FUNCTIONAL CONSOLIDATION: IMPROVING THE DELIVERY OF FIRE AND EMERGENCY SERVICES IN SOUTH CENTRAL PENNSYLVANIA

EXECUTIVE LEADERSHIP

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: ______________________________
Abstract

The problem was that South Central Pennsylvania is served by an excessive number of fire and emergency service agencies, therefore creating an over abundance of equipment and facilities. The purpose of this applied research project was to identify and quantify the potential benefits of functional consolidation between emergency services agencies without contemplating a formal merger.

Selected questions were used to frame the research and to set investigative parameters. Descriptive research methodology was utilized to analyze this problem. Procedures utilized in this applied research project included a review of available literature sources. To supplement the literature review, a survey instrument was utilized to help determine whether or not individual volunteer fire companies would be receptive to functional consolidation and what benefits might be realized.

The literature review provided information on functional consolidation as well as what resources may be best suited for this purpose. It was discovered that the majority of fire departments participate in mutual aid, but most do not participate in true functional consolidation. Although there are no standards to frame functional consolidation, several models exist that can guide the process. The survey indicated that many agencies believe functional consolidation would benefit their organization. Results from both the research and survey indicated that functional consolidation may enhance the response capability of participating agencies while reducing capital outlay and expanding the human resource pool – both of which are scarce.

Recommendations were made to evaluate the feasibility and potential benefits of sharing resources through functional consolidation.
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Introduction

The fire service of the 21st Century is faced with a plethora of new challenges extending beyond the traditional norms related to fire suppression and rescue emergencies. Today’s customers expect their fire department to provide a broad spectrum of services while at the same time holding firm on the fiscal balance sheet. Regardless of the method for providing vital community services, career, volunteer, and combination fire departments are finding it more difficult to provide more services with stagnant or shrinking budgets. With the exception of some of the larger metropolitan departments, many fire service leaders struggle to justify funding to provide even the most basic of services. Securing funds for specialty services such as hazardous materials response, technical rescue teams, aerial apparatus, and dedicated prevention divisions can be compared to performing a magic trick. Tough decisions regarding staffing, station location, apparatus deployment, and other governmental demands all have an impact on the ability to provide adequate service.

Pennsylvania boasts as being the birthplace of the American volunteer fire service when Benjamin Franklin organized this country’s first volunteer company, the Union Fire Company, in Philadelphia in 1736. Today, Pennsylvania holds the distinction of having more fire departments at 2,448 and more firefighters per capita than any other state. Yet with all this rich fire service history, Pennsylvania has suffered from a drastic reduction in the number of active volunteer firefighters from 152,000 in 1985 to approximately 72,000 in 2004 (LBFC, 2005, S-6).

Pennsylvania is structured as a Commonwealth form of government with York County lying in the South Central Region. The intent of this governmental structure is to
place the authority and responsibility for providing services at the lowest level of
government - borough, township, or city level. York County has 72 individual units of
government providing services to nearly 400,000 citizens. Public safety services are
provided by 67 fire departments, 21 police departments, and 70 emergency medical
service (EMS) agencies. In some cases, small municipalities encompassing just one
square mile have their own fire, police, EMS, and public works departments.
Surrounding these tiny towns are other municipalities that often have multiple
independent fire companies. In one 25 square mile township, 5 independent fire
companies provide service to just over 25,000 residents. These scenarios depict
hometown examples of the abundance of fire departments that exist in many areas of
Pennsylvania. These are the result of both tradition and the desire to have control over
their local services. Many local fire departments exist as community based volunteer fire
companies with a long history of tradition. Tradition aside, many areas of Pennsylvania
enjoy an over abundance of emergency services physical assets. The problem is that
South Central Pennsylvania is served by an excessive number of fire and emergency
service agencies, therefore creating an over abundance of equipment and facilities.

