MERGING FOUR FIRE PREVENTION DIVISIONS INTO ONE NEW UNIT

EXECUTIVE LEADERSHIP

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ABSTRACT

As four fire districts in Washington were considering merging into one fire district, the fire prevention divisions needed to be merged. A mechanism or process for bringing those divisions together was needed.

The problem was that there was no model, plan, or understanding of how to merge four fire prevention divisions with varied levels of service, programs, and staffing. This research intended to identify methods that could be used, not only by this group, but other fire departments considering a merger.

The purpose of this research was to determine; what services were provided by the districts, and a process to merge those fire prevention divisions into one unit. The research identified the details from each fire prevention division, and a process to determine the division’s goals and objectives. The research identified a process that could be used for determining the personnel needed to carry out the responsibilities of the new fire prevention division.

Descriptive and action research was used to answer the following questions:

1. What fire prevention programs or services are currently in place at each of the four fire districts?

2. What process can be used to identify the workload, organization, and goals of the merged fire prevention division?

3. What process could be used to determine the current, and future staffing levels for the merged fire prevention division?

The research procedures included a literature review, and a survey of the four involved fire districts.
The research resulted in a comprehensive list of programs and services currently provided, and a process to determine the workload, organization, goals, and staffing levels for the merged fire prevention division. It’s recommended that a task force develop a plan to merge the fire prevention divisions. The task force should utilize the goals and objectives listed in Appendix D as their guide.
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INTRODUCTION

As the population in Western Washington grew during the 1940’s and 1950’s, many small communities established their own fire districts to serve the few residents that were often isolated from the major cities of the day. As the area grew, in many cases, the small communities kept their districts. The result is an assortment of small fire districts that are duplicating the services of the neighboring departments or districts. Many of these small fire districts have one or two stations and limited resources. These limited resources are stretched by the need for administrative and support positions that are duplicated by the neighboring districts. In today’s economy, many smaller districts are facing budget problems, and are looking for ways to reduce overhead costs. Mergers have been identified as one successful method of dealing with budgetary and staffing challenges.

Four fire districts in western Washington are currently evaluating the possibility of merging their districts into one larger and more efficient fire district. The incentive is that the increased efficiencies of scale could be used to place more firefighters on the street, improving the services to all persons within the new boundaries. Each of these fire districts have their own history and programs, designed to meet the specific needs of the community.

The problem is that there is no model, plan, or understanding, of how to merge four fire prevention divisions with varied levels of services, programs, and staffing, within the four districts. This research is intended to identify methods that could be used, not only by this group, but other fire departments considering a merger.

The fire district merger requires the fire prevention divisions must be merged into one larger group. As part of the merger, details that make a modern fire prevention division a complex and dynamic division will need to be addressed.
The purpose of this research is to determine what services are currently provided by the four districts, and identifying a process that can be used to merge those separate fire prevention divisions into one unit. The research will identify the details from each fire prevention division and suggest a process to determine an effective organization of personnel and programs. Lastly, the research will identify a process to determine the number of personnel needed to carry out the responsibilities of that new fire prevention division.

The research will answer the following questions:

1. What fire prevention programs or services are currently in place at each of the four fire districts?
2. What process can be used to identify the workload, organization, and goals of the merged fire prevention division?
3. What process could be used to determine the current, and future staffing levels for the merged fire prevention division?

Descriptive research will be used to answer question one. The current programs and services provided by each division will be identified in an appendix. Action research will be used to answer questions two and three. The process to identify a possible organizational chart will be included as appendixes.

**BACKGROUND AND SIGNIFICANCE**

The four fire districts include; North Highline Fire District, King County Fire Protection District 2 (Burien/Normandy Park) King County Fire Protection District 26 (Des Moines) and the Federal Way Fire Department. While the name implies a city department, Federal Way, is still a separate fire district, impacted by the same laws and funding mechanisms as the other fire
districts listed above. All of the districts have a long history of providing fire and emergency medical services (EMS) services to their communities.

If the merger does get adopted, it will be a large fire district. The new district will have 12 stations, covering a population of 218,600 people in 57.5 square miles. It will have 170 employees and an annual budget of $22,157,915.00 (2002 Budget based on actuals). Using the total responses for 2001 as an example, if merged, the department would have responded to 19,959 calls for service. The fire prevention division will initially have four chiefs, six inspectors, and three secretaries. Public education will be assigned as a separate division.

In Washington State, fire districts are considered separate junior taxing districts. That is to say they are not part of the normal city or county government. They are stand alone agencies with an elected Board of Commissioners overseeing the budget and general policy issues. The Board of Commissioners has the authority, within limits, to set the tax levy rate for the district.

One interesting bit of history that the organizations share is that they were all formed before the cities incorporated. If a city chooses to not have their own fire department, they may simply annex into the fire district, leaving that agency intact. While the borders of the districts might have been logical at the time, the current situation is very different today.

Each fire district covers part or all of a city, and some unincorporated area. In some cases the fire district boundaries include parts of more than one city. For example, the Federal Way Fire Department protects all of the city of Federal Way, and via a contract with District 26, protects part of the city of Des Moines. Fire District 2 protects the cities of Burien and the city of Normandy Park. The North Highline Fire District protects part of the city of Burien as well. By merging into one fire prevention division, it will simplify code enforcement for city officials and the public in general, by establishing one group to work with.
Over the years, the fire districts each developed their own fire prevention divisions. Despite having different levels of staffing and service, the different divisions provide similar services. Each district conducts annual fire and life safety inspections, Uniform Fire Code (UFC) permit inspections, and some plan review. Public education services are offered by all of the districts considering the merger. With each district having similar programs, it makes sense to combine those efforts.

When examining the workforce, it’s interesting to note that the merged division will have four chiefs that are performing much of the same duties in each of their respective districts. This duplication of services is one of the reasons that the merger is being considered. It appears that a more efficient use of taxpayer dollars would be achieved by merging the divisions. If the merged division could reduce the chiefs to just one (the new fire marshal) and add three new inspector positions, it would allow greater service to the community. This increased service would be in the form of faster response time for plan review, more inspections, and a better ability to respond to the community’s needs.

