

# **The Impact of Jurisdictional Size and Population on E.O.C.'s**

Executive Analysis of Fire Service Operations in Emergency Management

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## ABSTRACT

The City of Sumner has a problem of which they are not aware. Specifically, it has not addressed the need to manage significant and/or disaster events that are beyond the normal day-to-day functioning of its emergency response system. Although there is no identified local facility that serves as an emergency operations center, nor an identified means to provide adequate staffing, the City of Sumner believes it has addressed the issue through a contract for emergency management services with the county emergency management department.

The purpose of the research was to determine whether jurisdictional size and/or population impact the existence and location of emergency operations centers. Using descriptive and action research methods, the following questions were answered:

1. Does the geographical size and/or population served by a jurisdiction influence the existence, location, and staffing of emergency operations centers?
2. How are other jurisdictions staffing emergency operations centers?
3. To what extent are key officials supportive and serving as participants within the emergency operations center?

The research revealed that jurisdictional size and/or population has no impact on the existence of emergency operations centers. However, the type of jurisdiction, municipal versus fire district did influence whether the emergency operations center was contained within the jurisdiction or was part of a regional center. It also provided a ranking of various individuals and agencies that should be represented in an emergency operations center. Finally, the research indicated that a majority of those agencies utilizing emergency operations centers are satisfied with the participation and support provided by key officials.

The recommendations from this study expressed the need for the City of Sumner to determine how they will provide appropriate local support to the regional emergency operations center and to identify what individuals and agencies would be utilized in this local support role.

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## INTRODUCTION

Emergency operations centers. Emergency coordination centers. Disaster management facilities.

All of these have been used to describe buildings or portions of buildings from which the management of large-scale, widespread and/or significant emergencies are managed. Since the late 1970's, the Federal Emergency Management Agency has been an advocate for the existence of these facilities.

While many in the fire service have heard or read about emergency operations centers, not all agencies have them available as part of their immediate operations. While some agencies have such facilities within their immediate jurisdictions, there are some that operate an emergency operations center as part of a regional concept. Finally, there are some agencies that have no access to facilities such as these.

The City of Sumner Fire Department, located in Sumner, Washington, has two problems relative to emergency operations centers. The first is that no primary location has been selected and therefore the emergency operations center is non-existent locally. This means communication links for radios, telephones, facsimiles, etc., have not been established.

Secondly, there exists a demonstrable reluctance, bordering on opposition, from City Administration to not only not locate such a facility, but to staff it appropriately during significant and/or disaster operations.

The purpose of this applied research project is to collect information from other jurisdictions on how they are addressing the existence, location, and staffing of emergency operations centers. This information will be used to provide a recommendation to the City of Sumner.

Utilizing descriptive and action research methods, the following questions will be answered:

1. Does the geographical size and/or population served by a jurisdiction influence the existence, location, and staffing of emergency operations centers?
2. How are other jurisdictions staffing emergency operations centers?
3. To what extent are key officials supportive and serving as participants within the emergency operations center?

### **BACKGROUND AND SIGNIFICANCE**

Beginning with the formation of the F.I.R.E.S.C.O.P.E. task force in the State of California in the 1970's, governmental entities have become increasingly aware of the benefits resulting from the coordination of large-scale emergency events. Since those early beginnings, the Federal Emergency Management Agency has been a proponent of these coordinated concepts, specifically through the use of centralized emergency operations centers. Unfortunately, not all governmental agencies, particularly at the local level, have developed this appreciation. Such is the case with the City of Sumner, Washington.

Until six years ago, the City of Sumner had given little thought to the need for an emergency operations center. When large or significant emergency events occurred within the city, all incident needs were handled at the scene of the event(s). Due to their immediate involvement at the scene of these events, the fire chief and police chief became the city's emergency management team and handled whatever needed to be done.

Beginning six years ago, the previous style of emergency management changed. At that time and continuing to this day, the City of Sumner has contracted with the Pierce County Department of Emergency Management for emergency management services, including the operation and staffing of an

emergency operations center, which is located in Tacoma, Washington. This particular arrangement provides for the management of emergency operations from a regional point of view.

