their facility or any information for this study*

Analysis 17: It was observed that the Garrison Ambulance station is located only a few hundred yards from the Route 9 Garrison fire company station. The cost of maintaining 2 separate facilities so close to each other points to areas where consolidation would save money in utility costs and station maintenance.

Fire and EMS Service Operations

- The efficiency of fire rescue and EMS operations as it relates to staffing, methods of scheduling, deployment, response times, safety and productivity could not be reviewed due to the lack of information supplied for this study by the agencies.

Records available from other sources indicate the agencies responded to the following number of calls in 2010. The records from NYS OFPC did not show any runs for the North Highlands fire district for 2010. This was a result in the failure of the system at North Highlands to be able to communicate with the NYS OFPC system.

Figure 14: calls for service in Putnam County 2010
Specific Recommendation 4: The problem of transmission of run data from North Highlands to NYS OFPC should be addressed immediately by both agencies to assure proper record transmission as required.

We examined the number of calls per person in each township and found that Philipstown, which has the lowest population base, experienced the second highest number of fire rescue calls for service per person.

Figure 15: total runs per person in each town

<table>
<thead>
<tr>
<th>Town</th>
<th>departments serving town</th>
<th>Town population</th>
<th>Total runs</th>
<th>runs per person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philipstown</td>
<td>Cold Spring, Continental village, Garrison, N Highlands</td>
<td>9422</td>
<td>656</td>
<td>0.0696</td>
</tr>
<tr>
<td>Carmel</td>
<td>Mahopac, Mahopac falls</td>
<td>36465</td>
<td>2320</td>
<td>0.0636</td>
</tr>
<tr>
<td>Southeast</td>
<td>Brewster</td>
<td>17316</td>
<td>1974</td>
<td>0.1140</td>
</tr>
<tr>
<td>Patterson</td>
<td>Patterson</td>
<td>11300</td>
<td>79</td>
<td>0.0070</td>
</tr>
<tr>
<td>Kent</td>
<td>Kent, Lake Carmel</td>
<td>14009</td>
<td>638</td>
<td>0.0455</td>
</tr>
<tr>
<td>Putnam valley</td>
<td>Putnam valley</td>
<td>10686</td>
<td>371</td>
<td>0.0347</td>
</tr>
</tbody>
</table>

Analysis 18: The calls for service reports published by the county demonstrate that Philipstown has the largest number of fire rescue agencies of any township in Putnam County while serving the smallest population base in the county. The administrative cost of multiple agencies generally exceeds the cost of providing those same services in a consolidated district even in areas served by volunteers.
Materials Requested from Fire Rescue and EMS Agencies in Philipstown

As part of this contract with the town the consultant made numerous requests to the fire rescue EMS agencies, and to county and state agencies. In the process, all requests for assistance were first sent directly to the leaders of agencies by the Town Clerk for Philipstown with a request that those agencies assist the town and the town’s consultant in gathering information that was important for the town’s efforts to examine current delivery of fire rescue and EMS services. The consultant subsequently also directly contacted each agency with follow up requests for information. Each request clearly stated that this study was a taxpayer funded effort being conducted under a Local Government Efficiency Grant awarded by the New York State Department of State.

To ease the work for each agency to provide the requested information, each was provided with prepared survey forms in MS Excel. Each of the Philipstown fire rescue and EMS agency was provided with soft copies of several survey booklets to reduce their workloads in preparing responses to our inquiries. The survey materials were sent as email attachments to agency leaders. The materials were also sent via express mail to agency leaders on separate flash drives that contained the survey Excel workbooks.

We requested from each agency materials that are relative to this study including but not limited to: Department Contact Information; Staff Readiness; Activity Summary; Apparatus survey; Pre Plans; Department Personnel training; Department Budgets; Station and facility information.

Following the three local meetings in early January, Town leaders asked that we extend the amount of time for the community and leaders of the fire rescue and EMS agencies to provide information and input into this study. A notice was posted in the Putnam County News and Recorder requesting members of the community and members of the fire rescue ems community to provide additional input directly to me at my email address. Letters were sent by the town to the leaders of each agency asking them to respond with the requested survey information by February 16, 2011. On 2/11 we received an additional request to extend the time for agencies to provide their survey information until the end of March. To further reduce the work load for the fire and EMS agencies in providing information for this study on 2/11/11 we prepared and distributed a consolidated information request survey and provided it to the town for distribution to the agencies. We sent an email to the town on that date reminding the town that the NYS DOS grant deadline was 3/31/11 and we requested that the town request an extension of that deadline. The extension was authorized by the NYS department of state representative administering this grant. All agency leaders where reminded that the due date for receipt of survey materials was 3/31 in an email sent on 3/18.
Responses from fire rescue & EMS agencies to requests for information

Financial Status Review
Assets, expenses and liabilities information was not provided by the departments except by the North Highlands Fire district and Cold Spring Fire Company. New York State requires every agency to submit an audit each year. It was not part of our contract to conduct a financial audit and audit copies were not provided by the agencies.

Specific Recommendation 5: The Town should engage the services of a forensic auditor to examine all of the assets, liabilities, income and expenses of each fire rescue and EMS agency and each of the supplemental support groups that may exist to generate and manage funds for the current agencies. Those fiscal reports should be examined separately and in summary or joint total with recommendations for cost containment and savings made upon the total findings.

Financial details
The examination of costs for fire rescue and EMS services can be misleading depending on how the figures are viewed. Putnam County recently prepared a report that shows Philipstown as having the highest tax cost per person in the county. However that same report showed that Philipstown also is the largest geographic area in the county with the lowest population.

- The information in the cost below was taken from sources that are assumed to be accurate but have not been personally verified.

Figure 16: comparative town fire taxes

Specific Recommendation 6: It is important when reviewing the tax cost figures to remember that in Philipstown these companies respond to the largest geographical area in the county. It is important in planning the number of stations required to look at stations and station locations independently of administrative structures.

Specific Recommendation 7: Station response districts reviews are needed to show how many homes are located inside the travel distance of 5 miles which has been determined by ISO as the maximum travel distance to be in a “protected” response area for better home insurance rates.
Budgets
The Town of Philipstown has adopted the following budget for fire rescue and EMS services for 2010.

Figure 17: Town of Philipstown fire and EMS budgets 2010

<table>
<thead>
<tr>
<th>Philipstown Budget 2010</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMBULANCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philipstown Amb</td>
<td>$199,299</td>
<td></td>
</tr>
<tr>
<td>Garrison Ambulance</td>
<td>$112,874</td>
<td></td>
</tr>
<tr>
<td><strong>EMS Total</strong></td>
<td>$312,173</td>
<td></td>
</tr>
<tr>
<td><strong>Fire</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Spring 2009 total</td>
<td>$116,450</td>
<td></td>
</tr>
<tr>
<td>CONTINENTAL VILLAGE</td>
<td>$256,829</td>
<td></td>
</tr>
<tr>
<td>PHILIPSTOWN #1 -SF13</td>
<td>$59,660</td>
<td></td>
</tr>
<tr>
<td>GARRISON #5 -SF14</td>
<td>$742,115</td>
<td></td>
</tr>
<tr>
<td>NORTH HIGHLANDS -SF15</td>
<td>$700,989</td>
<td></td>
</tr>
<tr>
<td><strong>Total Fire</strong></td>
<td>$1,876,043</td>
<td></td>
</tr>
<tr>
<td><strong>total town Fire &amp; EMS budget</strong></td>
<td>$2,188,216</td>
<td></td>
</tr>
</tbody>
</table>

The village of Cold Spring provided the following tax revenue information for the Cold Spring Fire department

Figure 18: Village of Cold Spring fire service budget

<table>
<thead>
<tr>
<th>Village of Cold Spring</th>
<th>2010</th>
<th>2010</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax Funds budgeted to Cold Spring Village fire department and ambulance services.</strong></td>
<td>Cold Spring Village fire service awards</td>
<td>Total to fire services</td>
<td></td>
</tr>
<tr>
<td>Taxes budgeted to:</td>
<td>$52,832</td>
<td>$43,096</td>
<td>$95,928</td>
</tr>
<tr>
<td>total value Assessment of properties in the Village of Cold Spring</td>
<td>$170,031,178</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Village of Cold Spring</th>
<th>2009</th>
<th>2009</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax Funds budgeted to Cold Spring Village fire department and ambulance services</strong></td>
<td>Cold Spring Village fire service awards</td>
<td>Total to fire services</td>
<td></td>
</tr>
<tr>
<td>Taxes budgeted to:</td>
<td>$53,050</td>
<td>$45,000</td>
<td>$98,050</td>
</tr>
<tr>
<td>total value Assessment of properties in the Village of Cold Spring</td>
<td>$171,724,252</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 19: Village of Nelsonville Fire protection budget and cost per resident

<table>
<thead>
<tr>
<th>Village of Nelsonville</th>
<th>Budget for fire protection</th>
<th>$38,056</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assessment</td>
<td>$45,851,137</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>567</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fire protection cost per person</td>
<td>$67.12</td>
<td></td>
</tr>
</tbody>
</table>

Figure 20 Cold Spring Fire Company Financial information

<table>
<thead>
<tr>
<th>Department Revenue Budget Asset and Liability Review</th>
<th>Cold Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department</strong></td>
<td>Value 2010</td>
</tr>
<tr>
<td>Assets</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$60,389</td>
</tr>
<tr>
<td>Cash Time deposits</td>
<td>$133,872</td>
</tr>
<tr>
<td>Petty Cash</td>
<td>$0</td>
</tr>
<tr>
<td>Cash Special Reserves</td>
<td>$121,871</td>
</tr>
<tr>
<td>Investments</td>
<td>$221,972</td>
</tr>
<tr>
<td>2% foreign Insurance account</td>
<td></td>
</tr>
<tr>
<td>Total cash and investment assets</td>
<td>$538,104.00</td>
</tr>
<tr>
<td>Real property, Equipment and Vehicle Assets</td>
<td>2010</td>
</tr>
<tr>
<td>Total Station including property value</td>
<td>$0</td>
</tr>
<tr>
<td>Total owned vehicle value</td>
<td>$670,000</td>
</tr>
<tr>
<td>Total owned equipment value</td>
<td>$208,511</td>
</tr>
<tr>
<td>Other real property owned value</td>
<td>$196,394</td>
</tr>
<tr>
<td>other (define)</td>
<td>$0</td>
</tr>
<tr>
<td>other (define)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$1,074,905.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax revenue</td>
<td>$113,138</td>
<td>$103,055</td>
<td></td>
</tr>
<tr>
<td>Fees</td>
<td>$5,276</td>
<td>$1,133</td>
<td></td>
</tr>
<tr>
<td>Fund raising</td>
<td>$28,508</td>
<td>$12,076</td>
<td></td>
</tr>
<tr>
<td>2% foreign insurance fund</td>
<td>$35,505</td>
<td>$17,590</td>
<td>$13,263</td>
</tr>
<tr>
<td>other (define) room rental</td>
<td>$2,200</td>
<td>$549</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$184,627</td>
<td>$134,403</td>
<td>$13,263</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Budget</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>$121,476</td>
<td>$126,376</td>
<td>$131,877</td>
</tr>
<tr>
<td>Capital</td>
<td>$325,000</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
<tr>
<td>2% foreign insurance fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$446,476</td>
<td>$151,376</td>
<td>$156,877</td>
</tr>
</tbody>
</table>

2% foreign insurance fund used to pay for (examples): Volunteer uniforms and refreshments, equipment

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Collateralized Property Name/Title</th>
<th>Purchase Yes/No</th>
<th>Lease Purchase Yes/No</th>
<th>Loan Start Date</th>
<th>Interest rate</th>
</tr>
</thead>
</table>

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Fire Rescue and EMS Service Study for the Town of Philipstown, New York

This study was funded by a Local Government Efficiency Grant awarded by the New York State Department of State Contract No. T-098832

RFG Fire Rescue Consulting, HTTP://FIRERESCUECONSULTING.COM

Phone: 770 630 0104 Fax 888 315 7356 Email: rgraner@aol.com
Figure 21: North Highlands budget information 2010

<table>
<thead>
<tr>
<th>CODE</th>
<th>CATEGORY</th>
<th>ACTUAL</th>
<th>PROPOSED</th>
<th>(OVER)UNDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Payroll</td>
<td>$13,999.96</td>
<td>$16,000.00</td>
<td>$0.04</td>
</tr>
<tr>
<td>200</td>
<td>Employer Social Security</td>
<td>$1,234.00</td>
<td>$1,224.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>300</td>
<td>NYS Employment</td>
<td>$533.68</td>
<td>$583.84</td>
<td>$0.00</td>
</tr>
<tr>
<td>301</td>
<td>MTA Tax</td>
<td>$54.40</td>
<td>$54.40</td>
<td>$0.00</td>
</tr>
<tr>
<td>401</td>
<td>Telephone</td>
<td>$403.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4832 Verizon</td>
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<td>6595 Verizon</td>
<td>$836.21</td>
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<td>Officers Cell Phones</td>
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<td>Legal Fees</td>
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<td>Medical OSHA</td>
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<td>$892.62</td>
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<td>200 - Grounds</td>
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<td></td>
<td>201 - Supplies</td>
<td>$2,662.91</td>
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<tr>
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<td>202 - Refuse Pickup</td>
<td>$2,136.24</td>
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<td>203 - Snow Plowing</td>
<td>$2,000.00</td>
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<tr>
<td></td>
<td>204 - Building Improvement/Repairs</td>
<td>$10,870.00</td>
<td>$9.91</td>
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<td>205 - Special Building Capital Project</td>
<td>$29,078.62</td>
<td>$10,000.00</td>
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<td>206 - Custodial</td>
<td>$3,200.00</td>
<td>$5,200.00</td>
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<td>5201</td>
<td>New Equipment</td>
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<td>5202</td>
<td>Equipment Replacement</td>
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<td>5204</td>
<td>Emergency Repairs</td>
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<td>5205</td>
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<td>5206</td>
<td>Training</td>
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<td>5207</td>
<td>Dry Hydrant</td>
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<td>5208</td>
<td>Mutual Aid</td>
<td>$1,200.00</td>
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<td>5209</td>
<td>Ddli, Details &amp; Parades</td>
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<td>5210</td>
<td>Recruitment</td>
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<td><strong>Total Firematic</strong></td>
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<td><strong>$33,000.00</strong></td>
<td><strong>$27,466.47</strong></td>
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<td>Principal/Interest Loan 1.1</td>
<td>$7,646.94</td>
<td></td>
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<tr>
<td>700</td>
<td>CR Apparatus</td>
<td>$10,000.00</td>
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<td></td>
</tr>
<tr>
<td>701</td>
<td>CR Building</td>
<td>$3,000.00</td>
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</tr>
<tr>
<td>800</td>
<td>Service Award</td>
<td>$35,450.70</td>
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<td><strong>Total ADOPTED BUDGET 2010</strong></td>
<td><strong>$680,741.52</strong></td>
<td><strong>$701,999.55</strong></td>
<td><strong>$21,248.03</strong></td>
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<tr>
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<td><strong>TOTAL ADOPTED BUDGET 2010</strong></td>
<td><strong>$700,999.55</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>To Be Raised by Property Taxes</strong></td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
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<td><strong>ACTUAL VS. BUDGET</strong></td>
<td><strong>$680,741.52</strong></td>
<td><strong>$700,999.55</strong></td>
<td><strong>$3,378.03</strong></td>
</tr>
</tbody>
</table>

This figure takes into account the encumbrances of $11,875.
North Highlands Fire district also provided copies of the audit reports as submitted to NYS for the past 3 years.