The fire districts have a history of working together on many issues. In recent years there has been coordination of training programs, shared special operations teams, and a common communications center. For major events in other parts of the county, or even the state, the districts form a single task force to respond as a unit, and operate under a Battalion Chief from one of the districts. Most recently all of the districts involved ran a joint public campaign in an effort to maintain funding at the existing level. All of those districts used the same campaign information, the same yard signs, and even the same press releases. The spirit of this cooperation is helping to facilitate the merger.
The significance of this research is that it will assist the district to merge the fire prevention divisions into one cohesive unit, providing fire prevention services to a very large population. The research will help identify the services to be provided, and the number of personnel needed to provide those services. Prior to the research there was no model or process identified.

The research is relevant to the content and instruction of the National Fire Academy’s (NFA) Executive Leadership course in several ways. Successfully merging the fire prevention divisions will require use of the skills taught in the class, such as the power of persuasion, negotiation skills, and influencing ability. For the merger to work effectively, all personnel must be prepared to be in a state of transition for quite some time. The merger efforts will require strong leadership for the employees to accept the concept as beneficial, and to work through the challenges that are sure to come up periodically during the process.

This research supports the United States Fire Administration’s operational objectives by striving to reduce the loss of life from fires for all age groups. It should also reduce the likelihood of firefighter injuries and fatalities by reducing the occurrences of fires in commercial occupancies. By merging the fire prevention divisions, it should allow increased efforts towards risk reduction. In other words, the new merged fire prevention division should be more successful in reducing the fires than four separate, small divisions.

**LITERATURE REVIEW**

The literature review found many sources of information that described the pros and cons of mergers in general, but very little that focused on merging fire prevention divisions. Even
those that took a more global view, tended to focus on financial issues or operations divisions, rather than fire prevention issues.

One author did speak to the benefits of merging fire prevention. Dana Murphy suggested the benefits are the “elimination of duplicate administration positions, a centralized communications system, more efficient fire prevention and code enforcement programs through unification” (1993). Murphy went on to describe how those efforts would improve fire prevention activities by providing more personnel that would become specialists in their fields. Rather than having personnel doing many different fire prevention tasks and not excelling at any, they could be focused more directly. This could be in the form of plan review specialists, inspectors, fire investigators, etc.

In another study of merging fire prevention divisions, James Wenzel described the benefits of a consolidated organization. “The larger the organization, the better it can afford high-quality staff services, such as training, statistical analysis, research and development, fire prevention, education and structure analysis.” He also described “Other indirect savings come from a more efficient service involving equipment utilization, fire prevention, code enforcement and continuity throughout the region with increased productivity” (1994).

Since this research is based on the assumption that the merger is a good thing, no more effort was given to the benefits of merging. The research immediately focused on methods that could be used to identify the workload, organization, and goals of the merged fire prevention division.

One of the papers reviewed, described a viewpoint that would be of interest to any district contemplating a merger. G. E. Schenk described it this way, “new benchmarks or yardsticks must be developed against which the fire service will be measured. The benchmarks will spring
from a vision of the future, supported by mission statements, goals and objectives. They will serve as the guideposts for fire protection delivery levels” (undated). The idea that benchmarks be used for measuring a merged fire prevention division was one not expected at the start of this research. It will be important to have methods to measure both the current workload and how much can be expected of the workforce in the future. In the same study, Schenk goes on to say that “the fire protection services in a municipal fire department must become goal oriented” (undated). Schenk presented a compelling argument that fire prevention efforts must be oriented to meet the districts goals of reducing fires, and have credible methods to evaluate the successes of that division. The benchmarks must measure not only the fire protection delivery, but also the level of productivity of the fire prevention personnel.

How to implement the change was one question that kept appearing during the research. This question was answered in a review of the research by Michael Curry, who was studying a proposed four district merger in Ada County, Idaho. His recommendation clearly suggests using the change management model as one tool that would help. Curry states, “The analysis portion, however, is an important first step. For the merger to happen, the other three steps, including phase two (planning), phase three (implementation), and phase four (evaluation), must also take place” (1999). The change management model would appear to be an effective method for accomplishing the merger of the fire prevention divisions. The organizations are currently in the analysis phase of this and will be moving to the planning stage once enough data is available.

As the research centered on the workload, organization, and goals of the merged fire prevention division, it identified a report from a task force in Tualatin Valley Fire and Rescue (TVF&R). “The report of the Fire Prevention Task Force identifies the major areas of responsibility that a fire marshal’s office is charged with as: community development, public
education, code enforcement, and investigation. The report sets forth the goals and objectives for each of these areas of responsibility” (Morss, Loar, Parker, Jefferies, Runyan, and Nelson, 1987). This finding of the areas of responsibility, and the corresponding goals and objectives, could easily stand as a model for any district attempting to set up operations for a fire prevention division. TVF&R used task forces with specific areas of responsibility to identify the goals and objectives for the different divisions of the fire department. Samples of those task force reports are included as Appendix C.

The research then attempted to determine the process to identify the workload, organization, and goals of the merged division. A flow chart was found in a paper by Floyd Pittard (1990) that detailed a systematic approach to mergers and consolidations. Pittard’s work group was looking at the feasibility of merging three fire departments in Oregon. The flow chart graphically represents the major items that a task force could concentrate on to prepare any division of a fire department for a merger. Pittard describes it this way:

The flow chart on the following page was established to assist the task force sorting through a tremendous amount of material and information. By following the flow chart we identified the services which our divisions were specifically responsible for, and to what extent that services should be provided. From there, each department would be responsible for identifying the workload existing within their jurisdiction for each of the service areas defined. The existing workloads were then combined and the task force developed the formulas for establishing our capabilities. Each department then identified their own capabilities. We studied the combined workload and began to allot our resources so as to be consistent with the workload. Organizational charts were developed which will provide for the
management and functional needs of the combined fire marshal offices now and in the future (1990).