This particular means of managing regional problems from a regional perspective works well. When incidents affect a wide-spread area, such as during flooding, severe weather, or other regional events, managing the incidents, controlling resources, and making decisions for the region has proven very effective.

However, attempting to manage local events from a regional perspective has not proven itself as effective. At least that has been the experience in Sumner. During such events, the City of Sumner reverts to old habits. The fire and police department find themselves managing large local incidents without the participation of other key city officials. With limited staff resources within these two departments, the ability to staff an emergency operations center at all is limited, much less the ability to staff one appropriately. Add to the lack of staffing support from city administration the fact that the City of Sumner has not located and equipped an emergency operations center, the difficulties encountered when attempting to manage the needs of significant local emergencies can be appreciated.

What role does Pierce County Department of Emergency Management play during these events? Essentially they play a limited role as a Logistics Section, providing limited outside resources. The roles of the Incident Command, Operations, Plans, and Finance sections all are being managed at the local level.

The intent of the research questions is to discover if the practices found in Sumner are endemic to small communities/jurisdictions. Based on the findings of the research, a recommendation will be made to City of Sumner officials regarding the appropriate location and staffing of an emergency operations



center that will provide for the necessary and appropriate management of significant emergencies that occur within the City's jurisdiction.

This applied research project is applicable to the National Fire Academy's Executive Fire Officer Program class "Executive Analysis of Fire Service Operations in Emergency Management" through the application of the concepts found in Unit 9: Emergency Operations Center.

## **LITERATURE REVIEW**

There existed a significant limitation in conducting a literature review of this subject area. The limitation was more than just a shortage of material dealing with emergency operations centers. It was further limited by the absolute absence of any material addressing the impact that jurisdictional size and/or population has on the existence of such centers. The same limitation continues with respect to the level of support and participation by key officials within the respective emergency operations centers.

Considering the near lack of related literature, this review will focus on some general issues regarding the location of emergency operations centers. It will also specifically consider the staffing of such centers.

When individuals whose job entails the management of an emergency services agency, such a fire or police, begin to talk about emergency operations, those outside this environment have difficulties in understanding our jobs. To an even greater extent, when we have discussions about disaster management and the role that key governmental officials play in that environment, we often are fighting a difficult battle. Nevertheless, it is important that local officials understand the complexity of the issues

faced when considering the preparedness, response, and recovery issues associated with significant or disaster events (Borders, 1993).

Along with understanding these complex issues, it is equally as important that all parties understand the need to centralize and coordinate the decision-makers. This is the role of the emergency operations center. It is the opinion of many that an emergency operations center is the key to successful disaster responses (Federal Emergency Management Agency, 1984; Scanlon, 1994). Based upon the premise that disaster management must provide for a centralized, coordinated decision process, it is felt the emergency operations center is essential in order to facilitate emergency operations, as well as the interaction with other public and private sector organizations (Czerwinski, 1995).

Much of the literature gave considerable comment to the issue of properly locating an emergency operations center. As will be discussed in this report, the need for key officials to be involved in local decisions during disaster operations is frequently mentioned. That being true, the literature consistently recommends that emergency operations centers be located in or close to the seat of local government (Federal Emergency Management Agency, 1984; Felsch, 1994).

Not only does the literature suggest the centers be located at the seat of government, but that events are best managed when officials are near each other, preferable in the same facility, and that provisions allow for direct communication among the represented groups (Federal Emergency Management Agency, 1984). This would suggest that the location of the emergency operations center has a direct impact on a community's ability to activate in the event of an emergency (Felsch, 1994).

A major area of discussion throughout the literature centered on the issue of staffing an emergency operations center. The staffing suggested by the literature seemed to be divided between the actual

practices that are occurring in the emergency management industry versus the staffing recommended as being necessary and appropriate.

On one side of the debate, espoused by the practitioners, typical staffing involved a relatively self-contained group of individuals. This means the staffing was provided by individuals immediately available within the jurisdiction. In repeated examples, the staffing would typically include the mayor, key department heads such as fire and police, and a variety of other agency personnel (Federal Emergency Management Agency, 1984; Felsch, 1994; Scanlon, 1994).