Analysis 19: Budget section 600 shows that 54% of the NHFD budget is for principle and interest payment of the loans for the new fire station and a Seagrave apparatus. Once these loans are paid off the budget will be reduced by 46%.

Analysis 20: In the review of the NHFD budget we questioned the amount in line 409 for 'legal services. We were informed that until this current year, 2011 line 409 included both legal and accounting fees. The figures in this account line includes the retainer for the district lawyer, audit and accountant fees plus the cost of legal ads, election clerks for commissioner elections in December and a truck bond vote.

2% Foreign Insurance funds

One of the sources of funds that can only be utilized for the benefit of volunteer members of the departments is the NYS 2% foreign insurance fund distributions. The foreign insurance program is a tax paid on fire insurance policies written by companies that are not located in NYS and they must be used under strict guidelines for the benefit of the fire personnel. We requested information from the state insurance department and received the following information on the 2% foreign insurance funds sent to the fire departments:

Figure 22: 2% Foreign Insurance Cold Spring

<table>
<thead>
<tr>
<th>Distribution Year</th>
<th>Check Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>$6,452.01</td>
</tr>
<tr>
<td>2002</td>
<td>$10,694.18</td>
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<tr>
<td>2003</td>
<td>$12,758.91</td>
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<tr>
<td>2004</td>
<td>$15,865.18</td>
</tr>
<tr>
<td>2005</td>
<td>$15,594.67</td>
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<tr>
<td>2006</td>
<td>$13,630.25</td>
</tr>
<tr>
<td>2007</td>
<td>$14,461.09</td>
</tr>
<tr>
<td>2008</td>
<td>$12,364.62</td>
</tr>
<tr>
<td>2009</td>
<td>$17,689.88</td>
</tr>
<tr>
<td>2010</td>
<td>$35,504.81</td>
</tr>
</tbody>
</table>
Figure 23: 2% Foreign Insurance North Highlands
Figure 24: 2% Foreign Insurance Garrison

FIRE DEPARTMENT CHECK HISTORY

FD ID: 03821
Department Name: GARRISON VOL FIRE DEPT
Check Name: 1) GARRISON FPD

<table>
<thead>
<tr>
<th>Distribution Year</th>
<th>Check Amount</th>
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<tbody>
<tr>
<td>2001</td>
<td>$12,635.59</td>
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<tr>
<td>2002</td>
<td>$15,297.23</td>
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<tr>
<td>2003</td>
<td>$19,394.77</td>
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<td>2004</td>
<td>$19,902.81</td>
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<td>2005</td>
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<td>$20,323.58</td>
</tr>
<tr>
<td>2010</td>
<td>$21,354.29</td>
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</table>

ANNUAL REPORT ON REVENUES AND EXPENDITURES OF FOREIGN FIRE INSURANCE PREMIUMS
(See instructions on reverse side)
For the calendar year January 1, 2009 - December 31, 2009

ALL NUMBERS IN THIS REPORT MUST BE ROUNDINO TO THE NEAREST DOLLAR

Name of Entry: Garrison Volunteer Fire Co., Inc.

Type: Fire Department
Fire District ID # (if known) 352

County Where Located: Putnam

Name of Fire District or Fire Protection District Where Located (If Applicable)
Address: 161 Route 9J, PO Box 252
City/Town/Village: Garrison
Zip 10524

AMOUNT

Balance (as of 1/1/09)
$3,912

Revenue:
Foreign Fire Insurance Premiums
$20,223

Total Revenue
$2,997

Total Balance and Revenues
$54,258

Expencitures:
Other Insurance
$3,555

Total Expenditures
$3,555

Balance (as of 12/31/09)
$3,992

I, John Swirsky, certify that this report is a true and accurate statement of the revenues and expenditures of Foreign Fire Insurance premiums for the calendar year ended 2009.

(Signature)
John Swirsky
(Title) Treasurer

(Telephone Number) 845-424-3388 (E-mail) John@swirsky.com
Figure 25: 2% Foreign Insurance Continental Village report from NYS
Analysis 21: State insurance records indicate that at the end of 2009 Continental Village FD had a balance of $58,528 in their 2% foreign insurance account.

Analysis 22: State insurance records indicate that at the end of 2009 the Garrison fire company had a balance of $29,621 in their 2% foreign insurance account.

Analysis 23: State insurance records indicate that at the end of 2009 the Cold Spring fire company had a balance of $0.00 in their 2% foreign insurance account.

**Historical & Potential Sources of Funding**

While the primary base for funding fire rescue and EMS services has been taxes, historically each agency has conducted separate fund raising to supplement those tax funds. From the days of the firemen’s carnival, where all members worked cooking sausages and running booths of games of chance, fund raising has been part of volunteering. As time demands for actually training for and delivering emergency services have increased, the ability of active volunteers to do fund raising has been reduced. The concept of asking the few to do it all has met its breaking point at fund raising in many volunteer departments around the nation.

All public safety agencies need to examine new sources for obtaining funds for the services provided.

**Strategic Recommendation 8:** The community leaders should identify members of the community with special expertise in fund raising to develop and operate ongoing modern cost...
effective fund raising activities for the benefit of the departments. These efforts should be done voluntarily as these residents contribution to the volunteer efforts for community benefit.

Strategic Recommendation 9: The town should examine the opportunity to initiate charge backs to insurance companies for responses to accidents and other emergencies that are covered by insurance policies of drivers and/or property owner.

**Lack of cooperation in the study:**

Throughout this study some leaders of the fire rescue and EMS departments failed to, or refused to, respond to repeated requests for detailed information that was necessary for this study. I heard from several sources that this failure was the result of feeling by rank and file members in the agencies that they and their agencies are under attack by members of the public who are demanding accountability from their public safety agencies as tax payers around the nation are doing for all tax payer supported services. It is unfortunate that some of the agency leadership chose not to take the opportunity to educate their members on the importance of maintaining public support and cooperation by opening the flow of information to the people being served in this community.

Analysis 24: The failure of some department leaders to respond to repeated requests for detailed information and cooperate in this study was apparently due to their failure to understand the importance of keeping the public informed about the services that they are funding and which they will depend upon in an emergency.

Strategic Recommendation 10: A vital first step in any effort to improve the efficiency, effectiveness and safety of fire rescue and EMS services in Philipstown is for the leaders of the agencies and local elected officials from all layers of government to engage the services of skilled and trained mediators who can help all resolve the relational issues between the public in the community, elected officials and the leadership of fire rescue and EMS services so that jointly each will do what will be in the best interests of the public and in the best interests of the safety of the emergency responders in the community.

**Leadership Issues**

Leadership at the upper levels of management within the agencies has been identified in this report and in the greater community as the most serious problem area that must be addressed to assure the effective efficient and safe operations of fire rescue and EMS services in Philipstown.

The leadership of the multiple agencies has, in general, failed their membership and the greater community by their failure to develop open organizations that keep all people in the community and in the volunteer services aware of and involved in the activities of their services. In our attempts to conduct this investigation we discovered serious systemic negative issues in the leadership structures as they exist today. We observed repeated evidence of failures of senior leadership in the Continental Village fire company, the Garrison fire company and the Cold Spring fire company. The leaders of both of the community’s EMS services were notable failures in their responsibility to keep the community informed by failing to participate in this study.

The term “leaders” refers to those directors or other titled people who are elected to leadership roles within their departments other than company operational roles such as Captains and...
Lieutenants. In this summary references to leadership refer to the administrative managers and not specifically to operational managers and leaders of the agencies. However we do have serious concerns in the area of incident safety management and control that do reflect upon the operational managers.

Leadership in each of the agencies has demonstrated an egocentric view of local fire rescue and EMS services and demonstrated a failure to work and plan in harmony with neighboring companies and to expand the role of the greater community. There has reportedly been an ongoing lack of inter-agency training efforts and a dangerous lack of joint practical incident management training with the multiple agencies that must work together in harmony for the successful mitigation of any major incident. Each agency leadership has viewed operations, staffing, recruitment, retention, apparatus maintenance and purchasing and the many other facets that assure effective and efficient performance as self-centered, separate departmental issues rather than as inclusive community group issues. This has created an operational atmosphere that is not as effective or safe as it should be for operations and the volunteers who serve the community. It was repeatedly reported by firefighters that when they are at an emergency incident they “make it work” in harmony with other responders while acknowledging that difficulties exist in doing so due to poor communications and lack of joint training.

The majority of active volunteers have long term roots to the community. There was a repeated expression of feelings by active volunteers that many “new comers” do not understand that these services are provided by their neighbors who voluntarily risk injury and death to serve their community. This lack of community understanding about their fire rescue & EMS services highlights an obvious long term leadership failure to continuously educate the public about the services being provided for their tax dollars and the failure of leadership to educate the public about the need for people in the community to become involved in their volunteer fire rescue and EMS services.

Analysis 25: The serious lack of ongoing communications between the taxpayers and the fire rescue and EMS services was highlighted as negatives in SWOT meetings and separately in comments provided by members of the agencies and by members of the general public.

Many of those who responded privately to us during this study expressed that they did not want to express the seriousness of their agency’s failure to communicate with the public in the meetings for fear of reprisal from their senior leaders. These failures by some of the leadership to communicate with the taxpayers and their elected officials who support all operations in these departments was clearly evidenced by some leadership directed refusal to participate in this study and the overt intimidation of department members who did want to participate in this taxpayer funded study for the good of the greater community.

Analysis 26: There were several reports of “outsiders” and women not feeling welcome or “comfortable” in some fire stations. The failure of leadership to promptly address these concerns could lead to hostile work environment charges and all of the potential costs that such an action can bring.

Analysis 27: The egocentric leadership issues are long term in nature with some going back for generations in the community. There still remain strong local feelings that one village is better than the other and/or that one hamlet or community is better than the other. These negative feelings towards others by leaders in the fire rescue services are systemic in the current
governing structures and can be a serious danger to the volunteers who serve in the greater community.

Analysis 28: The failures in leadership are evidence of a lack of understanding by these agency leaders about their real multi-level roles as both departmental managers of personnel, finances, and operations and as “political leaders” within and external to their agencies.

Analysis 29: There appears to be a lack of understanding among some of the current fire rescue and EMS “leaders” that as leaders they are responsible for assuring both the safety of their personnel and also constantly working to assure that the services being provided match the needs of the people being served and the public’s ability to support those services.

Analysis 30: Failures in the current fire rescue and EMS leadership have had a severe negative impact on safety of present service delivery and the problem must be addressed immediately by the elected officials of the villages and the town.

Examples of Overt Leadership Failures

Prohibiting Member Participation:

- The Cold Spring fire department had a membership vote to censure any member who participated in this study or who attended any meetings for this study;

Analysis 31: The vote by members of the Cold Spring fire department to censor their own members if they participated in this study, while rescinded at a subsequent meeting, demonstrates a failure of their leadership understanding of their role in communicating with the taxpayers who support the services of this department.

- On 01/11/11 to avoid travel on the winding roads in Continental Village after the expected snow storm I went to see the fire station in Continental Village. A member of the department who was plowing snow in the parking lot asked if he could help me. This department member called the Chief to let him know that I was there. I heard the Chief tell him that he would come to the station in 20 minutes. During that call, the chief did not seem to be troubled that I was at the station and sounded willing to come over to meet with me. When the Chief arrived he appeared to be upset. His whole demeanor had changed from what I had overheard during the phone call made to him just 20 minutes prior. The chief stated “my board has not decided if they want to participate in this study and I cannot talk to you.” I left Continental Village without ever seeing the inside of the station or any equipment.

Analysis 32: The refusal of the chief of Continental Village fire department to speak with me about the report or to show me the fire station indicates that the chief had decided or been directed not participate in the study by someone with more authority in the department.

- At the 11/14/11 meeting for Chiefs and civil officers I asked when the departments would be able to provide me with their staff readiness surveys and responses to the surveys that had been emailed and sent priority mail on flash drives to each department. I was informed by senior officer representatives of the Cold Spring, Garrison and Continental
Village departments that they had been directed by their leadership not to participate in the study of fire rescue & Ems services.

Analysis 33: Failure of some agency leaders to understand the importance of this study for the safety of the members of their department and the community is a highly troubling reflection of deeper issues of mistrust and /or lack of respect between those leaders of the fire rescue and EMS services and the people they serve in the greater community.

Intimidation of members of the fire rescue & EMS services:

❖ At the meeting on 01/13/11 for firefighters and line officers a member of the Garrison fire department stood over a group of members from that department who were sitting in the front row and in an agitated manner told those members that they were not authorized to talk for the Garrison fire department and that he would report them to the board for doing so if they spoke at this meeting. I immediately informed this person that all members of every department had been invited to the meeting by the town and that there was nothing being asked at this meeting that was specifically about any single department. He backed off and actually stayed and later participated in the group meeting.

Analysis 34: The fact that members of the fire rescue EMS service who were present at a public meeting failed to step up to stop intimidation of other members is a leadership failure and a reflection of a total lack of understanding of every American’s civil right to meet and speak their minds openly.

Analysis 35: Allowing intimidation of members of the fire rescue EMS services at an open public meeting or at internal meetings is a serious red flag for serious defects in leadership.

Spreading untruths & fears among those served

❖ At the 01/15/11 meeting for the public and elected officials a Friar from Graymoor arrived early. He was very upset because he had been told by leaders in the Garrison Fire Department that the intent of this meeting is to make plans to close the Garrison fire station.” He told me that he was afraid about losing protection for Graymoor and the rest of the area protected by Garrison fire. Even after speaking with the Friar before the meeting to let him know that closing of any fire station was not any part of this study, he immediately asked the same question publicly at the start of the public meeting. I informed the Brother on both occasions that closing of any fire station was not any part of this study.

Analysis 36: Having some members and leaders of the emergency services publically spreading untrue rumors about community fire rescue and EMS services to cause undue fear in the public is an outrageous failure of leadership at best.

