## **RFG Fire Rescue Consulting** Efficiency Effectiveness & Safety Planning for Local Government



# Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration

FINAL REPORT 03/31/2011

**Prepared for the sponsors:** 

Town of Manlius Town of Pompey Village of Fayetteville Village of Minoa Village of Manlius Kirkville Fire District

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#### Preface

The sponsors engaged this study of their fire rescue and emergency medical services after many years of internal agency, intra agency and community discussion and self-examination into the effectiveness efficiency and safety of their current service delivery system. Over a period of years there have been many reviews of fire rescue and EMS services in New York State, in Onondaga County and in the Towns of Manlius and Pompey. Some of those studies were conducted by members and leaders of these emergency services, some were conducted by outside consultants and some studies were conducted by the media. Each had the goal to review effectiveness, efficiency and safety of their current system.

We have reviewed many of those studies for this project. In each study we have seen many of the same findings: Taxes are raising; citizens see the need for more efficient use of their tax dollars; costs for equipment and operations is raising; the volunteer force is aging and shrinking; there are decreasing numbers of younger people able and willing to volunteer to serve their community; young people are leaving the community as they search for lower costs of living, lower taxes and for jobs; there are periods of the day when volunteer staff availability is dangerously low; time demands on volunteers has increased every year; unfunded mandates are costing local taxpayers money; ... and the list goes on detailing the issues and the need to address effectiveness efficiency and safety in the delivery of fire rescue and EMS services.

Agencies across the state have reviewed the findings in their own area's reports and taken steps to improve the effectiveness and efficiency of their services. They have seen positive results that benefit their communities and their fire rescue and EMS service providers.

It is our sincere hope that the sponsors of this study will carefully review this report and that they will accept the recommendations for improved efficiency effectiveness and safety. The issues in this report affect the safety and the costs of every citizen in the greater community. The issues impact every person who risks their health and safety to serve those citizens as volunteer and career firefighters and emergency medical personnel.

• It is important to note that this report contains many references to NYS laws and actions that reflect those laws. We are not attorneys and are not providing legal guidance in this report. Each agency should assure that their actions are guided by attorneys who have expertise in NYS law.

This study was funded by a Local Government Efficiency Grant awarded by the New York State Department of State. The driving force in this study is the question:

#### "What is in the public's best interest?"

#### Acknowledgements

We thank all those who contributed to this project. It would have been impossible to conduct this comprehensive study without the assistance, knowledge, skills, and abilities of many individuals from many levels of government. It would be impossible to thank each person separately in this report because so many saw the need to help the community assure efficiency effectiveness and safety in the delivery of fire rescue and EMS services to the public. We received assistance from several New York State offices including the Department of state, Comptroller's office, and Office of Fire Prevention and Control. We received materials and support from Onondaga County; Department of Emergency Management, Emergency Communications 9-1-1, and the GIS department. Locally, we had input and support from elected and appointed officials in each village and both towns. We received assistance from the town police department and certainly we received in-depth support and input from the leaders and members of the fire rescue and EMS services, including volunteers and career staff.

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## **Executive Summary**

The areas covered by this report include the Town of Manlius and a section of the Town of Pompey and the Villages of Minoa, Fayetteville and Manlius and the Kirkville Fire district. All are located in Onondaga County New York. The leaders of the sponsor jurisdictions commissioned this study, with funding assistance of a New York State Department of State Local Government Efficiency Grant as part of their efforts to review their service delivery programs to assure effective efficient and safe service delivery to the citizens of their communities.

New York State has in recent years recognized that the long term fiscal survival of New York State depends upon the ability of local citizens and governments to reexamine how their governments at every level operate. There is a growing understanding across NYS that each level of government must recognize that the status quo of governance which was established many years ago is no longer acceptable. The leaders of the sponsor jurisdictions are to be commended for their diligence in self-examination to determine <u>"What is in the public's best interest?"</u>

The Central New York region, as is true with the rest of New York State, is experiencing a loss of businesses as companies seek lower taxes and more favorable business conditions. Young people are leaving the area to find better employment opportunities. The population in the region is aging and service demands are increasing. Local government leaders struggle to contain costs and still provide the services the public demands. Taxes are rising as elected leaders struggle to cover the tax revenue lost from businesses and families that have left the region. Every community is struggling to retain the quality of services that their communities have come to expect.

The fire rescue and EMS services in the sponsor areas of the Towns of Manlius and Pompey and the Villages of Minoa, Fayetteville and Manlius and in the Kirkville Fire district revealed that this community has a core group of extremely hard working and dedicated volunteer firefighters, officers, and emergency medical personnel. Unfortunately the pool of people willing and able to serve as volunteers, as is true throughout the nation, is shrinking as demands for service increase. Due to ever increasing service demands over the years the Villages of Manlius and Fayetteville found it necessary to supplement their fire rescue and EMS services with career staff and the Village of Minoa has found it necessary to provide career staff in its EMS service. Those career members of the service are dedicated to the community and to their agencies. The career staff is seen as mentors to younger volunteers and they work in harmony with volunteers daily. The all-volunteer fire departments in Minoa and Kirkville continue to try to provide an all-volunteer service system in their jurisdictions.

Supervision at Incidents & Officer Selection is a concern of volunteer and career members at every rank. In 2002 the fire departments suffered 2 tragic deaths of firefighters battling a house fire. Management and supervision of that incident has been questioned in the courts by the families and by members of the fire services locally and nationwide. The primary concern is the desire to assure safety on scene.

The three village fire rescue services were established over 100 years ago to provide fire protection within the villages. Over the years as populations expanded from the villages into former farm and rural lands in the townships each of the towns contracted with the villages for fire rescue and EMS services. The people in the hamlet of Kirkville established their own fire

district to protect their homes as that hamlet grew. Over the years each agency has seen dramatic increases in service demand and each has increased the both the number and the types of services that they provide to the community even as they have faced increased costs and diminished numbers of people willing or able to serve as volunteers..

Today each village retains control of "its" fire department.

- Budget allocations are determined by the elected officials of each village.
- Major expenditures for each agency are voted on only by residents of the villages, while the costs for those decisions are passed on to the greater community through town taxes.
- Each village negotiates separate labor management agreements with career staff.
- Each agency develops its own standard operating procedures and operates under those guidelines.
- Each agency buys equipment and apparatus based solely upon its own departmental needs review.
- Each agency purchases and maintains its own logistical supplies of materials and equipment within the rules of their governing authority.
- Each agency conducts its own volunteer recruitment and retention program.
- Each agency has members who have special training abilities to share with other members.
- Each agency conducts its own independent training program;
- Each agency determines separately what type of self-contained breathing apparatus it will purchase and use.
- Each village and agency purchases insurance and service contracts independently.
- Each village garage provides service for the fire apparatus in that village.
- Each village and agency maintains separate record keeping.
- Each agency and government must provide its own incident reporting, financial management and separate fiscal audit reporting to the state and the public.

There is keen completion for volunteers among the agencies. There are wide differences in what each agency can use as incentives for recruiting and retaining those volunteers. Volunteers have transferred between department to find conditions that better fit their personal needs and expectations. The area has become home to many people who are in highly technical professional jobs and many of these people travel frequently for business. Demanding personal and professional schedules, coupled with the high time demands of being in the volunteer fire rescue and EMS services, make it difficult for many residents to volunteer.

There are vast differences in staffing levels depending upon time of day in every agency. The available pool of volunteers at any incident is limited by the agency the available volunteers belong to. In an era when even children have "play dates" on a scheduled basis, some agencies still expect their volunteers to respond to every service request. Some agencies have

successfully established scheduled station duty time for some members. The staffing issues have a direct impact on citizen safety and the safety of emergency responders.

For every aspect that it takes to actively plan, manage and provide fire rescue and EMS service in the sponsor area, there is currently a complex and inefficient multiplication of governmental efforts and costs for those services. These multiplied costs have a direct impact on every taxpayer in the sponsor area.

There is a lack of majority public input to the spending of the agencies because the majority of the population served lives outside of village boundaries. Residents outside of the villages have no vote on the major expenditures of the village owned agencies. The costs for providing fire rescue and EMS services have a direct impact on the elected leaders of each village who are burdened with the issues of cost containment for providing all of the other services that their villages provide to their residents.

While all of the management and operational decisions in the fire rescue EMS services are directed by each village, the cost for providing those services is overwhelmingly provided by property owners outside of the villages. While taxpayers of villages pay taxes for "village services" the reality today is that fire rescue and EMS services are not provided solely to those village residents. All ambulances are sent countywide based upon the closest unit available. Fire rescue units respond daily outside of their villages to emergencies on automatic and mutual aid incidents across jurisdictional boundaries. There are no emergency services that benefit only the villages.

Village life is an important part of the character of New York State. Every village provides a wide variety of exclusive services to village residents. Each village official faces many demands from residents and taxpayers for those services. At the same time those taxpayers are demanding that village officials control spending and taxes. Villages are seeking ways to continue to provide village services and reduce village budgets and costs to their taxpayers. If villages are to survive in the long term, village officials must concentrate their managerial oversight and cost control efforts on the wide variety of village exclusive service demands to serve the needs of their village constituents.

While the elected officials of each village strive to address the needs of "their" fire rescue and EMS services, the reality is that these services are not exclusive to the villages.

While some claim that the fire rescue and EMS budget costs are a small part of some village budgets, these services impact taxes community wide. It is not the individual village costs of these services that are the true driver of total tax fund demands. The true cost drivers are the inefficiencies inherent in the multilayer governance of community wide services. Cost containment for the total community of taxpayers will be better managed with a unified management and planning effort.

Village and town officials in general do not, and cannot be expected to, have the specific expertise or the time that is required to provide the in-depth oversight that effective and efficient management of fire rescue and EMS services demands today.

Our in-depth review of current service delivery and its management structure identified the factors that must be addressed to assure every taxpayer and every member of the fire rescue and EMS community that the operation of these services will be governed effectively efficiently and safely. Each of the Strategic Recommendations in this report is crafted to provide the direction

that will successfully attain that goal for the greater community. The Strategic Recommendations in this report are the building blocks for the formation of a governance system for fire rescue and EMS that will institute the planning and operational changes that will control capital equipment costs, staffing costs and every aspect of service delivery. This change in governance structure will establish safe operational procedures for every incident. The recommendations in this report establish the framework that will control spending and the taxes paid in the community. Statewide experience has shown the benefits of providing effective management of fire rescue & EMS services through special fire rescue and EMS districts with elected officials whose sole responsibility is the management of those services.

Therefore; we strongly recommend that the fragmented administrative organizational structure under which fire rescue and EMS services is currently being provided in the Towns of Manlius and the section of the Town of Pompey contracted to Manlius for fire rescue EMS services be changed. We strongly recommend the formation of a single **Joint Fire District** under the laws of New York State, NYS Town law Article 11 and other applicable laws, for all of those services in the combined sponsor area. This Joint District should also be structured to include a single emergency medical service district under the same administrative structure for effectiveness and efficiency. In addition to cost and management control improvements this change will have a positive impact on the safety of the people who risk their lives and safety to serve the public as volunteers and career staff and for the safety of the greater community that they serve.

We strongly urge the elected leaders of each of the sponsor governments to accept the recommendations in this report as soon as possible. The leaders of these governments should do so for the safety of the community and for the safety of all emergency responders. They should do so as a continued demonstration of their long term efforts to assure efficiency and effectiveness in the delivery of these vital services in the community.

Note for the record: During and subsequent to our site visit we have heard numerous comments that the leaders in the Village of Minoa and the Kirkville Fire District are not ready to "give up their control of their individual fire rescue EMS services". I have met and spoken with the Village of Minoa Mayor and Deputy Mayor and the fire chiefs in Minoa and Kirkville. I found them each to be intelligent, thoughtful and dedicated public servants who seek to do their best for the people they serve. I have heard directly from each of these officials that they recognize the serious issues that each faces in the delivery of their services. I have heard their concerns for village and fire district taxpayers. In an attempt to manage its budget the Village of Minoa has even issued a request for proposals to examine ways of saving taxpayer funds for the provision of ambulance services. Each of these leaders understands the importance of the services being provided and each understands the need to contain costs to their neighbors by assuring efficient and effective service. While there may be fear of loss of community service identity, we have addressed those concerns in this report. It is our professional opinion that both the Village of Minoa and the Kirkville Fire District have the most to benefit for their citizens and for the safety of their emergency responders by joining in a well-planned governance improvement program for the delivery of fire rescue and EMS services in a system that will maintain their local identity of those services.

- To ease review of this report we present a summary of Strategic and Specific Recommendations plus a summary of our analysis of each issue immediately following this executive summary.
- Following those summaries this report presents the supporting details and analysis that guided the development of the recommendations presented in this report.
  - To assure that this report would be based upon a thorough investigation of all facts regarding the current services the sponsors required that a draft interim report be submitted for their review prior to moving forward with this final report. That draft interim report contained many examples of the physical proofs of facts discovered in our investigation. We utilized those findings as a basis for our development of this final report.
    - Following the sponsors review of the interim report we received feedback from the sponsors. We have responded individually to that feedback. This report reflects the sponsor's response input to the draft interim report while maintaining our professional objectivity of this study as we addressed:
      - "What is in the public's best interest?"

#### Strategic Recommendations Summary

Strategic Recommendation 1: We strongly recommend that the current multi-layer administrative organizational structures under which fire rescue and EMS services are currently being operated be changed to an elected administrative structure that will provide a specific unified management and a coordinated oversight of fire rescue and emergency medical services across the greater community with elected officials who have been elected solely to direct and administer these services. These Joint Fire District officials will be elected by the voters across the greater community and be accountable to the taxpayers and voters of the Towns of Manlius and Pompey for assuring efficiency effectiveness and safety in the administration of the Joint Fire District...35

Strategic Recommendation 5: The Charter of the Joint Fire District shall define that the commission will continue to be Five Members comprised of two active members of the fire rescue EMS and three members of the general public who have no ties to the emergency services.

Strategic Recommendation 10: There is a need to develop plans so that the State 2% foreign insurance funds can be used even more effectively as part of a community wide volunteer recruitment and retention program
Strategic Recommendation 11: There is a need to conduct an audit of state 2% foreign insurance funds collection by the state to assure that the jurisdiction is receiving the full amount available from those collected funds. This effort should be undertaken by the NYS Fire Chiefs Association and other related groups as a joint project
Strategic Recommendation 12: Local elected village and town leaders need to work together to address the built in inequities and inefficiencies of the current governing structures of their fire rescue and EMS services and provide more effective and efficient service delivery while potentially reducing taxes and operational and managerial costs
Strategic Recommendation 13: Conduct a review of all current services being provided to the community to identify those services that could potentially be used to generate revenue for those services as is done through the current EMS billing
Strategic Recommendation 14: Reallocation of existing space in the Minoa municipal building will provide both; facilities for the community food bank and bunking facilities for fire and EMS personnel. This can be accomplished at a relatively much low cost as compared to the amount requested to accomplish this same objective that was defined in the grant application that was not awarded for this project
Strategic Recommendation 15: Manlius Engine 3 is out of service until such time as it is repaired or replaced. This machine should be removed from station 1, winterized and parked at the Village garage to provide much needed work space in the fire station
Strategic Recommendation 16: Plans should be developed to assure that all fire apparatus and specialized equipment technical testing and maintenance is performed by certified fire apparatus and equipment technicians
Strategic Recommendation 17: Consolidation of all logistical supplies including PPE will reduce immediate costs as inventory is brought down. That consolidation of supplies would be by type and may be spread across several physical locations to provide staffing for the management and control of each type of material and/or supply
Strategic Recommendation 18: The Joint Fire District should immediately establish a policy directing Strategic Planning and the format for conducting that Strategic Planning. That effort should involve all levels of the fire rescue and EMS service providers and it should be an ongoing process
Strategic Recommendation 19: There must be a regular ongoing review and monitoring of volunteer staffing availability and qualifications and monitoring of relations between career and volunteer members
Strategic Recommendation 20: In a time of a generally diminished interest in volunteerism nationally, there is a clear need to re-define the roles that volunteers are needed to fill in each department and to have a well-developed recruitment program to sell the community of the value of their volunteering

### **Specific Recommendations Summary**

Specific Recommendation 1: The process of establishing a Joint Fire District must be guided by the " <i>How to</i> " <i>Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages</i> document produced by NYS Department of State and other State laws and regulations under the guidance of competent legal experts
Specific Recommendation 2: Each fire rescue and EMS agency should appoint active members, both volunteer and career, to serve as an advisory team to the Joint Fire District as current operations are reviewed and future directions are planned
Specific Recommendation 3: The total membership of each of the current agencies must be encouraged to be involved in the planning and development of the new administrative and operating structures
Specific Recommendation 4: Current agency members at all ranks should be involved in development of: Training standards and programs; Standard operating procedures; Response standards, including response time, and staffing; Rank structure; Employee/member benefits, such as retirement systems and service award programs; Union contracts; and Personnel policies.
Specific Recommendation 5: The guide for all actions taken by the Joint Fire District shall be to address the primary question: "What is in the best interests of the public being served" while also addressing safety for all emergency responders
Specific Recommendation 6: Town leaders and village leaders should work to identify members of the public who are not currently members of the fire rescue or EMS services but who have the knowledge skills and abilities to assist in the development of a successful Joint Fire District administration.
Specific Recommendation 7: Creation of the Joint Fire District: The two Town councils and the three Village boards and the Kirkville Fire District shall meet to jointly select and appoint the first directors to the new Joint fire district
Specific Recommendation 8: The Joint Fire district shall be comprised of Five (5) members. Two (2) active members of the fire rescue EMS and three (3) members who have no ties to the emergency services selected from the general public after solicitation for people to serve has been made to the general public
Specific Recommendation 9: Each of the projects for implementation of the Joint Fire district should be tracked by the oversight committee and team leaders using the guide provided as part of this project
Specific Recommendation 10: Whatever changes are made for the use of the 2% funds those changes must assure that future disability funding that is currently funded by the 2% funds in Minoa is addressed.
Specific Recommendation 11: Labor and management must work together to develop a strategy to contain and/or reduce benefit costs for taxpayers while assuring that all employees retain access to the benefits that provide security for their families within labor costs that reflect wages and benefits earned in the community for similar work

Specific Recommendation 12: When the recommendations for consolidation of administration of fire rescue EMS services in this report are implemented all current contractual agreements should remain in place as per state law until such time as a new unified labor management agreement can be agreed to
Specific Recommendation 13: All current salaries that are above any new wage agreement schedules should be "redlined" at their present levels in the new agreement until the new agreement terms catch up to the current salaries of those redlined
Specific Recommendation 14: We strongly urge that as a safety issue Minoa E2 be mechanically evaluated ASAP by a certified fire apparatus specialist. If it is found that the unit, including the pump, is functionally sound it should have the defective aerial device removed and the unit returned to service as a reserve engine without the aerial device
Specific Recommendation 15: The presence of mold in Manlius Station 2 could be a severe health hazard. The suspect areas should be tested and remediated immediately if mold is found to be present for the health of any people who may occupy the station even for short periods of time
Specific Recommendation 16: Immediate steps should be taken to determine if mold is present in Manlius station 2. If mold is found to be present the station should not be occupied until the mold has been remediated for the health and safety of all personnel

### Analyses Summary

Analysis 11: Contractual agreements for code enforcement activities in the Village of Manlius should be reexamined to determine if those duties could be combined into the duties of current career staff in the fire services to increase productivity and reduce costs to village taxpayers.....40

Analysis 12: Review of the town taxes collected for the Kirkville Fire District show that the fire district geographical area has a lower property tax assessment base than any of the other departments have for just the portion of their districts that are located outside of the villages. ...40

Analysis 19: The materials provided by the Minoa village clerk is demonstrative of the materials produced and maintained by each of the village governments in the administration of their fire rescue and EMS services.

Analysis 21: As this report was being finalized we learned that the Village of Minoa had issued a request for proposals and qualifications to examine the potential to outsource their ambulance services. We were told that this was being done to enable the village to examine alternatives for EMS service delivery in the village's efforts to reduce village budget costs. This report presents more comprehensive recommendations that will allow all of the villages to reduce their budgets and the total costs of emergency services community wide through the formation of a Joint Fire District.