On the other side of the debate were the theorists or purists. In these examples, not only were the key local officials included, but a wide range of other representatives were suggested. Those additions included transit representatives, medical/health agencies, military representatives, engineering staff, social services, and more (Federal Emergency Management Agency, 1984; Goshe et al, 1980; Scanlon, 1994). The argument in this case was the need to address a broad spectrum of agencies that would provide services to at-risk or needy citizens during disaster operations. All of these representatives are intended to be gathered in a single facility.

The results of the literature review influenced the research in several ways. First, it strengthened the belief that Sumner needs an emergency operations center locally in order to provide local decisions to local issues. This solidified the need to determine what other jurisdictions are doing with respect to this issue.

Secondly, it confirmed the goal of determining how Sumner should consider staffing an emergency operations center. In order to make an appropriate recommendation to City of Sumner officials, the survey would need to provide statistical information on how similar agencies are addressing this question.

Finally, based upon anecdotal accounts, due to the successes experienced by communities that utilize an emergency operations center versus the poor outcomes experienced by those communities without such centers, the basis for the research was further shown to be appropriate for Sumner. Certainly worth the time necessary for the proper conduct of the research.

## **PROCEDURES**

The research procedures used in preparing this report consisted first of a literature review. The review was conducted initially at the Learning Resource Center, located at the National Emergency Training Center in Emmitsburg, Maryland, during July and August 1998. Further review was conducted utilizing industry-specific publications provided by the Sumner Fire Department. This secondary review took place October to December 1998.

The next step utilized descriptive and action research to develop data on the existence, jurisdiction, staffing, and satisfaction with respect to emergency operations centers.

### **Instrumentation**

A ten question survey was developed for distribution to a selected target audience. A copy of the survey is contained in Appendix A.

Questions 1-4 were used to differentiate the type of jurisdiction, manner of staffing, size and population of the respondent organizations.

Questions 5-7 provided information regarding the existence of local and/or regional emergency operations centers, as well as the type of facility in which the centers were located.

Question 8 provided information on how the respondent jurisdictions staff their emergency operations centers.

Question 9 provided information regarding the participation by key city/county officials in the staffing of emergency operations centers.

Question 10 addressed the respondents satisfaction with their current situation relative to support for emergency operations centers during major incidents.

### **Population**

The selected population that received the survey consisted of two differing groups. The first group consisted of twenty-three individuals that were participants of the National Fire Academy's Executive Fire Officer Program class, "Executive Analysis of Fire Service Operations in Emergency Management". This group was selected because it represents a broad spectrum of fire service organizations across the United States and because they were classmates of the author.

The second group consisted of two hundred twenty-eight (228) fire service agencies throughout the State of Washington. This group was randomly selected through a process that sent a survey to alternating jurisdictions listed in the 1998 Washington Fire Commissioners Association's fire service directory.

### **Collection of Data**

The raw data was collected and separated into categories useful in answering the research questions. After the data was collected, it was discovered that the element of the survey that provided results for jurisdictions listed as "Other" provided insignificant numbers and was therefore removed from further consideration in the report. The results of the categorized data is reported in the **RESULTS** section of this report.

### **Assumptions and Limitations**

The first limitation was discovered during the literature review. Other than applied research projects located in the Learning Resource Center of the National Emergency Training Center in Emmitsburg, Maryland, industry-specific publications, and several publications by the Federal Emergency Management Agency, little was found that addressed emergency operations centers in general. Nothing was found addressing the specifics of this research report. As such, the review is limited in its scope.

The survey population is assumed to have knowledge of the topic with respect to their jurisdiction and to have answered the questions honestly. However, the application of the survey results may only be representative of the State of Washington due to the small number of out-of-state agencies that were surveyed.

Finally, questions 9 and 10 of the survey provide subjective results as they call for the respondent to offer an opinion. While these create some interesting results, they are limited in their application for objectively answering problems with respect to emergency operations centers.