In 2003, the Pennsylvania Senate established a bipartisan legislative commission
to “develop legislation to provide direct and indirect assistance for the purpose of
improving the delivery of emergency services in the Commonwealth of Pennsylvania”
(SR 60 Commission, 2004). This group became known as the SR (Senate Resolution) 60
Commission. In November 2004, the SR 60 report was released. The report offered 23
recommendations to improve the delivery of fire and emergency services throughout the
Commonwealth of Pennsylvania. In June 2005, the Legislative Budget and Finance
Committee of the Pennsylvania General Assembly published a report entitled “The Feasibility of Regionalizing Pennsylvania’s Volunteer Fire Companies”. This document reported that according to Jensen and Snook (2000) “a myriad of strategic alliances, cooperative service agreements, consolidations, and mergers” have been utilized nationwide to address the challenges facing America’s fire service. The purpose of this applied research project is to identify and quantify the potential benefits of functional consolidation between emergency services agencies in South Central Pennsylvania. To accomplish this task, the author will utilize descriptive research methods to analyze this problem. The following four questions will be used to guide the research:

1. What is functional consolidation and how will it differ from a formal merger?
2. What types of services can be combined into a functional consolidation between neighboring agencies?
3. What are the potential impacts of functional consolidation?
4. How can functional consolidation benefit the participating emergency services agencies and South Central Pennsylvania’s (SCPA’s) communities?

**Background and Significance**

York County, Pennsylvania is located in the South Central region of the Commonwealth of Pennsylvania. York is a diverse county that encompasses 911 square miles with a population of nearly 395,000. The “Articles of Confederation” were first drafted in York, in which the words “United States of America” first appeared. The population core of 140,000 (35%) reside within the York Metropolitan region consisting of only 10% of the land area that includes the City of York and the first tier ring of suburban townships surrounding the city. The balance of the land area throughout York
County is a mixture of developing suburban sprawl and quiet agricultural communities. In accordance with Pennsylvania’s commonwealth form of government, the responsibility for providing emergency services rests at the lowest level of government. Within York County there are 72 individual local municipalities. This includes one city, 36 boroughs, and 35 townships. Providing emergency services in these 72 local municipalities are 67 fire departments, 21 law enforcement agencies, and 70 EMS providers.

The emergency services laws of Pennsylvania also mandate that each local government appoint an emergency management coordinator. At the county level, the York County Department of Emergency Services (YCDES) is charged with the responsibility for coordination of programs that serve the entire county. These include 9-1-1 communications, hazardous materials planning & response, and coordination of radiological response for the 2 nuclear power plants – Three Mile Island and Peach Bottom. YCDES also provides assistance to local municipal coordinators on request and works with all schools, daycare centers, nursing homes, and hospitals to ensure they are capable of protecting their at-risk populations.

At the end of the day, the possibility exists to involve more than 200 response agencies on a major incident. To add another element of concern, each response discipline may operate on one of three different radio communications systems. The management of a major incident will at best be an overwhelming experience for the incident commander. Therefore, York County’s volunteer fire services would likely benefit from exploring some type of functional consolidation.

This applied research project is relevant to the Executive Leadership course in that
managing a relatively new philosophy like “functional consolidation” will require the leadership skills and abilities discussed throughout the course. Those include employing influencing and persuasion tactics into the advanced decision making process; understanding fire service culture and how that relates to motivating people during proposed change; and exercising superior leadership while managing the complex conceptual ideas surrounding the culture and philosophical change associated with functional consolidation. This applied research project directly relates to the following 5-year operational objectives of the United States Fire Administration (last updated October 2005):

1. To reduce the loss of life from fires of firefighters.

2. To promote within communities a comprehensive multi-hazard risk reduction plan led by the local fire service organization.

3. To appropriately respond in a timely manner to emergent issues.

These objectives will be accomplished by ensuring that we develop an organized approach to managing all emergency incidents – both everyday and extraordinary – and implement a systematic process for staffing, training, and responding to both emergent and non-emergent incidents. Functional consolidation will support and facilitate efficient coordination of response resources by and between participating municipal agencies, while improving the fiscal dividends of the cost – benefit equation.

**Literature Review**

The fire service began to entertain the concepts of consolidation, strategic alliance, and cooperative agreements in the 1950’s and 1960’s. Formal cooperative efforts first began during the 1970’s and 1980’s, mostly in the western states of
California, Oregon, and Washington. Most areas that were first to embrace mergers and consolidations are “typically less than 40 years old and do not have the tradition and history issues…as other sections of the country may have” (LBFC, 2005, p.34). By the mid 1990’s, fire departments in the Midwest and Northeast were either voluntarily or forcibly discussing the ideas of some type of consolidation. According to Jensen and Snook (2000), “during the 90’s, however, political, economic, and operational forces pushed emergency service providers to seek alternatives…the result has been a myriad of strategic alliances, cooperative service agreements, consolidations, and mergers”.