Threat & intimidation of members of the public & elected officials:

❖ As reported in the Philipstown.info - http://www.philipstown.info/ptwp - “one attendee expressed his disgust that Town Board members would be present, only to add that it would be all right because “I’m packing,” an apparent reference to a concealed handgun, for which he said he has a permit.”
Personally I had serious concerns for the safety of the attendees at this meeting due to the statements made by this person. The group included elected officials. The memory of attendees was fresh of the recent shooting of the congresswoman which had occurred the previous week. This attendee was the same member of the Garrison Fire Department who had previously tried to intimidate members of his department into not participating at the meeting on 01/12/11. The attendees at this meeting included: four of five Town Board members – Councilwomen Betty Budney, Barbara Scuccionarra, and Nancy Montgomery, and Councilman John Van Tassel – plus Cold Spring Mayor Seth Gallagher and Village Trustees Bruce Campbell and J. Ralph Falloon.

Analysis 37: The fact that “leaders” of fire rescue and EMS services failed to step forward at a public meeting to control one of their members when he made statements that threatened the safety of public officials and attendees at a public meeting is a dangerous indication of the failure of those leaders to understand their roles in protecting the public.

Analysis 38: The fact that elected officials did not have the police remove the man who made threatening statements towards them at a public meeting was clear proof of the elected officials’ strong desire to assure that all members of the community had the opportunity for input into this process even at a risk to their own safety.
Information Requested from Putnam County and NYS OFPC:

On behalf of the Town of Philipstown, we requested specific information from Putnam County Bureau of Emergency Services, BES, and the NYS Office of Fire Prevention and Control, OFPC, relative to this study.

From the Putnam County BES and NYS OFPC we requested training information to help us evaluate the training received by members of each agency outside of in-house training provided by each agency. The County and the state have each established standards for each level of emergency service responder. To understand the service delivery abilities of the agencies in the township, it is vital to know the knowledge skills and abilities of each agency member and especially those in leadership and command roles. Training records provide that insight. The training records also provide the factual information regarding who and how many responders are certified to perform their duties under state and county regulations.

From the BES we requested detailed information from the County emergency communications center. As customers of that service, the Township and the agencies have a right to know what services are being provided to them and to know if those services meet recognized standards and benchmarks for performance. Taxpayers have a right to know what agencies will be dispatched to help them when an emergency occurs. The time it takes to receive calls from the public and process that information and dispatch emergency responders is a vital factor in determining when help will arrive at the scene of an emergency. That time can never be made up in response travel time therefore monitoring of call process times by each agency is a major factor in assuring that agencies can respond within nationally accepted benchmark times.

From the Putnam County Geographic Information System, GIS, office we requested travel distance maps from each fire & EMS station. The primary reasons why we ask for travel distance maps from government GIS offices is because the production of these maps demonstrate the capability of the GIS office to assist in any future planning efforts that the town and other towns or villages may conduct.

The use of GIS in planning goes well beyond fire station locations and travel times. In modern efficient and effective governments GIS is a very important and strong tool for government planning. Old fashioned map production is a minor part of what GIS can, and should be able to, do to make government more efficient and effective. Many governments do not properly support their GIS capabilities because leaders fail to understand the value of this tool especially as it relates to planning efforts.

To determine Putnam County’s in house GIS capabilities and to save the cost of outsourcing the production of GIS, mapping for the town we first checked with the County GIS office to see if that office had the ability to provide certain maps for this study and to find out what the charge would be to the town for producing those maps.

We requested that the County GIS department create the travel distance data and generate the following maps in PDF format for this process showing within the town of Philipstown:

- Locations of all fire and emergency medical stations in the Town of Philipstown: Cold Spring Fire Department, North Highlands Fire Department, Garrison Fire Department Station 1 and Station 2, Garrison Ambulance,
Continental Village Fire Department, Philipstown Ambulance and the location of all fire and emergency medical stations in all towns adjacent to the town if that information is readily available.

- Identify stations by symbol and name on maps
  - Current Putnam County 9-1-1 Emergency Response Zones for each station and agency
  - Response distance information: shown in road travel miles, from the point of each station to two and one-half miles (2 ½ miles), from each station. Display the miles traveled in bold green. All stations can be shown on one map.
  - Response distance information: shown in road travel miles, from the point of each station to five miles (5 miles), from each station. Show all distances from 2 ½ miles to the five-mile points in Yellow. All stations can be shown on one map.
  - If there are any areas within the township beyond the 5-mile travel distance calculated for the above map from any fire station, please prepare a separate map indicating those areas in the town in RED on one town map.

We provided the county GIS office with a sample map of the type of information we were seeking.

Figure 26 sample of the type of GIS maps requested (from another project)

**Responses from Putnam County**

**GIS Mapping**

We were told by the County GIS manager that the service would be provided to the town free of charge by the county. We were told that the GIS office had some of the capability needed to produce the types of maps needed for this study. The manager also informed us that she may not have access to the software needed to do specific travel distance measurements but that she did...
have the capability to produce circle measurements from fixed locations.

On 1/31/11 The Putnam County Emergency Management Director sent the town a letter stating that the county lacked the technological capability to produce any of the maps that the town had requested.

Analysis 39: Town officials arranged for me to meet with the Commissioner of Emergency Services, and managers of the technical services of the county. On 4/05/11 we personally observed that the county does not currently have much of the modern technology capabilities that other governments have, and use, to provide efficient and effective services to the public.

Analysis 40: This report will highlight some of the inefficiencies of technical capability in the Putnam County government. However it must be noted that it was also observed in our site visit and meeting that the lack of technical capabilities at the County level did nothing to diminish the strong desires of County BES management and staff to try to assure high levels of service to the public.

Analysis 41: The inability of the County GIS office to be able to provide travel distance GIS study maps for this project because of the lack of software products demonstrates the limited ability of this office to provide planning assistance to any planning projects in the county.

Analysis 42: The County GIS office does not have the GIS programs: ESRI's ArcGIS software (ArcInfo) level to do the distance analysis (and travel-time analysis), and/or ESRI's Network Analyst extension that would show travel distances from fire stations. This software is an excellent tool for many county, town and village planning efforts. Modern GIS offices have this capability and utilize it in planning efforts.

Analysis 43: It is difficult to understand how a modern government GIS office does not have this capability in an era when planning is so important for all governments and efficiency and effectiveness is so important to the public being served.

Analysis 44: Every local government must understand that every action they take and every service they provide is directly related to the land that comprises that government’s jurisdiction. GIS is the tool that can assure proper planning and management of every local government service.

Specific Recommendation 8: The County GIS office should obtain: ESRI's ArcGIS software ArcInfo level, to do the distance analysis (and travel-time analysis), and/or ESRI's Network Analyst extension that would show travel distances software that will enable the county to support planning efforts of many types.

Analysis 45: GIS services are services that governments can readily contract out to private providers to get the full GIS support needed for all planning efforts. However, keeping and supporting GIS as an “in-house service” is also an important tool in governments’ efforts to provide consistency and inter agency coordination in planning efforts.

The county did provide the town with a map showing the response district boundaries that each agency in Philipstown responds to. That map still shows Garrison Fire station 2 which was the original fire station in Garrison. According to our findings, this station is no longer in service.
Figure 27: Agency response district from Putnam County GIS

Analysis 46: A general review of the general response district map provided by the county shows that the boundary for the Cold Spring fire department should optimally be extended into part of the area previously covered by Garrison station 2.

Strategic Recommendation 11: Conducting a full GIS travel distance analysis of each of the current fire rescue and EMS station locations will clearly define optimum first due response districts throughout the town.

Strategic Recommendation 12: GIS studies will show where fire and EMS stations could be better located in the future to assure adequate response times.
Emergency Communications - 9-1-1

To allow us to analyze the agencies’ planning of effective response forces for each type of incident, the town requested the dispatch protocols for all call types that local fire rescue and Emergency Medical services serving the town of Philipstown respond to. The town also requested information on current automatic aid agreements that direct dispatches in Philipstown.

In the letter of 1/31/11 The Putnam County Emergency Management Director stated that the county had classified this information as a “controlled document” and that they were not able to comply with these FOIL requests. At the meeting on 4/05 we were provided with relative information pertaining to these requests. While all agreed that in today’s society there is a need to assure security, there was also acknowledgment of the public right to know “the process of governmental decision-making and to review the documents and statistics leading to determinations is basic to our society. Access to such information should not be thwarted by shrouding it with the cloak of secrecy or confidentiality. The legislature therefore declares that government is the public’s business and that the public, individually and collectively and represented by a free press, should have access to the records of government in accordance with the provisions of this article.”

Specific Recommendation 9: The County Attorney should review FOIL with management at BES to identify dispatch protocols and other relative information regarding capabilities fire rescue & EMS services that can and should be released to the public officials in the county’s local governments upon request to assure that taxpayers can have a clear view of the services they are paying for and can expect to be able to serve them in an emergency.

Analysis 47: It is important for the public and for their elected officials in their planning and review efforts to know what agency and apparatus is dispatched to each call type. It is important for the public and their elected officials to know what agencies will be dispatched when automatic aid is preplanned and mutual aid is needed.

The town requested dispatch information for all departments serving the town of Philipstown for the years 2010, 2009, 2008 and 2007. The town requested that the report indicate: Call receipt time; Call Type, Incident Number, Dispatch Time, Agency(s) Dispatched, Units Dispatched, Station acknowledgement time, First unit arrival time, Last unit arrival time, Last unit returned to service time. The town also requested call process times if the emergency communications section tracked call process times from receipt of call to call completion. The town requested that this information be provided in MS Excel format so that it could be analyzed.

Analysis 48: We observed that Putnam County has invested in a 9-1-1 computer aided dispatch system that appears to comply with the records retention laws of NYS. However capture of data is manual in this system data capture depends upon busy dispatchers to enter key strokes for almost every action. Manual capture of this data historically has inaccuracies due to the other immediate action demands that dispatchers must perform in assuring that proper notifications are made. Good practices in emergency communications systems incorporate automatic capture of times relative to dispatch and arrival of emergency units, utilizing in-unit acknowledgement units liked to the CAD system.

---

2 NYS FOIL
Analysis 49: We confirmed that the county 9-1-1 CAD system is not designed to provide some of the dispatch record data in a format that could be easily analyzed by customers of the BES service.

Specific Recommendation 10: The County should review 9-1-1 office records capture and retention capabilities with the CAD vendor, to assure that all records are being properly captured and can be provided for review and analysis on a regular basis by the taxpayers’ representatives.

Specific Recommendation 11: The County should work with its CAD vendor to determine how to export CAD records to EXCEL, or another readily available spreadsheet format, that can be readily used by customers of the 9-1-1 center for data review and analysis on a regular basis.

Analysis 50: While at the 9-1-1 center we observed that the computer screen maps for a dispatch made during our visit showed the location of water sources; dry hydrants; static sources such as ponds and pools; and public water supply hydrants. When we inquired if this information was available for locations in Philipstown we were told that the county BES had purchased GPS units and asked each agency in the county to use them to identify their local water sources. We were informed that the fire rescue agencies in Philipstown had not availed themselves of that ability and that the Philipstown maps in the CAD do not show water sources.

Radio Communications
During SWOT meetings and in general conversations in the community we heard many negative comments about the county emergency radio system. At the emergency communications center we learned that the County currently has consultants reviewing the radio system in an effort to make it more reliable and to reduce the dead spots of coverage that the terrain in Philipstown creates. We also are aware that there is resistance in the community to building new radio towers that would improve radio communications in Philipstown.

Currently the system is low band which serves well in some areas and poorly in others. However modern radio systems today use higher bands and trucking and/or digital systems in the 800 and 900 megahertz range. Some other communities have also partnered with cell phone and cable TV companies to reduce costs for towers and equipment.

Strategic Recommendation 13: There is a need for the community to support improvements in the infrastructure of the county emergency communications system to assure proper radio reception during emergencies. These improvements can also be used to improve cell phone reception in the community while generating funds from cell providers.

Tracking Emergency Responder Availability
The Putnam County BES, in an effort to assist county fire rescue and EMS agencies track who is available to respond to emergencies and who is actually responding to an emergency when dispatched has provided agencies with the software package IamResponding.com. This program lets dispatchers and agencies know immediately who is responding to calls and dispatches, where they are responding, and when they will be responding. This product can save critical time, and can reduce response times, for fire rescue and EMS agencies. The program lets agencies and the dispatch center know who is available.

Even for those departments and agencies which do not schedule duty crews, members can use
the web-based scheduling system to advise their department/agency of their availability or unavailability. For example, if a member is at home or work and knows that they can respond to any incident during the next 7 hours, they can log in and put themself "on duty" for the next 7 hours. Members who will be out of town or simply unavailable can schedule themselves as "out of service" for "X" hours or days. This enables their agency to be able to assess their in-town, available manpower resources at any time. The program is also used after dispatch by members simply pressing one button on any telephone, and any Internet connected computer or mobile phone which instantly displays who is responding to the incident, their qualifications, and when and where they are responding.

Analysis 51: It was observed while at the county emergency communications center that none of the agencies in Philipstown had any person logged on as “on duty” and available in the IamResponding system. This failure to utilize an available tool inhibits agency management ability to monitor and analyze member availability.

Specific Recommendation 12: Philipstown should establish a policy that requires interior certified members of all fire rescue and active members of EMS agencies to use the Iamresponding program and to sign on as on or off duty as well as responding to incidents. This data should be part of the tools used to track the agencies’ ability to provide emergency response to the community when needed.

Specific Recommendation 13: Every Emergency agency should, on a regular basis, utilize the data directly from the county dispatch office to monitor call process times by that office and response times for all responding units to emergency incidents.

**Dispatch Call Processing Standards**

Nationally recognized standards from National Fire Protection Association, NFPA, and the Commission on Fire Accreditation International have established benchmarks for call process time, the time beginning at when the phone call reporting an emergency is answered, to dispatch of emergency responders.

Per NFPA 1221 section 7.4.2 call processing shall be completed within 60 seconds 90% of the time and 99% of the time call processing should be completed within 90 seconds.

These standards have been established for fire and EMS services because unlike other types of events these types of emergency incidents continue to get worse until emergency responders arrive on scene and initiate remedial actions. Lost time in the call process phase of emergency response can never be compensated for by responders.

Meeting these call process times is a service objective that every emergency communications center management must continuously review and address through continuing staff training and performance reviews. However, the lack of automated time captures in a CAD dispatch system will always have negative effects on management of call process times.
The sample run report above is reflective of all others that were submitted. We reviewed the reports for each agency and year provided to get an overall impression of the times and call types that agencies were sent to.

Analysis 52: The run report PDF files show the call received times, the time each was sent to the dispatcher and the dispatch times for each call. The reports also show the arrival time of the first unit on scene. The reports do not show what unit is the first to arrive or the time that it takes to have all the dispatched units arrive so that the arrival of an “Effective Response Force” can be examined. Note: Effective Response Force is the total apparatus and staffing preplanned as needed to mitigate a specific type of incident and specific locations.