Analysis 35: The Village of Minoa issued an RFP in late February 2011 for private providers to offer proposals for operation of the village EMS service in an effort to reduce village costs. .....53

Analysis 44: It is expected that an unknown number of volunteers between the ages of 18 & 21 will leave the area due to school, job opportunities outside of the area and the cost of living in the

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area. If that expectation occurs, it would mirror the exodus of young people that is a regional concern
Analysis 45: There is concern for the long term viability of the Kirkville Fire Company if steps are not taken to increase the number of volunteers at this station
Analysis 46: The diminishing number of volunteers has caused the Villages of Manlius and Fayetteville to supplement the volunteer staff with paid employees to meet service demands with adequate staff while still actively recruiting volunteers and seeking better ways to improve retention of those volunteers
Analysis 47: The number of company officer and chief officers who are over 50 years old demonstrates that Officer Development training for younger members should be a priority in specific planning
Analysis 48: The dip in members between the ages of 40-49 and 30-39 and the dip between ages 22-29 and 18-21 is an indication that recruitment and retention remains important
Analysis 49: Historically young people joined volunteer fire departments in their teens. The low number of 18 -21 age range volunteers reflects trends nationwide that present a danger to future service delivery capabilities
Analysis 50: Historically there is a high attrition rate of volunteers in the $18 - 21$ age range as these young people leave for college and to seek employment in other areas
Analysis 51: There are only 31 volunteers available to respond to all calls around the clock that are between the ages of 22 and 60
Analysis 52: The volunteers over the age of 60 are generally serving in Fire Police roles
Analysis 53: The role of Fire Police, while not providing interior firefighting staffing, is extremely valuable not only to the fire departments but to the Town Police department as well.66
Analysis 54: The total number of volunteers and the aging membership base of volunteers certified for interior firefighting duties clearly indicate the importance of and need for extensive and coordinated volunteer recruitment and retention programs
Analysis 55: The total number of volunteers shows the need to integrate staffing and training to assure that those who are certified are able to respond wherever needed based upon their availability and current location rather than what agency they belong to
Analysis 56: EMS services are a growing service demand. It is important to increase the number of volunteers certified to perform at the Emergency Medical Technician level and higher
Analysis 57: Those departments that do not currently respond to EMS calls for service should reevaluate those service demands and their capabilities to provide lifesaving EMS
Analysis 58: The number of volunteers available to respond is much lower during normal business hours from between 0600 to 1800
Analysis 59: We have serious concerns that in the heat of an emergency incident that volunteers over the age of 60 and other volunteers who are not certified as interior firefighters would risk their health and safety by performing firefighting tasks when there are not sufficient numbers of certified members available on scene

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Analysis 60: Assigned station duty for volunteers has also created a less stressful environment for volunteers who can establish regular schedules far in advance and not need concern themselves with having to leave their other activities for every call that the department is dispatched to
Analysis 61: The number of Female Volunteers does not reflect the sex composition of the area being served. The low number of females in fire rescue services is common in many fire rescue services. However the reality is that females once they have found out that they are welcome in the services have proven that they are valuable members
Analysis 62: The fire police program needs to be expanded in the number of fire police and their duties. Members of the fire police branch of the service need to be properly trained and equipped for communications and all aspects of service at incidents
Analysis 63: Each of the local governments has a deep untapped pool of employees who have the potential of serving in the fire rescue and EMS services in an emergency with further training and cooperation of the local governments
Analysis 64: Review of current labor management agreements highlights some differences between the contracts in each of the agencies
Analysis 65: Many of the current paid fire department employees in Manlius and Fayetteville are former volunteers. They have a deep understanding of the need and importance to maintain volunteers as an important part of the community's fire rescue services
Analysis 66: Many communities look at the possible cost savings of outsourcing EMS and other services. At every convention for municipal leaders there are many vendors selling those services. While there may be some cost savings in outsourcing some jobs, the long term results can be catastrophic to service delivery when outsource providers fail in their service delivery of emergency services.
Analysis 67: Before considering outsourcing emergency services, agency leaders must examine the details of how those services can be provided by a for profit company for less money. Leaders must understand how profits can be earned by the outsource company if they are providing the same level of service as can be provided with employees who work under the direct supervision of the agency. In the management of any group employee productivity is a very important goal. Management must always review what can be done to maximize the productivity of the jurisdiction's employees
Analysis 68: The assignment of volunteers to station duty on specific days and/or nights has proven to be beneficial not only for assuring proper levels of staffing, but more importantly it has served to improve relations between career and volunteer members in the combination departments
Analysis 69: The creation of a Joint Fire District will allow better utilization of current career staff by allowing supervisors to shift members to other stations as needed within the current career staffed stations
Analysis 70: Assigned station duty enables volunteers to establish regular schedules far in advance. The pre-scheduling of duty time and training activities better fits the needs of modern families and allows more people the opportunity to serve their community within their busy life schedules
This report was prepared with funds provided by the New York State Department of State under the Local Government Efficiency Grant Program, Contract No. T-088849. RFG Fire Rescue Consulting Phone: 770 345 0013 - Fax 888 315 7356 - Cell 770 630 0104 - Email: rgraner@aol.com

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Analysis 84: Review of the second report demonstrated that most units do not routinely enter Analysis 85: Review of response time analysis indicates that each agency has the ability to arrive at incidents within recognized benchmark times for the types of areas they are protecting. That Analysis 86: Review of relative response times for each agency demonstrates that stations are properly located to assure response times that are within recognized benchmarks for the types of Analysis 87: There has been a lack of participation in this committee by ranking leaders of the fire rescue and EMS services. This may be due to the scheduling time for meetings. This committee should provide the forum for development of a unified Incident Command system in Analysis 88: One attendee at the meetings stated that he felt unable to speak enough about exact details that brought him to the meeting. He expressed that nearly everything discussed was very, very general to the fire service. Consultant's note: The input from those who attended most meetings provided a comprehensive over view of current conditions, concerns and expectations. As the process of improvement moves forward there certainly will be the need to assure specific Analysis 89: One meeting attendee stated "Stop using Command and Ops on one room fires and small incidents. It just muddles the air." Consultant note: This reflects a total misunderstanding of the importance of proper use of ICS. ICS must begin with the first arriving unit and that officer's size up and risk analysis. ICS builds upon those initial assessments as needed as a direct Analysis 90: One attendee stated "Volunteer Fire Chief is the PAID supervisor of career staff as the administrative assistant and asked: Is this a violation of the Fair Labor Standard Act? Analysis 91: It was observed that Automatic Defibrillators have been located in many areas

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# The Study Process Management & Operations Study of Fire Rescue & EMS Resources and Administration

The sponsors for this project: The Towns of Manlius & Pompey; The Villages of Fayetteville, Minoa, and Manlius and The Kirkville Fire District applied for and received a Local Government Efficiency Grant provided by the New York State Department of State, Contract No. T-088849. The purpose of this grant is to assist the sponsors in their efforts to conduct a Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration within the sponsor's jurisdiction.

The sponsors after advertising for proposals and reviewing the proposals received engaged the services of Ron Graner DBA RFG Fire Rescue Consulting to conduct in-depth review and analysis of all aspects of their Fire Rescue and EMS Services.

To assure that this report would be based upon a thorough investigation of all facts regarding the current services the sponsors required that an interim report be filed for their review prior to moving forward with this final report. The sponsors have reviewed that report and provided feedback. That interim report contained many examples of the physical proofs of facts as discovered in our investigation. That interim report can be used as a reference to validate the basis for recommendations in this report.

This report utilizes the facts observed and gathered in our research. It presents an analysis of those findings based upon our expertise in fire rescue and EMS service management. This report provides both Strategic and Specific Recommendations for actions that will improve the effectiveness efficiency and safety within the fire and EMS service of the sponsor's communities.

Our areas of investigation included:

- Organization effectiveness including training and staffing
- Efficiency and duplication
- Fiscal analysis and cost avoidance
- Growth considerations
- Strategies and keys to success
- Infrastructure needs and deficiencies
- Opportunities for shared Services

#### **Requests for information from agencies**

In this study we presented requests for information 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 Village Clerk for the Village of Fayetteville who had been designated as the primary contact person for the project.

Each agency was requested to assist the sponsors and the sponsor's consultant in gathering information that was important for the sponsor's efforts to examine current delivery of fire rescue and EMS services. The consultant followed up each request directly and contacted each agency with specific 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.

Through the use of prepared survey forms in MS Excel we provided each fire rescue and EMS agency with soft copies of survey booklets to reduce their workloads in preparing responses to our inquiries. 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

The materials presented in the survey responses and other correspondence has been validated through personal and team member observation.

### Findings, Analysis and Recommendations

#### Village Administration of fire rescue and EMS agencies

The Villages of Fayetteville, Minoa and Manlius each provide a variety of distinctive services for their village residents. Taxpayers in each of the villages pay village taxes for those services that are exclusive to their village life. Over the years each village has examined the services being provided exclusively to their village residents. By state law fire protection has been a responsibility of Village governments and the laws provided many ways that each village could elect to provide those services.

Today, "Many local governments in New York State are experiencing fiscal stress and searching for ways to save money by providing services more effectively and efficiently."<sup>1</sup> New state laws have expanded the opportunities for improving effectiveness and efficiency in the delivery of local governmental services.

Historically, the Villages of Manlius, Minoa and Fayetteville and the Town of Manlius have been leaders in self-examination of efficiency and effectiveness of the services being provided to their residents. After an in-depth review of Police services in the 1980's it was determined that the delivery of Police services expanded well beyond the municipal boundaries of each village, and that to assure that the community was to have a wide scope of police services delivered in a cost effective administration, the village police departments were consolidated into a Town of Manlius Police department serving the entire township including the villages. During a conversation with the Town Police Chief he clearly stated that there would be no way that his department could possibly deliver all of the services that they do today if each village had retained a separate department.

Currently, the management and operational decisions in the fire rescue EMS services in the service areas of the three village departments are directed by the elected officials of each village. While the elected officials of each village all strive to address the needs of "their" fire rescue and EMS services, the reality is that these dedicated village officials each face a wide variety of other village concerns and demands from their constituents. Village and town officials, in general, do not have the time and/or expertise required to provide the in-depth oversight that effective and efficient management of fire rescue and EMS services demands today.

While taxpayers of villages pay taxes for "village services" the reality today is that fire rescue and EMS services are not provided solely to those village residents and taxpayers. All ambulances are sent countywide based upon the closest unit available. Fire rescue units respond daily outside of their villages to emergencies on automatic and mutual aid incidents across jurisdictional boundaries. The costs and administrative time demands for providing fire rescue and EMS services as a "village service" have a direct negative impact on the elected leaders of each village who are burdened with the issues of cost containment for providing all of the other services that their villages provide to their residents.

The current cost for providing fire rescue and EMS serves is overwhelmingly provided by property owners outside of the villages. Yet there is a lack of genuine public input to the spending of the agencies because the majority of the population served lives outside of village

<sup>&</sup>lt;sup>1</sup> Consolidation, Dissolution, and Annexation of Towns and Villages How to Guide New York State Department of State

boundaries. The taxpayers living outside of the villages have no vote on the major expenditures of the village owned and directed agencies.

In the course of our team site visit we spoke with many active members of the fire rescue and EMS services of all ranks and seniority. Neither my associates nor I ever heard any active responder declare that the current system was as efficient and effective as it could or should be. Every active responder that we met seemed well aware that change of the current layered administration of these services is the only way to assure future success of the fire rescue EMS delivery system.

#### Administrative Reorganization

The current multi-layer administration of fire rescue and EMS services should be reorganized and consolidated to provide a more coordinated management and planning effort for these services in the greater community. The management of fire rescue and EMS services today demand a high level of expertise that requires managers to provide their exclusive dedication to these issues. New York State has recognized the need to reexamine current governance structures to assure efficiency and effectiveness, and 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.<sup>2</sup>

The NYS document "How to" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages provides the following guidelines for 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 emergency services in the sponsor area meet each of these criteria.

'The "How to" guide contains information to assist local officials in the process of consolidation of fire services.'  $^{3}$ 

In this study we examined each of the options and considerations presented in the state guide. We present each below to provide readers with a basis for evaluation of the recommendations made in this report.

#### **Operational Consolidation**

 <sup>&</sup>lt;sup>2</sup> "How to" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages NYS Department of State
 <sup>3</sup> ibid

This report was prepared with funds provided by the New York State Department of State under the Local Government Efficiency Grant Program, Contract No. T-088849.

Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

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. <sup>4</sup>

The review of existing governance, operational, staffing, planning and all of the other current issues surrounding fire rescue and EMS service delivery in the Towns of Manlius and Pompey clearly demonstrated that the most successful way to address all of the issues is through jurisdictional consolidation of all of these serves. This merger of multiple layer governance will provide an administrative structure that will address each of the issues above and also provide the governing mechanism that will control future costs through better planning.

New York State allows the following fire service organizations.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> "How to" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages NYS Department of State

#### FINAL REPORT

Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

#### 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 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

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

<sup>&</sup>lt;sup>5</sup> "How to" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages NYS Department of State

Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

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 refer readers to the "*How to*" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages guide for more details.

After examining all of the options available in NYS, we have determined that since any reorganization could involve multiple villages, part of one town and all of another town, and a current fire district, we have determined that the most effective structure for governance of fire rescue and EMS services would be the creation of a Joint Fire District for the entire Town of Manlius and that portion of the Town of Pompey currently contracted to the Village of Manlius.

A Joint Fire District is political entity with an elected 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(s) and the board(s) of trustees of a village(s). 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. A Joint Fire District with elected 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.

Over the years each of the agencies in the Manlius area has developed station identities that are a part of the morale factor that motivates the emergency response personnel in that agency. Since the majority of staffing is provided by volunteers who have a strong identity to "their departments" it is important that the reorganization be sensitive to those feelings. Individual station names should be retained to keep community identity. Current operational leaders of each agency should remain in place. Current apparatus colors should remain as they are today. Company identification on current apparatus and personal protective gear should remain as they are today. Every member of each organization should be actively involved in the implementation process for the creation of the new Joint Fire district so that they gain ownership in it.

The total membership of each of the agencies in the Joint Fire District must be encouraged to be involved in the planning and development of the new administrative and operating structures, including: Training standards and programs; Standard operating procedures; Response standards, including response time, and staffing; Rank structure; Employee/member benefits, such as retirement systems and service award programs; Union contracts; and Personnel policies. To aid in the implementation process of the development of the Joint Fire District, a guide for implementation is included at the end of this report and an MS Excel work book for project tracking will be provided under separate cover for the oversight team and project team leaders.

Analysis 1: Statewide experience has shown the benefits of providing effective management of fire rescue & EMS services through special fire/EMS districts with elected officials whose sole responsibility is the management of those emergency services.

Strategic Recommendation 1: We strongly recommend that the current multi-layer administrative organizational structures under which fire rescue and EMS services are currently being operated be changed to an elected administrative structure that will provide a specific unified management and a coordinated oversight of fire rescue and emergency medical services across the greater community with elected officials who have been elected solely to direct and administer these services. These Joint Fire District officials will be elected by the voters across the greater community and be accountable to the taxpayers and voters of the Towns of Manlius and Pompey for assuring efficiency effectiveness and safety in the administration of the Joint Fire District

Strategic Recommendation 2: We strongly recommend the formation of a single **Joint Fire District** under the laws of New York State for the administration and oversight management of all of those services in the combined sponsor area. This Joint Fire District structure should also include a single emergency medical service district under the same administrative structure for effectiveness and efficiency.

Specific Recommendation 1: The process of establishing a Joint Fire District must be guided by the "How to" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages document produced by NYS Department of State and other State laws and regulations under the guidance of competent legal experts.

Specific Recommendation 2: Each fire rescue and EMS agency should appoint active members, both volunteer and career, to serve as an advisory team to the Joint Fire District as current operations are reviewed and future directions are planned.

Strategic Recommendation 3: The primary functions of the Joint Fire District shall be to establish an administrative structure that will assure efficiency, effectiveness and safety in the fire rescue and EMS services in the greater community. The leaders of the Joint Fire district will work with current agency leaders and members; the broader community and the agency transition team to address the issues in this report.

Strategic Recommendation 4: The Joint Fire District shall endeavor to maintain the character and community names of each existing fire and EMS station through its administration and management of those stations.

Specific Recommendation 3: The total membership of each of the current agencies must be encouraged to be involved in the planning and development of the new administrative and operating structures.

Specific Recommendation 4: Current agency members at all ranks should be involved in development of: Training standards and programs; Standard operating procedures; Response standards, including response time, and staffing; Rank structure; Employee/member benefits, such as retirement systems and service award programs; Union contracts; and Personnel policies.

Specific Recommendation 5: The guide for all actions taken by the Joint Fire District shall be to address the primary question: "What is in the best interests of the public being served" while also addressing safety for all emergency responders.

Specific Recommendation 6: Town leaders and village leaders should work to identify members of the public who are not currently members of the fire rescue or EMS services but who have the knowledge skills and abilities to assist in the development of a successful Joint Fire District administration.

Specific Recommendation 7: Creation of the Joint Fire District: The two Town councils and the three Village boards and the Kirkville Fire District shall meet to jointly select and appoint the first directors to the new Joint fire district.

Specific Recommendation 8: The Joint Fire district shall be comprised of Five (5) members. Two (2) active members of the fire rescue EMS and three (3) members who have no ties to the emergency services selected from the general public after solicitation for people to serve has been made to the general public.

Strategic Recommendation 5: The Charter of the Joint Fire District shall define that the commission will continue to be Five Members comprised of two active members of the fire rescue EMS and three members of the general public who have no ties to the emergency services.

Analysis 2: In addition to cost and management control improvements the establishment of a Joint Fire District will have a positive impact on the safety of the people who risk their lives and safety to serve the public as volunteers and career staff and for the safety of the greater community that they serve.

Specific Recommendation 9: Each of the projects for implementation of the Joint Fire district should be tracked by the oversight committee and team leaders using the guide provided as part of this project.

### **Finances and Funding:**

Historically taxes have provided the total revenue stream for support of fire rescue services. Laws were changed to allow public emergency medical services to charge for services. Historically fire departments provided many services to the public with no direct charges to the users of those services. The scope and the cost of those services have grown over the years while funding for them has remained community tax based rather than user directed. Currently, around the nation fire rescue services are actively investigating charging for response to traffic accidents and water leaks in buildings. Some are investigating charging users for other incidents that are not direct fire emergencies. Some governments have initiated charges for fire safety inspections in buildings.

Over the years the agencies have each developed groups, organizations and programs to generate revenue for their departments in addition to tax funds. They have established these corollary organizations to conduct fund raising and these organizations control those funds. It was not the intent of this study to investigate these funding groups or to do an audit of those funds or any other funds.

Strategic Recommendation 6: There should be a review of each of the current corollary groups that support each of the agencies that have developed over the years to generate and manage funds outside of the tax structure. Those groups should continue to be utilized to generate continuing support for the services when a new administrative structure has been established. The funds from the corollary groups should continue to be audited in accordance with state regulations.

Strategic Recommendation 7: There is an urgent need for all fire rescue and EMS agencies to look "outside of the box" to find alternatives to current tax revenue streams for funding opportunities.

#### Taxes

Property owners in New York State are among the highest taxed in the nation. The State of New York is encouraging every layer of government to closely examine the services they provide and the costs of those services to help reduce the negative impacts that property taxes have on the economy of the state as a whole. Most citizens have no understanding of how their taxes are calculated or what they provide. To help readers understand the rules for property taxes in NYS we refer them to the NYS publication; Understanding the Equalization Rate A Guide For Property Owners NYS: Department of taxation and finance. That report shows that NYS has 1,200 separate governing units that assess property and more than 4,000 taxing jurisdictions. That report states that there is no fixed percentage at which property must be assessed; that not all municipalities assess property at the same percentage of market value; and the taxing jurisdictions, such as most school districts, do not share the same taxing boundaries as the cities and towns that are responsible for assessing properties. NYS is working to address these areas of inefficiency. However the reality remains that by whatever formula is used for setting taxes, the citizens in NYS are paying some of the highest taxes in the nation, and every effort must be taken at every level of government to contain and or reduce those taxes while still assuring the public the services that they expect and demand.

Locally elected officials and taxpayers are seeking ways to reduce local taxes and retain services. During this study we interviewed several local realtors. Each of the realtors that we interviewed was quick to point out that buyers face higher taxes for similar properties located in the villages rather than in unincorporated town areas. Their views have been verified by examining tax rate information provided by the county.

	2010 County	2010 Town	2010	Town Otisco	2010 County Rate 190.6965		<b>2010</b> Total 240.709
Village	Rate	Rate	Total	Cicero	89.9477	23.4515	113.3992
V. North Syracuse	168.5738	3.9314	172.5052	Clay	73.1097	14.3384	87.4481
V. North Syracuse	150.1834	6.7651	156.9485	Geddes	8.2589	1.9474	10.2063
V. Camillus	7.5918	3.5836	11.1754	Fabius Skaneateles	3.3771	5.1502	8.5273
V. Marcellus	7.4502	3.4467	10.8969		5.8809	2.1516	8.0325
V. Elbridge	7.4212	3.2813	10.7025	LaFayette	3.7452	4.2805	8.0257
V. Jordan	7.4212	3.2813	10.7025	DeWitt	5.2205	2.79	8.0105
V. Fayetteville	7.3864	3.2057	10.5921	Tully Camillus	4.7	3.0024	7.7024
V. Manlius	7.3864	3.2057	10.5921		3.7936	3.7657	7.5593
V. Minoa	7.3864	3.2057	10.5921	Manlius	4.1359 5.4326	3.3801 2.0603	7.516
V. Solvay	8.2589	1.9474	10.2063	Pompey Marcellus	3.6863	3.7099	7.3962
V. Tully	7,2497	2.9418	10.1915	Spafford	6.1607	1.1388	7.2995
V. Baldwinsville	7.4269	1.5834		Elbridge	2.6553	3.4428	6.0981
V. Skaneateles	7.2445	1.7628	9.0073	Lysander	4.143	0.882	5.025
V. Liverpool	7.5886	0.9059	8.4945	Van Buren	3.1496	1.7878	4.9374
V. Fabius	3.3771	4.8785	8.2556	Salina	2.8089	1.6619	4.9374
V. Baldwinsville	7.2849	0.7975	8.0824	Onondaga	3.5084	0.5298	4.0382
V. East Syracuse	7.2326	0.69	7.9226	Onondaga	3.5084	0.5298	4.0382
	7.2320	0.05	715220	ononuaya	3.3004	0.5290	7.0302

Figure 1: Tax rate ranking information based upon data from County

It is clear from examination of tax rates in Onondaga County to see that there are differences in the percentage at which properties are taxed between towns in the county, and that the equalization process must be applied to those assessments to assure equal tax impacts for services that extend beyond town boundaries. All of the properties in the Town of Manlius are assessed at the same rate.

Analysis 3: In 2010 the Villages in the Town of Manlius the total county, town and village tax rates paid by village taxpayers was \$3.08 higher for every thousand dollars of taxed property value than those taxes paid by taxpayers located in other areas of the town not within village boundaries.

Analysis 4: Compared to a property located outside of a village in the Town of Manlius, a taxpayer in any of the 3 villages paying property taxes on a property equally valued at \$150,000 would pay an additional \$461 in property taxes for all of the village services.