Exploration into cooperative relationships between fire and emergency services providers is in direct response to the fiscal, personnel, and service demand challenges of the 21st century.

Although the overall direction is leading fire service managers to investigate regionalization, there exists no consensus as to what model to utilize. After a failed merger attempt between Cedar Hammock and Southern Manatee Fire Districts in 2001, the Florida Office of Program Policy Analysis and Government Accountability (OPPAGA, 2001) recommends “the state establish a mechanism to provide guidance to local communities to assist them in planning and in determining optimal approaches to achieving and maintaining cooperation” in emergency services delivery. Thomas (1994) reported that “approaches range from the informal sharing of individual personnel to the formal consolidation of departments across jurisdictional lines”. Ultimately it is up to the elected officials and key leaders of the fire department to determine “whether or not there is interest in full or functional consolidation, what level is preferred, what services could be shared, and what partners to include in the process” (Flaherty, 2005, p. 32).
Cooperation on a daily basis can take many forms: mutual aid, automatic aid, or service contracts. Mutual aid can result from a formal or informal agreement between two or more jurisdictions to provide assistance upon request. Mutual aid agreements can ensure that needed resources can be requested with the terms of the assistance decided upon prior to the emergency. This may include personnel, equipment, technical expertise or a combination. Automatic aid, although very similar to mutual aid, provides the assistance on the initial dispatch to the emergency. Service contracts spell out the details of the arrangement to include measurable levels of service. Service contracts are most common where a suburban community is experiencing rapid growth and purchases some or all of its fire protection from an established neighboring city.

In an effort to initiate regional cooperation in San Diego County, Supervisor Chairwoman Dianne Jacob (2004) stated,

As we learned from the various committees, commissions and reports that followed the October 2003 wildfires, there is an overwhelming desire and need to reduce jurisdictional lines in order to enhance the delivery of fire protection and emergency medical services in San Diego County. To successfully accomplish this goal, fire officials must come together to determine the best model that fits our region and identify the resources needed to provide an appropriate level of service. In addition, a long-term stable funding plan must be developed to eliminate the numerous financial inequities between agencies and to build upon the resources that are already in existence.
From this, six northern San Diego County fire companies have formed a style of automatic aid whereas the closest unit(s) responds regardless of the jurisdictional boundary. Officials refer to this arrangement as a boundary drop, where units are dispatched regardless of department if they are the closest and most appropriate. According to Ott (2003), “we already have mutual aid and automatic aid…it takes it one step further: It sends the closest available unit irrespective of what side of the boundary it’s on”.

Other types of formal joint service agreements include mergers and consolidations. A merger occurs when two or more individual fire agencies legally combine to form a new entity. The merged entity may retain the identity of the largest pre-merger party whereas the smaller department is simply absorbed similar to land annexation. On the other hand, the merger can result when two or more fire departments dissolve and combine their assets in a truly new service provider. Contemplating a fire service merger may conjure up negative thoughts among the involved parties such as the perception of losing identity or local control. According to Jensen and Snook (2000), “considerable time and effort must be spent educating and, to the extent possible, defusing the nay-sayers.” Regardless of the type of genesis, Jensen and Snook recommend that:

A cooperative service agreement should begin with some form of short term (two- or three-year) contract. This allows each party the opportunity to enjoy the benefits of the relationship, while at the same time considering any loss of autonomy and local control.
Research indicates that mergers are most successful when the parties have a positive relationship prior to initiating any discussion of a possible merger.

Consolidation is often viewed as just another type of merger. Ironically, many thesauruses identify these words as synonyms for each other. Consolidation can take the form of administrative, partial, functional, operational, or full consolidation. McGrath (2005) states that “with today's demand for economic accountability, consolidation of departments or functional consolidation of specialized areas may provide an opportunity for enhanced services to your community and a reduction in costs”. The five most common types are (McGrath):

- Administrative Consolidation - Both organizations maintain separate operations, while some staff functions, such as clerical and personnel, are combined with a single department head leading the organization.
- Functional Consolidation - Both organizations maintain separate operations while some operational functions, such as dispatching, staff functions, personnel, and purchasing are combined.
- Selected Geographical Consolidation - Both organizations retain their autonomy while consolidating into a single department in special geographic need areas.
- Partial Consolidation - Both organizations consolidate some staff and operational functions, but still retain separate organizations.
- Full Consolidation - Both departments are integrated into a single department with all personnel working within a single organizational structure.