Figure 29: 9-1-1 Call process time analysis

<table>
<thead>
<tr>
<th>2010 Cold Spring</th>
<th>Call Process Time</th>
<th>NFPA Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 50 calls</td>
<td>Number of calls</td>
<td>standards</td>
</tr>
<tr>
<td></td>
<td>Under 1 minute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Under 90 seconds</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greater than 90</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>seconds</td>
</tr>
<tr>
<td>50</td>
<td>4</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>87</td>
<td>74%</td>
</tr>
</tbody>
</table>

Preliminary review of the PDF files clearly showed that there are call process time issues that should be examined. We conducted a detailed analysis of the first 50 dispatches made to Cold Spring in 2010. These are reflective of the times observed in other reports.

Analysis 53: The review of the first 50 dispatch records for the Cold Spring Fire Department in 2010 provided an indication that the county does not meet NFPA code 1221 standards of call process times for 90% of calls being processed in under 60 seconds and 99% of all calls being processed within 90 seconds.
Analysis 54: Observations of 9-1-1 office work flow and technical capabilities show that the call process times reported are inaccurate. We have concluded this is due primarily to CAD system technical and operational issues at the county 9-1-1 center.

Analysis 55: Meeting the nationally recognized and NFPA code standards for call process times is a service objective that every emergency communications center management must continuously review and address through continuing review of staff training, performance reviews and technology capabilities.

Analysis 56: It is vital to have accurate dispatch records to properly evaluate service capabilities in a community. Extended call process times create a clear danger to the public and emergency responders. Delays in dispatch to fire rescue and EMS emergencies can never be made up in response times. Every fire and EMS emergency continues to worsen until responders actually arrive on scene and begin remediation actions to control the emergency.

In our meeting at BES on 4/05 we were told that the county previously had a policy of providing dispatch information to each agency. They reported that the agencies had issues with the data received from the center and the data they had in their individual records management systems where the times and even dates were widely discrepant. The BES elected to discontinue providing these reports because they could not offer the agencies a way to readily fix the records issues with the wide discrepancies that were occurring.

Specific Recommendation 14: To assure accuracy of data in the records management systems of every public safety agency it is important that every records management system directly communicate with the County CAD system for automatic download of dispatch data and times. This will also reduce the time required within each agency for completing incident after action reports.

Specific Recommendation 15: The County 9-1-1 office should be required to provide dispatch call processing and unit arrival data in MS Excel format to its customers, every emergency response agency in the county, on a regular basis. Analysis of this data will allow each agency to monitor its own response time benchmarks and baselines and to also monitor the services of the 9-1-1 office. Call process times are a vital part of determining success of emergency response units.
Required Training & Operational Command:

NYS Office of Fire Prevention and Control Training Information

New York State defines the minimum standards for firefighter training in NYSCRR Parts 426 and 427.

Requests for the training information were made to OFPC. This state agency requested that a FOIL (freedom of information law) request be filed for the information. This was done.

The town requested the following information from the NYS OFPC records under New York State Public Officers law, article 6 sections 84-90, the freedom of information law: (FOIL)

1. The town requested that the NYS OFPC provide the number of individuals who are recorded as having received training in the years 2010 – 2008.

2. The town requested that the NYS OFPC provide the **number of members in each agency** that are in compliance with the following NYS regulations regarding training:

   - PART 426 Minimum Standards for Firefighting Personnel in the State of New York (Statutory Authority, Section 159-d)
     - Information was not provided by NYS OFPC
   - PART 427 Minimum Standards for Firefighting Personnel in the State of New York—Administrative Procedures (Statutory Authority, Section 159-d)
     - Information was not provided by NYS OFPC
   - PART 438 New York State fire training program minimum standards (Statutory Authority: Executive Law, §156(6))
     - Information was not provided by NYS OFPC

Analysis 57: The inability of the NYS OFPC to supply information regarding the number of members in each department who meet NY State required minimum training requirements indicates that there may be a records management issue at OFPC or that the agencies are not providing this required data to OFPC.

Analysis 58: We recognize that the inability of OFPC to provide training information may be reflective of current state budget cuts which result in reduced service capabilities for state agencies.

Analysis 59: It is inconceivable that the fire rescue and EMS agencies in Philipstown would assume liability for active responders who are not in compliance with NYS minimum training requirements. We can only assume that this is a record keeping issue.

Specific Recommendation 16: Each agency in Philipstown should do an internal analysis of their own training records to determine that all active volunteers are trained at the state required minimums. The agencies should then coordinate through the Putnam County Emergency Services Bureau to assure that all records at that office and the State OFPC are accurate.

The NYS Office of Fire Prevention and Control issued a bulletin 9 March 2006 “NIMS Alert/5 Most Asked Questions” NA: 004-06: This bulletin defined the NIMS ICS-300 and ICS-400 Training Requirements. The completion of ICS-300 and ICS-400 training is a National Incident Management System (NIMS) implementation activity for FY2007 for middle management and
command and general staff. All federal, state, local, tribal, private sector and non-governmental personnel with a direct role in emergency management and response must be NIMS and ICS trained. This includes all emergency services related disciplines such as EMS, hospitals, public health, fire service, law enforcement, public works/utilities, skilled support personnel, and other emergency management response, support and volunteer personnel.

The Town requested that the NYS OFPC provide the data that show compliance by the Philipstown fire rescue and EMS agencies with the NIMS ICS-300 and ICS-400 Training Requirements.

- **Information was not provided by NYS OFPC**

Analysis 60: The lack of response from the OFPC to provide data on compliance with NIMS ICS training by agency members indicates a serious problem with accuracy of records. We believe that this is due to lack of state mandates that agencies provide this data to the state.

Specific Recommendation 17: There is a need to have a state law mandating that every community and public safety agency report NIMS and ICS training for every person that will lead or respond to emergency incident. The OFPC would appear to be the agency that would collect and maintain that data.

Specific Recommendation 18: Each agency should do an internal analysis of their own Officer, Safety and ICS training records to determine that all active volunteers are trained at the federal, state, and county required minimums for the roles they are filling. The agencies should then coordinate through the Putnam County Emergency Services Bureau to assure that all records at that office and the State OFPC are accurate.

Analysis 61: As part of our investigation we have received comments of concern that some officers are elected to their roles without the training and experience that is required to assure safe operations at incidents. It was reported on one staffing report that a person serving as a deputy chief is not a certified interior firefighter. These are red flag issues of serious concern.

Strategic Recommendation 14: Every agency must assure that all members are currently trained and certified to at least the minimal levels required for the positions they hold.

Strategic Recommendation 15: It must be a priority to assure that every person who will serve in a command and supervisory role is trained and certified to the appropriate Incident Command levels.

Strategic Recommendation 16: Policies must be instituted that assure that ICS is utilized in practice at EVERY incident from the arrival of the first unit until the incident has been fully mitigated.

Analysis 62: The lack of qualifications of field commanders can be an inherent weakness in any organization that utilizes elections as a basis for the selection of command officers. This is, or can become, a safety issue and it must be addressed promptly.

Strategic Recommendation 17: All operational supervisory level promotions, company officers and chief officer, must be based upon qualifications for the position rather than popularity.
Strategic Recommendation 18: The administration of the Joint Fire District should identify and establish as policy minimal training levels required for promotion to each operational supervisory level.

Strategic Recommendation 19: All promotions to operational supervisory positions must be made based upon review of certifications for duty, qualifications and testing/interviews to assure that candidates have the ability to successfully perform in those roles.

Training Information Requested from Putnam County:

The town requested that the County Bureau of Emergency Services provide records of Department and Individual training received from the county and the state for the years 2010, 2009, 2008, 2007. We also requested the most recent ISO summary report for each department and any reports of any interactions between County Fire Coordinators and the departments serving any of the sponsors.

The town was informed that the Putnam County Emergency Services Bureau does not track the hours of training that the county agency provides to members of the fire departments. The town was informed that the training record information was only tracked at the NYS Office of Fire Prevention and Control, OFPC.

Analysis 63: Putnam County BES provided the requested the individual training reports for the fire department members for the years 2007 – 2010 to the town.

Analysis 64: North Highlands Fire district had 18 members take training from 2007 – 2010. Cold Spring had 16 members take training from 2007 - 2010; Garrison had 19 members take training from 2007 - 2010; Continental village had 29 members take training from 2007 – 2010.

Analysis 65: The relatively small number of members who have had training outside of their agencies may reflect a low number of active volunteers who are prepared to serve the community or the low number of members receiving training outside of their own departments may reflect the egocentric position of department leadership.

Figure 30: Total number of members taking County and State classes 2010 - 2008

<table>
<thead>
<tr>
<th>Department</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
<th>Total classes taken for 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold Spring</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>98</td>
</tr>
<tr>
<td>Garrison</td>
<td>7</td>
<td>7</td>
<td>10</td>
<td>88</td>
</tr>
<tr>
<td>North Highlands</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>84</td>
</tr>
<tr>
<td>Continental Village</td>
<td>12</td>
<td>18</td>
<td>14</td>
<td>115</td>
</tr>
</tbody>
</table>

The members who took state and county training classes in many cases took multiple classes each year as shown in total classes.

Each Department also conducted regular in-house training.
Analysis 66: The low number of volunteers who took training classes offered by the county and the state appears to be consistent from year to year. This low number presents an immediate red flag regarding the ability of these agencies to staff units with properly trained personnel in the event of emergencies in the community.

**Incident Command, NIMS Training Issues**

From the individual member training information received from the county we examined courses that would have some materials related to incident management and safety. The county mutual aid plan, state and federal regulations clearly outline the requirement for this training.

We discussed the issue of ICS and NIMS training with County BES. We were informed that when the county issued a request for MIMS, ICS training records per the county mutual aid plan, the fire rescue agencies in Philipstown and other areas of the county loudly complained about what they considered an invasion of their “privacy” by the BES.

The training for ICS and NIMS is available through many sources and it is not possible for the BES or OFPC to track this training without cooperation of the agencies and their members.

Figure 31: Command and safety related classes from County BES/OFPC records

| Officer, Safety & Command Courses Total members trained 2008 -2010 |
|--------------------------|------------------|-----------------|-----------------|----------------|-------------------|-----------------|-----------------|
|                          | Fire Officer     | Live Fire       | ff              | NIMS 700       | ICS 100          | ICS 200          | Safety officer  |
|                          | any level        | training        | survival        |                |                  |                  |                 |
| Cold Spring              | 3                | 2               | 5               | 0              | 0                | 0                | 0               |
| Garrison                 | 1                | 1               | 3               | 0              | 0                | 0                | 4               |
| North Highlands          | 3                | 0               | 7               | 0              | 0                | 0                | 4               |
| Continental Village      | 4                | 4               | 11              | 2              | 2                | 2                | 1               |

Analysis 67: The low number of members in each department who appear to meet Federal, State and County required minimum training requirements for NIMS, incident command, safety and officer positions indicates that this is a serious issue of safety at every incident if the ICS, NIMS training records are correct.
Analysis 68: Review of training class titles for the years 2007 – 2010 in each department indicates that most members do not comply with legal training mandates of the federal, state or the county for NIMS, National Incident Management System, ICS training. This safety issue was also raised in the local SWOT meetings by active volunteer responders.

Strategic Recommendation 20: An immediate program must be instituted to assure that all agency members are properly trained in NIMS and ICS to the levels they will be expected to operate in at emergency incidents.

Strategic Recommendation 21 Every agency and local government must assure that they are in compliance with national and local standards for NIMS / ICS training: The completion of ICS-300 and ICS-400 training is a National Incident Management System (NIMS) implementation activity for FY2007 for middle management and command and general staff. All federal, state, local, tribal, private sector and non-governmental personnel with a direct role in emergency management and response must be NIMS and ICS trained. This includes all emergency services related disciplines such as EMS, hospitals, public health, fire service, law enforcement, public works/utilities, skilled support personnel, and other emergency management response, support and volunteer personnel.

Specific Recommendation 19: All agencies must assure that their standard operating policies and practices reflect NIMS and ICS at every incident. It is incumbent upon the elected leadership in the community to assure that this is done as a matter of public safety.
Putnam County Mutual Aid Plan

Definition of Mutual Aid:

Mutual aid is organized, supervised, coordinated, cooperative, reciprocal assistance in which personnel, equipment and physical facilities of all participating Fire Departments or Ambulance Corps, regardless of type or size are utilized for fire or other emergency in which the services of Fire or Ambulance Volunteers would be used throughout the County of Putnam and adjacent New York State Counties. (See General Municipal Law #209) ²

Putnam County Bureau of Emergency Services publishes its Mutual aid Plan on the county web site for the public review. The plan details requirements for the agencies and personnel. The plan was developed by BES in conjunction with leaders of the various independent fire rescue and EMS agencies in Putnam County. This plan reflects the requirements that each agency feels is important to successful incident management.

Analysis 69: We have presented the Putnam County Bureau of Emergency Services / Mutual Aid Plan / January 2010 in the appendix of this report and will provide a copy on the CD provided to community leaders.

Analysis 70: The BES Putnam County Mutual Aid Plan is a well written and comprehensive directive that each of the fire rescue and EMS agencies in Philipstown has subscribed to. The Mutual Aid Plan clearly defines each of the aspects that are demanded in mutual aid. It is an important factor for safety at every incident that these same standards are maintained at every incident even when mutual aid is not needed, because proper ICS begins with the arrival of the first responder on scene for safety at the incident. It is unfortunate that the agencies in Philipstown have not provided proof of their qualifications to operate within the training requirements of this plan.

Specific Recommendation 20: The Town should, as part of its annual review of services contracted for by the town, require proof of compliance with each of the standards defined in the Putnam County Mutual Aid Plan from every fire rescue and EMS agency and district.

Specific Recommendation 21: The Town should specifically review the NIMS / ICS procedures and identify the agency members with the certified levels of training required to perform each of the supervisory and command duties in the systems.

Specific Recommendation 22: The Town should require proof that every emergency incident in the township is being managed from the arrival of the first units on scene, with commanders properly trained in and using NIMS and ICS as appropriate to assure responder safety.

² Putnam County Bureau of Emergency Services / Mutual Aid Plan / January 2010
Additional Information Research & Results

Current Services, Strengths, Weaknesses, Opportunities & Threats Meetings:

We conducted a series of three local meetings to gather direct input from Firefighters & EMTs; Chief Officers; and the general public with their elected officials. These meetings enabled us to examine their group views about what services are currently being provided to the community. At each meeting we did brainstorming sessions to determine local views of SWOT; Strengths, Weaknesses, Opportunities & Threats facing the services. We also examined the goals of meeting attendees for the future of fire rescue and EMS services in Philipstown.

NIMS / ICS: At each meeting we also solicited additional comments from attendees regarding the training for and use of recognized Incident Command Systems which have been mandated by state and federal regulations to help assure personnel and community safety.

Following the local meetings, notices were published locally in the newspaper inviting all residents to submit comments and concerns directly to us for consideration in this report. Attendees at each meeting were also provided with my contact information to allow them to contact me directly with any additional comments that they felt pertinent to the study.