Analysis 5: It is a fact that village residents do receive many additional special village services from their villages. However, it is also a fact that village residents do not have exclusive use of the services being provided by "their" fire rescue or EMS agencies.

The Town of Manlius budgets the following amounts for fire rescue and EMS services under contracts for service from the village fire departments:

	Fayetteville	Manlius	Minoa	Kirkville District Budget	Town of Pompey
Town budget Fire Rescue for each agency	\$ 979,737	<b>\$</b> 1,017,451	<b>\$</b> 724,636	\$ 170,125	\$ 400,254
assessed value of property outside of village	\$ 570,632,106	\$ 696,161,005	\$ 461,211,806	\$81,243,541	\$ 268,259,549
Mill rate	\$ 1.83	\$ 1.50	\$ 1.71	\$ 2.52	

Figure 2: Town of Manlius 2010 Budget information

Analysis 6: Examination of the Town budgets for fire rescue & EMS services demonstrate that the Town of Manlius taxpayers outside of the villages provide a total of \$2,891,949 for the operating budgets of the three village fire departments and the Kirkville fire district.

The Village of Minoa village taxpayers pay 23% share and the town taxpayers pay 77% share of the fire department budget in the village. Town taxpayers pay 100% of the annual operating costs for Minoa station 2 which is located outside of the village. In is important to note that both Minoa fire stations and all equipment are owned by the Village of Minoa. The village budget for the fire department shows salary and benefit costs for a motor equipment mechanic of \$4,700 as a chargeback for mechanical services provided by the village garage staff.

The Village of Minoa budget for ambulance services shows the same percentage shares as the fire department 23% village 77% town. The ambulance budget indicates salary and benefit costs of \$455,304 and ambulance revenue of \$260,000

The total budget for the fire department was \$518,889 with the town paying \$408,704. The ambulance budget was \$472,388 with the town share being \$363,739.

The Village of Fayetteville fire department budget allocation totals \$849,164 and ambulance service is budgeted at \$811,125 for a total of \$1,660,289. The village reported that ambulance billing revenue was \$550,000. Of that revenue the tax revenue for village operations was \$181,500 and the tax revenue for town operations was \$368,500

The Village of Manlius budget for the fire department was \$786,642 and the ambulance budget was set at \$858,997. The total fire rescue EMS village budget was: \$1,645,639. The village also budgeted \$19,500 for contractual codes enforcement for properties in the village. That enforcement is contracted to the Town of Manlius. The budget for this year show budget costs for a rescue pumper and a tanker pumper that will be completed in 2011. The Village of Manlius does not charge back or show a fire department budget line for DPW services provided by the village such as snow plowing, yard work and building repairs at fire stations and those costs are not passed back to the Town.

The Village of Manlius also has contracted to provide fire rescue & EMS services to a part of the Town of Pompey that has an assessed value of \$268,259,549. The contract with the Town of Pompey generated Village of Manlius revenue of \$400,254 in 2010. This is an annual contract that is renewable by mutual agreement each year on 12/31.

Analysis 7: While fire rescue and EMS budget costs are a small part of some village budgets, these services impact taxes community wide. It is not the individual village costs of these services that are the true driver of tax fund demands. The primary negative cost drivers are the inefficiencies inherent in multilayer governance of community wide services. Cost containment for the total community of taxpayers will be better managed with a unified management and planning effort can bring.

Analysis 8: The Town of Pompey paid \$400,370 to the Village of Manlius for contracted fire rescue and EMS services. This is an annual contract that could be modified in the future by either party.

Analysis 9: The combined funds provided by the non-village taxpayers of the Town of Manlius and the Town of Pompey to the Village of Manlius for fire rescue and EMS services totals \$1,417,705.

Analysis 10: The contract funds paid by the Town of Pompey are revenue to the Village of Manlius. However in the event of a fire in that district there is also response to Pompey from other fire rescue departments as well. The same service delivery to Pompey occurs when EMS services are needed that exceed the ability of the Village of Manlius to provide them.

Analysis 11: Contractual agreements for code enforcement activities in the Village of Manlius should be reexamined to determine if those duties could be combined into the duties of current career staff in the fire services to increase productivity and reduce costs to village taxpayers.

Analysis 12: Review of the town taxes collected for the Kirkville Fire District show that the fire district geographical area has a lower property tax assessment base than any of the other departments have for just the portion of their districts that are located outside of the villages.

Analysis 13: The Town of Manlius does not provide Kirkville Fire District with any additional funds for services the agency may provide in the township outside of their district

Analysis 14: The \$2.50 mill rate for the Kirkville fire district reflects that the district has the lowest property assessment base that can be used to generate funds for fire rescue services. This lower assessed value will severely limit the districts' abilities to expand services as demands increase.

Analysis 15: No correlation could be found between the amount of taxpayer funds spent by villages, towns and the district for services and the effectiveness and efficiency of management and control of the agencies providing those services.

Strategic Recommendation 8: There is a need to closely examine all taxes paid for fire rescue and EMS in the greater community to assure that there is an equality of tax burden across all jurisdictional lines that accurately reflect the services being provided by all agencies across those lines.

#### 2% Foreign Insurance funds

"The Foreign fire tax program under sections 9104 and 9105 of the NYS Insurance Department mandates that any foreign or alien insurance company that writes fire insurance in New York State must contribute 2% of the fire premiums written on property located in NYS to be distributed to the fire departments and fire districts statewide. Excess line brokers licensed to write business in NYS under section 2118 of insurance law, must contribute 3% of fire premiums written on property located in NYS."<sup>6</sup>

"The general rule for distribution of fire tax funds for a multi-company fire department is: the foreign fire tax monies distributed should be allocated between and among the fire companies proportional to the number of active members in each fire company. If a department is comprised of both paid and volunteer members, each group would be entitled to fire tax proceeds and monies should be distributed on a pro rata basis... Except as otherwise provided by a special act, fire tax proceeds may be used for any purpose which the members of the fire department or company determine to be for the use and benefit of the department or company as a whole.

Some examples of use of proceeds are: department social functions - such as installation dinners, picnics, banquets, holiday parties; appliances, furniture, televisions for the firehouse; dress & parade uniforms, hats, boots, jackets, t-shirts, turn out gear, and equipment for members of the department; offset of costs from life or disability insurance (must be group policies); and office equipment such as computers and fax machines. If the funds are designated to be received by an exempt or benevolent association created by a special act of the New York State Legislature, the use of the monies is limited to those purposes set forth in the special act.

The Office of the State Comptroller recommends that foreign fire tax funds be accounted for separately; a separate checking or savings account should be set up for the administration of foreign fire tax funds. Cash receipts and cash disbursements should be recorded, detailing the receipt of money and any expenditure of foreign fire tax funds."<sup>7</sup>

Each of the fire departments in the Town of Manlius received these funds from NYS. The distributed funds are managed by each agency and spent according to NYS laws for the benefit of each agency's members. Departments are required to submit audit reports to the NYS Comptroller's office each year. In the Town of Manlius the following funds were distributed in 2010 by NYS department of insurance: Fayetteville \$25,710, Manlius \$39,794, Minoa \$13,899, Kirkville \$3,905

Analysis 16: The total 2% foreign insurance funds received by the individual departments in Manlius totaled \$ 83,300

Strategic Recommendation 9: There is a need to examine all revenue sources and funding mechanisms, including the 2% foreign insurance funds, to maximize the benefits of each funding source.

We reviewed the audit reports that the agencies provided to the NYS comptroller's office. The NYS Comptroller's office did not provide a copy of the 2% fund audit report for Kirkville.

<sup>&</sup>lt;sup>6</sup> http://www.ins.state.ny.us/faqs/faqs ft fft.htm

<sup>7</sup> ibid

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Analysis 17: Each of the agencies used their distribution of 2% foreign insurance funds as allowed by the rules of the state. It appears that Minoa has opted to only use their funds to provide disability benefits for their members and have accumulated over \$139,000 in that account for future benefits.

Strategic Recommendation 10: There is a need to develop plans so that the State 2% foreign insurance funds can be used even more effectively as part of a community wide volunteer recruitment and retention program.

Specific Recommendation 10: Whatever changes are made for the use of the 2% funds those changes must assure that future disability funding that is currently funded by the 2% funds in Minoa is addressed.

Strategic Recommendation 11: There is a need to conduct an audit of state 2% foreign insurance funds collection by the state to assure that the jurisdiction is receiving the full amount available from those collected funds. This effort should be undertaken by the NYS Fire Chiefs Association and other related groups as a joint project.

#### Towns

New York State laws allow Towns to form Joint Fire districts. NYS Town law Article 11 A §189-a. states "The town board of a town or the town boards of more than one town, and the board of trustees of an incorporated village, or the boards of trustees of more than one incorporated village, as defined in the village law, located in said town or towns are hereby, authorized to establish in such town or towns and village or villages a joint fire district for the purposes hereinafter stated and in the manner hereinafter provided, provided all of the territory in such joint fire district shall be contiguous."<sup>8</sup>

The Towns of Manlius and Pompey each contract for fire rescue and EMS services to be provided in their respective towns as permitted by NYS laws for the protection of life and property outside of the villages. However, beyond providing funds for the issues covered in the contracts for services the towns do not have any direct input into the operation of fire rescue or EMS services being provided to town residents. Non village residents do not have a voice or vote on the major expenditures that village residents can vote on.

Strategic Recommendation 12: Local elected village and town leaders need to work together to address the built in inequities and inefficiencies of the current governing structures of their fire rescue and EMS services and provide more effective and efficient service delivery while potentially reducing taxes and operational and managerial costs.

# The Villages

The Village Clerks and staff in the Villages of Minoa, Fayetteville and Manlius each provided a substantial amount of input, work and materials in the process of this study.

Each of the Villages proudly provides an extensive array of special and direct services for their taxpayers. Each Village government has many issues that they must address to serve their taxpayer residents.

Analysis 18: There was no indication in our study of fire rescue & EMS services in the sponsor areas that these services could be considered to be exclusive "Village" services. However, under the current governing structures each village has total managerial and administrative control of "their" village fire rescue and EMS services.

#### Village of Minoa

The Village Clerk in Minoa conducted a review for accuracy of the materials from both the ambulance service and the fire department at the request of the Mayor. We met with the clerk to discuss the materials and the process. We also had meetings with the Village Mayor and Vice Mayor to discuss the study and the many services being provided to village residents by the village government. We appreciate their insight, help and the depth of materials provided. There was great pride in the history of the village in every conversation that we had with local residents and members of the emergency services.

We included samples of the many materials provided by the Village of Minoa in the interim report because they are typical of the materials maintained by each village and the fire district. They were presented to demonstrate just part of the work load in management of these services

<sup>&</sup>lt;sup>8</sup> NYS Town law Article 11 A JOINT FIRE DISTRICTS IN TOWNS AND VILLAGES

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that is compounded by having multiple jurisdictional administrations of the fire rescue & EMS services.

The Village of Minoa provided a detailed budget asset and liability report for their administration of fire rescue and EMS that showed the budget as presented in the tax section above. They also showed liquid and fixed assets and revenue sources. That report detailed a current loan liability for the fire station portion of the municipal building of \$26,000 with a 4.25% interest rate loan and a vehicle liability debt of \$178,120 for 2 emergency vehicles. The interest rate on those loans is under 2%.

The Village of Minoa owns all apparatus and both fire stations. The village also showed budgets for service awards of \$700 each to 4 chief officers.

Analysis 19: The materials provided by the Minoa village clerk is demonstrative of the materials produced and maintained by each of the village governments in the administration of their fire rescue and EMS services.

Analysis 20: The sheer volume of the materials from just one village give a clear view of the amount of time and effort that is required of each village staff and each village elected official to properly administer fire rescue and EMS services in each community. That multiplication of effort is neither efficient nor cost effective.

Analysis 21: As this report was being finalized we learned that the Village of Minoa had issued a request for proposals and qualifications to examine the potential to outsource their ambulance services. We were told that this was being done to enable the village to examine alternatives for EMS service delivery in the village's efforts to reduce village budget costs. This report presents more comprehensive recommendations that will allow all of the villages to reduce their budgets and the total costs of emergency services community wide through the formation of a Joint Fire District.

#### The Village of Manlius

The Village of Manlius provides a wide variety of services to its village residents. The village leaders are constantly trying to preserve local history and the village charm that have made the Village of Manlius a desirable place for families to live and work for over 200 years. The elected officials of the Village of Manlius have direct control of "village" fire rescue and EMS services. The village approves the budget for operations and administers both the operations of the department and maintenance of the facilities through the village budget and managerial oversight.

The Village of Manlius budget showed a 24.3% increase in the NYS police and fire retirement costs; a 12.3% increase in hospital and medical insurance costs and an increase in unemployent insurance costs of 150%

Analysis 22: The cost of benefits provided by the Village of Manlius reflects the costs that every government is experiencing. These costs are concerns that are part of a national public debate on benefit cost issue in both the public and the private sectors. There is a need for labor and management to work together to address these costs.

Specific Recommendation 11: Labor and management must work together to develop a strategy to contain and/or reduce benefit costs for taxpayers while assuring that all employees retain

access to the benefits that provide security for their families within labor costs that reflect wages and benefits earned in the community for similar work.

Specific Recommendation 12: When the recommendations for consolidation of administration of fire rescue EMS services in this report are implemented all current contractual agreements should remain in place as per state law until such time as a new unified labor management agreement can be agreed to.

Specific Recommendation 13: All current salaries that are above any new wage agreement schedules should be "redlined" at their present levels in the new agreement until the new agreement terms catch up to the current salaries of those redlined.

#### Village of Fayetteville

The Village of Fayetteville also provides a wide variety of services to its village residents. Village leaders strive to retain the historic character that has made the village a desirable home for so many people over the years. The elected officials of the Village of Fayetteville have direct administrative and managerial control of "their village fire department". The village approves the budget for operations and administers the operations of the department and maintenance of the facilities through the village budget and managerial oversight.

• The Mayor of the Village of Fayetteville is an active member of the fire department serving as a line officer. He brings that intimate knowledge of operations in the fire department to the table as Mayor in assuring the citizens of the village of effective and efficient operations of fire rescue and EMS services.

Analysis 23: The user fee income generated from EMS services provides a significant revenue stream from users to reduce costs to taxpayers.

Strategic Recommendation 13: Conduct a review of all current services being provided to the community to identify those services that could potentially be used to generate revenue for those services as is done through the current EMS billing.

#### The Kirkville Fire District

The Kirkville fire district is located in a hamlet that was primarily farm land and rural housing. The area also includes state parks and undeveloped lands and housing located in remote areas. Recently the Town approved one of the largest new residential housing developments in the region for the far eastern portion of the fire district on the county line adjacent to a large subdivision in that county. Construction has begun in the new development. Observation of the many property "for sale" signs on large farm properties in the district indicate that other farm land may be developed in the future.

Managed by elected district commissioners, this district currently has the lowest tax base of any area of the community.

### Fire Rescue & EMS overview

The fire departments in the Villages of Fayetteville, Minoa and Manlius and the Minoa Ambulance are each departments<sup>9</sup> managed and operated by and for their respective Village governments. All administrative management decisions in each of these departments is the sole purview of the respective elected officials of each village. Each of these agencies routinely responds to calls for services outside of "their" village limits. The Town of Manlius budgets funds for services provided by the village fire department under contracts for service to areas in the respective towns not located within villages. As an example, the Village of Minoa fire department budget is funded 77% by the Town of Manlius and 23% by village taxes. This is reflective of the percent of support rate across the Town of Manlius.

The Minoa fire department operates strictly as a volunteer fire department operating two (2) fire stations one of which is located in the village municipal building and the other in the hamlet of Freemont. Minoa station 2 is totally funded by town residents. The department provides primarily fire and rescue services to the community.

The Minoa ambulance service is totally funded 77% by the Town of Manlius and 23% by village taxes to provide EMS services in the Village of Minoa and adjacent areas.

The Fayetteville fire department is a "combination department" that operates as a volunteer fire department supplemented with career staff. The department operates from one (1) fire station. Currently that station is temporarily located in a former car dealership while the village is constructing new facility for the fire department. The department provides emergency medical services plus fire rescue services. The majority of service demand in the Fayetteville fire department is for EMS services.

The Manlius fire department is a "combination department" that operates as a volunteer fire department supplemented with career staff. The department has a volunteer fire chief who is also designated as the paid fire administrator by the village. The department operates two (2) fire stations. Station 2 is designated as a totally volunteer station and the headquarters fire station is operated as a volunteer station supplemented with career staff. The department provides emergency medical services plus fire rescue services. The majority of service demand in the Manlius fire department is for EMS services.

The Kirkville fire district is a legal entity in NYS with taxing authority directed by five (5) elected fire commissioners. The Kirkville fire district owns the fire apparatus and the Kirkville fire company owns the building and the land that the station is sited on.

Each department has a very long history of dedicated service to their village and the greater community. Each of the village fire departments was formed at a time when the centers of populations were based within village limits and the land outside of the villages was primarily farms and undeveloped land. The Kirkville fire district was formed by residents of the Kirkville hamlet to provide fire rescue protection and the ability to raise funds for those services. As more residents moved into the areas outside of the villages, the Town of Manlius contracted for service to those residents with the respective village fire department that was closest to each town

<sup>&</sup>lt;sup>9</sup> The term fire department, fire company and fire rescue EMS agency are used in this report interchangeably to refer to the agencies that are providing fire rescue and EMS services to their communities irrelative of the legal definition of their designation or title under NYS laws.

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resident. The Town of Pompey also contracts fire protection for a portion of their town to the Village of Manlius fire department.

Analysis 24: NYS State law mandates that Villages provide fire protection inside their corporate limits. New York State laws now also allow Towns to join together with other contiguous Towns and their villages to form Joint Fire districts. Joint Fire Districts were created to address the goals of improved efficiency and effectiveness.

Analysis 25: The population centers for the Town of Manlius have expanded outside of village limits and reduced the amount of farm lands and undeveloped land. The Kirkville Fire District encompasses a major area that is experiencing development and transformation from rural to suburban with the resulting service demands.

#### On site observations & validation of Information

During the first week in January 2011 my team and I personally visited each fire station and Minoa ambulance. I personally met with each chief of department to discuss the study and receive their direct input. I personally toured each of the stations, including the new Fayetteville station under construction with the chief of each department. In Minoa I was also privileged to tour the village hall and fire station with the Mayor and Vice Mayor. The Minoa fire chief also gave me a tour of both Minoa fire stations. My associate also visited each station separately, being given his tours by leaders, members and/or employees of each department. My associate's primary task was to observe and report on operations, facilities and equipment as found during his station visits.

# **Fayetteville Fire Department**

The Fayetteville Fire Department is currently in a temporary location during the construction of a new facility. This station was formerly an automobile dealership. The temporary quarters are neat, clean and well organized to provide an effective facility during the construction period. The members of the department are aware of the need to maintain physical and mental fitness and have set up a space dedicated to member staff fitness and a well-equipped training room.

The Apparatus and equipment is also neat, clean and organized, and appears to be well maintained. The apparatus storage spaces are in 3 sections of the building with ambulances operating out of the doors facing directly on to the street, fire apparatus is located in the former repair area exiting from the rear of the building and reserve apparatus is located in another rear facing space. All apparatus is arranged to optimize responding from a building lacking separate doors for each unit to respond from.

The consultant was given a tour by the fire chief of the new fire station under construction. This station is exceptionally well designed. It meets the recognized standards for modern fire rescue EMS stations and for the administration of those services. The new Fayetteville fire station has been well planned for servicing the needs of current and future growth in the community.

Analysis 26: The new Fayetteville fire station will provide the necessary space needed to enhance future and current service delivery capabilities. This station has excellent space allocations provided for training, and quartering personnel including designated space for quartering students studying fire science and EMS. Apparatus bays are well designed to enhance rapid response. Modern technology has been designed into the structure to enhance training, and record management. Space has been designated for cleaning and maintaining tools and

equipment in accordance with modern standards. Logistical storage space is provided for items that must be kept secure and for general storage items.

The Fayetteville fire department operates a wide variety of equipment from Ladder truck/Quint, Engines; Ambulances to EMS bicycles. The department has preserved its history in a 1938 Mack engine.

Figure 3: Apparatus Fayetteville

	Fayetteville			
				Status 1
				Front line -
		Year		2 Reserve -
Apparatus / Vehicles in station 01/09/11	Unit Number	manufactured	Manufacturer	3 Historic
	C-1			
chief 1		2009	tahou	1
	C - 2			
chief 2		2009	tahou	1
engine	E - 7	2000	FI	1
engine		2000	1.1	1
engine	E - 5	1995	El	1
truck				
	T - 1	2007	pierce	1
light rescue/squad				
	S -20	2005	alf chevv	1
mini brush truck				
	m3	2005	chevy	1
medic car			-	
	med 1	2009	tahou	1
ambulance				
	Al	2010	ford	1
ambulance				
	A 2	2008	ford	1
ambulance				
	A 3	2007	ford	1
pool vehicle	training fire police			
	etc	2002	ford	1
engine				
_	E 2 historic	1938	mack	3
bikes ems	bike l	2005	trex	1
bikes ems	bike 2	2005	trex	1

### Minoa Fire Department

The Minoa fire department prides itself on being 100% volunteer staffed. The department conducts fund raisers such as its annual field days which bring many residents and visitors to the village. The department acknowledges that they have difficulty staffing during certain times of the day. There are two (2) fire stations located in the Minoa fire department response territory. Station 1 is located in the Village Municipal building and under the total control of village elected officials. Station 2 is under the control of the fire department subject to the budget of the department as approved by the village and the Town of Manlius.