## **RESULTS**

Of the two hundred fifty-one (251) surveys that were distributed, responses were returned by one hundred fifty-seven (157) agencies. This equates to a sixty-three percent (63%) return rate. This high return rate provides sufficient data to clearly determine the trends in the State of Washington and might be construed to be representative of the national fire service, particularly as it relates to municipal fire departments and fire protection districts. Due to the limited number of respondents in the “Other” category, those results have been removed from consideration.

The first research question asked, “Does the geographical size and/or population of a jurisdiction influence the existence or location of an Emergency Operations Center?.” In answering this question,

the survey provided information as to the type of jurisdiction, how each are staffed, the size and population, and the existence and location of an Emergency Operations Center. The tables below provide the subject research data:

### Type of Jurisdictions

Type of Agency	Total surveyed	Fully paid staff	All Volunteer staff	Combination staff
<b>Cities</b>	57	24	7	26
<b>Districts</b>	96	6	41	49

Table 1

The above information on its own does nothing more than provide information as to the range of jurisdictions that were surveyed. It does provide information that may prove of value as the results of the survey are expanded. At this point, its interesting to note that of the respondent cities, forty-two percent (42%) are served by fully paid departments, six percent (6%) are served by fully volunteer departments, and fifty-one percent (51%) are served by combination departments.

For the respondent fire districts, six percent (6%) are fully paid, forty-three percent (43%) are fully volunteer, and fifty-one percent (51%) are combination departments.

From the combined totals, nineteen percent (19%) are fully paid department, thirty-two percent (32%) are fully volunteer, and forty-nine percent (49%) are combination departments.

In order to further understand the range of jurisdictions surveyed, the size and populations are provided in Tables 2 and 3 respectively.

### Jurisdictional Geographical Size

Type	Total surveyed	<10 sq. miles	10-25 sq. miles	26-50 sq. miles	> 50 sq. miles
<b>Cities</b>	57	27	19	9	2
<b>Districts</b>	96	3	10	26	57

Table 2

### Population Served

Type	Total surveyed	<10,000	10,000 to 24,999	25,000 to 49,999	50,000 to 99,999	>100,000
<b>Cities</b>	57	16	17	11	9	4
<b>Districts</b>	96	50	28	10	6	2

Table 3

Tables 4 and 5 below, again separating for size and population, provide the information regarding the existence of emergency operations centers within the respondent city jurisdictions. Of those providing information, thirty-nine percent (39%) have an emergency operations center within their jurisdictional boundaries. Forty-two percent (42%) participate in a regional center, nine percent (9%) have both a local center and participate in a regional center. Finally, four percent (4%) of the respondent jurisdictions do not have an emergency operations center available to them at all.

Possibly more important is the fact that of the total respondents, eighty-one percent (81%) of the participating agencies have an emergency operations center from which to work.



### Existence of EOC's per Agency Size: Cities

Type	<10 sq. miles	10-25 sq. miles	26-50 sq. miles	>50 sq. miles
<b>In city</b>	10	6	4	2
<b>Regional</b>	10	9	5	0
<b>None</b>	2	0	0	0
<b>Both</b>	4	4	1	0

Table 4

### Existence of EOC's per Agency Population: Cities

Type	<10,000	10,000 - 24,999	25,000 -49,000	50,000 - 99,999	>100,000
<b>In City</b>	3	9	6	0	4
<b>Regional</b>	10	4	3	7	0
<b>Neither</b>	1	1	0	0	0
<b>Both</b>	4	1	2	2	0

Table 5

By comparison, Tables 6 and 7, separated for size and population, provide the information regarding the existence of emergency operation centers for fire districts. The resulting data shows that of the respondent jurisdictions, twenty-three percent (23%) of the fire district operate an emergency operations center within their own jurisdiction, seventy-three percent (73%) participate with a regional center, six percent (6%) have both and four percent (4%) do not have a center available.