- The group titles in each column below are designated by letter rather than group identification to keep responses confidential as was promised to all attendees.

Meeting & Follow-up Findings

SWOT - Current services being provided:

<table>
<thead>
<tr>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Protection</td>
<td>Fire Protection</td>
<td>Firefighting</td>
</tr>
<tr>
<td>Mutual Aid</td>
<td>Fire Prevention and Education</td>
<td>Non Fire Incident- helping out, non fire rescues</td>
</tr>
<tr>
<td>Storm remediation and management</td>
<td>Public Assistance</td>
<td>Mountain rescue</td>
</tr>
<tr>
<td>Car accidents</td>
<td>EMS</td>
<td>Fire prevention</td>
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<tr>
<td>Fire Dept. assist EMS</td>
<td>Rescue and Extrication</td>
<td>Brush Fires</td>
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<tr>
<td>Accident response</td>
<td>Mountain and Water Rescue</td>
<td>Ladies Auxiliary,</td>
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<td>River Safety</td>
<td>Mutual Aid</td>
<td>Pipe band</td>
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<td>Animal Rescue</td>
<td>Automatic Aid</td>
<td>Fire Prevention Education</td>
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<tr>
<td>Black boxes Knox on buildings control</td>
<td>Parades-Public awareness</td>
<td>Community Events</td>
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<td>Building the community</td>
<td>Community Functions-4th of July, Open Houses</td>
<td>Fund Raising</td>
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<tr>
<td>Mountain rescue</td>
<td>Town wide cleanup</td>
<td>Power Line Problems</td>
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<tr>
<td>Haz Mat</td>
<td>Provide Public Meeting Space</td>
<td>Hazmat</td>
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<tr>
<td>Fire prevention and education</td>
<td>Shelter</td>
<td>Traffic Control</td>
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<td>Brush fires and traffic control</td>
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<td>Pump Outs</td>
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<td>Input into village and town planning</td>
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This study was funded by a Local Government Efficiency Grant awarded by the New York State Department of State Contract No. T-098832
RFG Fire Rescue Consulting, HTTP://FIRERESCUECONSULTING.COM
Phone: 770 630 0104 Fax 888 315 7356 Email: rgraner@aol.com
<table>
<thead>
<tr>
<th>Process</th>
<th>Emergency Shelter</th>
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<tbody>
<tr>
<td>Handle snake bites</td>
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<tr>
<td>Community relations – Santa runs – fund raising</td>
<td>Mutual Aid</td>
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<td>Fire safety School Education</td>
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<td>Persons trapped in elevator</td>
<td>Training</td>
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<td>Flood pump out</td>
<td>CPR Training</td>
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<td>Ice rescue</td>
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<tr>
<td>Hosting elections Community meeting centers</td>
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</table>

Analysis 71: The SWOT meeting expression of services currently being provided by fire rescue and EMS agencies indicates the expectations of those being served.

Analysis 72: The SWOT meeting responders providing the services understand that they may need to those services to meet community expectations.

Analysis 73: Each service provided to the public requires staffing, training and equipment for safe completion of the mission.

Analysis 74: Examination of the services being provided to public indicates that there may be some services being provided that would be better delivered by private businesses with charges for services provided billed to users rather than to expect all taxpayers to pay for those services.

Strategic Recommendation 22: Due to the current staffing, cost and training issues noted at each SWOT meeting, leadership must examine the list of services both expected by and/or currently being offered to the public. There must be a determination as to which services can no longer be provided due to staffing and cost issues.

Specific Recommendation 23: Agency leaders must notify the public if their agencies are unable to provide some specific services during certain times of the day or in some case unable to provide some of those services at any time.

Specific Recommendation 24: If services are eliminated that information should be given to the county emergency communications division for revision of dispatch procedures. These notices should also include information regarding where citizens can locate private companies that may be able to assist citizens for a fee when the fire rescue services can no longer provide those services.
SWOT - Strengths

**Group A**
- Comrades working together
- High morale
- There when you need them
- Life safety commitment
- All work together for the safety of community
- Commitment
- Volunteers save money for community  NVFC.org
- Strength of facility and apparatus
- Desire for quality and training
- Fundraisers for people in need in community
- General interest in community
- High community support
- Longevity of departments
- Providing facilities for community use

**Group B**
- Experience
- Good Equipment
- Dedication
- Membership
- Volunteerism
- Training and Education
- Long length of service
- Commitment to Safety

**Group C**
- Training
- Fire Prevention
- Dedicated Leadership
- Diversity
- History
- Stake in the Community
- Community Outreach
- Efficiency on Scene
- Intimate Knowledge of buildings in District
- Lack of Injuries (Safe work habits)
- Long term investment in good equipment
- Record keeping and documentation
- Public Image/accountability
- Dual Memberships, EMS and Fire
- Time Commitment/Sacrifice
- Youth Involvement

Analysis 75: The primary review of strengths in the SWOT is that each group acknowledged the commitment and value of the volunteers who serve the community and their long time dedication to the community.

Analysis 76: Each SWOT meeting group recognized that there has been a long term investment in good equipment.
SWOT - Weaknesses

**Group A**
- Getting volunteers
- Aging volunteers
- Lack of ladder truck in village
- Getting enough coverage during the day
- Communications on scene
- Communications with community – taxpayers
- Lack of Needed Fire Flow (the amount of water required to combat a fire in a structure as determined by calculations of construction type and contents etc)

**Group B**
- All of the above strengths can become weaknesses
- Man power
- Need more money
- People don’t support activities, needs as in the past
- Public Perception

**Group C**
- All of the above strengths can also be weaknesses
- Recruitment and Retention
- Budget
- Lack of enough space for training and equipment
- Politics
- Training facilities too far away
- Community Understanding
- Lack of mutual aid training
- Lack of Manpower during work hours
- Selective responses to alarms

Analysis 77: Review of the primary weaknesses in SWOT shows recognition that each of the strengths can rapidly become a weakness with a failure to continuously work to keep each strong.

Analysis 78: There is a general recognition of the negative aspects of poor community relations and the resulting diminishment of public support.

Analysis 79: The SWOT meeting identified lack of training facilities and training between agencies is a red flag for safety of volunteers and the community.

Analysis 80: The SWOT meeting identified weakness of water supply availability has been a long term issue for many years and is actively being reviewed by local authorities in the villages.

Strategic Recommendation 23: To reduce costs of providing fire flows adequate for protection of the historic villages there is a need to examine less expensive alternatives for providing those adequate fire flows rather than upgrading the entire potable water system, unless the system has other issues that must be addressed.

Analysis 81: The primary SWOT meeting identified weaknesses regarding staffing, and more specifically the lack of staffing by time of day and type of incident, should be of great concern to the community.

Strategic Recommendation 24: A unified recruitment, retention, training and staff readiness program should be immediately developed and instituted across the township.

Strategic Recommendation 25: Space and facilities for teaching and practicing the skills needed for fire rescue and EMS should be located within Philipstown. Recommend a review of the current North Highlands station property as a potential location for a common fire rescue ems training facility.
**SWOT - Opportunities**

**Group A**
- More volunteers
- How to convert commuters into volunteers
- More jobs in the village
- Consolidation increase efficiency
- Build better relations with the community
- Defining community through the fire service
- Opportunity to educate the public
- Build a new fire station for the village of Cold Spring and encourage new volunteers
- Removing power lines near buildings in Cold Spring
- Better sharing of services and facilities
- Do away with redundancy
- Improve water distribution
- Install Dry hydrants (fire hydrants that get water by drafting from static water sources)

**Group B**
- Increase Recruitment
- Compensation
- Man power (staffing) improvement
- Better communications
- Explorer Program
- Good young line officers-future leaders
- Opportunity to train better

**Group C**
- Retirement system
- Better training opportunities
- More mutual aid drills
- Help on resumes and college applications

**Analysis 82:** All three SWOT meeting groups recognized that each of the *opportunities* reflects the need to address the weaknesses they observed.

**Analysis 83:** There was a clear sense of willingness among attendees in each meeting to take advantage of the noted opportunities and to address issues to assure public safety for the greater community.
SWOT - Threats

<table>
<thead>
<tr>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
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<tbody>
<tr>
<td>Budget constraints</td>
<td>Lack of people in Fire service</td>
<td>Need more people</td>
</tr>
<tr>
<td>Lack of communication</td>
<td>MONEY</td>
<td>Need better facilities</td>
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<tr>
<td>Lack of collaboration</td>
<td>Bureaucracy</td>
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<tr>
<td>Lack of volunteers</td>
<td>Unfunded mandates</td>
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<tr>
<td>Women and outsiders not feeling welcome in some stations</td>
<td>Spreading everything too thin Same people doing all the work</td>
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<tr>
<td>If change not handled properly can divide the community</td>
<td>Move to increase service area</td>
<td></td>
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<tr>
<td>Climate Change</td>
<td>Consolidation</td>
<td></td>
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<tr>
<td>Unfunded Mandates</td>
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<td></td>
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<tr>
<td>OSHA requirements</td>
<td>How to pay for them?</td>
<td></td>
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<tr>
<td>Lack of sprinkler systems in buildings</td>
<td></td>
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<tr>
<td>New light weight construction</td>
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<tr>
<td>Municipal governing structure</td>
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Analysis 84: There was wide recognition of SWOT threats that unfunded state and federal mandates can have a negative impact on the future of service delivery and also a general understanding that many mandates are an important part of safety for emergency responders.

Analysis 85: There were comments that women and outsiders not feeling welcome in some stations may create a hostile work place and recognition that leaders have not properly addressed this issue with all members.

Analysis 86: There was recognition in SWOT meetings that there are clear dangers to the safety of firefighters responding to modern light weight construction buildings that do not have sprinkler systems.

Analysis 87: The idea of “consolidation” is seen as a threat by some and others see the failure to collaborate and spreading people and work expectations to thin and the current governing structures as more dangerous threats.

Analysis 88: There are recognized staffing threats across all agencies. There is clear recognition that the status quo for recruitment, retention and utilization of volunteers is an immediate danger to the future survival of the fire rescue and EMS services in Philipstown.

Specific Recommendation 25: The issues of volunteer recruitment and retention and all other personnel issues must be addressed immediately and fully within the greater community, utilizing the potential expertise for human resource development that exists among the residents of Philipstown.
**SWOT - Goals**

**Group A**
- See the services continue
- Be effective
- Insuring safety for all volunteers and responders
- Maintain character of organizations and community
- Control costs
- Recruitment
- Provide adequate training capabilities
- Making new people moving into community feel like part of community
- Updated facility
- Expand junior fire fighter program
- Group Spirit
- Acceptance of new members by the old

**Group B**
- Bettering all of the above
- Keeping all the doors open
- Maintain Autonomy

**Group C**
- Recruit more volunteers to the service
- new fire station with more facilities for volunteers

Analysis 89: The goals expressed by all SWOT meeting attendees and after the SWOT meetings are a clear reflection that the community and the volunteers in this community all see the potential to successfully continue to serve and to strengthen the services provided to the residents of Philipstown.

Analysis 90: There was general acknowledgement that some fire stations do not currently have the facilities that are expected and needed to attract volunteers.

Analysis 91: It was clear in every conversation that failure to address the serious issues found in this study is not an option for the community or for those who are active volunteers serving the community.

Analysis 92: Each group in the SWOT meetings fully understands the potential dangers of failing to address the issues.

Specific Recommendation 26: Every fire station should have the facilities that will encourage members to want to be at those stations, including bunking facilities for both overnight and long term residency for responders.

Specific Recommendation 27: Every member should review their own personal conduct to assure that they are open and welcoming to all members and potential members.
SWOT Meetings & Community Comments

The following comments were gathered from; groups attending SWOT meetings, from emails sent to the consultant and from direct comments made in conversations during the site visit.

*Note: Some comments were edited for clarity and language and some comments were joined to similar comments to show relationship. However, the intent of each comment was kept intact.*

- Use the “I am responding” program at all stations in town to track availability of all volunteers at every station and have volunteers be able to respond anywhere in town when they are close to incidents.
- Members are criticized for wanting to spend nights in station to enable them to provide ready response without delay.
- Lack of acceptance of women firefighters and younger members by senior members may discourage others from joining the department.
- Senior members have experience plus knowledge skills and abilities to contribute for the betterment of the services.
- Senior members need to be positive influences and mentors to younger members, women and “outsiders”.
- There is a need to increase diversity in some departments.
- Lack of females in the role of active firefighters.
- Females and “newcomers” need to be made to feel welcome in our station.
- Volunteer firefighters, Lieutenants and Captains from every agency are willing to work together in harmony and have joint training with other departments but senior leaders resist doing this.
- The problem with our fire department is the negative leadership at the upper levels.
- I am concerned about my safety when officers are elected with no qualifications or experience to do the job.
- NIH exists in our department and we are stuck in the past unaccepting of new ideas.
  - (NIH = Not Invented Here)
- There is a lack of ICS training within the department and with other agencies especially police, sheriff officers.
  - (ICS = Incident Command System)
- North Highlands has a great group of willing and able young people who want to train, learn and work hard.
- Our leaders fear change and the loss of their “power”
- The idea of consolidation is not easy in Volunteer organizations with unpaid staff.
- I fear that volunteers will quit serving if any changes are made to their departments.
- Fire departments and Ambulance Corps should remain separate organizations with their own concerns.
- NYS laws make it very difficult to operate a combined fire/ems service and not impact our citizens.
- The Ambulance services currently use “soft billing” and offset the cost of the ALS service provided by the County.
- I do not want to go back to the days of our citizens refusing ALS in fear of getting a bill.
Fire departments are an easy target for swift political gains but when the employee pool is not compensated you can run into problems.

The lack of support for improvement / change will hopefully not continue after the report is submitted.

The current lack of planning will hopefully not continue after the report is submitted.

The internal workings of the Town need to be looked at when it comes to flow of information

The Building Dept., Planning Board and Zoning Board of appeals all work in a vacuum when it comes to commercial buildings in Town.

- Fire Chiefs need to be given access to, and have input into plans and permits for: Demolition permits, Change of use, Change of exiting property use, new and renewal of permits for construction in all Commercial properties.
- This will give the fire departments an opportunity for input and plan review with pre-plan information for safer operations at emergencies
- The current lack of input into the development and construction from the fire services will eventually cause problems for the firefighters and the citizens of Philipstown.

The need for fire apparatus to be modern and area specific should be a consideration in planning

Need task specific apparatus that reflects service needs.

There is a need for assuring adequate protection of our home areas and our members while we are responding to other emergencies

We need to provide proper vehicles for the chiefs to safely respond in to reduce wear on main line vehicles

Need to adequately fund and maintain current fleet of fire trucks

I want to emphasize the importance of all emergency responders having epinephrine immediately available to them. Epinephrine saves lives in the event of a severe allergic reaction causing anaphylaxis. Anaphylaxis is rapid in onset and often fatal. Mere minutes make a difference!