## Minoa Station 1

The Minoa Station 1 is a 6 bay Fire Station that is part of the Village of Minoa Municipal Building. The 6 bays are situated 3 in the front and 3 in the rear of the building. We found the facility to be neat clean and organized except for some minor storage issues. We also found all the equipment to be neat clean and organized and appeared to be well maintained. There is designated space for cleaning equipment properly.

Our observations revealed that there is an impression that the paid ambulance staff has taken over occupancy of the fire rescue EMS station area lounge area to the exclusion of volunteer members of the fire department. It appears that the fire department has in fact ceded this room to the EMS staff and has not even placed fire department pictures and memorabilia which are sitting on the floor along the walls.

There are two (2) very small bunk rooms in the fire station space that are used by the paid ambulance staff. There are no bunk room facilities that would encourage in station staffing by fire department volunteers. The village applied for a grant to construct bunk room space for volunteer firefighters but the grant was not awarded. We observed that space immediately adjacent to the fire station section of the municipal building has been allocated to a community food bank function which could be used to provide bunk room / living quarters for volunteers.

Analysis 27: The lack of bunking facilities at the Minoa village fire station and the perception that the lounge room is for the use exclusively of career ambulance staff have caused the fire service volunteers to choose to spend more time at their station 2 instead of station 1.

Analysis 28: Based upon the space allocated to the food bank and activity of the food bank as compared to the needs of the fire department, the municipal building does have enough space to provide both the food pantry and space for fire department staffing.

It also appears that sharing space in the municipal building with the Village functions may cause some scheduling conflicts for fire department meetings and training. Due to other village uses of space for vital village functions there is an inability of the fire department to readily use certain rooms in the building.

Analysis 29: Lack of space dedicated to live in or bunk in staffing of volunteers in the fire rescue services in the Minoa Municipal building has caused volunteers to gravitate towards station 2 instead of station 1 which reduces the immediate response capabilities in the village.

Analysis 30: There are obvious issues between Minoa fire department leadership and members of the village EMS service that need to be addressed to bring the benefits of supplemental

staffing to the fire rescue service. That available staffing could be utilized to perform many of the routine station tasks that are impeded by the time constraints of volunteers.

Strategic Recommendation 14: Reallocation of existing space in the Minoa municipal building will provide both; facilities for the community food bank and bunking facilities for fire and EMS personnel. This can be accomplished at a relatively much low cost as compared to the amount requested to accomplish this same objective that was defined in the grant application that was not awarded for this project.

The Minoa fire department operates a wide variety of equipment from station 1 including:

Apparatus / Vehicles in station as of 01/09/11	Unit Number	Year manufactured	Manufacturer
ambulance	A - 1		
ambulance	A - 2	2001	ford
medic car	MC - 1	2006	
utility / squad	S - 4	2004	ford F350
Engine	E - 3	1996	E one
Engine	E-1	1988	E - One
Chiefs vehicle	C - 2	2006	ford

Figure 4: Apparatus at Minoa Station 1 as of 1/9/11

We observed that Minoa Station 1 had the following facilities:

Figure 5: Minoa Station 1 facilities

Department:	Minoa	
Station #	1	
Apparatus room: # of bays:	6, 3 front 3 back	
Station	Yes	No
Apparatus can enter from front and rear doors	x	
Vehicle exhaust system:	vacuum system units	
PPE Gear storage area	x	
PPE Cleaning facilities/equipment	x	
Designated Equipment cleaning area:	x	
Designated EMS equipment cleaning area:	x	
Logistics supply area Meds and EMS equipment	x	
Logistics supply area Personnel Protective Equipment supplies		
Logistics supply area other emergency supplies	x	
Logistics supply area non emergency supplies IE		
cleaning/housekeeping supplies	x	

#### FINAL REPORT

Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

Training room	x	
Officers' room:	x	
Kitchen:	x	
Bunk Room:	ems only	
Restrooms male	x	
Restrooms female:	x	
Restrooms Common	x	
Restrooms Public	x	
Shower area Males	x	
Shower area Females:	x	
Shower area Joint use area	decon only	
Recreation areas:	x	
Community use room	x	food pantry

#### Minoa Station 2

Minoa fire station 2 is a three bay facility that is used as a 2 deep bays, front to back, for apparatus parking. The station was found to be neat clean and organized. The station does have office space, a lounge and cooking facilities. There are no facilities available to provide bunking quarters for personnel which would enable on duty staffing of the station to improve response times. This stations operations are funded by the Town but the property, building and apparatus are all owned by the Village of Minoa.

The equipment and apparatus at station 2 was neat clean and well organized. All appeared to be well maintained with the exception of E-2 which is out of service with a faulty boom.

Figure 6: Minoa station 2 apparatus

Rescue Engine	E - 4	1999	Saulsbury	1
	E -2			out of service
				squirt boom
Engine /Squirt		199 <mark>2</mark>	E - One	failed tests
Rescue / Squad / Brush	R - 2	2008	ford	1
Antique engine				historic

Although E2 was neat and clean the unit has an aerial device on it that has failed the in service test in 2009. Even though the aerial device failed the in service test the unit is still in service. It was reported that some of the volunteer members do not feel safe operating the unit. There are volunteers who do not think that it is a good idea that this Engine remain in service. All other functions of E-2 reportedly operate properly.

Analysis 31: There is a possible danger that having a non-certified aerial devise such as Minoa E2 at the scene of an emergency could result in it being used in the heat of an emergency which creates an unacceptable risk of injury and liability.

Specific Recommendation 14: We strongly urge that as a safety issue Minoa E2 be mechanically evaluated ASAP by a certified fire apparatus specialist. If it is found that the unit, including the pump, is functionally sound it should have the defective aerial device removed and the unit returned to service as a reserve engine without the aerial device.

We observed that Minoa Station 2 had the following facilities that impact safety and personnel use of the station:

Station	Yes	No
Apparatus can enter from front and rear doors		x
Vehicle exhaust system:		x
PPE Gear storage area	x	
PPE Cleaning facilities/equipment	x	
Designated Equipment cleaning area:	x	
Designated EMS equipment cleaning area:	x	
Logistics supply area Meds and EMS equipment	x	
Logistics supply area Personnel Protective Equipment supplies	x	
Logistics supply area other emergency supplies	x	
Logistics supply area non emergency supplies IE		
cleaning/housekeeping supplies	x	
Facilities provided in this station	Yes	No
Training room		x
Officers' room:	x	
Kitchen:	x	
Bunk Room:		x
Restrooms male	x	
Restrooms female:	x	
Restrooms Common		х
Restrooms Public		x
Shower area Males	x	
Shower area Females:	×	
Shower area Joint use area		x
Recreation areas:	x	
Community use room	~	x
Community use room		X

Figure 7: Minoa station 2

The village and the department have long recognized the importance of having facilities for staffing personnel at both fire stations. There was a grant application made to provide these facilities but the grant was not awarded.

Analysis 32: Alternative solutions to providing staffing for volunteers at both stations do exist and the lack of action to provide and assure adequate facilities for volunteer firefighting staff is having a direct negative impact on current volunteers and the future recruitment and retention of volunteers. This report recommends that every station be provided with facilities that will encourage volunteers to spend more time at the stations including the provision of living quarters / bunking facilities

#### Minoa Ambulance

The Minoa ambulance service is a service provided by the Village of Minoa taxpayers and is controlled by the village board with a paid EMS supervisor in charge of operations with a career staff of medics with a mix of full and part-time employees. These employees are on duty 24/7 and located in the Minoa Village Hall fire station.

The protocol for dispatching EMS services in Onondaga County is to send the closest available unit to all EMS calls for service County wide. As can be seen from the response chart below, the Village ambulance service provides services outside of the village and the village receives services from agencies not located in the village. The chart also provides a summary of the type of calls for service that the agency responded to.

The village EMS employees are solely dedicated to EMS services and do not provide any work for the fire department. Station observations over several days revealed that some of these village EMS employees spent time during normal business hours in less than productive pursuits due to the rules of their employment and at the direction of fire department leadership.

Analysis 33: The Village of Minoa ambulance service paid employees have time during their work hours to improve their productivity and provide services and duties for the fire department with the proper training and direction.

The Minoa Ambulance responded to 1091 calls for service in 2009. Of those calls, 329 were in the village and 516 were in the town and the remainder of calls were outside of the town.

Minoa Ambluance Calls for service locations in Town of Manlius	Total calls by location	percent of total calls for service
In Minoa Village	329	36%
Town	516	56%
M/A to Kirkville	29	3%
M/A to Fayetteville	41	4%
M/A to Manlius	9	1%
Total calls in township	924	100%
Minoa Ambluance Calls for service to all locations		
In Minoa Villaqe	329	32%
Town	516	50%
M/A to Kirkville	29	3%
M/A to Fayetteville	41	4%
M/A to Manlius	9	1%
M/A to EAVES	72	7%
M/A to N. Chittenango	6	1%
M/A to Rural Metro	3	0.29%
M/A to Bridgeport	27	2.62%
Total calls for service	1032	100%

Figure 8 Calls for service distribution Minoa Ambulance

Analysis 34: The Minoa ambulance only responds to between 32 % and 36% of its total calls in the Village of Minoa. Other EMS agencies did respond into the village 102 times to cover when the Minoa Ambulance was not available.

Analysis 35: The Village of Minoa issued an RFP in late February 2011 for private providers to offer proposals for operation of the village EMS service in an effort to reduce village costs.

# Manlius Fire Department

# Manlius Station 1

This facility is the oldest fire station in the township. The apparatus floor is cramped for space for the amount of apparatus and equipment in place and for the amount of storage that is allocated to this location.

Manlius station 1 has: a training room; physical fitness area; staff lounge, good kitchen space and some very limited equipment cleaning space. The space for staff bunks is extremely limited however there has been space dedicated to female bunks, shower and restroom.

The building appears to be energy inefficient due to old leaky windows and doors and a boiler that appears to be original to the building.

The equipment and apparatus at Manlius station 1 was neat and clean. The equipment on each unit was well organized. All appeared to be well maintained with the exception of E-3 which is out of service with a cracked frame. There also appears to be minor body corrosion on this apparatus.

	Year	
Unit Number	manufactured	Manufacturer
r mcl	2008	ford excursion
e E3	1988	Out of service cracked frame. E one
k T2	1999	RD Murray/Spartan
k M-l	1999	Ford F350
e 32-A1	2007	Road Rescue ford 350
e 32-A2	2007	Road Rescue ford 350
	ur mcl e E3 k T2 k M-1 e 32-A1	Unit Number         manufactured           ar         mcl         2008           ae         E3         1988           k         T2         1999           k         M-1         1999           ce         32-A1         2007

Figure 9: Apparatus Manlius Station 1

Strategic Recommendation 15: Manlius Engine 3 is out of service until such time as it is repaired or replaced. This machine should be removed from station 1, winterized and parked at the Village garage to provide much needed work space in the fire station.

# Manlius Station 2

The Manlius Station 2 is a three Bay used as a 2 deep front to back parking for apparatus fire station. However much space is dedicated to storage and training materials

The size, setup and layout of Manlius station 2 does not appear to be user friendly for the volunteer firefighters. There are no cooking facilities and the lounge is small and does not encourage volunteer staffing. The station is lacking facilities such as a designated Personnel Protective Equipment (PPE) cleaning, and decontamination area.

There is a small Lounge area that has visible buckling of the paneling that is believed to be caused by moisture. There was also an obvious odor in the lounge area that smelled of moisture problems and possible mold.

There is inadequate space to permit staffing of this station. The small Bunk Room is used for storage and has visible staining on the block wall near the floor that appears to be mold.

Specific Recommendation 15: The presence of mold in Manlius Station 2 could be a severe health hazard. The suspect areas should be tested and remediated immediately if mold is found to be present for the health of any people who may occupy the station even for short periods of time.

• Out of concern for firefighter health and safety we sent an email to the chief concerning the possible mold conditions and the potential risks of exposure to mold.

There are signs of roof leaks but because the roof was frozen it could not be determined if the leaks are current or residue signs from leaks that have been repaired.

Although there are issues with the station, the apparatus appeared to be well maintained, clean, organized and ready for response.

We were informed that due to septic tank drainage issues on one side of the building, future repair issues with the dam on the creek and the close proximity to the subdivision at the rear of the building that there is no way to remediate this facility to make it a more functional fire/ems station that could be routinely staffed.

The following apparatus is located at Manlius station 2

Figure 10: Manlius Station 2 Apparatus

		Year	
Apparatus / Vehicles in station as of 01/09/11	Unit Number	manufactured	Manufacturer
Engine	<b>TP 6</b>	2007	Pierce contender
Squad 5	S 5	2006	EVI Ford 550
			retired school bus
Bus			for rehab
Engine	E-3	2002	American laFrance
Engine	Historic	1936	American laFrance

The station facilities at Manlius station 2 included:

Figure 11: Manlius station 2

Apparatus room: # of bays:	3 potentially double deep	
		No
Station	Yes	
Apparatus can enter from front and rear doors		x
Vehicle exhaust system:		
PPE Gear storage area		
PPE Cleaning facilities/equipment		X
Designated Equipment cleaning area:		x
Designated EMS equipment cleaning area:		x
Logistics supply area Meds and EMS equipment		x
Logistics supply area Personnel Protective Equipment supplies		
Logistics supply area other emergency supplies	x	
Logistics supply area non emergency supplies IE		
cleaning/housekeeping supplies	x	
Facilities provided in this station	Yes	No
Training room		x
Officers' room:	x watch room	
Kitchen:		x
Bunk Room:	storeroom possible mold	
Restrooms male	x	
Restrooms female:		x
Restrooms Common		x
Restrooms Public		x
Shower area Males		x
Shower area Females:		x
Shower area Joint use area	x	
Recreation areas:	possible mold	
Community use room		x
	Manlius # 2	

The Manlius fire department provided a large volume of materials for our review in this study. Included in those materials was a 2008 building assessment report. That report detailed some of the conditions we observed in our station review.

Analysis 36: Review of the Manlius building report and our onsite observations of the Manlius fire stations confirm the detrimental conditions in the report. Our findings of possible mold conditions in station 2 indicate that conditions are deteriorating and possibly have become a health risk.

Specific Recommendation 16: Immediate steps should be taken to determine if mold is present in Manlius station 2. If mold is found to be present the station should not be occupied until the mold has been remediated for the health and safety of all personnel.

# Kirkville Fire Company

The Kirkville Fire Station is a three bay station that appears to be able to be used as a 2 deep front to back for apparatus. The main part of the building has been converted from an older school building. The exterior of this station is in a need of a coat of paint and a sign identifying it as a fire station.

Although the building is older and could use some upgrades, the membership has worked hard to make this station as functional as possible. The building interior and apparatus was well maintained, clean, organized and ready for response. The station is lacking necessities like PPE cleaning area and equipment, decontamination area and equipment maintenance space and showers. The station has no bunk areas for volunteers to staff.

The old former fire station next door is used for supplies and training. Based on the equipment, the station and the information gathered during our observation it appears that the membership works very hard to do a lot with what they have, or have access to. We found the company members to be highly motivated to serving their community and aware of their limitations to do so. The department still puts on chicken dinners to raise funds.

The former fire chief has been brought back as fire chief as of the first of the year and he immediately initiated the process of organizing records and improving efficiency in the administration of the department.

Legal structure of department under state laws	district /fire company	 	· ا	}
Title of directing body				
Size of governing body (# of people)	5 commisioners	The District owns the apparatus ,Kirkville fire company owns the building and land that hold the equipment		
Current Budget - Operations				1
Current Budget - Capital		DISTRICT BUDGETS	\$	170,000
Current total value of cash and investments in reserve		CHIEF BUDGETS- 2007	\$	53,600
Budget approved by		2008	\$	53,800
Strategic Plan approved by		2009	\$	56,000
Operational plans approved by		2010	\$	49,425
		 2011	\$	47,100

Figure 12: Information received from the Kirkville District

We observed the following conditions in the Kirkville station:

Figure 13: Kirkville station

3 pot	tentially double	
Apparatus room: # of bays:	deep	
Station	Yes	No
Apparatus can enter from front and rear doors		x
Vehicle exhaust system:		x
PPE Gear storage area	x	
<b>PPE</b> Cleaning facilities/equipment		x
Designated Equipment cleaning area:		x
Designated EMS equipment cleaning area:		x
Logistics supply area Meds and EMS equipment	x	
stics supply area Personnel Protective Equipment supplies	x	
Logistics supply area other emergency supplies	x	
Logistics supply area non emergency supplies IE		
cleaning/housekeeping supplies Facilities provided in this station	Yes	No
Training room	x	
Officers' room:	x	
Kitchen:	x	
Bunk Room:		x
Restrooms male	x	
Restrooms female:	x	
Restrooms Common	x	
Restrooms Public	x	
Shower area Males		x
Shower area Females:		x
Shower area Joint use area		
Recreation areas:	x	
Community use room	x	

All of the apparatus and equipment in the Kirkville station was clean and well cared for. The following apparatus is in the Kirkville station

Figure 14: Kirkville apparatus

	1	1	
		Year	
Apparatus / Vehicles in station as of 01/09/11	Unit Number	manufactured	Manufacturer
Squad	S-2	1994	Chevy 50
Rescue Engine	R-4	2008	Spartan - Crimson
Engine	E - 3	1999	E one / International
Squad	<b>S</b> - 1	1995	Dodge Van

Analysis 37: The Kirkville fire company is comprised of a small number of very dedicated members. Those members struggle to continue to provide service 24/7 and they are well aware of the need to build the number of volunteers and to assure continued service to their neighbors 24/7

# Apparatus Overview

Each of the agencies utilizes a mixture of in house volunteers and career staff to perform minor and daily routine apparatus checks and maintenance. The departments operated as village fire department utilize mechanics and facilities from their village public works garages for more extensive maintenance. All contract out for specific apparatus maintenance and annual certification testing where feasible.

Analysis 38: We did not receive any evidence that any of the village motor equipment mechanics were certified to maintain fire apparatus. We were informed that agencies do contract out repairs that are outside of the scope of training of the village mechanics.

Strategic Recommendation 16: Plans should be developed to assure that all fire apparatus and specialized equipment technical testing and maintenance is performed by certified fire apparatus and equipment technicians.

During this study it was very obvious that apparatus in each department reflects the needs and wants expressed by each individual department's members. Three of the departments spoke about the need to replace their aerial ladder trucks yet we did not see evidence that there has been a thorough examination of the effective response force to identify the apparatus and staffing that is required to mitigate each type of incident.

Analysis 39: Before any apparatus is purchased, or removed from service, it is important to do a community and regional analysis of the equipment that is currently available and able to be utilized. This can be accomplished through the regular meetings of county fire chiefs and by the constant review of apparatus as listed with the county office of emergency management.

#### Immediate cost savings potentials

Efficiencies in administration of fire rescue and EMS will produce cost savings in many areas including staffing, purchasing, administration, reporting, insurance and apparatus and equipment purchases and maintenance. There are specific areas where immediate savings will be recognized under a joint administrative structure. The primary immediate savings are in the area of logistical management of expendable goods, personal protective equipment and medical supplies. For example, bulk purchases of all expendables can be purchased through lowest responsible bidders and distributed as needed.

It was observed that there are large quantities of turn out wear and other personal protective equipment, PPE, in each agency. While it is an absolute necessity to have spare PPE available when needed, the total sum quantity that was observed in the total agencies if combined into a single PPE pool would be sufficient for several years of normal replacement. Additional PPE can be readily obtained as needed in the future.

Centralizing medical supplies and drugs to a single location will reduce the total quantity needed to be kept on hand. Centralization of drug supplies to a secure location will also improve security and help prevent risk of loss.

Strategic Recommendation 17: Consolidation of all logistical supplies including PPE will reduce immediate costs as inventory is brought down. That consolidation of supplies would be by type and may be spread across several physical locations to provide staffing for the management and control of each type of material and/or supply.

# **Strategic Planning**

Each agency was requested to provide information on their current state of strategic planning and their standards of response coverage policies. Strategic planning is that long range planning that establishes goals for the future operations within an agency. Strategic planning generally has a direct impact on future budgets of governments. In past practices it was common for many government agencies to develop "internal" strategic plans that were not shared with or approved by the elected officials of the community being served before budgets were requested. In modern effective and efficient government for review and input. When the elected officials have concurred with the strategic direction as presented in the agency plans, the elected officials adopt those strategic plans as part of the overall strategic plans for that government and they are made public documents for citizen review and input. It is not uncommon in government for strategic plans to be regularly reviewed and modified to reflect changes in the community and changes in funding sources.

Analysis 40: While each department has a clear view of what they each would like to see in the future, there is a lack of formal strategic planning in place that has been submitted to elected officials for review and action.

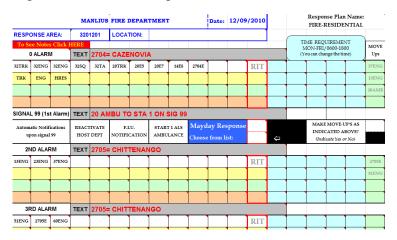
Strategic Recommendation 18: The Joint Fire District should immediately establish a policy directing Strategic Planning and the format for conducting that Strategic Planning. That effort should involve all levels of the fire rescue and EMS service providers and it should be an ongoing process.

### Standards of Response Coverage

"Standards of Response Coverage" is a relatively new term in the fire rescue service. In years past it was common and acceptable for departments to claim that it was their standard to respond to all calls within X minutes. Today thanks to the efforts of the Commission on Fire Accreditation International and the NFPA and dedicated fire service leaders around the world there have been many positive changes in the way fire rescue services self-examine their service delivery.