The flow chart is included as Table 1 below. The four step process identifies performance areas for both the old organization and the new merged one. It then goes on to determine the workloads for each performance area. Once the capabilities are determined, they can be matched up to identify any discrepancies. The final step is preparing a report for the governing body to examine. The bottom line is that this model could be used to identify the workload, organization, and goals of the merged fire prevention division. It could also help determine the process to identify the current, and future staffing levels for the merged fire prevention division.
Table 1

Step 1
Identify Performance areas → Establish level of service for each performance area

Step 2
Identify present workload for each Performance area
Identify present workload for combined areas → Develop capability formulas

Step 3
Identify existing capability of each dept. in relation to own jurisdiction
Capability of combined jurisdictions → Assign existing resources of combined areas to workload

Step 4
Develop proposal for future → Alternatives and recommendations → Assemble report

Go to step 2
Go to step 3
Go to step 4
The use of task forces to evaluate the merger of fire departments is common. A very detailed look at task force assignments was found that proved to be very helpful as it focused specifically on fire prevention. Snook and Johnson (1997) described the steps that a task force could use for a fire prevention merger. It is included as Table 2.

**Table 2**

**Fire Prevention Task Force**

1. Evaluate workload of all agencies, determining percentage of uninspected properties, if any.
2. Determine practical performance levels for suppression personnel as it relate to building inspections.
3. Analyze political external influences which impact fire prevention activities.
4. Evaluate plans, examine workload, and make recommendations as to number of needed positions.
5. Provide an organizational chart which meets the goals listed over a period of five to seven years.
6. Establish a reasonable performance standard for fire prevention officers relative to number of daily inspections, special assignments, etc.
7. Make recommendations relative to physical location of fire prevention officers.
8. Develop a performance standard relative to turn-around for various building plans submitted for review (fire and life safety).
9. Identify current certification and expertise levels for existing personnel.
As with any task force or committee, clear time lines should be set with periodic benchmarks to ensure success. The report should include an analysis of the current situation, alternatives, recommendations, and summary.

Finally, the literature review identified a document that will be important not only in this case, but it can be a model for other departments as well. The four Fire Chiefs currently considering a merger in southwest King County have developed an overview of their plan. The key to their plan is a group of core values that every phase of the merger must measure up to. Church, Marrs, Polhamus and Pritchard write, “the Chief Officers that are leading this study have committed themselves to a set of core values. These core values shall be used as our litmus test to assist us in weighing decisions associated with this study. No decrease in the level of service to the community. Maintain local community identity and involvement. No harm to our employees” (2003).

By using core values such as these, a task force will have another measuring device that can be used to stay on the right path; it will be acceptable to the organizations, and the community.

The literature review to this point has answered two of the research questions used for this paper. The flow chart in Table 1 and the task force assignments listed in Table 2 could be used to answer research question two, identify the workload, organization and goals of the merged fire prevention division. By modifying these two items to fit the local needs, a department would have the tool necessary to develop their merger plan. For research question three that addresses the current and future staffing levels for the merged fire prevention division, the same tools would work, as that is addressed in Table 2. For research question one concerning what current programs or services are provided was not included in the literature
review. This question was answered with a survey that was sent to each agency involved in the merger discussions. It is included as Appendix B.

**PROCEDURES**

The procedures for this research included a survey of the four fire districts considering a merger. The survey was to accurately identify the fire prevention programs and services in place in each agency. A literature review was conducted to identify models that could be used to consider workloads, organizations, and goals for the merged fire prevention division. It also attempted to find a model that could be used to determine future staffing levels.

**Definition of Terms**

**Consolidation**- An operational consolidation occurs when two or more separate departments join together operationally or administratively to form one organization. The entities remain legally separate; however they deliver services as if they were one agency.

**Fire District**- A special purpose district within the state of Washington. These separate districts are governed by an elected Board of Fire Commissioners, and are not part of a city or county organization. They are authorized to levy taxes for operation of the fire district.

**Merger**- A merger occurs when two or more entities legally resolve to become one entirely new entity. The two entities legally become one and the permanence afforded during a merger often provides the framework for a long-lasting relationship.

**Research Methodology**

Descriptive research was used to answer question number one. This identified the fire prevention programs in place at each of the four fire districts. The research included a survey instrument sent to the fire marshal at each district. The fire marshals in each of the affected
district felt that a survey would be the best way to identify services provided. Having their assistance with the development of the survey helped to ensure that appropriate questions were asked. The responses were compiled into one form and are included as Appendix B. Action research was used to answer questions two and three. The action research was used to determine a process that can be used to identify the workloads, and goals of the merged fire prevention division. It also identified methods to determine the current and future staffing needs of the new division. This research could be replicated by other departments considering merging fire prevention divisions, by conducting a similar literature review of trade journals and other material.

It is intended that this research will be used to guide the efforts to merge the fire prevention divisions into one unit. The goal is to have the four districts fully merged and operational by February 1, 2005. This research may make it feasible to consolidate operations of the fire prevention divisions before the formal merger date.

**Literature Review**

The research began at the National Fire Academy’s Learning Research Center (LRC), with a review of trade journals, applied research papers, and student manuals. The focus of the LRC research included searches for fire district mergers, and specifically how mergers affected the fire prevention divisions. It also focused on other topics to obtain information related to fire prevention programs. The review includes a systematic review of current National Fire Protection Association guidelines for any information on prevention programs, goals, staffing and other relevant details.
Assumptions and Limitations

An assumption of this research is that the merger is beneficial to the fire districts and the citizens they serve. The research did not attempt to evaluate the benefits of that merger; it simply focused on how to merge the fire prevention divisions.

One of the limitations of this research is that it focused strictly on the fire prevention activities; it did not examine any Public Education efforts. The reason for this is that under the proposed merged fire district chain of command, public education is considered a separate division. Both fire prevention and public education are under the supervision of the Chief of Prevention and Public Education.

RESULTS

Answers to Research Questions

1. What fire prevention programs or services are currently in place at each of the four fire districts? There are a wide variety of programs and services provided by each of the districts in question. While there are many similarities there are differences as well. Some of the agencies are very involved in plan review and permit inspections while others are not. One of the districts has the fire marshal perform a very large amount of the annual inspections, while in others the operations division conducts all of those inspections. A survey instrument was designed to identify the programs and services currently provided. The survey is included as Appendix A. The results of the survey were compiled into one comprehensive document as Appendix B. This became a very simple method to see the results in an easy to compare format.
2. **What process can be used to identify the workload, organization, and goals of the merged fire prevention division?** The research revealed several methods to identify these items. Tualatin Valley Fire and Rescue used a task force concept with goals and objectives for each division of the future department. A sample is included as Appendix C. Floyd Pittard suggested using a flow chart that focused on performance standards and service levels. A very detailed description of task force steps aimed at a fire prevention merger was developed by Jack Snook. This task force assignment is included as Table 2. By taking the task force steps that are included in Table 2, a district could modify it for local needs and utilize as the basis for merging fire prevention divisions.