For the context of this applied research project (APR), the author will focus on functional
consolidation and the potential benefits it may offer.

The Wisconsin Towns Association (WTA) offered a proposal in 2001 to the Kettl Commission to promote functional consolidation as a method to minimize taxpayer costs and maximize public services. The WTA (2001) proposed “functional consolidation as the most promising strategy to achieve the ambitious goal set by the Governor”. The objective was to emphasize the positive aspects of functional consolidation as it relates to all facets of local level government. The WTA proposed that local governments should achieve economies of scale and pass the savings on to taxpayers. This can be accomplished by eliminating duplicative services, equipment and facilities. They also championed the concept that intergovernmental cooperation should be the rule and distracting turf battles should be the (rare) exception. “The bottom line is that functional consolidation agreements can be structured to retain local control and fiscal accountability while also giving elected officials a powerful tool to enhance the quality and cost-effectiveness of municipal services” (WTA).

Functional consolidation and other cooperative service agreements have the potential to improve the overall efficiency and effectiveness of emergency services. This can be achieved by a more efficient use of scarce resources; a reduction in equipment needs and duplicate efforts; and promote greater flexibility. Operational and political issues can also be overcome as a result of functional consolidation. Boundary disputes can be minimized with the closest and most appropriate resource(s) being dispatched. This will foster rational service response zones and the likelihood of faster response times. “Where local governments operate fire services within close proximity to one another, regional fire service studies suggest that service delivery would be more
efficient, if they cooperated” (Municipal Research and Services Center of Washington, 2006). The LBFC (2005, p. 39) study reported that various national studies, reports, and case studies document the advantages and benefits provided by fire service merger, consolidation, and other forms of regionalization. Examples include more efficient use of resources and personnel, improved service levels, elimination of duplicate equipment, uniform training and operational guidelines, and potential ISO savings, among others.

“Since the days of fire-fighting by “bucket brigades,” neighbors have pitched in to help with response to disasters” (Lerner, Vasco, and Yantosik, 2000). The primary reason for having agreements is to improve the quality of emergency preparedness and response. Effective emergency response often requires a coordinated effort among several local departments. Agreements…can help build bridges between their response plans and ensure that response efforts are coordinated and timely.

In southwest Ohio, the Miami Valley Fire / EMS Regional Cooperative Study Committee was formed to “discuss service related problems and evaluate more cost effective solutions” (Alexander, 1996, p.87). Its mission was “to evaluate and recommend the feasibility of Fire & EMS service delivery systems for the region which maximizes resource utilization, minimizes cost to the community, and insures a high level of service” (Alexander, p. 88). It culminated in December 1994 with the formation of the Miami Valley Fire / EMS Alliance. The makeup of the Alliance includes 20 fire departments encompassing 27 communities, and serves 600,000 citizens over a 455 square mile region. Member departments have reported the implementation of standardized terminology, streamlined training programs, joint purchasing, and coordination of the region’s urban search and rescue team.
The LBFC report compiled the benefits of consolidations, mergers, and other regional partnerships. These are based on responses to various surveys and case studies conducted during the study (LBFC, 2002, pp. 71–73).

- Recruitment and retention of members improved
- Improved relationships between fire company and local government(s)
- Unnecessary or duplicate equipment or facilities were sold with anticipated replacement cost savings.
- Improved opportunities for the standardization of apparatus and equipment.
- One point of accountability for budgeting and a systematic approach to multi-year capital programs.
- Uniform training and certification credentials can be adopted and available to all members.
- Reports indicated improved response times and more efficient use of resources to provide a uniform delivery of services.
- Enhanced municipal funding commitments resulted in a reduction in fundraising demands. One respondent reported an annual savings of $6.0M versus a comparable sized career staffed department.
- Better planning and utilization of resources.