### Existence of EOC's per Agency Size: Fire Districts

Type	< 10 sq. miles	10-25 sq. miles	26-50 sq. miles	> 50 sq. miles
<b>In District</b>	1	2	9	10
<b>Regional</b>	3	15	10	42
<b>Neither</b>	0	4	0	4
<b>Both</b>	0	0	2	4

Table 6

### Existence of EOC's per Population: Fire Districts

Type	< 10,000	10,000 - 24,999	25,000 - 49,999	50,000 - 99,999	> 100,000
<b>In District</b>	8	4	4	2	0
<b>Regional</b>	27	23	4	2	2
<b>Neither</b>	6	0	0	0	0
<b>Both</b>	0	1	2	2	0

Table 7

Table 8 provides the information regarding where the emergency operations centers are located. As indicated, twenty-eight percent (28%) of the cities and twenty-two percent (22%) of the fire districts locate their emergency operations center within a fire department facility. Twenty-five percent (25%) of the cities and twenty-three percent (23%) of the fire districts locate their centers at a dispatch facility. Eighteen percent (18%) of the cities and three percent (3%) of the fire districts locate their centers at city hall. Twenty-six percent (26%) of the cities and forty-nine percent (49%) of the fire districts locate their center at a county emergency management facility. Lastly, twelve percent (12%) of the cities and eight percent (8%) of the fire districts locate their emergency operations center at some other facility.

### Locations of EOC's

	F.D. Facility	Dispatch Facility	City Hall	County Emerg. Mngmt. Bldg.	Other
<b>Cities</b>	16	14	10	15	7
<b>Fire Districts</b>	21	22	3	47	8

Table 8

In totality, twenty-four percent (24%) of the jurisdictions locate their emergency operations center at a fire department facility, twenty-four percent (24%) locate them at a dispatch facility, eight percent (8%) locate them at city hall, forty-one percent (41%) locate their emergency operations center at a county emergency management facility, and ten percent (10%) locate them at some other facility.

In answering the question concerning the existence of emergency operations centers, there exists a clear difference between the cities and fire districts. The data provided in the first three tables indicates that, based upon the geographical area served by a city agency, it is nearly an equal split between having an emergency operations center within the jurisdiction versus cooperating in a regional center. However, when considering the population served, the numbers indicate that the larger the population served, the greater the likelihood that the jurisdiction will operate an emergency operations center within their own jurisdiction.

When considering the same information for fire districts, the tendencies change significantly. In this case, in all categories, fire districts appear to favor participation in a regional center.

Finally, regarding the existence of an emergency operations center, there appears to be no relationship between jurisdictional size and/or population and the existence of such centers. Clearly, in most cases, fire service agencies have recognized the value of these centers and have made choices that allow them to participate within a emergency operations center environment.

Research question number two asked, “How are other jurisdictions staffing emergency operations centers?”. Table 9 below provides the information provided by the agency surveys.

### Staffing of Emergency Operations Centers

	Fire	Police	Public Works	Health Dept.	City/Cnty Manager	Finance Dept.	EMS Mgmt.	Mayor	Council Memb.	E.M. Dir.	Other
<b>Cities</b>	50	49	47	18	32	32	34	30	17	38	19
<b>Districts</b>	71	73	59	28	34	23	42	15	18	62	22

Table 9

For the cities surveyed, the staffing for emergency operations centers breaks down into three groupings. The largest group consists of representatives from three agencies/departments; fire, police, and public works. The second group contains five additional representatives. It consists of the mayor, finance department, emergency medical services, the city manager, and the Director of Emergency Management. The final grouping consists of three others that were included infrequently; the Health Department, city council members, and other participants.

The fire district surveyed produced similar results, which again resulted in three major groups. The first group remains nearly the same as with the cities. In this case, it includes fire, police, public works, plus the Director of Emergency Management. However, the second group provides some differences. In this case the group consists of the Health Department, the county manager, and emergency medical services management. The final group consists of finance representatives, the mayor, and council members.

The third research question asked, “To what level are key officials supportive and participants within the Emergency Operations Center?”. Table 10 and Table 11 provide responses received from the survey respondents.