Need to assure that we have proper equipment for response to emergencies on the river and along the railroad

Need to assure that we have proper training and equipment to minimize risks due to possible exposure to haz-mat and Mass Casualty Incidents, MCIs.

We have a commuter rail system with trains carrying over 700 people doing 90 Miles per hour going up and down the Hudson River line and the potential for MCI every day and little training for the potential accident.

I would like to see you look at the three different models of fire service in the Town and see which is operating the best.

The Continental Village fire department takes pride in being extremely prudent in our finances

We are a well trained professional fire operation that has served our community for many years

I hope as a tax payer that I will not have to pay higher taxes.
Analysis 93: The comments made by members of the emergency services and the public speak for themselves. Each of the comments is a genuine reflection of concern for community safety and for the safety of the volunteers who serve this community.

Analysis 94: There has been fear expressed that volunteers will quit serving if there are changes to “their” departments. We reject that assumption. After viewing the dedication of the current active volunteers in the community we strongly believe that if the active volunteers are kept involved in the change process and if civic leaders assure that the process will be designed to improve responder safety, training and operations that the current volunteers will become strong supporters of beneficial changes for the good of the total community.
Fire Rescue & EMS Services Governance Options

The administration of fire rescue and EMS services in every community must be well organized to provide efficient, effective and safe delivery of service to the community. Management of these services must assure taxpayers that their services are cost effective and safe for responders and the public. Each of these factors demands a coordinated management and planning effort in the greater community. New York State has recognized the need to reexamine current governance structures of all government funded services to assure efficiency and effectiveness and NYS has in fact provided the grant funds for this project to help this community reach those objectives.

Consolidation, through shared services or combining jurisdictions, can increase the efficiency and effectiveness of departments by allowing for the better use of resources and providing greater flexibility and capability. Consolidation may also result in cost savings due to the efficient use of resources and the reduction of duplicative efforts through reorganization.

- An example of the cost savings from consolidation of administrations can be found in the metropolitan region of Ontario, Canada, where the administration of over 200 fire departments was consolidated. The same benefits have been found in Florida, Georgia and many other states in the USA, where single administrations successfully provide service through multiple stations often County wide and regionally.

The NYS document “How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages provides the following guidelines for communities considering consolidation:

Fire departments should consider consolidation when any of the following factors are present:

- Fire protection services exist immediately adjacent to one another, each with a complete, and many times, duplicated set of resources, including apparatus, equipment, facilities, and staffing;
- Increasing demands at all levels of government for funding of essential services;
- Insufficient career staff or difficulty recruiting and retaining volunteer staff; and
- Increasing service requirements, including hazardous materials, technical rescue, emergency medical services, and terrorism and natural disaster preparedness.

The Fire Rescue and EMS services in the Town of Philipstown meet each of these criteria.

The NYS “How to” guide contains information to assist local officials in the process of consolidation of fire services. We urge community leaders to use this document in their process to improve the efficiency, effectiveness and safety of the fire rescue & EMS services in Philipstown.

The “How to” guide presents several options and considerations for governance of these services. We present each below to enable readers of this report with a basis for evaluation of the recommendations made in this report.

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4 “How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages NYS Department of State
5 ibid
Operational Consolidation
Operational consolidation is the pooling of services, equipment, apparatus, and staff through inter municipal agreements. Here, one or more duties normally performed by individual departments are joined together and carried out as one entity while each fire department remains legally and administratively separate.

Inter municipal agreements must be entered into by the governing bodies and should outline the terms of the agreement. Such agreements would enable the parties to legally commingle their resources in order to achieve efficiency and economy. Examples include:

- Joint staffing at fire stations;
- Combining training programs;
- Dispatching the closest resource to an emergency incident;
- Creating a central dispatch function;
- Allowing one organization to perform apparatus maintenance for another; or
- Pooling specialized resources, such as heavy rescue, hazardous materials, rope rescue and emergency medical services.

Jurisdictional Consolidation
Jurisdictional consolidation involves the dissolution of existing jurisdictions (i.e. fire districts and fire protection districts) to create a new jurisdiction (i.e. combined fire district, fire protection district, or a joint fire district). This process requires a complete merger or reorganization, in which the governing bodies of each jurisdiction must agree to dissolve the current jurisdictions and form a new single jurisdiction.

The parties involved must plan and develop new administrative and operating structures, including, but not limited to:

- Training standards and programs;
- Standard operating procedures;
- Response standards, including location of facilities, number of fire companies, response time, and staffing;
- Current indebtedness of each jurisdiction;
- Rank structure;
- Employee/member benefits, such as retirement systems and service award programs;
- Union contracts, if applicable; and
- Personnel policies.

Analysis 95: Review of the current issues surrounding fire rescue and EMS service delivery in the Town of Philipstown clearly indicated that the current system has many problems at the managerial and civic leadership levels. The primary issue is that some of those leaders have not come together to work at addressing “what is in the public’s best interests”.

“How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages NYS Department of State
Strategic Recommendation 26: A merger of the current multiple layer governances of fire rescue and EMS services in Philipstown will provide a unified administrative structure that will address each of the issues noted in this report and also provide the governing mechanism that will control future costs through better planning. This administrative change can also be set up to maintain current station and community identities while simultaneously improving cost control, responder training, safety and volunteer response availability.

New York State allows the following fire service organizations.2

Fire Districts
A fire district is a political subdivision located within a town. Fire districts are established for the purpose of providing fire protection and response to emergencies. A fire district is a political entity with an elected governing body, administrative officers, and expenditure limitations. A fire district is dependent on the town or towns as a means to its initial creation, extension and dissolution. A fire district has the power both to incur indebtedness and to require the levy of taxes. Fire district taxes are assessed, levied, and collected at the same time and in the same manner as town taxes.

Fire Protection Districts
A fire protection district is a geographical area of a town which is provided fire protection pursuant to contract with any city, village, fire district or incorporated fire company. It is an assessment area within which a town can provide limited services and assess the cost back against the taxable properties within the district. A town board can create a fire protection district, consolidate adjoining fire protection districts, alter the boundaries of a fire protection district, or dissolve a fire protection district on its own motion or by petition.

Fire Departments
In cities and villages, fire protection is commonly provided by a municipal fire department, composed of career and/or volunteer firefighters. In towns, fire protection is not a municipal function but is provided by a fire district or pursuant to contract in a fire protection district. The fire department of a fire district encompasses all fire companies organized within the district, with the members appointed by the board of fire commissioners.

Fire Companies
Fire companies are subunits of a fire department. They may be a membership group of a fire department or incorporated as a membership corporation under the Not-for-Profit Corporation Law. The board of fire commissioners of a fire district may organize, operate, maintain and equip fire companies, and provide for the removal of the members thereof for cause.

Not-For-Profit Fire Corporations

2 “How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages NYS Department of State
A fire corporation is a special not-for-profit corporation formed to provide fire protection to a fire district, fire protection district or village under contract with the governing body (board of fire commissioners, town board, or village board of trustees). Fire corporations are under the control of the city, village, fire district or town authorities having control over fire protection in such areas.

Joint Fire Districts
Joint fire districts are created by the town board(s) and the board(s) of trustees of a village. Contemporaneously with the establishment of the joint district, the town board(s) and the village board(s) of trustees of each participating municipality shall, by local law, dissolve any existing fire, fire alarm or fire protection districts contained within the joint fire district.

Each structure has its weaknesses and strengths. We again refer readers to the “How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages guide for more details. We also strongly recommend that community leaders engage legal assistance from lawyers who are totally versed in this process.

Analysis 96: A Joint Fire District is a political entity with a governing body, administrative officers, and expenditure limitations. A joint fire district is dependent on the town or towns as a means to its initial creation, extension and dissolution. A joint fire district has the power both to incur indebtedness and to levy taxes. Joint fire district taxes are assessed, levied, and collected at the same time and in the same manner as town taxes. Joint fire districts are created by the town board and the board(s) of trustees of a village(s) with direct citizen involvement in the process. Contemporaneously with the establishment of the joint district, the town board and the village boards of trustees of each participating municipality shall, by local law, dissolve any existing fire, fire alarm or fire protection districts contained within the joint fire district. A Joint Fire District, with appointed officials dedicated solely to the provision of effective and efficient fire rescue and EMS services, will increase efficiency, improve effectiveness, enhance and expand services, reduce costs, establish mechanisms that will produce cost avoidance, improve coordination of regional planning, eliminate artificial boundaries, and standardize services and programs while improving safety for the public and emergency responders.

Analysis 97: We have come to the conclusion that in Philipstown the administrative organizational structure under which fire rescue and EMS services is provided from six (6) individual departments must be changed for the safety of the people who risk their lives and safety to volunteer and for the safety of the community they serve.

As stated in the NYS How to guide:
"Fire departments in towns, villages and cities are exploring new ways to improve the delivery of fire protection services. Consolidation, through shared services or combining jurisdictions, can increase the efficiency and effectiveness of departments by allowing for the better use of resources and providing greater flexibility and capability. Consolidation may also result in cost savings due to the efficient use of resources and the reduction of duplicative efforts through reorganization. While the concept of consolidation is not new, few fire departments have taken advantage of its benefits. Faced with increased costs and budgetary constraints, fire departments should consider consolidation or cooperating/joining services as a way to stabilize or reduce fire protection costs. The driving force behind all
decisions during the consolidation process should be the question: “What is in the public’s best interest”.

Strategic Recommendation 27: We strongly recommend the formation of a single Joint Fire District under the laws of New York State for the administration and operation of local fire rescue services. This district shall also include a single emergency medical service district under the same administrative leadership as currently required by NYS.

Analysis 98: The Attorney General of New York State in 1991 issued an informal view that the determination whether commissioners of a joint fire district are to be elected or appointed must be made at the time of establishment of the district as may be determined by resolution adopted at the meeting for the establishment of the district.

Strategic Recommendation 28: We recommend that the Commissioners of the Joint Fire District be appointed in joint agreement by the elected officials of the Town of Philipstown and the Villages of Cold Spring and Nelsonville following public solicitation for residents interested in serving who have no ties to the fire rescue or EMS services but who do have a background of education and experience that will serve to assure an efficient and effective organization.

Strategic Recommendation 29: The Commissioners of the Joint Fire District shall be comprised of five (5) members. Three members with no ties to the fire rescue and Ems services shall be directly appointed by joint agreement of the elected officials of the Town of Philipstown and the Villages of Cold Spring and Nelsonville. Two commissioners shall be selected and appointed by the Town and Village elected officials from a single list of candidates presented to the elected officials by the six fire rescue & EMS agencies in the township. As members leave the commission the same proportion of membership shall be maintained in making new appointments.

Strategic Recommendation 30: The fire rescue and EMS Joint Fire district Commissioner Candidates from the fire rescue and EMS agencies must be, and remain, certified as interior firefighter, Company Officer and Chief Officers or as Ambulance Corps Captain as detailed in the Putnam County Mutual Aid Plan 2010. Each must have successfully completed the NIMS / ICS (ICS100 & ICS 700, 200 AND ICS 300) Incident Command Systems Training and each must meet all of the Mutual Aid Plan requirements to serve as minimum requirements to serve as commissioners of the joint district.

Strategic Recommendation 31: The Joint Fire District Commissioners shall select and appoint a Fire / EMS Chief officer who meets all of the requirements of the County Mutual aid Plan as Chief of Operations and Training for the entire district. This chief officer shall work with the chiefs of each station to assure that all responders meet the requirements for their duties as outlined in the Mutual Aid plan, State and Federal requirements and NFPA fitness requirements. This Chief shall assure joint training between all of the stations and companies; Monitor staffing availability and response; Work with members of each station to prepare the operational budget request for the district commission consideration, and do other duties as may be required by the commission for the efficiency effectiveness and safety of the Joint District.

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8 NYS DOS “How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages"
Specific Recommendation 28: We strongly support the concept of neighborhood fire stations. It is important for the Joint Fire District Commission to maintain local station identity within the community wherever fiscally and operationally possible as community based response units with identification to the communities each serves.

Specific Recommendation 29: To accomplish the formation of a Joint Fire district a series of specific legal steps must be taken simultaneously for this improvement plan to be successful. The process must follow the laws of NYS Specifically: NYS Town law Article 11 A JOINT FIRE DISTRICTS IN TOWNS AND VILLAGES

Specific Recommendation 30: It is very important that the town seek and maintain legal guidance throughout this process from its local attorneys. The Town board and villages should engage their attorneys to review and draw up the legal documents required for the dissolution of the current governing structures and for the creation of a new Joint Fire District as the governing body under the guidelines established by NYS.

Analysis 99: It appears that many individual active volunteer members of each agency are more than willing to meet and work together to help plan for the betterment of their services.

Analysis 100: The value to the community of all the active and dedicated volunteers cannot be over emphasized. Every effort must be made to engage all active volunteers in all planning efforts for the fire rescue and EMS services in Philipstown

Specific Recommendation 31: Every effort must be taken to assure that current active volunteers continue to serve and that they are included as active participants in every effort to plan for the future.

Strategic Recommendation 32: The most important step in review of this study and in development of strategic planning for fire rescue and EMS services is for the community and community leaders to reach out and to assure all active volunteers that they each are a vital part of this system and that the community needs them to continue to serve as volunteers.

Specific Recommendation 32: Elected leaders in the community and the leaders of the emergency services should jointly select a trained relationship mediator and a business organizational professional/mediator and work with those experts to address the very serious issues noted in this report for the betterment of the services and the safety of the community.

Strategic Recommendation 33: The community and community leaders must work closely with current active volunteers to co-develop plans to demonstrate to every volunteer that their input is and will continue to be valued in the greater community.

Specific Recommendation 33: It is vital for the safety of responders and the community that every volunteer understands their importance to the community and to the process of planning to assure the continuation of those services.

Specific Recommendation 34: Rank and file active volunteers and the active volunteer operational officers of the fire rescue and EMS services need to be engaged in all dialogs concerning their services.

Specific Recommendation 35: Town and Village leaders should work directly with Active responding volunteers of the existing companies and districts to establish a transition
management team that will address each of the issues raised in this report and all others that have not been addressed as they relate to safety of responders and the public.

Strategic Recommendation 34: The primary functions of the Joint Fire District Commission shall be to address the issues in this report; to work with the broader community and the active volunteer transition management team to help them address the issues in this report and to operate the Joint district in a way that will address the primary question: What is in the best interests of the public being served."

Strategic Recommendation 35: The Joint Fire District shall work to assure that local identification of each station is retained as they also work to assure joint training and response by available volunteers across former jurisdictional boundaries.

Specific Recommendation 36: Town leaders must work to identify members of the public who are not currently members of the fire rescue or EMS services who have the knowledge skills and abilities to assist in the development of a successful Joint Fire District administration.