Today, modern departments examine each of the types of service demands that their departments responds to by the location of those potential events. They determine an "effective response force" that details the types of apparatus and the amount of staffing that will be required to successfully mitigate each type of event. They determine the total length of time that that will be required for the full effective response force to be expected to arrive at each type of incident to assure proper mitigation of those events. Those agencies measure call process time (call receipt to dispatch), acknowledgement time, reflex time (time from dispatch to when units are actually leaving the station) arrival time for first and subsequent units and all of the other aspects that track operational effectiveness and efficiency. They compare their baseline information by call type with nationally recognized benchmarks for performance.

As is true of many agencies across the nation, none of the subject agencies have developed formal standards of response coverage policies. Each agency in this study has reviewed their districts and provided dispatch information to the 9-1-1 center to define what units they want dispatched to each location and type of call by time of day. They are to be commended for that ongoing preplanning effort.



#### Figure 15 Run card sample

Analysis 41 There is no indication that any of the study agencies regularly monitor effective response force time data. However, there is a general awareness of the seriousness of issues that arise from delay in response within each agency. This report recommends that the new Joint Fire district do extensive work on the development of incident specific standards of response coverage policies and regular monitoring of benchmarks and baselines for response.

### Staffing

A major part of the investigation process was an evaluation of staffing of the fire rescue EMS services. We asked each agency to have all active members fill out a staff readiness form. The information on this form was kept confidential by not requesting the names of the respondents on the forms. Each chief was requested to verify that a form was submitted by each active volunteer. We also requested the same for career personnel. Monitoring staffing is a primary job of emergency managers. In volunteer departments that monitoring effort should include assuring the availability of trained and certified interior firefighters and supervisors for all incidents.

The reporting system of the current Iamresponding staff availability and response system can provide much of the needed tracking for planning. Conducting detailed regular surveys of all members will provide managers with the information needed to plan for and to assure proper staffing levels 24/7. In combination departments it is vital to assure on a continuing basis that volunteer and career staff continue to work together in harmony and mutual respect.

Analysis 42: We are aware that some members did not respond to the staff readiness survey. It was estimated in the Fayetteville fire department that approximately 80% of their active members responded to the survey. However, based upon review of the materials received and our observations on site we feel that the members who did respond in each agency represent a significant overview of the membership.

Strategic Recommendation 19: There must be a regular ongoing review and monitoring of volunteer staffing availability and qualifications and monitoring of relations between career and volunteer members.

The staff readiness study produced the following information:

Based upon the reports submitted by the members of each agency we examined their responses to each question below for each age range of the respondents. This process has given us a comprehensive overview by agency and age of the positions members of each agency hold; how many people are certified to perform interior firefighting activities; the number of females in the membership; and the availability of members to respond to emergency calls for service by time of day. Since EMS services are a major part of the work load in most departments, we also surveyed the level of NYS EMS certifications held by the volunteer and career responders. The surveys also allowed us to examine the number of town and village employees who also serve as volunteers.

Figure 16: Staff readiness survey details requested for each age range

#### FINAL REPORT

Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

Age Range 18 – 21	Approximate Hours of the day normally out of the district
Firefighter	and unavailable to respond immediately to all calls:
EMT/ Medic	
Company Officer	0000-0600
Chief Officer	0600-1200
Fire Police	1200-1800
Fire Folice	1800-2100
	2100-0000
Physical exam 2010	The you a town of vinage Employee
Currently Certified for Interior fire fighting;	Position
Currently Certified SCAB	
Not Certified	
Sex Male	T
Sex Female	
Members available to respond immediately in the district	Certified First Responder (CFR)
for all calls including during normal school or work hours:	Emongonary Medical Technician (EMT)
for an can's menuting during normal school of work nours.	Advanced Emergency Medical Technician - Intermediate
	(AEMT-I)
members who live in the township?	Advanced Emergency Medical Technician - Critical Care
members who work or go to school in the township?	(AEMT-CC)
members who travel outside of the town for work or	Advanced Emergency Medical Technician - Paramedic
school?	(AEMT-P)

#### Volunteer staffing

No service can be more cost effective than those that utilize volunteer staffing in that service delivery. The value of volunteer's time commitment in fire rescue and EMS services to their communities can be easily calculated monetarily. However, the real full community value of volunteers serving their neighbors can never be over emphasized. It is often the spirit of volunteerism that drives communities forward. Each of the fire rescue departments began as totally volunteer departments many years ago. Minoa and Kirkville still maintain a proud tradition of total volunteer service while Manlius and Fayetteville have found it necessary to supplement volunteers with career personnel to meet their growing service demands.

Each department has independently conducted ongoing recruitment programs to bring more volunteers into their services and each has initiated programs to retain current volunteers. EMS is a high service demand in Manlius and Fayetteville and both agencies have directed recruitment for people to serve in EMS roles.

The Manlius /Pompey area has become home to many people who are in highly technical professional jobs and many of these people also travel frequently for business. Demanding personal and professional schedules coupled with the high time demands of being in the volunteer fire rescue and EMS services make it difficult for many residents to volunteer. There are a limited number of people available and willing to serve as volunteers in the community and there is keen competition for those people among the agencies.

There are wide differences in what each agency can use as incentives for recruiting and retaining those volunteers. Volunteers have transferred between departments to find conditions that better fit their personal needs and expectations. In an era when even children have "play dates" on a scheduled basis it is still the expectation of volunteer firefighters that they are expected to stop whatever they are doing and respond to every service request.

New staff utilization programs must be established to provide volunteers the opportunity to serve within their demanding schedules. Some agencies have successfully established scheduled station duty time and flex schedule training for volunteers. All staffing issues have a direct impact on citizen safety and the safety of emergency responders.

There are vast differences in volunteer staffing levels depending upon time of day in every agency because the available volunteer pool is limited in when they can respond within their busy schedules.

Strategic Recommendation 20: In a time of a generally diminished interest in volunteerism nationally, there is a clear need to re-define the roles that volunteers are needed to fill in each department and to have a well-developed recruitment program to sell the community of the value of their volunteering.

Strategic Recommendation 21: It is vital to establish volunteer staffing programs that reflect the time demands all members of the public have today. Those programs must include schedules that afford the staffing and training time flexibility that modern families need today.

#### Volunteer staffing by age range

We conducted the staff readiness surveys with age ranges to allow analysis of those age ranges to enable prediction of future availabilities and needs.

					<u>Total # of</u>
	Fayetteville				volunteers
	Fire	Manlius Fire	Minoa Fire	Kirkville Fire	reported in
	Department:	Department:	Department:	Department:	system
# of active Volunteer members reported	48	38	42	17	145

Figure 17: Summary of volunteer staff as reported total and by age range

	Fayetteville			
	Fire	Manlius Fire	Minoa Fire	Kirkville Fire
	Department:	Department:	Department:	Department:
Age Range 18 – 21	5	0	9	2
Age Range 22 - 29	8	5	12	1
Age Range 30 – 39	2	7	12	3
Age Range 40 – 49	17	6	3	5
Age range 50 - 59	6	10	5	4
Age range 60+	10	10	1	2
Total	48	38	42	17

Analysis 43: The number of total volunteers in all of the agencies who responded to this survey is 145. Twenty three of those members are over the age of 60 and twenty five volunteers are between the ages of 50 and 59 and sixteen are between the ages of 18 & 21.

Analysis 44: It is expected that an unknown number of volunteers between the ages of 18 & 21 will leave the area due to school, job opportunities outside of the area and the cost of living in the area. If that expectation occurs, it would mirror the exodus of young people that is a regional concern.

Analysis 45: There is concern for the long term viability of the Kirkville Fire Company if steps are not taken to increase the number of volunteers at this station.

Analysis 46: The diminishing number of volunteers has caused the Villages of Manlius and Fayetteville to supplement the volunteer staff with paid employees to meet service demands

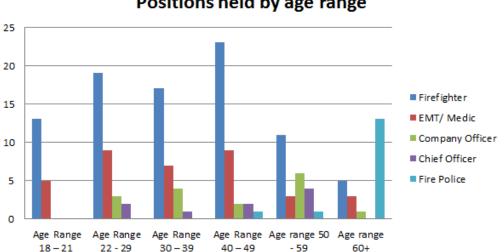
with adequate staff while still actively recruiting volunteers and seeking better ways to improve retention of those volunteers.

Strategic Recommendation 22: There is an immediate need to professionally review current volunteer recruitment efforts and to develop a comprehensive recruitment marketing effort across the greater community. Assistance in conducting these efforts should be sought from local universities to seek educators and students who have expertise in marketing, psychology, Human resources and the other education specialties that will aid in development of this plan.

#### Volunteer staffing positions held by age range

The age range of volunteers is a predictor of future staffing needs.

Figure 18: Positions held by volunteers age range in all departments combined



## Positions held by age range

Analysis 47: The number of company officer and chief officers who are over 50 years old demonstrates that Officer Development training for younger members should be a priority in specific planning.

Analysis 48: The dip in members between the ages of 40-49 and 30-39 and the dip between ages 22-29 and 18-21 is an indication that recruitment and retention remains important.

Analysis 49: Historically young people joined volunteer fire departments in their teens. The low number of 18 -21 age range volunteers reflects trends nationwide that present a danger to future service delivery capabilities.

Analysis 50: Historically there is a high attrition rate of volunteers in the 18 - 21 age range as these young people leave for college and to seek employment in other areas.

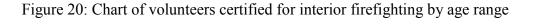
	Age Range 18 – 21	Age Range 22 - 29	Age Range 30 – 39	Age Range 40 – 49	Age range 50 - 59	Age range 60+	Total available all ages
Members available to respond immediately in the district							
for all calls including during normal school or work hours:							
	4	8	9	9	5	6	41

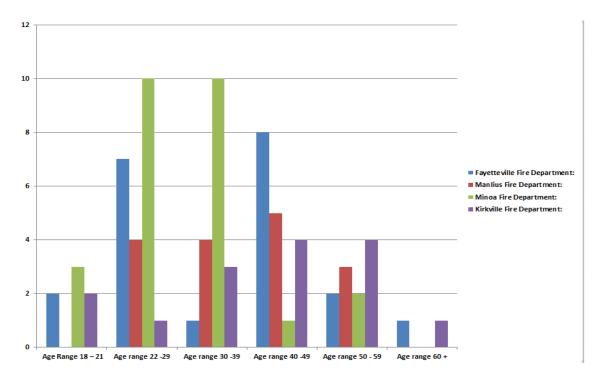
Figure 19: Available volunteers for all calls all hours of the day

Analysis 51: There are only 31 volunteers available to respond to all calls around the clock that are between the ages of 22 and 60.

Analysis 52: The volunteers over the age of 60 are generally serving in Fire Police roles.

Analysis 53: The role of Fire Police, while not providing interior firefighting staffing, is extremely valuable not only to the fire departments but to the Town Police department as well.



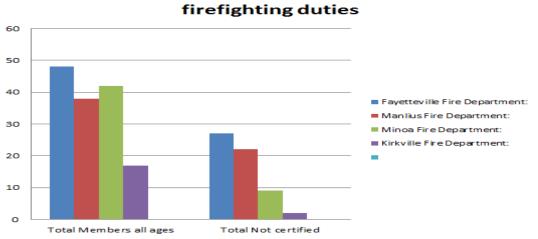


Analysis 54: The total number of volunteers and the aging membership base of volunteers certified for interior firefighting duties clearly indicate the importance of and need for extensive and coordinated volunteer recruitment and retention programs.

Analysis 55: The total number of volunteers shows the need to integrate staffing and training to assure that those who are certified are able to respond wherever needed based upon their availability and current location rather than what agency they belong to.

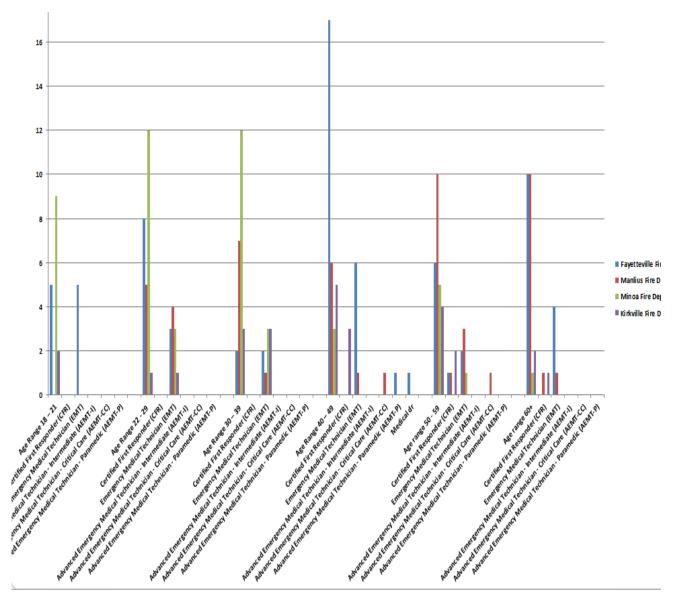
Figure 21: Members who responded to the survey as not certified for interior firefighting

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**Members NOT certified for Interior** 





Analysis 56: EMS services are a growing service demand. It is important to increase the number of volunteers certified to perform at the Emergency Medical Technician level and higher.

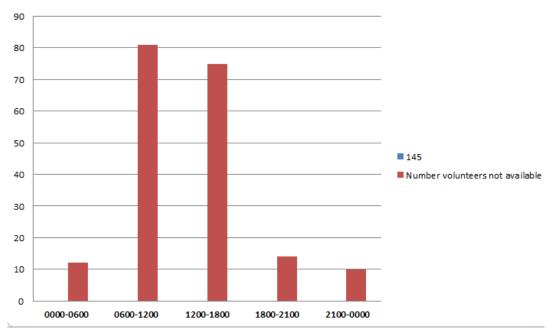
Analysis 57: Those departments that do not currently respond to EMS calls for service should reevaluate those service demands and their capabilities to provide lifesaving EMS.

# FINAL REPORT Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

# Figure 23 Chart of times members **NOT** available to respond by age range

	Fayetteville				
	Fire	<b>Manlius Fire</b>	Minoa Fire	Kirkville Fire	Total
	Department:	Department:	Department:	Department:	Volunteer
# of active Volunteer members reported	48	38	42	17	145
					Volunteerr
	Fayetteville				unable to
	-	Manufi and Fina		Kishe dila Pisa	
pproximate Hours of the day normally out of the district and unavailable	Fire	Manlius Fire	Minoa Fire	Kirkville Fire	repond b
o respond immediately to all calls:	Department:	Department:	Department:	Department:	time of da
<u>Age Range 18 – 21</u>	<u>5</u>	<u>0</u>	<u>9</u>	<u>2</u>	
0000-0600	0	0	0	0	0
0600-1200	0	0	0	0	0
1200-1800	0	0	0	0	0
1800-2100	0	0	0	0	0
2100-0000	0	0	0	0	0
	Fayetteville				
pproximate Hours of the day normally out of the district and unavailable	Fire	<b>Manlius</b> Fire	Minoa Fire	Kirkville Fire	
o respond immediately to all calls:	Department:	Department:	Department:	Department:	
Age Range 22 - 29	•		• • •		
	8	5	12	<u>1</u>	•
0000-0600	1	0	1	0	2
0600-1200	4	5	5	0	14
1200-1800	6	5	5	0	16
1800-2100	2	1	2	0	5
2100-0000	1	0	3	0	4
	Fayetteville				
pproximate Hours of the day normally out of the district and unavailable	Fire	<b>Manlius Fire</b>	Minoa Fire	Kirkville Fire	
o respond immediately to all calls:	Department:	Department:	Department:	Department:	
Age Range 30 – 39	2	7	12	3	
					-
0000-0600	1		2	0	3
0000-0600	1	0	2	0	3
0600-1200	2	7	7	2	18
0600-1200 1200-1800	2 2	7 6	7 3	2 3	18 14
0600-1200 1200-1800 1800-2100	2 2 2	7 6 0	7 3 0	2 3 1	18 14 3
0600-1200 1200-1800	2 2 2 1	7 6	7 3	2 3	18 14
0600-1200 1200-1800 1800-2100 2100-0000	2 2 2 1 Fayetteville	7 6 0 0	7 3 0 2	2 3 1 0	18 14 3 3
0600-1200 1200-1800 1800-2100 2100-0000 Approximate Hours of the day normally out of the district and unavailable	2 2 2 Fayetteville Fire	7 6 0 0 Manlius Fire	7 3 0 2 Minoa Fire	2 3 1 0 Kirkville Fire	18 14 3 3
0600-1200 1200-1800 1800-2100 2100-0000 pproximate Hours of the day normally out of the district and unavailable o respond immediately to all calls:	2 2 1 Fayetteville Fire Department	7 6 0 0 Manlius Fire Department:	7 3 0 2 Minoa Fire Department	2 3 1 0 Kirkville Fire : Department:	18 14 3 3
0600-1200 1200-1800 1800-2100 2100-0000 pproximate Hours of the day normally out of the district and unavailable o respond immediately to all calls: <u>Age Range 40 – 49</u>	2 2 Fayetteville Fire Department <u>17</u>	7 6 0 0 Manlius Fire Department: <u>6</u>	7 3 0 2 Minoa Fire Department <u>3</u>	2 3 1 0 Kirkville Fire Department: 5	18 14 3 3
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0600-1200           1200-1800           1800-2100           2100-0000           o respond immediately to all calls:           Age Range 40 – 49           0000-0600           0600-1200	2 2 Fayetteville Fire Department <u>17</u> 4 10	7 6 0 0 Manlius Fire Department: <u>6</u> 0 4	7 3 0 2 Minoa Fire Department <u>3</u> 1	2 3 1 0 Kirkville Fire Department: <u>5</u> 0 4	18 14 3 3 5 19
0600-1200           1200-1800           1800-2100           2100-0000           pproximate Hours of the day normally out of the district and unavailable or respond immediately to all calls:           Age Range 40 – 49           0000-0600           0600-1200           1200-1800	2 2 Fayetteville Fire Department <u>17</u> 4 10 9	7 6 0 0 Manlius Fire Department: <u>6</u> 0 4 5	7 3 0 2 Minoa Fire Department <u>3</u> 1 1 1	2 3 1 0 Kirkville Fire Department: <u>5</u> 0 4 4	18 14 3 3 5 19 19
0600-1200 1200-1800 1800-2100 2100-0000 Approximate Hours of the day normally out of the district and unavailable o respond immediately to all calls: <u>Age Range 40 – 49</u> 0000-0600 0600-1200 1200-1800 1800-2100	2 2 1 Fayetteville Fire Department 17 4 10 9 3	7 6 0 0 Manlius Fire Department: <u>6</u> 0 4 5 0	7 3 0 2 Minoa Fire Department <u>3</u> 1 1 1 1 1	2 3 1 0 Kirkville Fire Department: <u>5</u> 0 4 4 1	18 14 3 3 5 19 19 5
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0600-1200           1200-1800           1800-2100           2100-0000           pproximate Hours of the day normally out of the district and unavailable           a respond immediately to all calls:           0000-0600           0600-1200           1200-1800           1800-2100           2100-0000           pproximate Hours of the day normally out of the district and unavailable           proximate Hours of the day normally out of the district and unavailable           proximate Hours of the day normally out of the district and unavailable           proximate Hours of the day normally out of the district and unavailable           0000-0600           0000-0600           0000-0600           0000-0600           0000-0600           0600-1200	2 2 1 Fayetteville Fire Department 10 9 3 1 Fayetteville Fire Department <u>6</u> 1	7 6 0 Manlius Fire Department: <u>6</u> 0 4 5 0 4 5 0 0 Manlius Fire Department: <u>10</u> 0 9	7 3 0 2 Minoa Fire Department 3 1 1 1 1 1 1 1 1 1 1 2 Minoa Fire Department 5 0 2	2 3 1 0 Kirkville Fire Department: 5 0 4 4 1 0 Kirkville Fire Department: 4 0 Xirkville Fire	18 14 3 3 5 19 19 5 2 2 1 1 20
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Figure 24: Time ranges showing total number of Volunteers **NOT** available by time of day



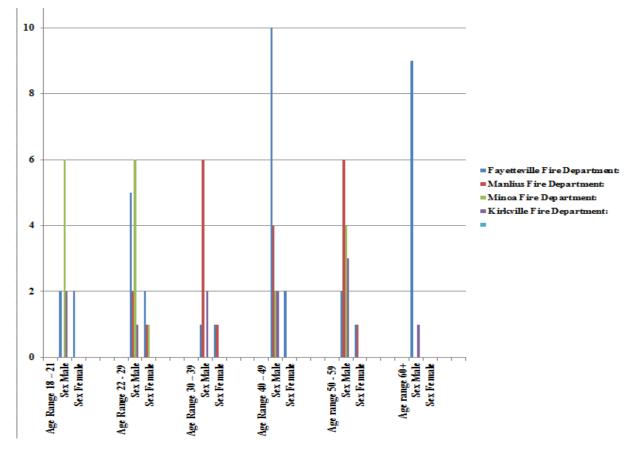
Number of volunteers not available by time of day of 145 total volunteer base

Analysis 58: The number of volunteers available to respond is much lower during normal business hours from between 0600 to 1800.

Analysis 59: We have serious concerns that in the heat of an emergency incident that volunteers over the age of 60 and other volunteers who are not certified as interior firefighters would risk their health and safety by performing firefighting tasks when there are not sufficient numbers of certified members available on scene.

Analysis 60: Assigned station duty for volunteers has also created a less stressful environment for volunteers who can establish regular schedules far in advance and not need concern themselves with having to leave their other activities for every call that the department is dispatched to.

Figure 25 Volunteers by sex in age ranges



It must be noted that not every member listed their sex in the survey

Analysis 61: The number of Female Volunteers does not reflect the sex composition of the area being served. The low number of females in fire rescue services is common in many fire rescue services. However the reality is that females once they have found out that they are welcome in the services have proven that they are valuable members.

Strategic Recommendation 23: Female member recruitment is a source of staffing that needs to be developed in recruitment and retention efforts.