### **Participation by City/County Officials**

	<b>Full Participation</b>	<b>Limited Participation</b>	<b>No Participation</b>
<b>Cities</b>	31	13	12
<b>Fire Districts</b>	47	15	17

**Table 10**

In the case of the cities, fifty-four percent (54%) of the respondents indicate in Table 10 that key officials fully participate, when requested, in the emergency operations center. By comparison, twenty-three percent (23%) experience limited participation and twenty-one percent (21%) receive no participation whatsoever.

For the fire districts surveyed, forty-nine percent (49%) indicated full participation by key officials when requested. Sixteen percent (16%) indicated limited participation and eighteen percent (18%) indicated they receive no participation from key officials. In the case of the fire districts, seventeen percent (17%) did not provide a response to this survey question.

When considering the level of satisfaction within the respondent jurisdictions, Table 11 provides the data tabulated from the surveys.

### Level of Satisfaction

	Very Satisfied	Satisfied	Marginally Satisfied	Dissatisfied
<b>Cities</b>	10	27	17	4
<b>Fire Districts</b>	23	36	27	4

Table 11

As seen in the table, eighteen percent (18%) of the cities are very satisfied, forty-seven percent (47%) are satisfied, thirty percent (30%) are marginally satisfied, and seven percent (7%) are dissatisfied with the level of support provided to the emergency operations center during major events. This indicates a significant level of satisfaction as sixty-five percent (65%) of the respondent cities are at least satisfied with the support provided.

With respect to the level of satisfaction experienced by the fire districts, the numbers change to some extent. In this case, twenty-four percent (24%) are very satisfied, thirty-eight percent (38%) are satisfied, twenty-eight percent (28%) are marginally satisfied, and four percent (4%) are dissatisfied.

Again, the overall level of satisfaction is high, with sixty-two percent (62%) indicating satisfaction or better with respect to the support for emergency operations center functions provided during major events.

### DISCUSSION

During the literature review conducted for this research report, no other examples of previous research dealing with the effects of jurisdictional size and/or population on the existence of emergency operations centers were found. The same is true for participation by key officials or the support

provided for the functions of these centers during major events. As such, the discussion of these points is limited to personal interpretations of the study results.

This discussion is divided into four parts. The first three will discuss each of the issues explored by the research questions. The final portion will discuss the issues in relationship to their implications to the Sumner Fire Department.

### **Effects of Size/Population of E.O.C.'s**

The first thing that was discovered in the survey results is that a significant majority of the fire service has recognized the value of having an emergency operations center available for use during major events. Over ninety percent (90%) of the agencies surveyed have such facilities available for their use.

It is interesting to note the effect, or lack thereof, that geographical size and/or population has on the location of an emergency operations center, particularly when considering cities. In this case, location refers to either a location within the jurisdiction or as part of a regional center.

When simply considering size, there appears to be no correlation between size and the location of the emergency operations center. With minor deviations, there is nearly an equal split between a local versus a regional center.

However, when population served is taken into consideration, a pattern is demonstrated. The smaller, the population, the more likely it is that the emergency operations center exists as part of a regional center. For cities and fire districts serving a population under ten thousand (10,000), the majority of jurisdictions have selected the regional approach by more than a three-to-one margin. For cities, this margin turns around with the next population group, up to the point where all of the cities serving a population over one hundred thousand (100,00) have a local emergency operations center.

This trend does not continue for fire districts. Beyond the two smallest population groupings tracked by the survey, there is an even split between having a local center versus having a regional center. In fact, the two fire districts serving a population over one hundred thousand (100,000) utilize a regional center.

Why do these trends exist? With the cities, it seems rather logical. Smaller communities, serving lower populations, typically are served by smaller agencies. These agencies, having limited staff resources, find it expedient to combine their management resources with other agencies during significant and/or disaster events. As communities become larger, agency staffing increases and both the ability and expectation to utilize a local emergency operations center increase.

When considering fire districts, the same arguments explain the regional approach for smaller agencies. But why do fire districts serving large populations choose to operate from a regional center? One likely explanation is due to political expediency. As fire districts grow in size, particularly with respect to population, they frequently serve multiple communities. The expense of maintaining an emergency operations center in each community is cost prohibitive. In this scenario, it is less costly and decisions affecting one or more communities are more easily managed on a regional basis.