Strategic Recommendation 36: The Joint fire district commission will provide specific direction and guidance to the officers in charge response units in each station relative to training objectives, staffing requirements, apparatus maintenance, purchasing, the development of standard operating guidelines and other issues that are required for the proper administration of emergency services.

Strategic Recommendation 37: The Commissioners of the Joint Fire District shall not have or assume command roles at emergency incidents unless they have been specifically trained and been assigned to operational duties by the board of commissioners.
Debts, liabilities and obligations rules overview
The new N.Y. GOVERNMENT REORGANIZATION AND CITIZEN EMPOWERMENT ACT (EFFECTIVE March 21, 2010) has defined the process for treating debts, liabilities and obligations in the consolidation process:

§ 768. Debts, liabilities and obligations.2
1. All valid and lawful debts and liabilities existing against a consolidated local government entity, or which may thereafter arise or accrue against the consolidated local government entity, which but for consolidation would be valid and lawful debts or liabilities against one or more of the component local government entities, shall be deemed and taken to be like debts against or liabilities of the consolidated local government entity and shall accordingly be defrayed and answered to by it to the same extent, and no further than, the component local government entities would have been bound if no consolidation had taken place.

2. The rights of creditors and all liens upon the property of any of the component local government entities of a consolidation shall be preserved unimpaired. The respective component entities shall be deemed to continue in existence to preserve such rights and liens, and all debts, liabilities and duties of any of the component entities shall thence forth attach to the consolidated local government entity and be enforced against it to the same extent as if such debts, liabilities and duties had been incurred or contracted by the consolidated local government entity.

3. All bonds, contracts and obligations of the component entities which exist as legal obligations shall be deemed like obligations of the consolidated local government entity, and all such obligations as are authorized or required to be issued or entered into shall be issued or entered into by and in the name of the consolidated local government entity.

Specific Recommendation 37: According to the NYS government reorganization act § 768 debts liabilities and obligations; The obligations of each component agency become the obligations of the consolidated agency and the new organization assumes the right to use the properties that have been contracted for. It will be imperative for the Joint Fire District to work with legal advisors to determine how the property being paid for by the original entity tax payers will be paid for by the total users of the new entity if that property or equipment is used by the greater consolidated district.

Strategic Recommendation 38: The Joint Fire District and its legal advisors should seek ways to lease and/or purchase properties and equipment that have be indebted by component agencies of the district when the new use of that property is for the good of the entire district.

2 N.Y. GOVERNMENT REORGANIZATION AND CITIZEN EMPOWERMENT ACT
Implementation Recommendations

Identification of Available Resident Community Expertise

Philipstown is a bedroom community for the greatest metropolitan business region in the world. There are residents in this community who are leaders in the world’s major businesses. This community has residents who have expertise in the law; human resources; training; business administration; finance; insurance; safety; technology; public relations; fund raising and the media just to name a few. It appears that the community has residents who have expertise in every field that is needed to assure efficiency effectiveness and safety in the community.

The lives and safety of these residents and their families and their homes depend upon the services being provided by the volunteers serving this community. Those same business leaders also are the property owner taxpayers who have the most to gain from assuring that the delivery of local fire rescue & EMS services are effective efficient and safe. These residents are a potential resource that can be utilized to bring forth the true capabilities for an effective efficient and safe fire rescue and EMS service for the entire community. It is time to tap into the espoused philosophies of those residents who demand effective and efficient services from their government by enrolling them in the local effort to do so.

Strategic Recommendation 39: The town, villages and agencies should all work together to identify residents who are not currently associated with the fire rescue Ems services or local governments who have special knowledge skills and abilities that can be utilized to mediate current areas of conflict and to help develop and administer a modern fire rescue & EMS service organization for the community

Strategic Recommendation 40: Residents who do not currently have any ties to current leadership in the agencies or local elected governments who have been identified as having specific knowledge skills and abilities should be selected to mediate current areas of conflict and to help develop and administer a modern fire rescue & EMS service organization for the community.

Strategic Recommendation 41: Local residents with media, public relations and human resources expertise should be mobilized to establish and operate an ongoing volunteer recruitment and retention program.

Strategic Recommendation 42: Local residents with expertise in safety and the law should be mobilized to provide review of current operating practices and be active participants in the development of updated operations policies.

Strategic Recommendation 43: Local residents with human resources and counseling skills should be utilized to work with current personnel in each agency to help them to identify and work through issues and concerns that they may have about the future of these services and future relationships internally and externally.

Strategic Recommendation 44: Local residents with human resources and counseling skills should be utilized to be part of an ongoing effort to help identify and manage stress among volunteer members of the services, both post incident traumatic and the stresses of family VS service to the community that all volunteers face.
Strategic Recommendation 45: Local residents with Technology expertise should be utilized to review existing communications and record keeping and be part of the team designated to design and implement systems that will assure that all stations apparatus and personnel have the technology required to perform the duties required effectively efficiently and safely.

**Technology Implementation / Utilization**

There is a repeated acknowledgement and concern that current technology and communications equipment in the services is not performing at acceptable levels to assure accuracy of reporting and communications safety for operational personnel.

Strategic Recommendation 46: All reasonable efforts should be initiated to assure that all technology is effective for its intended use. Previous sections of this report laid out specific recommendations for accomplishing this mission including working with BES to address the needs and solutions. The community should solicit the pro bono assistance of residents with the technological knowledge skills and abilities required to address all technology issues.

Analysis 101: Review of current technology and planning / implementation of technology improvements should be conducted using community identified available specialized expertise.

**Potential for sharing or consolidation of services and/or inter-municipal cooperation arrangements**

There are immediate areas that offer potential for sharing and consolidation of services. Those areas include:

- Increasing the total pool of available responders based upon their current physical locations at the time of an alarm and not upon the department they belong to;
- Improved Volunteer Recruitment and Retention programs;
- Single source physical exams and fitness testing;
- Joint station and inter agency training;
- Common standard operational practices and guidelines
- Consolidation of all administrative functions including record keeping;
- Single contractor bids for apparatus testing and maintenance;
- Single provider bids for Insurance purchases for personnel and facilities;
- Standardization of apparatus bid specification development;
- Centralized purchasing;
- Centralized logistics and the resultant reduction of the amount of supplies and materials used by all that currently are stored at each agency;
- Better loan rate negotiation power
  - There are many other potential cost savings that closer examination by the commissioners of the joint district will reveal.

The key to the benefits of consolidation of administrations include the power of size in negotiations and the elimination of wasted duplication and costs to achieve the same results separately.
Benchmarking Analysis

The Consultant was unable to perform a detailed analysis of baseline information based upon industry benchmarking standards due to the lack of relevant data provided or available. The lack of this data is not a serious issue in this effort to gather information for planning of the administration of fire rescue and EMS services. The lack does highlight the need to plan to address this issue in the future.

Population trends and projections of socio-economic characteristics

Observations within the community and at meetings indicate that Philipstown has an aging population and an aging volunteer membership base. There are young high school age students serving as active volunteers, but leaders have concerns that these young people will leave service when they go to college and that many will not return to live in the community as adults due to the high cost of homes and taxes in the township.

Specific Recommendation 38: The exodus of young people from local communities in every part of NYS is a serious concern. The high cost of living, housing and lack of high paying local jobs are all driving influences in that exodus. Philipstown has all the elements that cause young people to seek opportunities outside of the region. This exodus may have long term negative effects on recruitment and retention of volunteers in the community.

Inter-Departmental Coordination (boundaries, mutual aid)

There are rapidly identified areas of distrust and lack of coordination and cooperation between the departments. It appears that most are fostered by leadership failures. These are long term issues are based upon previous isolation of each hamlet over the years. Historically issues of turf in response were zealously protected.

Today there are active mutual aid and automatic aid agreements between all of the agencies. While the response of effective forces requires mutual and automatic aid between agencies, there is evidence of a lack of mutual aid training or respect between the agencies due to the failures of senior leaders to assure that it is done. One fire officer reported that his department had repeatedly invited adjacent departments to take part in joint training over the years. It happened once and he was still waiting for it to happen again. Several active volunteers told me that ‘they make it work at the scene of emergencies in spite of senior leaders.”

Analysis 102: The failure to actively develop policies and procedures that reflect the importance of joint training for automatic and mutual aid and the practice those policies and procedures together is a direct danger to the safety of all responders and to the community.

Strategic Recommendation 47: Effective Response Force: It is important to establish standards for effective response force for each type of incident and incident location. Agencies need to continuously evaluate a jurisdiction’s potential “worst case” service demand scenarios, based upon structural and life hazard risks, and the ability of the responding agencies to successfully control and extinguish a fire in those properties safely and efficiently with the equipment and staffing available.
Generally Accepted Benchmarks, Standards, Goals and Objectives

In the following sections we present the readers of this report with an overview of generally accepted standards and benchmarks that fire rescue and EMS agencies should be guided by in their planning efforts.

- This section does not include the codes of standards of the State, OSHA or the NFPA for operations and safety because these volumes are extensive and more highly detailed than what is required for this initial planning study.

Strategic Recommendation 48: As strategic and specific planning for fire rescue and EMS services is undertaken in the community those doing such planning should be mindful of current laws and codes to assure that their work products are compliant with NFPA, OSHA and NY State codes and laws as they apply to each situation.

Benchmark & Baseline Definitions

Benchmark: A Benchmark is defined as a standard by which objectives are judged. They are best practices that help define superior performance of a service.

Baseline: Is the measure of current performance based upon observations and data.

Benchmarks

In the Fire and Emergency Medical Services industry there are well established benchmarks for successful performance of efforts to mitigate emergencies. These standards and benchmarks have evolved over many years. Understanding these standards and benchmarks and how they affect the efficiency, effectiveness and safety of operations is an important factor in the review of existing services, and in development of policies and operational guidelines for those services.

ISO Public Protection Classification Program

The grandfather in the field of establishing standards for evaluating fire protection capabilities of communities is the insurance industry. For over 100 years, through a division formerly known as ISO, the insurance service organization, the insurance industry examined fire hazards and protection capabilities in every community. ISO based its standards upon reported losses within the categories of classification in those communities. ISO became a separate corporation in 1971. ISO is a leading source of information about risk. ISO helps customers identify and mitigate risk, provides comprehensive data, leading-edge analytics, and decision-support services to the federal government, municipal leaders, insurance industry regulators, and public- and private-sector customers. ISO standards have been proven general indicators for effective emergency service response. While the ISO classification survey is directed to the insurance industry as a guide for establishing premium rates for residential and smaller commercial properties, and it does not reflect all the factors that must be considered when determining effective force response for each of the services provided by the agency, the ISO survey does assist in verifying those factors that are important considerations in establishing standards of response coverage.

ISO provides information on:

- Communities — fire protection, water systems, emergency reporting capabilities and
other critical infrastructure, building codes, and potential for natural and man-made catastrophes.

- Buildings — size, construction, occupancies, hazards, and public and private fire protection.

Analysis 103: Improvement in ISO classification rating has direct positive impacts on the cost of fire insurance of home owners.

**Event Cascade**

For all emergency incidents there are factors that affect successful outcomes: Station location; number of available and responding units; and the response of the required staffing to mitigate the emergency incident. The success of each factor is based upon the reaction to and timing of each of the following cascade of events.

1. Event initiation
2. Emergency event
3. Alarm
4. Notification
5. Alarm processing/unit is notified
6. Turnout time/unit leaves station
7. Travel time
8. On-scene time/unit arrives
9. Initiation of action
10. Termination of incident

Figure 32: Cascade of events
As can be seen in the chart above, there are several uncontrollable factors in responding to emergency incidents. These factors provide soft data that is not measurable.

- There is no measurement of the time from when an incident actually starts to when it is discovered.
  - This fact holds true even when there are automatic detection devices and automatic extinguishing systems.
- There is no way to accurately determine the time between discovery of the event and notification of the emergency communications system, although that time seems to multiply in the minds of the average person discovering and reporting an emergency incident. Call processing times, dispatch, turnout time and response time and arrival times can all be readily measured.

**Dynamic Effect of Fire Growth**

This section provides an overview of the chemistry of fire growth that determines the efficiency and potential for operational safety and effectiveness of every fire department in their response to emergency incidents involving fires in structures. This section can be directly related to the findings of the ISO survey of fire protection capabilities in the time it takes to travel from fire stations, and the apparatus and staffing required mitigating and controlling the fire.

The dynamics of fire growth is essentially a chemical reaction with easily calculated and predictable elements. The stage of every fire emergency effects staffing and equipment needs to mitigate the emergency. Both staffing and equipment needs can be reasonably predicted for different risk levels and fire stages. The ability to correlate fire and emergency medical staffing and equipment to this cascade and timing of events is the primary basis for establishing an agency’s standards of response coverage policy.

The fire suppression tasks that are required at a typical fire scene vary depending upon the stage of the incident fire propagation, and public and responder risk hazard vs. personnel/public safety level. What the personnel on the responding fire companies must do – simultaneously, efficiently and safely, if they are to save lives and limit property damage - is to arrive at the right time, with adequate resources to do the job. Matching the arrival of resources with a specific point of fire growth or number of patients found is one of the greatest challenges to emergency managers.

The answer for controlling the variation in fire dynamics lies in finding a common reference point; something that is common to all fires regardless of the risk level of the structure, the contents of the structure, or the time the fire has burned. The benchmarks for evaluating these factors do exist.

Regardless of the speed of growth or length of burn time, all fires go through the same stages of growth: The point of Flashover marks the critical change in hazard conditions for both the structure occupants and the responding personnel. When flashover occurs, all combustibles in the room instantaneously erupt into flame. This eruption into flame generates a tremendous amount of heat, smoke, and pressure, resulting in enough force to extend the fire beyond the room of origin through doors and windows or breaches in walls, ceilings and floors. The
combustion process then speeds up geometrically because there is now an even greater amount of heat to transfer to unburned objects through convection, radiation, direct flame contact, and conduction. To save structures and lives, it is vital to have fire suppression efforts, firefighting operations, well underway before Flashover occurs.

Flashover, which normally occurs within ten minutes after free burning begins, is the critical stage of fire growth for two primary reasons:

- When a fire has reached flashover, it is too late to save anyone in the room of origin. No living thing in the room of origin will generally survive flashover. The chances of saving lives after Flashover drop dramatically.
- Flashover creates a quantum jump in the rate of combustion, and significantly greater amounts of water and resources are needed to reduce the temperature of the burning material below its ignition temperature. A post-flashover fire will burn hotter and move significantly faster, compounding the search and rescue problems in the remainder of the structure, at the same time that more firefighters are needed for fire attack and extinguishment.

As shown in the following chart, there is a definite time of growth to the point of flash over that can be predicted. That growth pattern can only be changed by intervention of firefighting personnel or the activation of protection systems such as automatic fire protection sprinklers.