3. **What process could be used to determine the current, and future staffing levels for the merged fire prevention division?** One of the duties for the task force identified in Table 2 included making a recommendation as to the number of needed positions. Once the workload is identified with practical performance levels it will be relatively easy to determine the number of personnel needed to accomplish the task. Using the task force goals and objectives will provide the process needed to identify those positions.

**Survey Results**

A survey instrument was used to identify the programs and services currently provided by the four separate districts. The questions were designed to identify the similarities and differences between the separate districts. The survey did reveal some surprises and confirmed that as a group we have many similarities.

If the merger included all of the personnel that are currently assigned to the various fire prevention divisions it would have a total of 13 personnel. That includes four chief officers, four deputy fire marshals, two lieutenants, and three secretaries. While the number of personnel is
encouraging, the division make up will need to be addressed. As the chiefs retire or are transferred to other divisions, they could be replaced with other personnel. The secretaries will also need to be considered. If the division is located in one office, perhaps the number of secretaries could be reduced. For many districts considering a merger, this is one of the biggest advantages, by reducing the administrative personnel more funding can be directed at line personnel.

Another interesting fact discovered by the survey was that while three of the districts have firefighters assigned to engine companies conduct annual inspections, North Highline has a split. As required in the union contract, the suppression division does 40% of the inspections and the Fire Marshal does 60%. For reinspections, if the firefighters conducted the inspection, the Fire Marshal does the reinspections, and vise versa. This could be a significant workload issue if the merged district desires to have all companies conduct the annual fire inspections.

While the Uniform Fire Code (UFC) permit inspections are the same throughout, the fee structure is not. In King County, the County Fire Marshals Office conducts UFC permit inspections in all unincorporated areas. Fire districts that protect cities may perform the permit inspection within the city boundaries. North Highline doesn’t perform any permit inspections, Des Moines does them for no fee and Burien, and Federal Way conduct them inside their cities for a fee. In each of the cases the permit fees are collected via an agreement with the city.

The survey also revealed the raw numbers of inspections for the merged district. The total annual fire and life safety inspections totals 4935, this does not include 2392 occupancies that are classified as self inspections in Federal Way. These self-inspections are sent out to the low hazard occupancies every other year. Approximately half of them are inspected by the
firefighters each year. The merged district will have 1175 UFC permits to issue and inspect each year. Approximately 166 of the permitted inspections required a reinspection in 2002.

One other area that was identified was the amount of money collected from the UFC permit inspections. The merged district could expect to collect approximately $102,500.00 from those permit fees. This does not take into consideration that additional money could be collected from the existing permit inspections in Des Moines.

The computer programs used by the various districts could be a challenge. Federal Way uses SunPro FireRMS 5.0 for the inspection program. All of the other districts use Microsoft Access. For fire incident reporting, Federal Way and North Highline use SunPro (either 5.0 or 3.7 versions respectively) while Des Moines and Burien use Firehouse software. North Highline doesn’t use a computer report for aid calls, while the rest of the districts use the same mix of Firehouse and SunPro.

The survey revealed much about the separate districts that will be valuable to a task force assigned the duty of making recommendations to the districts about a merger. The data suggests that the concept could work, as the separate divisions are similar in nature, and in many cases are performing the same work.

Research identified a series of goals and objectives for a fire prevention task force. This list has been slightly modified and included as Appendix D. Items have been added as a result of this research to include fire investigations and an evaluation of computer programs. This list can be used to identify workloads, organization and goals of a merged fire prevention division. It will also help identify staffing levels for such division.
**DISCUSSION**

The quest to merge four separate fire prevention divisions really has three parts: identify existing elements of the separate agencies, identify the desired outcomes from the newly merged division, and determining how to get from one point to the other. This research did answer all three of those items listed above. While the answers to the first questions may be relatively easy, determining the desired outcomes and outline a plan to implement it is a complex endeavor. In the case in King County, identification of the existing elements has been accomplished. The fire marshals researched the programs currently in place. This is included as Appendix B.

One advantage to starting with an examination of the existing services provided by the separate districts is that it very quickly shows the similarities and differences in today’s environment. Not only does it identify the programs, but it serves as a work list allowing the task force to select each area of responsibility for consideration. In this particular case, the survey showed that there are many similarities, and that merging the programs will not have a dramatic effect in most cases.

One area that may create a major change is that in the North Highline Fire District, the fire marshal currently conducts 60% of the annual fire inspections. If that were to be reassigned to the engine companies as in the rest of the district, it would add approximately 714 annual inspections to the company’s workload. That is a significant number added to the two engine companies that would be affected. This item will require coordination with other task forces that are considering the operations divisions’ duties.

Another workload issue in North Highline is that they have an unusual reinspection program. The fire marshal conducts all reinspections for engine company inspections, and the firefighters conduct reinspections for the fire marshals inspections. This unique check and
balance system is not used in any of the other districts. This also has the potential to impact the workload of the engine companies if all reinspections are shifted to the firefighters.

Computer programs may also be an issue as the districts review a potential merger. Three of the districts are using Microsoft Access, and one is using SunPro for their inspection programs. For the fire incident reports, two districts use Firehouse, while two use SunPro. This will take some evaluation to determine the best way to select one program for the new district to migrate to. This is another area that requires coordination with other task forces.

The survey also revealed that while each of the districts have plans for response to natural and man made disasters, there has been little focus on mitigation and recovery plans. King County is leading efforts for a regional mitigation plan, but it will require much attention in the future. In the draft merger plan, emergency management falls under the direction of the Chief of Prevention and Public Education.

The research quickly revealed a critical factor for the task forces examining the merger in King County. The four fire chiefs developed three core values that must be met at all stages of the merger process. “There will be no decrease in the level of service to any community as a result of the merger. We will maintain local community identity and involvement. There will be no harm to our employees” Church et al. (2003). These core values will prevent siphoning of personnel from one area to another. It will also prevent taking one program that’s in place and spreading over the merged district without consideration of adding personnel.