### **How EOC's are Staffed**

It was interesting to note the variety of participants that the various authors suggested should be involved in the staffing of an emergency operations center. Staffing began as low as just the fire chief and police chief. This level of staffing was found to generally exist in those jurisdictions that had no emergency operations center (Scanlon, 1994).

Unlike the staffing typical of those jurisdictions working without the benefit of a center, most of the literature provided a wide range of suggested staffing. It is interesting to see how the varied authors



ultimately suggest one grouping similar to the main group that was identified in the survey. Most of the authors include the chief executive officer of the local government, as well as the key department heads which includes the fire chief, police chief, the public works director, and someone serving as the public information officer (Federal Emergency Management Agency, 1984; Felsch, 1994; Goshe et al, 1980; Scanlon, 1994).

In addition to the core group, the literature suggests a wider range of representation than that indicated by the survey participants. These additional representatives included transit, medical/health, military, social services, utility (gas, electric), resource (food, housing, transportation, etc.), volunteer agencies (Red Cross and others), and others (Federal Emergency Management Agency, 1984; Goshe et al, 1980; Scanlon, 1994).

While it would prove difficult to argue the importance of any of these suggested representatives, the study clearly indicates that the respondent jurisdictions utilize a more conservative approach when staffing their own emergency operations center. While nearly all the respondents utilize the same core group as that indicated by the literature, it appears the agencies surveyed are mostly dependent on pulling together staff from within their own jurisdiction to operate the functional positions within a center. This is likely due to the ability to quickly capture personnel that are under the agency's direct control. Then, as the incident indicates, either secure needed resources are secured utilizing the available personnel or additional staffing is solicited from other necessary agencies. This may prove difficult unless prior agreements have been made.

### **Support Provided**

As to the issue of the support the respondent agencies indicated they receive during significant and/or disaster events, the results surprised this writer. By nearly a two-to-one margin, the survey

participants indicated their satisfaction with the level of support received. These results were further confusing from one particular viewpoint. While from the total respondents, there were twenty-nine (29) that indicated they had no participation by city/county officials, only eight (8) indicated they are dissatisfied with the support they receive.

On the first issue, it is encouraging to have so many jurisdictions enjoying the level of support they expect to receive. This demonstrates the degree to which those officials have been educated and the importance they place on taking care of their communities.

On the second issue, it is unfortunate to believe there are leaders in emergency services positions that are either uneducated about the role of a properly staffed emergency operations center or are unwilling to properly educate local officials for fear of losing some perceived personal power or control. In either case, it is the community that ultimately suffers.

### **Organizational Implications**

What does all of this mean to the City of Sumner and the Sumner Fire Department?

Based upon the research, the fact that the City of Sumner contracts for emergency management and the use of an emergency operations center through a regional group has been shown to be acceptable. What needs to happen is the development of a policy and/or procedure that delineates what will happen at the local level to either facilitate operations through the regional center or to develop improved cooperation that combines local decision-making with regional resource procurement and distribution. I believe the latter to be the better alternative.

Secondly, local determination of required staffing must be undertaken. Once that has been completed, an educational process for local officials must be pursued.

## **RECOMMENDATIONS**

The first thing the City of Sumner needs to establish is how it will function with a regional emergency operations center during significant and/or disaster situations. The study results clearly indicate that for its size and population, the current use of a regional center is appropriate.

In order to utilize this arrangement to the fullest extent possible, the City of Sumner needs to meet with Pierce County Department of Emergency Management personnel. The purpose of the meeting would be to articulate the scope of services provided by the County. Once that has been determined, the City of Sumner will have identified those functions that must be performed at the local level.

Having identified their roles with respect to emergency management, the next step would be the selection of a local facility from which to conduct local emergency management. Again, based upon the results of the study, the City is not limited to a particular site. In the case of Sumner, two sites stand out as prime locations. The first is the city council chambers located at city hall. With this being the center for city government and having the dispatch center located within the same facility, this would be an excellent choice.