Figure 33: Flashover time chart

It is important to note that while the Fire Department cannot control the duration of time that passes between the inception of a fire and its discovery and reporting to the emergency communications dispatch center, there are ways to reduce this time. Assuring that there are automatic fire and smoke detection systems with direct alarm notification in every structure is the most positive factor in reducing the variables between fire initiation and notification of
occupants and emergency responders. Without automatic detection and notification there are numerous variables that affect the detection and notification time frame. These include time of day and location of the fire, the capabilities of the person discovering the fire to make a report, whether the reporting party uses a “land line” or a wireless telephone, and any other factors.

Once a report of a fire and its location has been received by the emergency communications dispatch center, the fire and rescue agencies can begin to influence the subsequent timeline of events. From the point of notification, direct Fire Department actions, along with outside influences such as additional emergency calls, distance to the incident, traffic and weather patterns, and etc. result in the final response time to any specific event.

**Benchmarks for Standards of Response Fire Incidents:**

Today’s modern standards of response guidelines and benchmarks as defined by the Center for Public Safety Excellence and the Commission on Fire Accreditation International 10 encourages multiple levels of service within the following categories, combined with appropriate deployment of equipment and personnel. As agencies analyze their response times, those times should include call processing, turnout time, and travel time.

The following benchmarks apply to areas in the Town of Philipstown:

**Suburban:** Population of 10,000 to 29,999 people and/or any area with a population density of 1,000 to 2,000 people per square mile: (The combined Villages of Cold Spring and Nelsonville in the Town of Philipstown could be considered to be in this category)

**Bench mark:**
- First unit 5 minutes,
- Second unit 8 minutes,
- Balance of 1st alarm assignment 10 minutes
- Performance 90%

**Base line – 70%**
- First unit 6 minutes/50 seconds,
- Second unit 10 minutes/40 seconds,
- Balance of 1st alarm assignment 13 minutes
- Performance 90%

**Rural:** Population of less than 10,000 people and/or any area with a population density of less than 1,000 people per square mile.

(Most areas of the Town of Philipstown outside of the villages are in this category)

**Bench mark:**
- First unit 10 minutes,
- Second unit 14 minutes,
- Balance of 1st alarm assignment 14 minutes
- Performance 90%

**Base line – 70%**
- First unit 13 minutes
- Second unit 18 minutes/20 seconds,
- Balance of 1st alarm assignment 18 minutes/20 seconds

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10 Center for Public Safety Excellence, Commission on Fire Accreditation International Fire and Emergency Service Self-assessment manual 7th edition
Performance 90%

Wilderness: Any rural area not readily accessible by public or private maintained road (Philipstown includes many square miles of land that is this category)

Benchmark:
- First unit N/A,
- Second unit N/A,
- Balance of 1st alarm assignment N/A
- Performance N/A

Baseline – 70%
- First unit N/A
- Second unit N/A,
- Balance of 1st alarm assignment N/A
- Performance N/A

The criteria above show the range of performance within each population category from the target benchmark to a lesser base line of 70% of the benchmark. These performance indicators are based upon emergency, priority 1 responses.

Emergency Medical Service Generally Accepted Guidelines

Emergency medical services in Philipstown are provided by the Garrison and the Philipstown Ambulance agencies. Although the fire and rescue services serving the Philipstown do not provide emergency medical transport services, they do provide important medical first responder services for major medical emergencies. Therefore, it is important to also examine the benchmarks that have been established for the emergency medical services as they apply to all responders.

Cardiac Arrest Survival: Brain Death

A patient’s survival after cardiac arrest is one of the industry standards that measure emergency medical systems effectiveness. The correlation between cardiac survivability and the treatment received by patients suffering from stroke (CVA), apnea and trauma is well founded. A system that is maintained to ensure survival of the cardiac patient is better able to support the needs of other less severe, but no less critical patients.

- The American Heart Association has indicated that the ability for a patient to survive cardiac arrest diminishes rapidly unless definitive life support (Cardio-pulmonary resuscitation and defibrillation) occurs within four (4) minutes and that Advanced Life Support (ALS) is initiated within eight (8) minutes or less of the event.

- New findings from the Mayo clinic show that lives are saved or lost within six (6) minutes after cardiac arrest. In a study by USA TODAY, “data analysis show that, of the 250,000 Americans who die outside of hospitals from cardiac arrest each year, between 58,000 and 76,000 suffer from a treatable short circuit in the heart and therefore are highly “savable”.

While the location of responders is an important factor in rapid response to these events, it is more important that early notification and intervention take place to increase the chances for survival. It is the patient who is in fibrillation who has the greatest chance of survival. A patient
has six (6) minutes to live from the beginning of the cardiac event and the first defibrillation shock as indicated on the following chart.

Figure 34: Response time Intervention survival chart

Response Time / Intervention vs. Survival

The typical cardiac patient in ventricular fibrillation has six (6) minutes to live.

A number of organizations support early defibrillation of cardiac patients in ventricular fibrillation. The American Heart Association (AHA) endorses the position that, “…all emergency personnel should be trained and permitted to operate an appropriately maintained defibrillator, if their professional activities require that they respond to persons experiencing cardiac arrest.”

In a position statement of the American College of Emergency Physicians (ACEP), it states that; “the efficacy of early defibrillation with the reliable technology of current automatic external defibrillation (AEDs) is proven and widely accepted within the out-of-hospital provider community. A victim’s best chance for survival is when their revival is within 4 minutes.”

American Public Health Association (APHA) has taken the position that, “…AEDs need to be available, with people who know how to use them, within four minutes response time to cardiac arrest victims.”

The National Association of EMS Physicians has stated in its literature that, “…rapid defibrillation is the most critical of these resuscitation interventions: strategies to enhance survival should focus on reducing the interval from collapse to defibrillation.”

An advisory statement from the International Liaison Committee on Resuscitation stated in a 1997 article that, “Most adults who can be saved from cardiac arrest are in ventricular fibrillation (VF) or pulse less ventricular tachycardia. Electrical defibrillation provides the single most important therapy for the treatment of these patients.”
The American College of Occupational and Environmental Medicine has stated that between thirteen (13%) percent and sixteen (16%) percent of workplace-related deaths can be attributed to sudden cardiac arrest (SCA). They went on to state, “Factors contributing to out-of-hospital survival following SCA have been described primarily in terms of the time-related ‘chain of survival’ paradigm. The four links of the chain include: early recognition and call for emergency medical services; initiation of basic life support (BLS) CPR; defibrillation; and advanced cardiac life support (ACLS) drug support.”

Emergency Health Services Federation has stated: “Time is a determining factor in the outcome of a patient suffering from cardiac arrest. For every minute after collapse, without adequate interventions, a person’s chance of survival drops by 10 percent”. They go on to state that survival rates of nearly thirty (30%) percent are not uncommon when defibrillation is applied quickly.

Universally, all groups that study survivability of cardiac arrest victims support early defibrillation by first responders within the first few minutes after discovery of cardiac arrest to insure maximum survivability of the ventricular fibrillation patient.

Figure 35: Emergency medical time factors for cardiac survival

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It is for these reasons that NFPA\textsuperscript{11} Standard 1710 states that:

- “a fire department shall establish the response time objectives of 8 minutes or less for the arrival of an advanced life support unit at an emergency medical incident, where this service is provided by the fire department;” \textsuperscript{12}

- ... that “units that provide ALS transport shall be staffed with a minimum of two members providing patient care that are trained to emergency medical technician-

\textsuperscript{11} NFPA National Fire Protection Association

\textsuperscript{12} NFPA 1710, Section 4.1.3.1.1(3)
Paramedic (EMT-P) level;" \(^{13}\)

- ... that ALS emergency response deployments, “shall include a minimum of two members trained at the emergency medical technician- Paramedic (EMT-P) level, and two members trained at the emergency medical technician- basic (EMT-B) level arriving on scene within the established response time.” \(^{14}\)

As can be seen by comparing the Fire Propagation Curve and the Cardiac Patient Survival Rates charts below, there is a direct correlation between the response and initiation of activities to time required to save a cardiac arrest victim and the time affecting the ability of a fire department to mitigate fire propagation and rescue of fire victims successfully.

Figure 36: Effect of Response Times on Cardiac Patient Survival Rates

<table>
<thead>
<tr>
<th>Initiation of CPR</th>
<th>Time to Defibrillation</th>
<th>Time to Advanced Cardiac Life Support (ACLS)</th>
<th>Predicted Survival Rate/All Cardiac Arrest (percentages)</th>
<th>Survival Rate/All Potential Survivors (percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes</td>
<td>11 minutes</td>
<td>13 minutes</td>
<td>4.6%</td>
<td>6.9%</td>
</tr>
<tr>
<td>5 minutes</td>
<td>11 minutes</td>
<td>12 minutes</td>
<td>18.2%</td>
<td>27.2%</td>
</tr>
<tr>
<td>5 minutes</td>
<td>6 minutes</td>
<td>11 minutes</td>
<td>25.8%</td>
<td>38.5%</td>
</tr>
<tr>
<td>5 minutes</td>
<td>6 minutes</td>
<td>7 minutes</td>
<td>34.2%</td>
<td>51.0%</td>
</tr>
</tbody>
</table>

The Cardiac Patient Survival Rates chart scenario requires:

- two EMS trained individuals to provide CPR:
  - one to prepare the AED and analyze the results of an electrocardiogram (ECG) report,
  - one to prepare for and initiate advanced cardiac life support measures, such as advanced airway management, I.V. therapy, and the range of pharmacological interventions.

This breakdown of the expected capabilities of a medical alarm assignment requires a minimum contingent of four EMS trained personnel to arrive at the scene of a cardiac arrest.

Most experts agree that four responders (at least two trained in ACLS and two trained in BLS) are the minimum required to provide ACLS to cardiac arrest victims. \(^{15}\)

\(^{12}\) NFPA 1710, Section 5.3.3.3.2.2
\(^{14}\) NFPA 1710, Section 5.3.3.4.4
\(^{15}\) The Journal of the American Medical Association, October 28, 1992; p. 2291
**Improvement Plan**

The issues noted in this report are extremely serious. They affect the life safety of residents and emergency responders in Philipstown.

Failure to address each issue properly will have an adverse effect on community public safety and the safety of all emergency responders. The NYS Department of State web site and others contain numerous materials that can serve as guides to the process of making improvements in efficiency and effectiveness in government services. Materials such as: “How to” Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages”; The New N.Y. Government Reorganization and Citizen Empowerment Act and many other materials are important reading. All parties should familiarize themselves with these materials and their legal representatives should understand and be guided by current NYS laws which pertain to Towns and Joint Fire Districts.

This process will require legal guidance as this project moves forward. The findings in this report each indicate the seriousness and importance of entering this process from the start with the ongoing guidance of attorneys who are currently up to date with changes in NYS laws regarding government.

**Strategic Recommendation 49:** The mistrust demonstrated toward elected officials by some leaders in the current fire rescue and Ems services must be replaced with cooperation between all parties to assure that every citizen in the community and every volunteer serving the community are assured that the fire rescue & EMS services are efficient, effective and safe. The deep seated feeling must be identified and worked through with the assistance of professional experienced in bringing people together for a common good.

**Strategic Recommendation 50:** We strongly recommend that the elected officials in the village and the town immediately begin the process of rebuilding the community’s fire rescue and EMS service delivery system as outlined in this report.

**Strategic Recommendation 51:** The process of successfully addressing all of the legal factors in this process demand that the total process be managed under the guidance of competent legal representatives who are fully conversant with New York State laws.

**Strategic Recommendation 52:** We strongly urge that the elected officials immediately engage the services of trained mediators and counselors to help all parties come together in a community driven effort to assure effective efficient and safe delivery of fire rescue and EMS services in Philipstown.

**Specific Recommendation 39:** The greater Philipstown area certainly has residents who are experienced expert mediators who are not part of the existing fire rescue EMS services and not part of the elected officials or political leaders in the community. Every effort should be taken to identify residents meeting these qualifications and to secure their services on a voluntary basis. Another source for locating people with such skills would be the colleges in the region.

**Strategic Recommendation 53:** We strongly remind town and village leaders of the importance of including active rank and file volunteers in the administrative reorganizational process.

We recommend the following steps to develop and implement a plan to improve efficiency effectiveness and safety of the fire rescue services in Philipstown.
1. The town must secure the services of skilled mediators and counselors to meet with the leadership of the fire rescue and EMS services with the mediator serving as a facilitator to address issues that have created the current climate of distrust.
2. The town and the leaders of the services must define and adopt standards of performance for the services to be provided by fire rescue and EMS services.
3. The town and the leaders of the services must adopt a reporting system as part of the contract for services in which fire rescue and EMS services must report how they have met the adopted standards of performance prior to contract renewals.
4. The town and the leaders of the services must examine the alternative governing forms for operation of fire rescue and EMS services as allowed under NYS laws.
5. The mediator should meet with active volunteer firefighters and EMS providers to determine their issues with the current climate and jointly develop ways to assure services into the future.
6. The Strategic Recommendations in this report should be used as a guide for development of a community Strategic Plan for Fire Rescue EMS service delivery and administration.
7. The Specific Recommendations in this report should be implemented as soon as possible to address concerns for safety, efficiency and effectiveness.
8. Recruitment, retention and training of volunteers should be given a high priority in all efforts to address the issues in this report.

Future support
We offer the community our future services to assist in local implementation of the recommendations made in this report and for future reviews of progress as it is made.

If the town does receive staff readiness reports from the majority of volunteers in the fire rescue and EMS services within 1 year, we will perform the analysis of that data under the terms of this contract.
Conclusion

Unlike the scene in the movie the Wizard of Oz where the wizard tells Dorothy to “Disregard the man behind the screen”; the residents, tax payers and their elected representatives in Philipstown cannot afford to “disregard the people behind the screen” who control the agencies providing fire rescue and EMS services to Philipstown.

Analysis 104: As a minimum, those in leadership roles in the fire rescue and EMS agencies must be re-educated about their roles in leadership in their departments. They must relearn that they will be held accountable to the public they serve. If the current fire rescue and EMS leaders cannot refocus on the greater community needs, their replacement with community leaders who will do what is in the public’s best interests should be considered.

Specific Recommendation 40: For the safety of the community, and for the safety of the dedicated volunteers who serve this great community, it is imperative that the villages and the town promptly move forward with addressing the Strategic and Specific recommendations in this report and reorganize the fire rescue and EMS services.

Specific Recommendation 54: The elected representatives of the Villages and the Town should immediately address the issues outlined in this report for the safety of the community and for the safety of the emergency responders.

Specific Recommendation 55: The accountability issues noted in this report should be required as minimum standards for receipt of tax funds as a part of the town’s efforts to assure the total community that that these leaders are addressing the primary question of this study: “What is in the public’s best interest?”

Specific Recommendation 56: Any strategic planning effort to improve efficiency effectiveness and safety in the delivery of fire rescue and EMS services in Philipstown must address each of the findings in this report to be successful.
Appendix

Putnam County Mutual Aid Plan