While surveys can and do highlight generalities regarding staff availabilities nothing can be more accurate in assuring that there are enough adequately trained and qualified personnel available when they are needed than to either have those people on duty in the stations or to know on a minute to minute basis who is able to immediately respond. Manlius is the home of a company that provides departments across the nation with that capability. Departments in the Town of Manlius have been using the "Iamresponding" software since its inception to let volunteers sign in as being available to respond and to enable volunteers to let stations know specifically that they are responding to either the station or directly to the incident location when an alarm does come in.

While its use has not been universally adopted by the agencies or consistently by every member, the tool is available for total use by all the agencies.

Strategic Recommendation 24: Once personnel from all agencies have been trained on the same standard operating guidelines for operations at incidents, policies should be developed to use "Iamresponding" software to provide tracking of all available volunteer responders. The program should accurately report which volunteers are currently available and inform on duty station personnel of the number of volunteers who will be responding directly to the scene of an emergency based upon their current locations.

#### **Fire Police**

Incident safety in terms of traffic control as been identified as an important issue and the departments have developed cadres of fire police officers to serve in that function. In conversations with Town Police command officers we heard direct praise for the value of the members of the fire police cadre and their importance to the police department not only at fire incidents but also at other major events where police officers would be tied up with traffic concerns rather than investigation.

In general we found that most fire police members are in the upper age ranges. This has the effect of keeping experienced people involved in volunteer service and assures all of the benefits that their maturity brings to volunteerism.

The police department has provided radios and training to some fire police groups but not to all.

Analysis 62: The fire police program needs to be expanded in the number of fire police and their duties. Members of the fire police branch of the service need to be properly trained and equipped for communications and all aspects of service at incidents.

#### Village and Town Employee Volunteers

The review of staff readiness surveys indicated that only a few volunteers designated themselves as a village or Town employees. During our onsite investigation we asked about the number of village and town employees who were active volunteers and we were told that the employees are not encouraged by their local governments to volunteer. In fact we were told that in Manlius there had been two village employees serving as volunteers in the fire department. These volunteers resigned after their pay was docked by the village when they reported late for work because they had been at a fire in the village.

Analysis 63: Each of the local governments has a deep untapped pool of employees who have the potential of serving in the fire rescue and EMS services in an emergency with further training and cooperation of the local governments.

#### **Career staffing**

The Fayetteville and Manlius fire departments supplement volunteer staffing with paid employees. The Minoa ambulance is totally staffed by paid employees. The full time career employees of each agency are all represented by the International Association of Firefighters, Manlius Professional Firefighters Association Local 3316. Many current career employees began their service as volunteers. Each agency has a separate labor management agreement. The EMS supervisor in Minoa Ambulance is not a part of the bargaining unit. Part-time employees in all agencies are not represented by the bargaining unit. The collective bargaining agreement between the Village of Fayetteville and its employees expired February 28, 2011. The Village of

Manlius labor management agreement expires May 31, 2012. It appears that the labor management agreement for EMS employees in the Village of Minoa expired May 31, 2009.

Analysis 64: Review of current labor management agreements highlights some differences between the contracts in each of the agencies.

Review of training records and qualifications demonstrate that the career employees are well trained and certified for the positions they hold. These employees provide much of the training effort in the 2 combination departments and are viewed as mentors by younger volunteer members. Career staff provides much of the logistical support and record keeping in their agencies.

The Village of Minoa EMS employees are solely dedicated to EMS services and do not provide any services for the fire department. Many of these EMS employees are part timers who are motivated to earn extra income for their families. Station observations over several days revealed that some of these village EMS employees spent time during normal business hours in less than productive pursuits due to the rules of their employment. Some fear that the village will contract its EMS to a for profit ambulance company.

There was definite recognition by the Village of Minoa EMS employees that they had more to offer in their service time to the fire department. However these employees understood that their services were not wanted by fire department because they were being paid to be EMS employees of the village. Some of the EMS employees are also certified firefighters.

Analysis 65: Many of the current paid fire department employees in Manlius and Fayetteville are former volunteers. They have a deep understanding of the need and importance to maintain volunteers as an important part of the community's fire rescue services.

Analysis 66: Many communities look at the possible cost savings of outsourcing EMS and other services. At every convention for municipal leaders there are many vendors selling those services. While there may be some cost savings in outsourcing some jobs, the long term results can be catastrophic to service delivery when outsource providers fail in their service delivery of emergency services.

In the consideration of outsourcing jobs in government it is important to differentiate between jobs that require emergency response and operational safety and governmental service support jobs. The companies that provide EMS and other emergency services historically provide a layer of management for oversight and some other regularly scheduled employees for operations. However these outsource companies also depend heavily on the assignment of part time employees for cost savings in their staffing models. Many outsource part time employees are generally selected from employees of other agencies in the region and they are subject to recall back to their full time employers in the event of major incidents. These outsource employees often have no motivation for productivity and performance at their part time employment. It is not uncommon to have part time outsource employees from outsource companies who are not familiar with local agency standard operating guidelines and procedures including safety and command. In some jurisdictions with part time EMS employees, EMS has become known as Earning Money Sleeping. It is important to look back at some of the negative impacts of outsourcing government services. Low ball entry prices are common in the industry. There have been cases where governments turned over entire fleets of vehicles to outsource companies only

to see prices raised drastically after the vendors had title to the vehicles used for service delivery. There have been financial failures of outsource companies over the years that have had serious negative service delivery impacts on communities. I was fire chief in a jurisdiction that had outsourced its EMS services to 3 different vendors across the county. I was notified at 18:00 hours one evening that the creditors for the company providing EMS services in the entire southern portion of the county had just arrived at each fire station and driven off with every ambulance because the vendor had failed to make payments on his loans.

Analysis 67: Before considering outsourcing emergency services, agency leaders must examine the details of how those services can be provided by a for profit company for less money. Leaders must understand how profits can be earned by the outsource company if they are providing the same level of service as can be provided with employees who work under the direct supervision of the agency. In the management of any group employee productivity is a very important goal. Management must always review what can be done to maximize the productivity of the jurisdiction's employees.

# On duty staffing

Due to the high number of incidents and to assure ready staffing 24/7 in their primary stations, the Manlius and the Fayetteville fire departments have a mixture of paid and volunteers on duty in their stations. Minoa ambulance is staffed 24/7 by paid employees.

On duty staffing by volunteers may be more effective in Fayetteville than it has been in Manlius primarily because of the lack of bunking facilities available for adequate staffing in Manlius station 1 and the problem of no available facilities for staff at station 2. The new Fayetteville station will have much improved facilities for volunteers to co-staff the station 24/7 with career employees.

Analysis 68: The assignment of volunteers to station duty on specific days and/or nights has proven to be beneficial not only for assuring proper levels of staffing, but more importantly it has served to improve relations between career and volunteer members in the combination departments.

Analysis 69: The creation of a Joint Fire District will allow better utilization of current career staff by allowing supervisors to shift members to other stations as needed within the current career staffed stations.

Analysis 70: Assigned station duty enables volunteers to establish regular schedules far in advance. The pre-scheduling of duty time and training activities better fits the needs of modern families and allows more people the opportunity to serve their community within their busy life schedules.

# Supervision at Incidents & Officer Selection

During interviews in each fire rescue agency we heard from both volunteer and career members that there were some concerns about the qualifications of some who have become officers. The primary concern expressed was for the desire to assure safety on scene.

In 2002 the Manlius and Pompey Hill fire departments suffered 2 tragic deaths of firefighters battling a house fire. Management and supervision of that incident has been questioned in the courts by the families and by members of the fire services locally and nationwide. This document will not review the details of that incident other than to utilize it to demonstrate the actions that have been taken in the legal system since that incident. It is those court decisions that have profound impact on future incident management and the willingness of members of fire rescue services to step into supervisory roles.

The NYS Supreme Court Appellate Division in Rochester – in a 4-1 split decision – concluded the law granting personal immunity to volunteer firefighters does not apply to the fire departments themselves or to department officials. The court majority concluded the section of state General Municipal Law granting immunity to volunteer firefighters in the performance of their duty did not apply to the fire departments or the department officials. The plain language of the statute reflects the Legislature's purpose in enacting that law was "first, to immunize volunteer firefighters from civil liability for ordinary negligence and, second, to shift liability for such negligence to the fire districts that employ them," the majority wrote.

The court rejected the fire departments' contention that the law only allows fire departments to be held liable for volunteer firefighters' negligent operation of motor vehicles. The court concluded the Legislature – in enacting the statute in 1934 – meant to expand, not restrict, the liability of fire districts. "In other words, the Legislature sought to assure that there would be some liability on the part of the fire districts where previously there had been some doubt," the majority wrote.

Analysis 71: It is clear that Command Officers at incidents assume liabilities for their actions and that the courts will hold governing bodies liable for those actions as well. It is also clear that any command officer who experiences the death or injury to someone under their command will live with that internal guilt and doubt for the rest of their lives.

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.

Strategic Recommendation 25: It must be a priority to assure that every person who will serve in a command and supervisory role is trained to the appropriate Incident Command levels.

Strategic Recommendation 26: 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.

We heard concerns from members that having chiefs who are elected to their position has caused issues where chiefs have not taken bold management steps where they were needed because of fear of the possibility of losing the future votes of those who might be offended by the strong actions that it was felt should be taken.

The Fayetteville fire department provided a copy of their current General Order which defines the qualifications for every rank of line officer. The general order also defines that the positions of Battalion Chief; 1<sup>st</sup> Captain; 1<sup>st</sup> Lieutenant ; 2<sup>nd</sup> Lieutenant ; 3<sup>rd</sup> Lieutenant; Safety Officer; Director of Medical Operations; Deputy Director of Medical Operations; and Fire Police Captain are appointed positions. The General Order directs that any member who is interested in serving in any of the appointed positions shall submit a resume and letter of interest to the Chief of Department by the Annual Meeting. The rule directs that a selection committee which shall include Chief Officers and the Village Liaison will decide who will be appointed to each position. The General Order also dictates that the Chief and Deputy Chief will be elected by the membership.

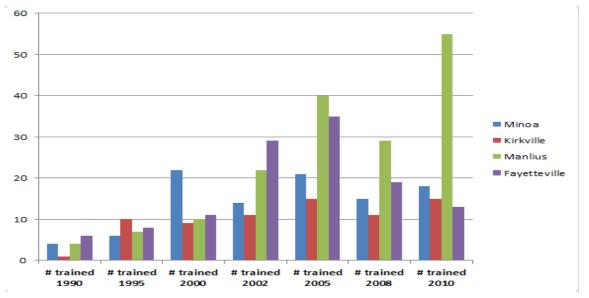
Analysis 72: NFPA codes, the International Association of Fire Chiefs, New York State and Federal laws have established minimum standards that every person in command of a company or an incident should meet. It is important for personnel and public safety that all officers meet those minimum qualifications and that training be made available to all who aspire to become or remain line officers in fire rescue services.

# Training

Ongoing training at every level in all emergency services is a key element towards assuring safety of personnel and the safety of the greater community. Training is the primary factor in assuring effective and efficient service delivery. New York State defines the minimum standards for firefighter training for career and volunteers in rules NYSCRR Parts 426 and 427.

In this study we examined training records from the County Fire Bureau for individuals in each fire department. Those records showed training received by department members from 1974 to the present. We also examined the training records of each of the agencies individually because each of the individual departments provide a very valued ongoing training effort for its members beyond that provided by the county Fire Bureau.

Figure 26: Training reported by County 1990 – 2010



Analysis 73: The county training records clearly demonstrate the increase in the amount of training that members of these agencies have received and the increasing demands on volunteer's time commitment to fire rescue services. It is important to note that each of the agencies also conducts ongoing training for its members that is not reflected in the county training records and that training has immediate impacts on the personal time demands of active volunteers.

Analysis 74: Each of the agencies has members, career and volunteer, who are state and nationally certified fire rescue and EMS instructors.

# Training - Fayetteville Fire Dept.

The review of department training in the Fayetteville Fire Dept. demonstrated a high level of ongoing training for all members, volunteer and career. Training is held nightly in the fire station and in the district. Each class is held multiple times to allow all members the opportunity to attend based upon their personal schedules. Adequate records are maintained to assure that each member receives the required training. The department has members who are certified as NYS Fire Instructors.

Training classes from 2007 to the present included: All anticipated skills required for successful

and safe tactical operational practices; District familiarization; Building construction; Emergency vehicle operations; Safety; Patient care; Safety and legal considerations in EMS service delivery; Incident Command and management; Leadership; Fire Prevention and safety; Fire Behavior; Safe and proper operations of apparatus, tools and equipment; Rescue and Search techniques and skills; vital firefighter survivor skills; Loss control and prevention; Fire cause investigation; Hazardous Materials; work place safety and hazard recognition; and administrative procedural training.

In addition to the State and county provided training, the members of this agency also conduct ongoing in house training for all members. The department has members, career and volunteer, who are certified fire rescue and EMS instructors.

# Training - Manlius Fire Dept.

Review of the County training records clearly demonstrate the growth and improvement of training received by the members of the Manlius fire department over the years. In 1974 only one department member took 1 class with the county fire bureau. In 1995, seven members took a total of 12 different classes. In 2000, ten members took 24 different classes. In 2002 Twenty two (22) members took 31 different classes. In 2008 twenty nine members took forty seven (47) different classes. In each year several members took multiple classes during the year including NY State Office of Fire Prevention & Control classes run in the department.

In addition to the State and county provided training, this agency also conducts ongoing in house training for all members. The department has members, career and volunteer, who are certified fire rescue and EMS instructors.

# Training - Minoa Fire Dept.

Review of the County training records clearly demonstrate the growth and improvement of training received by the members of the Minoa fire department over the years. In 1976 a total of 2 members took 2 classes with the county. In 1990, one member took a total of 1 class. In 1995 ten members took 7 classes. In 2000, 13 members took 5 different classes. In 2002 eight (8) members took 7 different classes. In 2008 two (2) members took 1 class. In each year several members took multiple classes during the year.

In addition to the State and county provided training, this agency also conducts ongoing in house training for all members. The department has members who are certified fire rescue and EMS instructors.

# Training - Kirkville Fire Company

Review of the County training records demonstrate the number of members in the Kirkville fire department receiving training over the years. In 1974 a total of 1 member took 1 class with the county. In 1995, seven members took a total of 12 different classes. In 2000, ten members took 24 different classes. In 2002 Twenty two (22) members took 31 different classes. In 2009 and 2010 combined years eleven (11) members took 13 different classes. In each year several members took multiple classes during the year.

In addition to the State and county provided training, this agency also conducts ongoing in house training for all members. The department has members who are certified fire rescue and EMS instructors.

Analysis 75: The training currently provided to members of each of the agencies is comprehensive, detailed and designed to assure that members have the knowledge skills and abilities to safely deliver service to the public.

Analysis 76: Each department has class rooms for training and a variety of training props for hands on training of basic skills.

Analysis 77: There is a lack of coordination of training efforts between the various departments which causes a duplication of training classes provided by each department rather than the ability to provide a wider variety of development training that would be of benefit to the greater fire rescue and EMS community.

Analysis 78: The lack of training coordination between departments causes the specialized knowledge skills and abilities that members of every department have to not be readily shared by all responders through training efforts within the jurisdiction.

Analysis 79: While each agency has identified class rooms for training efforts there is a lack of identified outdoor space to practice the skills learned in the class room lectures.

Strategic Recommendation 27: Open space that is away from public impact should be identified for routine fire rescue skill training and practice. It appears that the Kirkville fire district may have space that could be utilized by all agencies for skill training and practice.

Analysis 80: There is no "live fire" training facility located in the township. However this town is not the only township in the county without a live fire training area.

Strategic Recommendation 28: A regional approach should be considered for development of live fire, advanced rescue, and emergency vehicle operations training facilities.

# Information requested & received from Onondaga County:

In this study we requested a large amount of information and assistance from departments of the Onondaga county government. The various departments in the Onondaga County government that were requested to provide assistance for this project were each extremely helpful. The materials they provided were of high quality and useful to the accomplishment of the goals of this study.

# 9-1-1 Emergency Communications Center

The following specific information was requested from Onondaga County 9-1-1 office:

- Dispatch protocols for all call types that local fire rescue and Emergency Medical services serving the sponsor area respond to.
- Automatic aid dispatch agreements that may be in effect for these agencies.
- Dispatch information for all departments serving the sponsor area for the years 2010, 2009, 2008 and 2007. We requested that this report include:
  - 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

We requested that if the emergency communications section tracked call process times from receipt of call that they also provide us with the following additional data for each of the above calls:

- Call answer time
- Call information completion time (hang up time)

Analysis 81: The county 9-1-1 CAD system does not interface with the telephone call distribution system and therefore the 9-1-1 office does not capture call processing times. This data is an important part of response time analysis.

# 9-1-1 Office data received

The county 9-1-1 office was extremely helpful in providing not only data that was requested but even more importantly, the interim commissioner spent his valuable time with me to personally walk me through their offices and to explain in detail the operations of the office. We interviewed many employees of the center about their jobs and reviewed the technology that is in use to serve the public.

Analysis 82: The Onondaga County 9-1-1 center is modern, well equipped and staffed with extremely caring and dedicated employees who truly understand the importance of their roles in assuring public safety.

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1 15ul 27. 5u	inple of full out	us used by cou	ing with uppiovu		und Livid ageneies

ONONDAGA COUNT	Y RESPONS	SE PLAN F	ORM		(Mo	dified 10/2	006)		DEPT. #:	32		
FD NAME:	MANLIUS	FIRE DEP.	ARTMENT					BOX #:		1201		
RESPONSE AREA:	MAF1			BC	OX NAME	(OPTIONA	L)	WEST AR	EA STATI	ON ONE (1)	Weeknights	
		INDIO	ATE APPI	ICABLE C	ORRESPON	DING DA	VS OF WE	EK & TIMES	SOFDAY			
DAY OF WEEK	MON	TUE	WED	THUR	FRI			MONTH	From:	JAN	DATE	1
TIME OF DAY	1730-0600	1730-0600	1730-0600	1730-0600	1730-0600				To:	DEC		31
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AMBULANCE RESPO	NSE (LIST PI	RIMARY AN	BULANCE,	IF THEY AN	E UNAVAIL	ABLE THE N	IEXT CLOS	EST WILL BE	SENT)		n-Emergency	
	MAN		AMB								ehicle	NO
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										(H	idicate yes of	10)
					FIRE	& RESCUE	RESPONS	E LISTS				
RESPON	ISE LIST				DISP	ATCH REC	OMMENI	ATION			AUTO-	REPLACE
AIRCRAFT E	MERGENC	(	32TRK2	32E1	32SD1	32SD2	20E7				20TRK1	32E3
APPLIANCE OR			32TRK2	32E1	32SD1	32SD2	20E7				20TRK1	32E3
FIRE / UNKNOWN	AND CO AL	ARMS	32TRK2	32E1	32SD1	32SD2					20TRK1	32E3
HAZ	MAT		32TRK2	32E1	32SD1	32SD2					20TRK1	32E3
HOUSE	RESCUE		32E3	32E1	32SD1	32SD2					20TRK1	32TRK
INVESTI			32TRK2	32E1	32SD1	32SD2					20TRK1	32E3
NON-STR	UCTURE		32E3	32E1	32SD1	32SD2	32M1				20TRK1	32TRK
SIGNAL 79 F	OSSIBLE 80		32TRK2	32E1	32SD1	32SD2	L				20TRK1	32E3
SIGN.	AL 80		32TRK2	32E1	32SD1	32SD2	20E7				20TRK1	32E3
SIGNAL 80 INV		US	32TRK2	32E1	32SD1	32SD2	20E7				20TRK1	32E3
VEHICL	<u>E FIRE</u>		32E3	32E1	32SD1	32SD2					20TRK1	32TRK
VEHICLE / RESIDEN	TIAL LOCK	OUT/IN	32TRK2	32E1	32SD1	32SD2	32MC1				20TRK1	32E3
WATER	RESCUE		32TRK2	32E1	32SD1	32SD2					20TRK1	32E3

# Figure 28: list of units and tabs to other dispatcher information used by the 9-1-1 personnel

AGENCY	#	COUNTY	AGENCY	#	COUNTY
			Otisco Fire	46	Onondaga
Air One		Onondaga	Owasco Fire	0617	Cayuga
Air National Guard Fire	67	Onondaga	Palermo Fire	3819	Oswego
Airport Crash Fire	99	Onondaga	Pennellville Fire	3821	Oswego
Amber Fire / Amb	01	Onondaga	Phoenix Fire	47	Onondaga
Apulia Fire	02	Onondaga	Plainville Fire / Amb	48	Onondaga
Baldwinsville Fire	03	Onondaga	Pompey Hill Fire	51	Onondaga
Belgium Cold Springs Fire	04	Onondaga	Port Byron Fire	0618	Cayuga
Borodino Fire	05	Onondaga	Preble Fire	1208	Cortland
Brewerton Fire / Amb	09	Onondaga	Rural Metro Amb	88	Onondaga
Bridgeport Fire	07	Onondaga	SAVES Amb	83	Onondaga
Camillus Fire	08	Onondaga	Sempronius Fire	0627	Cayuga
Canastota Fire	2703	Madison	Seneca River Fire	52	Onondaga
Cato Fire	0604	Cayuga	Sennett Fire	0621	Cayuga
Caughdenoy Fire	71	Onondaga	Sentinel Heights Fire	53	Onondaga
Cazenovia Fire	2704	Madison	Skaneateles Fire	54	Onondaga
Central Square Fire	3805	Oswego	Solvay Fire	57	Onondaga
Chittenango Fire	2705	Madison	South Bay Fire	58	Onondaga
Cicero Fire	10	Onondaga	South Onondaga Fire	59	Onondaga
Clay Fire	11	Onondaga	Southwood Fire	60	Onondaga
Cleveland Fire	3806	Oswego	Spafford Fire	61	Onondaga
Cody Fire	72	Onondaga	Syracuse Fire	99	Onondaga
Constantia Fire	3808	Oswego	Taunton Fire	62	Onondaga
Cortlandville Fire	1213	Cortland	Truxton Fire	1209	Cortland
Cuyler Fire	1203	Cortland	Tully Fire / Amb	63	Onondaga
Delphi Falls Fire	13	Onondaga	Volney Fire	3828	Oswego
Deruyter Fire	2706	Cortland	Warners Fire	65	Onondaga
Dewitt Fire	14	Onondaga	WAVES Amb	87	Onondaga
East Syracuse Fire	15	Onondaga	Weedsport Fire	0625	Cayuga
EAVES Amb	80	Onondaga	West Monroe Fire	3833	Oswego
Elbridge Fire	17	Onondaga	West Niles Fire	0628	Cayuga
Fabius Fire	18	Onondaga			
Fairmount Fire	19	Onondaga	UNIT	DESCRIPT	!ON
Fayetteville Fire / Amb	20	Onondaga	4TOWN#	4 Town Ambulance	
GBAC Amb	81	Onondaga	88AUB1	Rural Metro Auburn	
Granby Center Fire	3810	Oswego	88MAD1	Rural Metro Madison	
Hastings Fire	3811	Oswego			

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# **Response Time analysis**

Recently Onondaga County released a report to the press on "average" response times to fires by all the departments in the county. Unfortunately the public and many members of the emergency services see these "average" response times as a true measure of the efficiency of their fire rescue and EMS services. However, from a professional analysis point of view simple "averages" present an inaccurate view of service capabilities of an agency. Averages provide an inaccurate view that is either a slower or a faster response time due to extremely longer and/or shorter response times being added together with all responses and the sum being averaged. To properly analyze response times it is vital that the complete dispatch and arrival data be carefully reviewed and that anomalies of extreme times be identified as not typical of the agency's actual response patterns.