In 1994, Cherry Hill Township, New Jersey embarked on a new journey with its recently consolidated fire department. After just 6 years, Cherry Hill boasts of many improvements. Giorgio (2000) reported that all personnel are now trained to meet the national standards of Firefighter, Fire Officer, and Fire Service Instructor. The department’s fleet has been downsized and modernized. And surplus vehicles were sold,
with the purchase of three new engines and a heavy rescue unit to replace older units. “Prior to consolidation, there were times when only the duty officer … was available to respond” (Giorgio). After consolidation, “the department established a minimum of three firefighters and one officer for each company, to improve firefighter safety…this action ensured … a minimum of 13 members at any structure fire” (Giorgio). And the logistics division was able to streamline purchasing procedures, saving the department thousands of dollars through joint purchasing. The evidence speaks clearly that the consolidated Cherry Hill Fire Department continues to provide a higher level of service to the citizens, while at the same time saving tax dollars.

According to Thompson (1992), the benefits of consolidation include lower apparatus replacement requirements; specialization of special functions; ISO rating improvements; cost reductions through volume purchasing; fewer fire stations because of larger scale planning; faster response time; more efficient personnel allocation; increased levels of service for the same dollars spent; and elimination of redundancy thus resulting in cost savings.

The study involving the Cedar Hammock and Southern Manatee (Florida) fire departments reported that between 1995 and 2001 both entities essentially functioned as one department. The quality of fire protection services improved, the insurance rates improved, and the board members reported a savings of $1.8M resulting from shared administrative services. Then in early 2001, Cedar Hammock commissioners began to make unilateral decisions that ultimately resulted in the dissolution of the alliance. The fire chief was dismissed and Cedar Hammock promoted several staff members without consultation with Southern Manatee. Consequentially, Southern Manatee withdrew its
support for the formal merger. After the dissolution, Cedar Hammock estimated an increase of $237,387 and Southern Manatee had to redirect funds within its budget to cover new expenses (OPPAGA, 2001). Each district reported additional costs for the replacement of vehicles and equipment that was previously shared. Communications and trust must play an important role in the success of any cooperative service agreement.

Unfortunately, human nature can create problems following a consolidation. Coleman (2003) “found that political bodies invariably feel cheated because “their” resources were being “used” elsewhere.” The entire purpose of consolidating is to have economies of scale that provide a mutual benefit to the entities agreeing to contribute to it. In order to be successful, each party has to give up the territorial aspects when the end goal is an economy of scale. Each party needs to consider what its community can protect by itself and what it can protect if it combines forces. If the latter option provides better coverage for everyone, then there’s an economy of scale where everyone wins. Those systems that design the performance requirements up-front tend to be much more successful. Coleman suggests that “in using the concept of economies of scale, departments should begin to work more cooperatively together on how to measure fireground performance.”

Based on the literature research, functional consolidation can prove to be a valuable asset to a small or moderately sized emergency services agency. Enhancements in staffing, more efficient resource deployment, improved ISO ratings, as well as direct and indirect savings have been reported as a result of cooperative alliances such as functional consolidation. It remains to be determined if functional consolidation will benefit South Central Pennsylvania’s emergency services and their customers.
Procedures

The problem was that South Central Pennsylvania is served by an excessive number of fire and emergency service agencies, therefore creating an over abundance of equipment and facilities. Descriptive research methods were utilized to develop applicable conclusions.

Research and data collection methods included an initial literature review conducted at the National Fire Academy’s Learning Resource Center (LRC) in April 2006. Materials available for review at the LRC were reference books, technical reports, articles published in fire service periodicals, and previous Executive Fire Officer Applied Research Projects (ARP’s). A second visit to the LRC was conducted in October 2006. In addition to reference materials contained at the LRC, research incorporated literature sources available to this author and also encompassed a search via the Internet for additional relevant data and other sources that may not have appeared in published works.

In an effort to ensure the significance of this ARP, all sources of data had to meet the following criteria. First and foremost, the validity of all data, regardless of the source, must be verifiable. Second, all information had to be relevant to the subject matter and intent of the project. Third, the information must be as recent as possible. If the data source was greater than 10 years old, it was utilized when the context had not significantly changed or the content was historically significant. And finally, if the findings identified performance criteria or standards germane to the subject matter, they had to be consistent with current accepted fire service professional standards or principles.