In a recent consolidation in Cherry Hill, New Jersey, the community experienced an improvement in fire prevention and public education. Robert Giorgio describes it this way,

Shortly after consolidation, the new board of commissioners moved the Fire Prevention Bureau into their own facility. An organizational structure was established that provided
a uniform chain of command and clearly identified job descriptions for each role within the new bureau. The division quickly set out to establish a single database to enter all the information that had previously been maintained in separate formats (2000).

By consolidating their efforts, the departments were able to streamline their efforts, improve data collection and recovery, and provide an improved service by adding inspectors to the workforce.

The consolidation described by Giorgio is similar to the merger being contemplated in King County. By merging the fire prevention bureaus, the number of fire marshals can be reduced from four to one. The other three positions can be replaced with inspectors or deputy fire marshals, providing direct benefit to the community. While the fire marshals won’t be reduced in rank, they can be transferred or replaced due to attrition. As this occurs, the result will be a greater ability to conduct more inspections, plan review, and other services directly to the community.

Research indicated the importance of developing performance or service levels. This was important enough that it is included in the recommended goals and objectives. This was backed up by Jack Snook, and Jeffery Johnson, “Identify service levels prior to redesigning the new organization. We got so wrapped up in consolidations and the merger that we forgot to ask ourselves what are the services and levels required to meet the community needs” (1997). The service level recommendation is valid as it provides a means of measuring not only the productivity, but also helps determine the number of personnel needed.

Similarities were found throughout the literature. The flow chart included as Table 1 was designed to assist the task forces sorting through a tremendous amount of material and information. “By following the flow chart, we identified the services which our divisions were
specifically responsible for and to what extent that service should be provided. From there each
department would be responsible for identifying the workload for each service area” (Pittard,
1990). The idea of identifying current workload, setting service levels, and determining future
staff levels, was again confirmed as an appropriate method to work through a merger of fire
prevention divisions.

One item that was not a focus of the research but was discovered is the benefit to
centralizing the staff into one location. In a merger study Dana Murphy states, “the
centralization of staff functions would result in better training programs, better community fire
prevention programs, better equipment maintenance, and strategic planning that could not have
been done on a small scale basis” (1993).

An opposing viewpoint to the centralization of fire prevention was found in a report by
G. E. Schenk. The report suggests that “fire prevention bureaus should be organized in such a
way that fire prevention officers (inspectors) are posted to fire stations as consultants and
enforcement experts” (undated). The concept of locating fire prevention should be considered
during item seven of the goals and objectives in Appendix D. The benefits to locating all fire
prevention staff in one location versus decentralized must be carefully considered, there are
benefits to both.

One surprise during the literature review was the improvements in quality of service.
James Wenzel wrote about that in a paper on improving fire prevention activities, “we weren’t
able to do more inspections, but the quality of inspections increased”. He even went on to say
“fire investigation success has increased as the investigators are better trained and have more
field experience” (1994). While improved efficiencies of scale were expected, the increase in
quality of work was not expected before conducting this research.
Overall the research did reveal many tools to assist districts that are considering a merger. By reviewing these tools or documents one can design a process that will serve the agencies well as they work towards the merged fire prevention division. Many of these methods are included as appendixes or tables.

The implications of this research are:

1. The fire prevention programs in place have been identified among the four fire districts involved in the merger talks.

2. A process has been identified to determine workload, goals, and objectives.

3. A process has been identified to determine the staffing levels for the new organization.

This process or the procedures identified by this research can not only be used for the districts in King County, but at fire districts or departments anywhere.

**RECOMMENDATIONS**

It is recommended that the fire districts in King County considering the merger designate a task force to make recommendations on how to merge the four fire prevention divisions. This task force concept has worked well in many other mergers as this research has indicated. The task force should be assigned with the following duties.

**Fire Prevention Task Force Goals and Objectives**

1. Evaluate workload of all agencies, determining percentage of uninspected properties, if any.

2. Determine practical performance levels for suppression personnel as it relate to building inspections.

3. Analyze political external influences which impact fire prevention activities.
4. Evaluate plans, examine workload, and make recommendations as to number of needed positions.

5. Provide an organizational chart which meets the goals listed over a period of five to seven years.

6. Establish a reasonable performance standard for fire prevention officers relative to number of daily inspections, special assignments, etc.

7. Make recommendations relative to physical location of fire prevention officers.

8. Develop a performance standard relative to turn-around for various building plans submitted for review (fire and life safety).

9. Identify current certification and expertise levels for existing personnel.

10. Determine a fee structure for UFC permits, and plan review for city building departments.

11. Identify a fire investigation program that meets the needs for each city and the unincorporated areas.

12. Evaluate computer programs and recommend one that could be used in the future by all personnel.

The research has already identified the programs or services that are currently in place at each of the four fire districts, this is included as Appendix B. The list above will allow the proposed task force to identify the workload, organization and goals of the merged fire prevention division. It will also help to identify the current and future staffing levels for the merged fire prevention division.
Summary

Prior to this research project, the fire districts in King County didn’t know about the fire prevention programs provided by the other districts involved in merger discussions. They didn’t know how to merge those divisions into one cohesive unit. This research has identified the programs currently provided. This could be the starting point for the merger attempt. By knowing what is currently being done the participants can design a future program that meets the community’s goals. The research has also revealed a model that can be used by a task force or committee to design the merged division. This model is a step by step guide that lists clear goals and objectives. One of the goals of this research was to assist the four fire districts in their quest to merge the fire district. This document should meet that goal.
REFERENCES


Appendix A

Fire Prevention Division Survey

The following survey is intended to identify the different programs, services and other features of the four different fire prevention divisions in the districts considering merging in the future. The goal is to provide a picture that shows who we are and what we’re currently doing. This should allow us to find similarities and help in our effort to identify if a merged fire prevention division makes sense.

A. Programs
   1. Give an overview of the fire prevention programs in place in your district. This narrative summary should give the reader an understanding of what each Prevention Division does on a day to day basis before getting into the details of the different work units.

B. Personnel
   1. List the number of personnel assigned to the fire prevention division. This does not include public education, but should include any secretarial personnel that are specific to the division. Please include ranks or titles, and whether they are represented by the bargaining unit.