The second choice would be in the training room of the fire station. Because this facility provides sleeping areas, cooking facilities and showers, it lends itself to a longer operation. It is also a more sound structure with respect to seismic construction. Either of these facilities could easily accommodate a local emergency operations center.

Once a local site has been selected, the need still exists for staffing. In the case of Sumner, this will require educating key officials on the role each would/could play in the operations of a center. The recommendation for accomplishing this task utilizes a two-pronged approach.

Initially, the Pierce County Department of Emergency Management will have been involved in completing the first recommendation, if not both. Through that involvement, an education process

would have begun. Building on those initial steps, a workshop would be developed, presenting information as to the functions of an emergency operations center. The workshop would include discussions on how disaster operations differ from day-to-day operations and why it is important for key officials to be involved in management of disaster operations.

To follow-up the workshop, it is suggested that the Pierce County Department of Emergency Management assist Sumner officials in securing spots in the Emergency Management Institute of the National Emergency Training Center, located in Emmitsburg, Maryland. By participating in the classes on disaster operations and emergency operations centers, Sumner staff will gain hands-on experience and develop a deeper understanding of the purpose and functions of an emergency operations center.

### **Future Research**

For those that wish to replicate some or all of this study for their own organization, there are several recommendations.

Number one, provide a more definitive breakdown of the jurisdictions. In this study, population and size were considered as separate determinants. This may have impacted the overall accuracy of the report. To explain, a given jurisdiction may cover a relatively small area but have a large population. Conversely, it may cover a large area and have a small population. Maintaining and identifying these distinctions may change the results.

Number two, be sure to develop a survey instrument that utilizes question that require an objective response. Questions that call for the respondent to provide an opinion are of limited value in obtaining qualifiable results.

Lastly, consider expanding the survey audience to improve the depth and breadth of the data. If you're interested in generating study results that are reflective of the national fire service, a broader survey base must be utilized.

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**APPENDIX A: SURVEY DOCUMENT**

## RESEARCH SURVEY ON THE USE OF EMERGENCY OPERATIONS CENTERS

1. Indicate what form of fire service agency you represent.

City/Municipal  
 Fire District  
 Other (Please specify) \_\_\_\_\_

2. Indicate the form of staffing utilized by your agency.

Career only  
 Volunteer only  
 Combination

3. Indicate the size of your jurisdiction.

< 10 square miles	10-25 square miles
26-50 square miles	> 50 square miles

4. Indicate the population served by your agency.

< 10,000	10,000-24,999	25,000-49,999
50,000-99,999	> 100,000	

5. Do you have/operate an Emergency Operations Center within your jurisdiction?

Yes No

6. If you answered no to the above question, do you participate in a regional/county Emergency Operations Center?

Yes No

**Note: If you answered no to the above two questions, please go to question number ten (10). Thank you for your participation.**



7. Indicate the location of your Emergency Operations Center.

FD facility	Dispatch facility
City Hall	County Emerg. Mngmt. building
Other (please specify) _____	

8. Indicate personnel/agencies utilized in staffing the Emergency Operations Center. Check all that apply.

Fire	Health Dept.	EMS Mngmt.
Police	City/County Manager	Mayor
Public Works	Finance Dept.	Council members
Director of Emergency Management		
Other (please specify) _____		

9. Indicate the level of participation in the Emergency Operations Center by key City/County officials.

Full participation when requested  
 Limited participation. Difficulty in having officials make commitment to participate.  
 No participation. Operations-level personnel handle all needs/issues.

10. Indicate your level of satisfaction with your current situation regarding support for major incidents with respect to the functions of an Emergency Operations Center.

Very satisfied. Anticipate no need to change in the near future.  
 Satisfied. Some improvements in staffing and/or operations of the EOC should be considered.  
 Marginal. Significant change should occur for staffing and operations of EOC.  
 Dissatisfied. Either lack of support for or non-existence of EOC.

**Thank you for taking the time to respond to this survey. If you wish to receive the results of the survey, please include a contact name and address.**