In addition to the literature review, one survey instrument was conducted. The
survey instrument involved an external questionnaire that was sent electronically to a sample group of 50 fire chiefs and fire officers serving jurisdictions throughout York County, PA. This survey was designed to gather basic data on each respondent’s agency; identify what, if any, services the agency provided or received via automatic or mutual aid; whether or not survey respondents felt functional consolidation could benefit their agency and customers; and what positive impacts may result from participation in functional consolidation. Each respondent was provided with an opportunity to indicate if they felt functional consolidation would have any negative impact on their agency. And finally, each respondent was able to offer any additional comments related to functional consolidation. A total of 50 surveys were sent via email on November 8, 2006 with a return date of November 20, 2006. The external survey cover letter and questionnaire with results are included in Appendix A and B respectively.

As with many types of research or survey instruments, there were limitations encountered. For the literature review component, this author was limited to materials located at the LRC, available publications, and additional resources located via the Internet. Speaking to the local external survey instrument, a total of 23 responses were received versus 50 surveys sent out. This reflects a 46% return rate. This relatively low response limited the overall representation of this survey. It is unknown if the balance of the non-respondents would have dramatically changed the results.

Lastly, due to the research abilities of this author, additional sources of data related to this topic may have been overlooked or gone undetected. Inclusion of otherwise undetected relevant or collateral sources of information may have altered the results of this applied research project.
Results

The results of the literature review provided the following data regarding research question 1: What is functional consolidation and how will it differ from a formal merger?

McGrath (2005) described functional consolidation as where “both organizations maintain separate operations while some operational functions, such as dispatching, staff functions, personnel, and purchasing are combined.” In comparison, a merger occurs when two or more individual fire agencies legally combine to form a new entity. This new merged agency may retain the name of the larger pre-merger entity or a truly new organization can be established.

A functional consolidation would allow each agency to retain its identity, while at the same time combining resources or specialty assets. This can improve efficiency and reduce cost. Those shared functions can enhance response capability while taking better advantage of the economy of scale.

A merger will likely require one or both organizations to relinquish their names. Mergers can create animosity by and between firefighters, fire officers, and elected officials. Although a long term goal may well be a full merger, a functional consolidation may be better suited within the volunteer fire service or as an initial step in the process – similar to a test drive prior to a major purchase. Jensen and Snook (2000) recommend a short term arrangement to allow “each party the opportunity to enjoy the benefits of the relationship, while at the same time considering any loss of autonomy and local control”.
The results of the literature review provided the following data regarding research question 2: What types of services can be combined into a functional consolidation between neighboring agencies?

Fire departments that participate in some type of joint arrangement have reported sharing of personnel, equipment, facilities, and expertise. Joint 9-1-1 dispatch centers, public safety training facilities, and fire prevention offices appear to be popular choices for cooperative ventures.

In southwest Ohio, the Miami Valley Fire / EMS Regional Cooperative Study Committee was formed to “discuss service related problems and evaluate more cost effective solutions” (Alexander, 1996, p.87). It culminated in December 1994 with the formation of the Miami Valley Fire / EMS Alliance. Member departments have reported the implementation of standardized terminology, streamlined training programs, joint purchasing, and coordination of the region’s urban search and rescue team.

In central New Jersey, six independent fire districts consolidated to form the Cherry Hill Fire Department. Although this resulted from a former merger, it highlights the functions that can be consolidated to improve services and control costs. Giorgio (2000) reported that the following functions were combined as a result of the merger – standardized training, fleet and facilities management, consistent staffing levels, and centralized purchasing. It is clearly apparent that the citizens of Cherry Hill, as well as its firefighters, have benefited from the consolidation efforts.

The results of the literature review and external survey provided the following data regarding research question 3: What are the potential impacts of functional consolidation?
Thompson (1992) reported the following as benefits of consolidation – lower apparatus replacement outlay; specialization of special functions; ISO rating improvements; cost reductions through volume purchasing; more efficient personnel allocation and fire station sighting; quicker response time; increased levels of service for the same dollars spent; and elimination of redundancy thus resulting in cost savings.

Pennsylvania’s Legislative Budget and Finance Committee (2002) found that consolidations, mergers, and other regional collaboration can yield positive benefits. Incentives likely include improved recruitment & retention, uniform training of members, better accountability, enhanced utilization of resources, and reduced costs through better “economy of scale”.