For this study we obtained dispatch records from the county 9-1-1 center for the past 3 years. These records provided us with an in-depth view of the very high work load of the dedicated county public safety dispatchers and some of the issues and stresses they face in their efforts to efficiently and effectively dispatch fire rescue and EMS units to emergencies while simultaneously maintaining accurate records of the events associated with that process.

In the review of response times provided by the county dispatch center we examined over 150,000 individual dispatch records in our response time analysis for a 3 year period. The records from the dispatch office show an entry line for every unit dispatched to every incident. In the process we reviewed dispatch times, enroute times and arrival times and status change times for every event. The dispatch records did not show effective response force because arrival data for every unit dispatched is not currently recorded as a result of a current lack of a consistent policy to have every responding unit change status through their on board computers immediately upon arrival at all incidents. Currently not all command vehicles have this capacity.

Preliminary review of response times in these records indicated that there was not a significant difference between the records for 2008 and 2009. The year 2007 only contained approximately one half a year's records due to changes made in the CAD system being used. Therefore we elected to analyze only records for 2009 as typical responses for each agency.

### Figure 29: sample of Dispatch records and tabs to other data provided for each agency by 9-1-1 for 2008 - 2010

Type Code	Sub Type	Dispatch Time		Enroute Time	Arrival Time	Clear Time	Unit	Status	Mun	Status Change Time	
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C1	DP	тма	20090101124643	0
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C1	DP	тма	20090101124643	0
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C1	DP	тма	20090101124643	0
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C2	DP	тма	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C2	DP	тма	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C2	DP	TMA	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C3	DP	TMA	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C3	DP	тма	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C3	DP	тма	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C4	DP	TMA	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C4	DP	TMA	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C4	DP	TMA	20090101124645	2
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E22	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E22	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E22	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E24	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E24	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E24	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E13	DP	тма	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E13	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E13	DP	TMA	20090101124646	3
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E11	DP	TMA	20090101124647	4
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E11	DP	TMA	20090101124647	4
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E11	DP	TMA	20090101124647	4
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C1	ER	TMA	20090101124916	273
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C1	ER	TMA	20090101124916	273
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C1	ER	TMA	20090101124916	273
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C2	ER	TMA	20090101124929	286
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C2	ER	TMA	20090101124929	286
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C2	ER	TMA	20090101124929	286
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C4	ER	TMA	20090101125001	358
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C4	ER	TMA	20090101125001	358
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37C4	ER	TMA	20090101125001	358
ALRM	F	20090101124643	-7109	20090101124916	20090101125455	20090101131752	37E22	ER	TMA	20090101125120	477

### **Averages & Fractal Numbers**

The calculation of "averages" as taught in elementary school is to add all the numbers together and to then divide the result by the total number. This method is not satisfactory in analysis of response times and is no longer acceptable in the industry. The impact of including extremely high or low numbers in determining an average number results in misleading figures that do not reflect consistency of responses.

In this analysis we used fractal numbers to present a clearer picture than straight averages can present. Fractal number take a total number and segment that total into segments with meaning and value in this case, nationally accepted benchmarks for effective response force<sup>10</sup> times was used<sup>11</sup>

The dispatch record spreadsheets were broken down to show the number of event records. Each event record was then calculated to show arrival times: Arrival time less than 5 minutes, Arrival Time 5 - 8 minutes; Arrival Time 8 – 12 minutes and arrival times greater than 12 minutes. The number of each was divided by the total number to determine the percent of each in each fractal

<sup>11</sup> CFAI effective response force times

<sup>&</sup>lt;sup>10</sup> Effective response force is the total amount of apparatus, units including command personnel and apparatus staff required to be on scene within a specified time to effectively mitigate an incident.

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category. In the analysis process it was discovered that the records contained events that were clearly outside of normal response patters for each agency and events that were recorded but noted as 'null" by the dispatch office. We eliminated those events from the calculations to present a more realistic view of response times.

Figure 30: Fractal response time % charts

60%

40%

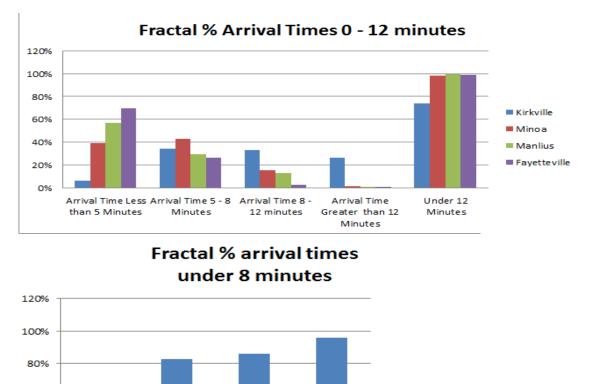
20%

0%

Kirkville

Minoa

Manlius



Immediate and accurate recording of unit arrival times is a key component to accuracy of Effective Response Force determinations and to defend against potential legal actions and adverse publicity when issues of slow response time are raised by the public. Manual entry of arrival times is at best inaccurate a high percent of the time in dispatch offices that use this method. Manual entry is also a stressful task in an already stressful dispatch center environment that can be corrected by providing the tools that technology can provide to automatically record this information directly from responding units. This technology will also improve efficiency and accuracy.

Fayetteville

under 8 minute

Analysis 83: Currently there is reliance upon manual entry of arrival times into the CAD. Recording the same arrival times for every responding unit clearly demonstrated that arrival times are being manually entered into the CAD by dispatchers.

After an initial review of response time data we requested and received a second report form the 9-1-1 office. That report provided status change times as entered directly by responding units from their on-board computers.

Analysis 84: Review of the second report demonstrated that most units do not routinely enter status changes to the CAD system due to lack of consistent policy and training.

Analysis 85: Review of response time analysis indicates that each agency has the ability to arrive at incidents within recognized benchmark times for the types of areas they are protecting. That response is dependent upon the staff available.

Analysis 86: Review of relative response times for each agency demonstrates that stations are properly located to assure response times that are within recognized benchmarks for the types of areas protected by each department.

# **County GIS Office**

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

- Locations of all fire and emergency medical stations in the sponsor area: Fayetteville & Kirkville Fire Departments; Minoa Fire Department station 1 & 2; Manlius Fire Department Station 1& 2; Minoa Ambulance, and the location of all fire and emergency medical stations in all towns adjacent to the sponsor area if that information is readily available.
  - Identify stations by symbol and name on maps and show:
- 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 <sup>1</sup>/<sub>2</sub> miles to the five- mile points in Yellow. All stations can be shown on one map.
- If there are any areas within the sponsor area beyond the 5-mile travel distance calculated for the above map from any fire station, we requested that the county GIS office prepare a separate map indicating those areas in the town in RED on one sponsor area map.

# County GIS Office materials supplied

The professional staff at the county Geographic Information System (GIS) office was extremely helpful in the production of GIS maps that clearly show not only the locations of current stations in the town but also the locations of adjacent town's stations for review of mutual and automatic aid responses.

Strategic Recommendation 29: Prior to relocating or constructing any new fire rescue stations it is important to utilize the county GIS office to do time and distance studies of potential locations to assure proper station locations in relation to other stations and not just the stations governance jurisdiction.

Figure 31: GIS Mapping Onondaga Fire EMS station locations

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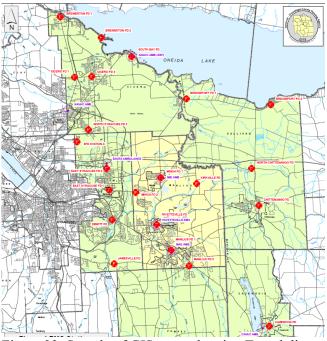
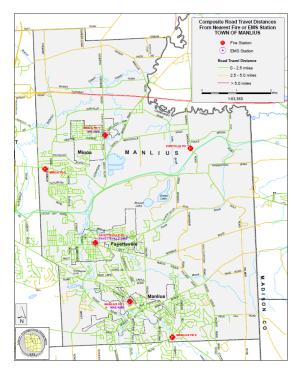


Figure 32: Sample of GIS maps showing Travel distances from stations in Manlius



### Meetings to gather input:

We conducted a series of three local meetings to gather direct input from Firefighters & EMTs; Chief Officers; and Career personnel from Manlius, & Fayetteville fire departments and Minoa Ambulance. 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.

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.

We also requested that each village and town clerk ask every elected official to submit comments and concerns directly to us by email or fax for consideration in this report. Attendees at each of the meetings 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.

# **Meetings & Follow-up Findings**

The meeting group columns below have been identified as A, B, & C so that readers of this report would recognize that there are many similarities in the views from each of the participating groups without any biases that group identification might cause.

Group A	Group B	Group C
Fire and Rescue	Fire suppression	EMS
EMS (Minoa is only EMS on career staff)	EMS	Fire
Public education	Rescue services (top 3, all equal)	Ice/road rescue (3 depts)
Paramedic care	Investigation	Public education
Fire inspections	Fire education	Fire police
Emergency management/disaster level	Public education	Commercial fire inspections
State level delivery of fire and EMS	Community relations	Vehicle extrication
training	Fundraising	Professional training
Car seat inspections	Ice/water rescue	Car seat program
CPR training for the public	wild land fire rescue	Smoke detector program
Home fire inspections	fire police	Street number identification program
CO/smoke detector (Fayetteville village only, not Manlius )	Smoke detectors	Hydrant identification program
Loan closet of equipment for elderly	Building inspections (commercial)	
(Manlius )	Home inspections (residential)	
Ambulance transport (maintain 7 ambulances in the area)	Car seat inspections	
Advance Life Support EMS		
School based fire prevention programs (2,4,6,8 grade, high school) (FM, not ES-M)		
District hazard and risk pre-planning		

# Current services that are being provided:

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# Strengths

Group A	Group B	Group C
Staff available in station 24/7	Staffing	Leadership
Recruitment brings in good people	Recruitment	Volunteers
Fayetteville & Manlius Volunteers	Training	Career staff dedicated
and career work together,	Well trained responders	Training
Volunteers are dedicated to their community,	Teamwork, internally and externally	On duty program
Exceptional ambulance services	Equipment	Recruiting program Awesome
Combination departments	Community involvement	Department response time
(Fayetteville and Manlius)	Mutual aid	Public presence, education
Use same type equipment purchasing standards same, trained (Fayetteville	Automatic aid	Apparatus
and Manlius )	Leadership	Equipment readiness
State and municipal fire/EMS	Dedication	Preplanning and knowledge of
instructors on staff	Volunteer and career staff/personnel	community
Staff proactive in personal training,	LOSAP (all except Kirkville)	Ability to suck it up and meet major problems
Education of personnel overall, high level (sometimes not acknowledged)	Benefits retention system (Fayetteville Manlius Minoa)	- Mutual aid
Officer Chief support for training	Good Support from public officials	Automatic aid
Base level career staff duty time	(Kirkville Fayetteville )	911 system
required for volunteers		Fundraising
Departments work well together covering for each other		
Legislation, in state is good, sometimes not followed but sets standards		
Most career staff started as volunteers, worked their way up		
Career staff hired from within volunteer ranks		

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# Weaknesses

Group A	Group B	Group C
Duty time requirements	Personnel conflicts, inter agency and	Apparatus & equipment repair and
Scheduling	outer agency	maintenance
No minimum on duty staff 24/7	Governing board not dedicated, lack of commitment from elected officials	Stations, facilities do not meet needs of the services being delivered
Volunteers dedicated but unreliable in attendance & availability	village board Manlius & Minoa	Aging membership and community
When career staff out on alarms, there	Availability of responders, various times of day	Communications At all levels, reporting chains, etccoordination
is no backup within station	Lack of progression within organization, leadership development	Constantly changing procedures
Incomplete Tracking of staffing and response times		Daytime response
Need more qualified volunteer drivers	Inability to replace and repair equipment/apparatus	Funding
-	Replacement Schedules not followed	5
Need more qualified interior volunteer firefighters	Budget restrictions	Call volume = fewer training opportunities
No full time career management at senior level governed by volunteer chief officers Therefore, upper level	Lack of community understanding of departments and how they do what	Limited interaction between agencies for training, etc.
management controlled by popularity	they do	Communication, fire police (radios)
Volunteers focused on fire police,	Member retention	Fire commissioners not invested in fire service
other duties, not firefighting	Paid staffing, trying to get approval for personnel needed	Necessity to train many people due to
Fayetteville, one station to cover Manlius 2 when they can't make full	Recruiting	turnover
crew to staff apparatus,	Inadequate facilities	Turnover
Senior management, staffing needs to be established & prioritized	Ineffective voucher approval process	Lack of proper training facilities (live fire)
Personnel sent to parades and no one left at home to cover	Relations between career and volunteer	Poor incorporating of new members who bring in experience
No opportunity no one qualified to	Daytime staffing	No officer development program
advance in ranks	Fire police don't have good	Difficulty in getting people to serve as
4 chief vehicles in Minoa	communication on the scene need Radios	officers
Governing officials of municipalities don't require accountability for chiefs reports, vehicle usage	Unfunded mandates, county, state, federal	Lack of village board/government understanding of needs
• • •		Lack of openness to new people
Municipal politics and lack of management Hiring from within can also be		Better sense that volunteers & paid staff are working toward same goals
weakness, other volunteers expect		in department Internal fighting and favoritism
things		Generation gap
Combined duties and responsibilities when people hold both volunteer and career positions		NIH Not Invented Here syndrome: If
Village management lacking		was not invented here we don't want to know about it
knowledge about fire/ems services		Reluctance to recognize expertise of
Company lieutenants and Captains doing the administrative work		volunteers
Chief doesn't work with labor on		

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leader management agreements,

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Chief leaves labor management issues to local government leaders	
Volunteer company officers are in charge of career staff	
Perceived that some Volunteer officers don't have KSAs required to do the job	
Career staff perceived as threatening to some volunteers,	
No upper level management on career staff	
Career staff not allowed to vote for chiefs	
Competitiveness between departments interferes with operations	
Cooperative effort between Fayetteville and Manlius but not exhibited with other stations, depts.	
Day VS nighttime coverage gaps	
No room for bunking full crews in most stations (in closets)	
Mino leadership against combined volunteer paid fire staff concept	
Minoa has paid EMTs who would help with fire service duties but not allowed	
No ability to get 2 rigs out, ambulances, won't staff enough—no volunteers at EMS, no interest	
Volunteers sign up to serve but don't volunteer after that,	
Feelings of 2 houses within one, distinguish between perks of volunteering VS needs of the dept.	
Need more honesty in the beginning of recruiting to define requirements that new members need to meet to succeed	
Need to get better info to volunteers	
All members need better understanding of department NEEDs	
All members need better understanding of publics NEEDs	
Minoa, double hits stretched out, when Fayetteville is on fire calls, Minoa is their EMS	
Career staff is supplemented by volunteers, not volunteer supplemented by career	
Recruitment promises not followed through,	

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Volunteer requirements not made clear	
Lack of general orders (do have SOP but no general orders)	
Discipline lacking because elected chiefs management need to be friendly to be elected	
Inconsistent management structure between depts.	
Lack of trust & honesty between chiefs and village board,	
Lack of trust & honesty between staff and chief, he said/she said	
Village board has no interest, doesn't want to learn about fire EMS service and its needs	
Some chiefs, feel threatened because it is perceived that career staff is better trained	
Volunteers perceived to be less involved, and less trained	
Minoa struggling with legitimacy of ability to serve	
Local government leaders not understanding purpose / job	
Only fire chief talks with government, not EMS	
Separation between fire/ems departments and municipality government	
Duplication of all services, villages, town, could be integrated, 4 separate DPW, Parks/Rec, etc	
Leaders don't want to lose their kingdoms (Elected officials and department leaders)	
NY state is home rule state	

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# **Opportunities**

Group A	Group B	Group C
Improved leadership that is trained	Continue to enhance community	To work with neighboring
and qualified	programs	departments
Share resources,	Officer development	Growth in membership
Expand Fayetteville Manlius staffing	Consolidated purchasing	Improve retention
model to rest of town	Improve Volunteer/member retention	Improve facilities
More CAREER leadership	Improved structure of ambulance &	Improve apparatus and facility
Increase staffing to meet true needs of	EMS,	maintenance
community	EMT recognition	Centralization of services
Strategic placement of staff	Improve relations with village officials	Integrating technology
Local training facilities	Education, growth and outreach	Utilizing more
Growth of fire/EMS services in town	Facility improvement	technology/computerization
How do we take the taxpayer money		More proactive community
that's right there, right now, and	Combined training for agencies	engagement
make it work better	More involvement with working together	Improve sustainability of combination
Improved efficiency, better budgeting and use of \$	5	departments
	Integration & consolidation of services	Less political BS
Possibly one career department, with one leader, continue volunteer depts.	Fundraising	More coordinated and productive
	Shared services	training Interagency & Real life
Unacceptable phrase: that we are forcing volunteers out	New tool for recruitment efforts	Better coordination between
Make an army of ONE out of multiple	Website: <u>www.recruitny.org</u>	departments
parts		
Being able to grow with local		
development		
Being able to meet the needs of an aging population		
Assure staffing needs are met with no		
loss of current jobs		

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# Threats

Group A	Group B	Group C
Bottom line focus of local government	State mandates	Bedroom community VS budget
elected leaders,	Unfunded mandates	restraints
Possible competition with private service providers (rural metro, etc)	Politics	Apparatus issues
Privatization	Staffing	Potential for violence at scene
Internal threat from EMS medical	Finances and income	Declining community attitude to commit as volunteer
director of 2 departments who is also a volunteer of another, and rumored to	Lawsuits	Volunteer retention
be trying to set up own private	Grant funding	Village politicians
ems/ambulance service.	Friction between career/volunteer	Overall political climate at all levels
Total Volunteer management, chief officers	Location within Town of Manlius /less tax base on north side of canal	Liabilities
Elected officials	Split between areas of town	Don't treat leaders well, including in fire service
Loss of perspective by management that departments are the communities' departments, not	Misunderstanding of the services provided	Lack of local industry, leads to lack of volunteers and lack of tax base
THEIR departments	Public has no idea what needs of service providers are	Suburban sprawl
	All about the money	Weather incidents
	Younger generation not interested, not	Mass incidents
	into volunteering, community	High use facilities
	Workforce demands, no time to volunteer	Aging population, especially when gather in places difficult to serve
	Loss of local industry business impacts both tax base and volunteers	Notion of centralization, need efficiency without losing identity and
	What's in it for me attitude & not into	pride
	helping community as much	If separate volunteers from identity with community, might lose volunteers
	Continued ability to meet needs of aging population	Need to integrate rather than centralize
		Conflicts between career and Volunteers

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# Goals

Group A	Group B	Group C
Improve service & Response	Officer development	Improve training opportunities
Combine all departments	Answer every call with appropriate equipment	Remove chicken BBQ from district
Combined resources Seamless transition agency to agency	Combining services to meet needs of community	Improve recruitment and retention Improve facilities
Standards of Operations for all	Do more with the school districts for recruiting and develop feeder	Eliminate negativity
Standard training	program	Be able to continue working to protect the community
A department of ONE	Recruitment social networking and video	Better PR for dept
More staffing to get qualified personnel to all incidents	Improved community growth and	Secure financial stream
Minimum staffing levels in all stations	outreach	Improve relations with village authorities/government
Leadership with vision	Training, on a continued basis beyond first levels	Having residents be proud of their fire
Test all officers for proficiency for the positions they hold	Code-compliant safe and functional facility	department Improve awareness of department
ICS NIMS	Mentoring for new recruits	Better/more incentives for volunteers
Professional leadership Career advancement	Retention of members, it's a cost to lose people when they're trained	To get municipalities to participate in overall financial plan, coordination
Better management training	Improve relationships with	
Consistent competent volunteer component	municipalities at all levels Improve knowledge base of elected	
Achieve the opportunities shown above	officials. They need to know who we are and what our needs are	
Single combination station in Manlius		

# Meeting findings RE Current NIMS / ICS training and use at incidents:

Attendees were asked to rate the current level of Incident Command of each from 1 - 10 with 10 being the best or highest:

• Some issues were not rated but commented on by attendees

### NIMS / ICS Training department wide:

- ICS is required training
- Rated 5, 8, 8-9, 8,
- Rated at Zero or 1 in several meetings

### NIMS / ICS Training for department command staff:

- ICS is required training
- Reported that chief officers are not using ICS

• Reported that some officers have little acceptance of the value of ICS

### NIMS / ICS Training with other responding Fire Rescue and EMS agencies:

- Not as active as it used to be
- some involvement with other agencies

### NIMS / ICS Training with Police agencies:

- Very little interaction, other than CRC
- Have radios but they still don't work with police (need to patch or go through call center, not same frequency, etc..)
- No real training together with police, but police are on scene

### NIMS / ICS Training with local businesses, schools and industry:

- Town wide committee for disaster preparation, CRC, meets monthly, drill together
  - ICS policy with CRX/rail not followed or practiced
  - CRC committee at state county level not local,
  - CRC meetings poor notification of meetings,
  - CRC committee little involvement from Chiefs
  - CRC is more police, asked for programs but not given,
  - CRC programs and meetings conflict with local schedules

# NIMS / ICS procedures and principles are actually initiated at all emergency incidents by our agency:

- Establish command, yes most of time for fire incidents
- Not at EMS incidents
- ICS Not used at all incidents

### Suggestions for improvements of NIMS / ICS use and training:

- Incorporate into training
- Practice & drill using ICS
- Making sure we do use ICS at all incidents and expand roles as incident builds
- Make sure there is someone taking charge of safety
- Visual aid ICS posters in each station,
- Have every leader have ICS position responsibilities and task flowchart
- Noted that EMS doesn't use ICS generally

The town established a Critical response committee in 2001 to improve coordination and communications between emergency responders and the community. The committee is managed through the police department and has comprehensive details in place. There is frustration on all sides about the lack of participation and utilization.