   2. Do you require/encourage any certifications for your personnel?

C. Inspections
   1. Describe your inspection program. In other words, what types of inspections does your district conduct?

   2. Do engine companies conduct annual inspections?

   3. Who conducts re-inspections?

   4. Do you have a night inspection program for higher risk occupancies?

   5. Who conducts UFC permit inspections?

   6. Describe any special inspection programs that you may be using.

   7. List the number of annual inspections, re-inspections, permit inspections, night inspections.
D. Fees
1. Describe your fee structure for fire prevention services. If possible, attach the fee structure adopted by the commissioners. This includes fees for UFC permits such as public assembly, open flames, etc.

2. Describe your fee structure for plans review.

3. If your budget includes estimates for projected income from these fees for 2003 please list here.

4. Does your division generate any other income for the district? If yes, please describe.

E. Computer Systems
1. What computer software are you using for your inspection program?

2. What computer software are you using for fire incident reports?

3. Are you using computer software for aid reports? If so, which one?

F. Investigations
1. Who conducts Origin and Cause investigations within your district?

2. Who conducts criminal follow-ups for fires in your district?

3. What level of training or certification do your investigators have?

G. City/County Relationships
1. Describe any contracts, partnerships or relationships that you have with any cities, county or other public agencies. These could be agreements for plan review, contracts for inspections, etc.

H. Disaster preparedness
1. Describe any programs for improving your ability to survive a major disaster such as an earthquake or winter storm.

2. Do you have or is your district developing a Mitigation plan as required by FEMA for future grants after a federally declared disaster?
Appendix B

Fire Prevention Division Survey

The following survey is intended to identify the different programs, services and other features of the four different fire prevention divisions in the districts considering merging in the future. The goal is to provide a picture that shows who we are and what we’re currently doing. This should allow us to find similarities and help in our effort to identify if a merged fire prevention division makes sense.

The abbreviations for the jurisdictions are as follows:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH</td>
<td>North Highline Fire District</td>
</tr>
<tr>
<td>DM</td>
<td>King County Fire Protection District 26, Des Moines</td>
</tr>
<tr>
<td>FW</td>
<td>Federal Way Fire Department</td>
</tr>
<tr>
<td>B/NP</td>
<td>King County Fire Protection District 2, Burien/Normandy Park</td>
</tr>
</tbody>
</table>

A. Programs

1. Give an overview of the fire prevention programs in place in your district. This narrative summary should give the reader an understanding of what each Prevention Division does on a day to day basis before getting into the details of the different work units.

**NH** Both fire prevention and public education services are provided. NH has many different classes and diverse groups that it reaches. The focus is not just on fire prevention but injury and accident prevention as well. NH has a very strong customer service approach to fire prevention.

**DM** Each shift is responsible to conduct annual fire and life safety inspections of the Des Moines area businesses, public facilities, and high occupancy residential facilities. At the beginning of each month, each shift receives their inspection assignments and completes the inspections by the end of the month. The Fire Marshal conducts the business license inspections on a daily basis. Fire system reviews are conducted by the fire marshals, and the district utilizes a consultant for sprinkler plan reviews. Additionally, the Fire Marshal oversees the abatement of oil tank removal and fill.

**FW** Both fire prevention and public education services are provided. Efforts include annual, new construction, permits, and special inspections. Personnel work with the city of Federal Way’s building department on many issues. We also provide origin and cause fire investigations within the city of FW.

**B/NP** Both fire prevention and public education services are provided. Our annual inspection program includes company inspections of every business and multi-family residential facility on a yearly basis. Inspections of occupancies permitted under the UFC are conducted by the
Fire Marshal’s Office on an annual basis. The office maintains the “Smoke house” and conducts yearly training to all of the elementary schools in its jurisdiction. We maintain a close interface with both the City of Burien and City of Normandy Park Building Departments and provide a broad range of services from participation in pre-development meetings to fire code review of building permits and fire systems. We conduct origin and cause investigations for both cities.

B. Personnel

1. List the number of personnel assigned to the fire prevention division. This does not include public education, but should include any secretarial personnel that are specific to the division. Please include ranks or titles, and whether they are represented by the bargaining unit.

   **NH**
   1 Fire Marshal, B/C (Union)
   1 secretary (non-union civilian)

   **DM**
   1 Fire Marshal, B/C (Non Union)
   1 secretary, one half FTE (Non Union)

   **FW**
   1 Fire Marshal, A/C (Non Union)
   1 Assistant Fire Marshal, Lt. (Union)
   4 Deputy Fire Marshals (Union)
   1 FTE Secretary/receptionist (currently job share)

   **BNP**
   1 Fire Marshal, B/C (Non Union)
   1 Lt/Inspector, (Union)

2. Do you require/encourage any certifications for your personnel?

   **NH**
   Certification and education not required but certainly encouraged.
   All suppression personnel have taken the UFC/UBC Inspection training through King County or BCC.

   **DM**
   None required

   **FW**
   Unwritten policy to have IFCI Fire Code certification.
   FM, Deputy Fire Marshals (DFM), and one volunteer investigator are Certified Fire Investigators (CFI)

   **B/NP** Encourage

C. Inspections

1. Describe your inspection program. In other words, what types of inspections does your district conduct?
**NH**  Annual Inspections- suppression does 40% and FM does 60% by contract.

**DM**  The district conducts annual life and safety inspections for business, public facilities and multi-family residential facilities, performed by the firefighters. The fire marshal conducts business license inspections, tank removal/fill inspections, sprinkler and fire alarms inspection/testing.

**FW**  Annual inspections on most occupancies are performed by suppression. Some Group B and M occupancies are included in a self-inspection program, (every other year they conduct self inspection and in the off year firefighters inspect). Some larger Group B and M occupancies receive a “modified inspection during the self inspection year. Group H get annual inspection and permit inspection 6 mos. later. DFM’s conduct permit inspections within the city of FW and collect a fee. FMO personnel conduct new construction inspections within the city of FW. Suppression conduct Night inspections on select occupancies, not all are public assemblies.