One-hundred percent (100%) of the survey respondents indicated that they feel functional consolidation is or could benefit their organization. More than 80% of the survey participants suggest possible improvements in the areas of staffing, training, safety, customer service, and personnel experience.

The results of the external survey provided the following data regarding research question 4: How can functional consolidation benefit the participating emergency services agencies and South Central Pennsylvania’s (SCPA’s) communities?

The survey results indicated that the respondents believe that the concept of functional consolidation is worth exploring. One-hundred percent (100%) of the survey participants provided feedback that indicated functional consolidation is or could be a benefit to the organization and its customers. Respondents reported they believe functional consolidation can benefit their organization in the following areas:
Fiscal / Financial 74%  Staffing 91%
Specialty Resources 70%  Training 87%
Response Times 65%  Firefighter Safety 87%
Property Loss 65%  Customer Service 83%
Firefighter Experience 83%  Officer Development 65%

It is apparent that many fire service leaders report successes associated with cooperative ventures. The survey participants believe that there are benefits of exploring more formalized partnerships between neighboring agencies. Additional benefits may be identified and investigated by engaging in formal discussions. Discussing the potential benefits of functional consolidation may provide local fire chiefs and emergency managers with both tangible and intangible means to plan for and respond to emergency incidents in south central Pennsylvania. Based on the literature research and the survey responses, York County would likely benefit from further investigation into the use of functional consolidation. Functional consolidation may likely enhance the response capabilities of York County’s volunteer fire service by fostering better coordination, more effective resource management, and improved safety for both responders & citizens alike.

**Discussion**

The results of this applied research project indicate that there is both a need and a desire to develop and implement more formalized cooperative alliances. Functional consolidation is one form of cooperation that can be utilized to enhance the response capabilities of neighboring fire departments and assist with better managing the cost of providing vital community services. At the present time, York County has centralized
enhanced 9-1-1 dispatch services managed at the County level. Operational assets available to county municipalities and agencies include a hazardous materials response team, a law enforcement forensic team, police tactical team, and an advanced technical rescue team. Regional intra-county assets include a medical response team, a mass decontamination strike team, and a regional incident management team (IMT). Each of these resources is available upon request by any municipality through the counter terrorism task force.

If these intra-county and inter-county assets are successful, then local fire chiefs should explore the potential benefits of functional consolidation of basic resources at the local level. Therefore, the onus rests with the local fire chiefs and government officials to explore the feasibility of functional consolidation and potential benefits from such cooperative arrangements. Working together, these individuals must decide whether or not there is enough interest to pursue functional consolidation, what level of cooperation is feasible, what services could be shared, and who will be involved (Flaherty, 2005).

The literature review identified successful examples of functional consolidation, along with other types of cooperative arrangements. Functional consolidation must become part of our vocabulary. It is imperative that we acknowledge functional consolidation as a viable enhancement to providing fire, rescue and emergency medical services to our customers. The days where we operate as individual agencies are gone.

**Recommendations**

The problem, as previously stated, is that South Central Pennsylvania is served by an excessive number of fire and emergency service agencies, therefore creating an over abundance of equipment and facilities. The purpose of this applied research project is to
identify and quantify the potential benefits of functional consolidation between emergency services agencies without contemplating a formal merger.

The research contained in this ARP has identified that many fire departments participate in some type of formal cooperative arrangement for the provision of providing vital community services. This cooperation can take one of many forms - mutual aid, automatic aid, varied degrees of consolidation, and full mergers. Functional consolidation provides for the sharing of services or resources to improve the efficiency of services, reduce the cost of services, or both.

Based on the literary review, survey data, and the analysis of the results, the following recommendations have been developed to begin the process of exploring functional consolidation as a method for improving the delivery of fire and emergency services in South Central Pennsylvania.

1. Establish an exploratory committee to cultivate the concept of functional consolidation by and between neighboring fire companies. The exploratory committee should determine what level of interest exists between fire companies.

2. If sufficient interest exists, establish a “task force” to formally study the feasibility of entering into a functional consolidation arrangement.

3. Identify key individuals or positions to serve on a “task force”. Members should include fire chiefs, government officials (both professional and elected), corporate leaders, and citizen advisors.

4. Retain the services of an outside neutral facilitator to assist with charting the future roadmap toward functional consolidation.
5. Determine which services can be consolidated and the potential benefits that may be realized.