Analysis 87: There has been a lack of participation in this committee by ranking leaders of the fire rescue and EMS services. This may be due to the scheduling time for meetings. This

committee should provide the forum for development of a unified Incident Command system in the total community

# General Comments from three groups attending SWOT meetings

*RFG* Note: Some comments edited for clarity and language. Some were combined if commonalities existed but intent of each comment is kept intact to reflect the opinions and perceptions of the people who provided the input.

- ICS is not used at every incident
- ICS not supported by management •
- Chief doesn't believe in ICS •
- Chief took ICS course thought was a waste •
- Safety officers at incidents may not be capable for interior operations
- Safety officer may not make decisions properly or immediately address safety issues •
- Classwork is not experience or expertise •
- Let company officers BE company officers •
- Don't need all the chiefs at every incident •
- Non decision makers/non policy makers are sent to trainings •
- Managers won't make decisions or attend trainings
- Lack of accountability tags •
- Training VS knowing- need to use training to know it
- The lack of leaders willing to take command at incidents •
- Career staff needs to be classified as firefighters rather than EMTs to be exempt from workers compensation laws, to protect their recovery time if they are hurt. (This issue needs to be examined by an attorney and addressed in the new organizational structure)
- The majority of volunteers perform mainly auxiliary support or fire police functions •
- Many volunteers are not trained to do interior or don't have experience.
- It would be better for everyone if the roles and responsibilities were more clearly defined all • around.
- Expectations need to be clear all around •
- Every member needs to be in a group in which everyone knows and is comfortable with their role
- Concern that the people directing incidents, don't always have the requisite knowledge and • experience
- The career staff has no say and no vote as to who is in command •
- Suggest that the career staff have a command / management representative, at least someone who can command at incidents.
- Need to measure training and commitment of the Fire Commissioners
- Need to examine Recruitment and retention programs of each department •
- Need for more Inter-departmental training
- NYS should provide more funding for volunteer Fire Departments across the board
- Need to correctly exercise Span of Control and managing effectively so that ICS structure • appropriate to incident size
- Fire and EMS services have Great Volunteer and Career people who care about the community
- Services just need better organization and leadership to harness member motivations
- Everyone acts as an individual. Need to be a team •
- Need career representation at chief level
- Make all officers go to First Line Officer Training
- Have Fire Chiefs with more training than career staff

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- Have Career Department augmented by volunteers during the day
- Have Volunteers department augmented by career at night
- Require all officers to show annual proficiency of NIMIS ICS appropriate to their rank
- Suspend all officers from command roles until proficient for safety of personnel and citizens
- Reportedly one Fire Chief does not meet 1910.156, In NY the Chief must have training that exceeds that of the people he is in command of. (training is that is acceptable is determined by the standard)
- There are a lot of education and talent among the career staff that is not tapped or acknowledged.
- There is poor record keeping in general
- Leaders need to understand members' education and training backgrounds
- There are members career and volunteer with advanced degrees; Masters, Bachelors, Associates degrees etc.
- ICS Span of control needs to be appropriate for incident size.
- Use ICS consistently
- The town needs both a volunteer and career component for fire and EMS
- Keep building on the Fayetteville and Manlius FD relationship
- Need more classes
- Make the town a better community
- Use and practice NIMS/ICS training
- Incorporate ICS into all training
- Practice ICS Implementation
- Have all agencies practice ICS and use it at all drills, etc.
- Help elected officials understand their important role in the delivery of emergency services and their roles in ICS
- Help elected officials understand their responsibilities and liabilities related to the Fire Chiefs and support needed for the responders

Analysis 88: One attendee at the meetings stated that he felt unable to speak enough about exact details that brought him to the meeting. He expressed that nearly everything discussed was very, very general to the fire service. Consultant's note: The input from those who attended most meetings provided a comprehensive over view of current conditions, concerns and expectations. As the process of improvement moves forward there certainly will be the need to assure specific and detailed input into every aspect.

Analysis 89: One meeting attendee stated "*Stop using Command and Ops on one room fires and small incidents. It just muddies the air.*" Consultant note: This reflects a total misunderstanding of the importance of proper use of ICS. ICS must begin with the first arriving unit and that officer's size up and risk analysis. ICS builds upon those initial assessments as needed as a direct matter of responder and public safety.

Analysis 90: One attendee stated "Volunteer Fire Chief is the PAID supervisor of career staff as the administrative assistant and asked: Is this a violation of the Fair Labor Standard Act? Consultant note: This is a legal question that should be addressed to the village attorney.

# **Benchmarking Reference Materials**

# **Definitions: Benchmark & Baseline**

**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.

The Consultant identified industry benchmarking for several relevant areas of Fire Rescue and EMS Service delivery to provide the Sponsors a basis for assessing current operations. The Benchmarks were compared with the current Baselines information provided for performance as well as "best practices" seen in the industry today. This benchmarking analysis includes, but is not be limited to the following:

- Response Times to mobilize Effective Response Forces at the scene of emergencies
- Staffing
- Total Fire and EMS spending (total, per capita)
- Capital equipment employed
- Technology implementation
- Organizational Structures
- Tax Rates

# Generally Accepted Benchmarks, Standards, Goals and Objectives

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 was 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. In the United States and around the world, 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. With the cooperation and support of many federal, state, and local agencies, ISO delivers mission-critical information to help solve challenging infrastructure problems and aid in disaster readiness and threat assessment for communities.

The 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:

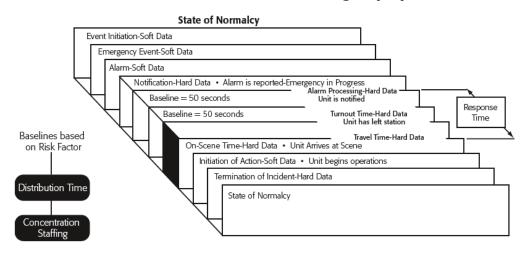
- Communities fire protection, water systems, emergency reporting capabilities and other critical infrastructure, building codes, and potential for natural and man-made catastrophes.
- Buildings size, construction, occupancies, hazards, and public and private fire protection.

# 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 33 Cascade of events



# **Cascade of Events Associated with Emergency Operations**

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 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.

# 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 <sup>12</sup> defines 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 and the arrival times for the entire effective response force.

**Metropolitan**: Population over 200,000 people and/or a population density of over 3,000 people per square mile Bench mark:

First unit 4 minutes, Second unit 8 minutes, Balance of 1<sup>st</sup> alarm assignment 8 minutes

<sup>&</sup>lt;sup>12</sup> Center for Public Safety Excellence Commission on Fire Accreditation International Fire and Emergency Service Self-Assessment Manual 7<sup>th</sup> edition

This report was prepared with funds provided by the New York State Department of State under the Local Government Efficiency Grant Program, Contract No. T-088849.

### FINAL REPORT

Management & Operations Study of the Fire Rescue Departments & EMS Resources and Administration Prepared for the sponsors: Town of Manlius; Town of Pompey; Villages of Fayetteville, Minoa, Manlius & Kirkville Fire District

```
Performance 90%
Base line – 70%
First unit 5 minutes/ 20 seconds,
Second unit 10 minutes/40 seconds,
Balance of 1<sup>st</sup> alarm assignment 10 minutes/40
Performance 90%
Urban: Population of over 30,000 people and/or a population density of over 2,000 people per square mile
Bench mark:
First unit 4 minutes,
```

Second unit 8 minutes, Balance of 1<sup>st</sup> alarm assignment 8 minutes Performance 90% Base line – 70% First unit 5 minutes/ 20 seconds, Second unit 10 minutes/40 seconds, Balance of 1<sup>st</sup> alarm assignment 10 minutes/40

```
Performance 90%
```

**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 Villages and hamlets in the Town of Manlius are in this category*) Bench mark:

```
First unit 5 minutes,
Second unit 8 minutes,
Balance of 1<sup>st</sup> alarm assignment 10 minutes
Performance 90%
Base line – 70%
First unit 6 minutes/ 50 seconds,
Second unit 10 minutes/40 seconds,
Balance of 1<sup>st</sup> 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. <u>(Large areas of the Town of Manlius and Pompey outside of the Villages are in this category)</u>
Bench mark:
```

First unit 10 minutes, Second unit 14 minutes, Balance of 1<sup>st</sup> alarm assignment 14 minutes Performance 90% Base line – 70% First unit 13 minutes Second unit 18 minutes/20 seconds, Balance of 1<sup>st</sup> alarm assignment 18 minutes/20 seconds

```
Performance 90%
```

```
Wilderness: Any rural area not readily accessible by public or private maintained road
Bench mark: (Manlius includes some land that may be considered to be in this category including state and local parks)
```

First unit N/A, Second unit N/A, Balance of 1<sup>st</sup> alarm assignment N/A Performance N/A Base line – 70% First unit N/A Second unit N/A,

Balance of 1<sup>st</sup> 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. *At this time local time and unit record keeping practices does not allow the subject agencies to monitor their performance baselines to compare with accepted benchmarks*.

# **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.

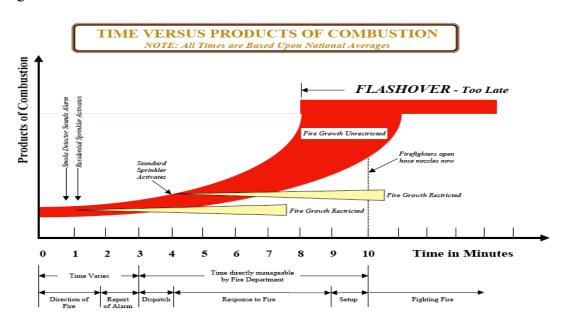


Figure 34: Flashover time chart

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.

# **Emergency Medical Service Generally Accepted Guidelines**

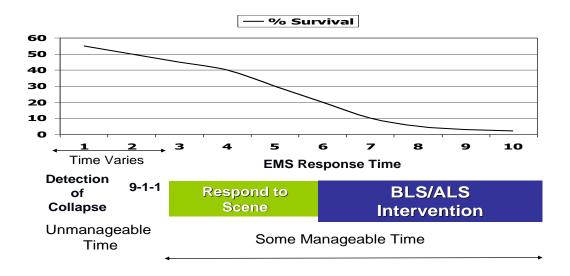
# Cardiac Arrest Survival: Brain Death

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 35 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 <u>American Heart Association (AHA)</u> 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 <u>American College of Emergency Physicians (ACEP)</u>, 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."

<u>American Public Health Association (APHA)</u> 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 <u>National Association of EMS Physicians</u> 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 <u>International Liaison Committee on Resuscitation</u> stated in a 1997 article that, "Most adults who can be saved from cardiac arrest are in ventricular fibrillation

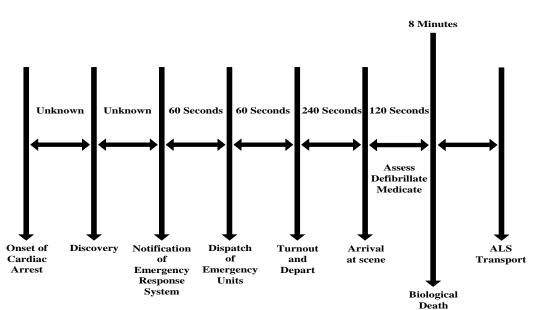
(VF) or pulse less ventricular tachycardia. Electrical defibrillation provides the single most important therapy for the treatment of these patients."

The <u>American College of Occupational and Environmental Medicine</u> 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 CPR; defibrillation; and advanced cardiac life support (ACLS) drug support."

<u>Emergency Health Services Federation</u> 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 36: Emergency medical time factors for cardiac survival



# EMERGENCY MEDICAL - CARDIAC

It is for these reasons that NFPA<sup>13</sup> 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

<sup>&</sup>lt;sup>13</sup> NFPA National Fire Protection Association

This report was prepared with funds provided by the New York State Department of State under the Local Government Efficiency Grant Program, Contract No. T-088849.

service is provided by the fire department;" <sup>14</sup>

- ... 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-Paramedic (EMT-P) level;" <sup>15</sup>
- ... 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." <sup>16</sup>

As can be seen by comparing the Fire Propagation Curve and the Cardiac Patient Survival Rates charts 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.

Initiation of CPR ♥	Time to Defibrillati on ✓	Time to Advanced Cardiac Life Support (ACLS)	Predicted Survival Rate/ All Cardiac Arrest (percentages)	Survival Rate/ All Potential Survivors (percentages)
10 minutes	11 minutes	13 minutes	4.6%	6.9%
5 minutes	11 minutes	12 minutes	18.2%	27.2%
5 minutes	6 minutes	11 minutes	25.8%	38.5%
5 minutes	6 minutes	7 minutes	34.2%	51.0%

Figure 37; Effect of Response Times on Cardiac Patient Survival Rates

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,

**RFG Fire Rescue Consulting** 

<sup>&</sup>lt;sup>14</sup> NFPA 1710, Section 4.1.3.1.1(3)

<sup>&</sup>lt;sup>15</sup> NFPA 1710, Section 5.3.3.3.2.2

<sup>&</sup>lt;sup>16</sup> NFPA 1710, Section 5.3.3.4.4

• 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.<sup>17</sup>

Analysis 91: It was observed that Automatic Defibrillators have been located in many areas around town including at school recreation fields. Provision of automatic Cardio Defibrillator on-site and encouraging members of the local communities to train in CPR will improve cardiac survival rates.

<sup>&</sup>lt;sup>17</sup> The Journal of the American Medical Association, October 28, 1992; p. 2291

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# Summary Statement

This study was conducted to examine the total fire rescue & EMS services of the sponsor organizations. They are to be highly commended for joining together in this effort to assure efficiency effectiveness and safety for their constituents and for the dedicated and brave members of these services. The members of the services clearly see the needs to make orderly improvements in the service delivery system.

- There is a system wide active member acknowledgement that staffing 24/7 is a major issue of concern.
- There is overwhelming acknowledgement that there is a need to assure proper incident management at every incident for the safety of all responders.

This study clearly showed that organizational changes and improvements are needed to assure public safety across all of the sponsors' areas.

# **Cost Saving Potentials**

Strategic Recommendation 30: Throughout this report we have presented recommendations that if implemented will result in cost savings both long and short term. Improved Volunteer recruitment and retention programs coupled with enhanced station conditions will produce an atmosphere that will encourage volunteer on duty staffing in every station. Having a single base of career employees will allow them to be detailed where needed when on duty rather than confined to a single station. A single labor management agreement will provide a tool for better cost control. Purchasing and service agreement bids for larger agencies are generally more cost effective than multiple bids for the same products and services among smaller agencies. Control of logistical supplies at a single point reduces the size of needed inventories for multiple products used by each service. Proper management and direction focused on cost control will provide cost savings.

# **Community Identity**

Throughout this study we heard the fear of departments losing their identity to the community they serve.

• We also heard concerns that there remains a resistance among some leaders of the villages and in some of the agencies of "losing their power" and control over the operation of "their" services.

Strategic Recommendation 31: The fear of losing department identity to the community being served is unfounded if the establishment of a Joint Fire district is viewed as an administrative and managerial reorganization. There is a need to assure that the development of the Joint Fire district remains focused on maintaining the name and character of each neighborhood fire station.

Strategic Recommendation 32: The fear of "losing power" and control is a normal human fear of all leaders. That fear must be overcome through rational evaluation of factual information. Leaders must not be afraid to work together to assure every taxpayer and every member of the fire rescue and EMS services that the creation of a Joint Fire District in the long term will improve efficiency effectiveness and safety in the delivery of fire rescue and EMS in the greater

community. The creation of a Joint Fire District will prove to be "<u>What is in the public's best</u> interest"

# **Implementation Plan Outline**

Following the acceptance and approval of the fire rescue EMS study report we propose the following outline for the successful implementation of the Joint Fire Rescue District:

- 1. Establish legal guidance for the process from the start.
- 2. Follow the steps as outlined in the NYS Department of State "How to" Consolidate Fire Protection in Fire Districts, Fire Protection Districts and Villages.

# Primary Implementation Immediate Objectives:

- Administration Reorganization
- Address Operational issues
  - Safety
  - o Staffing
  - o Standards of Response Coverage
  - o Incident Management
  - o Standard Operating Guidelines
  - Training
  - Records Management
- Address Tax Impact issues
  - Staffing Costs
  - o Facilities Costs
  - Apparatus and Equipment Cost Control
  - o Efficiency and effectiveness
  - Planning; Strategic and Specific
  - Logistics Purchasing

# Reorganizational Oversight Tasks & Teams

# Project Oversight Team

Current sponsor committee for conducting the study should be re-tasked to oversee implementation efforts and team task assignments.

- Maintaining core sponsor committee will assure project continuity
  - Committee role will be team assignment & oversight
    - Consultant will provide a project tracking tool in MS Excel to assist with project management
    - Committee will seek assistance in project management from university school of government professors and interns
    - Committee will seek marketing expertise from within community and local universities

- Oversight team will establish operational teams to review, plan and develop:
  - 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.
  - Joint staffing at fire stations;
  - Combining training programs;
  - Dispatching the closest resource to an emergency incident;
  - Apparatus maintenance for another;
  - Pooling specialized resources, such as heavy rescue, hazardous materials, rope rescue and emergency medical services

# Governance Team:

The local governments currently involved in providing and/or funding fire rescue and EMS services will appoint a governance team.

- Elected officials of Village, Towns and Fire district
- Legal team composed of local lawyers with assistance from SU School of Law and the School of Government
  - Task conduct the legal steps needed to form a Joint Fire district as defined in Article 11 and Article 11-A of NYS Town Law which describes the procedures and requirements for the consolidation of fire services in towns.

# **Staffing and Finance Issues Team:**

- Current staff from each village and town and from each agency should be coordinated and utilized within their expertise specialties to develop the standard operating guidelines for each area within the new organizational structure
  - Village and Town Staff, Representatives of Labor Tasks
    - Finance
    - Assessment
    - Current indebtedness of each jurisdiction
    - Rank structure;
    - Employee/member benefits, such as retirement systems and service award programs;
    - Union contracts
    - Personnel policies.
    - Payroll

- Research and Develop Specifications and Requests for Proposal for Payroll and Benefits management services
  - Current local governments would be invited to bid these services in completion with outsource companies with the expertise for performance of these services.
- Benefit management
- Purchasing
- Career Fire rescue and EMS staffs -Tasks
  - Serve as members of project teams where their expertise will provide valued input
  - Serve on each team as support to team for development of reports
- Volunteers and Career Staff from all ranks as appropriate Tasks
  - Training standards and programs;
    - Assure that all levels of responders have the training required to perform the functions of their rank
    - Assure that training schedules are flexible to accommodate the various time constraints and needs of current and future responders
  - Standard operating procedures;
  - Response standards of coverage
  - Records management
  - Communications
  - Facilities
    - Review for safety and systems efficiency
  - Review location of proposed facilities
  - Apparatus, Vehicle and Equipment maintenance
    - Research and Develop Specifications and Requests for Proposal for apparatus and equipment maintenance
      - Current local governments would be invited to bid these services in completion with outsource companies with the expertise for performance of these services.

# Securing outside expertise:

- Utilize current volunteer and career member contacts with Universities and the public to obtain Pro Bono expertise
  - School of Law
  - School of Government
  - Schools of Marketing & Business
- Publically seek additional residents with expertise in specialized areas through marketing

# **Project Timetable**

The proposed time table for each action item will be included in the MS Excel workbook for project implementation. That timing will flex with the speed at which local governments elect to move forward with this project.

# **Project Cost Management:**

- It must be the goal of the Joint Fire District implementation project to utilize existing and local expertise resources to minimize costs.
- Advertising and marketing should be the only additional costs for the process