**B/NP**  Permitted as outlined in UFC and non-permitted for all business/multi-family

2. **Do engine companies conduct annual inspections?**

   **NH**  Yes 40 % of annual inspections

   **DM**  Yes, engine companies do conduct annual fire and life safety inspections.

   **FW**  Yes all companies conduct annual inspections

   **B/NP**  Yes for non-permitted

3. **Who conducts re-inspections?**

   **NH**  Uses a re-inspection system where the firefighters conduct re-inspections of fire marshal inspections, and the FM conducts re-inspections of firefighter inspections.

   **DM**  Re-inspections are conducted by the original shift assigned to the inspection.

   **FW**  The engine companies are responsible for up to 2 re-inspections, after that it is turned over to FMO for compliance.

   **BNP**  Engine company conducts re-inspections for non-permitted, unless unusual circumstances dictate otherwise.
4. Do you have a night inspection program for higher risk occupancies?

**NH** No, however the fire marshal will occasionally perform night inspections on occupancies that have a high occupancy concern such as nightclubs or other place of assembly occupancies.

**DM** We do have a night inspection program for higher risk occupancies.

**FW** Yes, these are conducted by the engine companies. Includes Group A, some Group I, and some Group R occupancies, based on risk. Each occupancy in the program is inspected every 3-4 months. The Group I and R may be conducted during daytime hours.

**B/NP** On case by case basis as determined by a Chief Officer

5. Who conducts UFC permit inspections?

**NH** Used to have contract with King County to conduct UFC permit inspections. That contract was cancelled in 2002. King County now performs permit inspections.

**DM** Fire marshal conducts UFC permit inspections.

**FW** In unincorporated areas, KC FMO does the permit inspections at a rate of $132.00 per hour, including travel time. Within the city of Federal Way, our DFM’s conduct permit inspections approximately one month after the firefighters complete their inspection. Via a contract with KCFPD 26, we protect the Woodmont/Redondo area. In that area we conduct permit inspections for no fee.

**B/NP** Lt. Inspector with help from FM as required.

6. Describe any special inspection programs that you may be using.

**NH** *Target hazards*-occupancies are divided into High Hazard and Place of interest. Once on the list additional notification of firefighters and increased training are implemented. *Citizen concern towards safety* program that allows citizens to notify the district of any safety concerns they have.

**DM** None

**FW** Night inspections, haunted houses, firework displays. Our self-inspection and our modified inspections are unique.

**B/NP** N/A
7. List the number of annual inspections, re-inspections, permit inspections, night inspections.

<table>
<thead>
<tr>
<th></th>
<th>Annual</th>
<th>Re-Inspections</th>
<th>Permits</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH</td>
<td>1,191</td>
<td>640</td>
<td>533</td>
<td>5</td>
</tr>
<tr>
<td>DM</td>
<td>659</td>
<td>UKN</td>
<td>UKN</td>
<td>UKN</td>
</tr>
<tr>
<td>FW</td>
<td>1,985*</td>
<td>781</td>
<td>342**</td>
<td>161</td>
</tr>
<tr>
<td>B/NP</td>
<td>1,100 Non Permitted</td>
<td>300+ Permitted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Does not include self inspections or modified inspections (2392).

** Does not include number of re-inspections, only permits issued.

D. Fees

1. Describe your fee structure for fire prevention services. If possible, attach the fee structure adopted by the commissioners. This includes fees for UFC permits such as public assembly, open flames, etc.

   **NH** Does not conduct permit inspections in the unincorporated area. Collects money for permit inspections within the portion of Burien that they cover via contract.

   **DM** $50.00 fee charged for tank fill/tank abatement services. No fee charged for fire hydrant availability service.

   **FW** We collect fees for our permit inspections within the city of FW. The fees generally range from $120.00 to $390.00 for an initial permit. Renewals generally cost $80.00 to $260.00. The higher numbers are for occupancies requiring multiple permits. In 2002, we collected approximately $50,000.00 for permit inspections.

   **B/NP** See Attachment

2. Describe your fee structure for plans review.

   **NH** The fee structure is supposed to be $120.00 per hour but have yet to see any of this money. Provide plans review for all occupancies that fall within contract area with Fire District 2. Main function is to make sure there is a fire hydrant availability form filled out.

   **DM** Sprinkler and fire alarm fees are determined by the City of Des Moines, and are a percentage of the valuation of the project. A check is sent to the District on a quarterly basis.
Sprinkler plan reviews are conducted by a consultant. He charges an hourly fee for plan review, which is paid by the customer. Additionally, the District charges a fee for this permit.

Fire alarm reviews are conducted by the Fire Marshal. A plan review fee is charged by the District as well as a permit fee.

**FW** We receive money from the City of FW for fire prevention plan review. It is via an interlocal agreement and is based as a percentage of the city’s fees. In 2002, we collected approximately $98,000.00 for plan review

**B/NP** Portion of permit fee

3. If your budget includes estimates for projected income from these fees for 2003 please list here.

**NH** UFC Permit Fees generated from the City of Burien permitted occupancies is approximately $3,000.00.

**DM** The 2003 budget does include fees collected in the 2003 budget.

**FW** We use very conservative numbers historically.

\[
\begin{align*}
\text{Permit Fees} & \quad $45,000.00 \\
\text{Plan Review} & \quad $50,000.00 \\
\end{align*}
\]

**B/NP** $4,500.00

4. Does your division generate any other income for the district? If yes, please describe.

**NH** Nothing generated at this time, however will be exploring the possibility of billing the City of Burien for plans review and fire hydrant availability review and fire protection equipment testing.

**DM** The division does not generate any other income.

**FW** Not at this time.

**B/NP** No

E. Computer Systems

1. What computer software are you using for your inspection program?

**NH** MS Access 2000

**DM** MS Access (can use Firehouse for business inspection program).
**FW**  SunPro FireRMS 5.0

**B/NP**  MS Access

2. **What computer software are you using for fire incident reports?**

   **NH**  SunPro 3.7

   **DM**  Firehouse

   **FW**  SunPro FireRMS 5.0

   **B/NP**  Firehouse

3. **Are you using computer software for aid reports? If so, which one?**

   **NH**  N/A

   **DM**  Firehouse

   **FW**  SunPro FireRMS 5.0

   **B/NP**  Firehouse

**F. Investigations**

1. **Who conducts Origin and Cause investigations within your district?**

   **NH**  Incident Commander/NH Fire Marshal for smaller fires. We utilize KC Fire Investigation Unit (FIU) for fires that meet KC protocol. For fires within the City of Burien use Burien Fire marshal or a B/C to determine if King County FIU should be called out.