6. Ensure that all key stakeholders are kept abreast of the status and progress of the process. This can be accomplished by written instrument of the exploratory process.

It is recommended that the exploratory process begin as soon as practical. The exploratory committee can begin to establish program guidelines. Once it is determined if sufficient support exists, request that key stakeholders meet to establish the “task force” membership. Eventual success of a cooperative agreement will ultimately depend on the support and involvement of our regional partners. With the support of the exploratory committee, task force members, and key stakeholders, functional consolidation can become a viable option to enhance the delivery of fire and emergency services in South Central Pennsylvania.
References:


APPENDIX A

November 8, 2006

Dear Fire Officer,

My name is David Nichols and I am the Chief of Fire & Emergency Services in West Manchester Township, York County, Pennsylvania. I am currently enrolled in the National Fire Academy’s Executive Fire Officer Program (EFOP). I have just completed the fourth year course in the program – Executive Leadership. One of the requirements for graduation is to complete an applied research project (ARP) on a related topic.

I am currently exploring the potential benefits of *functional consolidation*. Functional consolidation is the concept of combining like services or sharing of specialized resources to improve efficiency and/or reduce costs. Although we acknowledge the benefits of mutual aid, I believe that we can further expand the concept of functional consolidation by entering into cooperative alliances like joint ownership or planned purchases of specialized resources. Let me stress that within functional consolidation, each partner maintains its own identity and autonomy.

My theory is that many of us are participating in informal levels of functional consolidation through existing mutual aid or automatic aid pacts. I am hopeful that more fire service leaders will embrace functional consolidation as a tool to enhance the delivery of fire & emergency services to their customers, while reducing the cost of doing business. At the same time, formal alliances can strengthen the fire service at a time when many of us are struggling to provide more services with fewer resources – both human and fiscal.

If so inclined, please take a few minutes to complete the survey form. You may return via email or simply fax to my attention at 717-792-4374. I would like to have all replies returned no later than Friday Monday, November 20, 2006.

Thank you in advance for your assistance with my ARP. If you should require any additional information or have any questions, please contact me at 717-792-3505 or via email at dnichols@westmanchestertownship.com. Be safe.

Warmest Regards,

*David W. Nichols*

Chief of Fire & Emergency Services
APPENDIX B

National Fire Academy - Executive Fire Officer Program

Survey Questionnaire Results – *Functional Consolidation*

Please complete the following questionnaire related to the concept of *Functional Consolidation* in the Fire Service.

For the purposes of completing this survey instrument, the context of *Functional Consolidation* is combining like or specialized assets to reduce costs, improve efficiency, or both through the use of joint ownership, cost sharing, or combining of available resources.

1. What type of service best describes your agency?

   Career 1
   Combination – Mostly Career 8
   Combination – Mostly Volunteer 1
   Paid-On-Call 0
   Volunteer 13

2. Department Profile (Fill in all that apply):

   Urban 3 Population 15,750
   Suburban 3 Coverage Area 19.7 Sq. Miles
   Rural 4 Municipal N/A
   Combination 13 Fire District N/A
   ISO Rating Varies Call Volume 835

3. Do you currently participate in a formal mutual aid or automatic aid agreement?

   YES 18
   NO 5

4. What services does your agency provide or receive via automatic or mutual aid? Mark “P” for provide or “R” for receive (Check all that apply):

   Suppression P:23 R:19 EMS P:8 R12 Tech Rescue P:9 R:12
   Tanker P:8 R:11 Other RIT / RESCUE
5. Do you believe that functional consolidation is or could be a benefit to your agency and your customers?

YES 23 NO 0

6. If YES, what positive impact(s) do you believe functional consolidation can have on your agency? (Check all that apply)

- Fiscal / Financial 17 Staffing 21
- Specialty Resources 16 Training Opportunities 20
- Response Times 15 Firefighter Safety 20
- Property Loss 15 Customer Service 19
- Firefighter Experience 19 Officer Development 15

7. If NO to question 5, please indicate why you feel that functional consolidation would not benefit your agency.

No Responses / Not Applicable

8. Indicate any other comments regarding functional consolidation.

Contact Name: ___________________________ (Optional)
Position: __________ Jurisdiction Name: ________________
Telephone or email info: ________________

Please return via email or fax (717-792-4374)

Thank you for taking a few minutes to complete the survey.