   **DM**  The Fire Marshal conducts origin and cause investigations.

   **FW**  In unincorporated King County, and our portion of Des Moines, the Incident Commander or FW FMO is responsible for smaller fires. We utilize the KC FIU for fires that meet KC protocol. For fires within the City of FW, we do all origin and cause investigations.

   **B/NP**  Fire marshal in conjunction with King County FMO for city of Burien.

2. **Who conducts criminal follow-ups for fires in your district?**
**NH**  KC Fire investigation Unit (FIU) or they will conduct this with the local law enforcement personnel. (The impression is that KC FIU will elect to coordinate with the other law enforcement agency).

**DM**  King County FIU conducts criminal follow-ups for fires in this district.

**FW**  In the Des Moines and King County portions of our district, the KC FIU. Within the city of FW, we partner with FWPD

**B/NP**  Mix of King County FMO, Normandy Park PD and Fire Marshal.

3. What level of training or certification do your investigators have?

**NH**  None or our personnel are certified fire investigators, however four (4) of our personnel have AA Degrees in Fire Investigations.

**DM**  The fire marshal has training from the National Fire Academy in arson/fire investigation.

**FW**  All of our career fire investigators (with one exception) are CFI’s. Fire Marshal and one DFM are both state and IAIA certified CFI’s. The Fire Marshal has an AA in fire investigation. One of our two volunteer investigators is also a CFI.

**B/NP**  Significant including extensive training in criminal investigations (Harm).

**G. City/County Relationships**

1. Describe any contracts, partnerships or relationships that you have with any cities, county or other public agencies. These could be agreements for plan review, contracts for inspections, etc.

**NH**  We do have a contract with KCFD 2 to provide Fire and Emergency Medical protection to approximately 33% of the City of Burien. Copy of contract is attached to original survey response. The previous contract with KCFMO to perform permitted occupancy inspections is null and void; however it may resurface at any time.

**DM**  The fire marshal works closely with the building Department, city of Des Moines. The fire Marshal and Building Official have agreed to allow the fire marshal to conduct both the fire prevention side and Building Division requirements of New Business License Inspections. This agreement serves to promote efficiency for the customer (who now does not have to wait for both entities to schedule inspections) and establishes a positive working relationship.

The Fire Marshal works closely with a representative from the Puget Sound Clean Air Agency.
We have an interlocal agreement with the City of FW to perform fire code work for them. We have a contract with KCFPD 26 to provide fire and emergency medical protection to the Woodmont and Redondo neighborhoods. This partnership also describes responsibilities for fire code services as well.

Contracts with cities of Burien and Normandy Park for plan review, inspections.

H. Disaster preparedness
1. Describe any programs for improving your ability to survive a major disaster such as an earthquake or winter storm.

Have SOP’s for dealing with bomb threats, civil disturbances, earthquakes and storms.

N/A

We have a disaster plan that was recently revised. We have a very close relationship with the city and our other public agency stakeholders in the community. The Greater FW EOC is located at station 62 and recently underwent a comprehensive upgrade.

See attachment. Plus State approved emergency operations plan with City of Burien.

2. Do you have, or is your district developing a Mitigation plan as required by FEMA for future grants after a federally declared disaster?

Not at this time but King County is taking the lead on this and we will coat tail on the plan according to the chief of the department. Until then there is a previous plan in place and it is included in the original response to this survey.

N/A

We are currently developing a mitigation plan in cooperation with King County and the City of FW.

Yes, in conjunction with King County
B/NP  Number of fire investigations conducted
       Accidental/other
       Criminal
Appendix C

Sample Task Force Report on Goals and Objectives

Performance Areas for Fire Prevention

The following performance areas have been included as an example of what goals and objectives would look like for a fire prevention division. They are not all inclusive, merely a sample.

Community Development

Community Development refers to the growth of the community. As the Community grows, the Fire Marshal’s office plays an important part in mitigating the negative fire related impacts that growth could have on a community. We do that by the adoption and implementation of state and local codes and ordinances followed up by plan review and construction inspections.

Goal: Implement and enforce necessary codes, ordinances and standards to ensure reasonable fire and life safety in new structures and to reduce the need for massive public fire defenses.

Objective: Provide and approved and/or written review of construction plans in an average turn around time of three working days from the day the plans are received by the fire department.

Provide field inspections of structures under construction to verify that fire and life safety features i.e. fire resistance, fire protection and alarm systems, and exiting systems are operational.

Code enforcement

Code enforcement is the regulating of the communities required fire and life safety features. It is the fire marshals office’s responsibility to regulate the maintenance of the fire and life safety features within the community. This is accomplished through inspections within the businesses of the community; and the abatement of deficiencies noted. Both state and local fire protection laws and codes are followed in the maintenance of our community.

Goal: Through quality code enforcement and follow-up inspections of occupied, regulated buildings, achieve corrections of fire and life safety deficiencies.

Objective: Conduct inspections on 90% of the occupied, regulated buildings and cause correction of all noted fire and life safety deficiencies.
Appendix D

Fire Prevention Task Force Goals and Objectives

1. Evaluate workload of all agencies, determining percentage of uninspected properties, if any.
2. Determine practical performance levels for suppression personnel as it relate to building inspections.
3. Analyze political external influences which impact fire prevention activities.
4. Evaluate plans, examine workload, and make recommendations as to number of needed positions.
5. Provide an organizational chart which meets the goals listed over a period of five to seven years.
6. Establish a reasonable performance standard for fire prevention officers relative to number of daily inspections, special assignments, etc.
7. Make recommendations relative to physical location of the fire prevention officers.
8. Develop a performance standard relative to turn-around for various building plans submitted for review (fire and life safety).
9. Identify current certification and expertise levels for existing personnel.
10. Determine a fee structure for UFC permits, and plan review for city building departments.
11. Identify a fire investigation program that meets the needs for each city and the unincorporated areas.
12. Evaluate computer programs and recommend one that could be used in the future by all personnel.