FIRE PREVENTION IN AMERICA
AT THE DAWN OF THE NEW MILLENNIUM

EXECUTIVE LEADERSHIP
R125

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ABSTRACT

American fire death statistics are among the highest in the industrial world, and this is unacceptable. The problem is that the fire service's historical emphasis on suppression alone has proven to be inadequate, and a higher priority should be put on the fire prevention and public education programs.

The purpose of this descriptive paper was to evaluate the priority of the fire prevention and public education programs in the overall hierarchy of priorities of the American fire service.

The questions researched were:

1. Historically, what has been the major priority of the American fire service?
2. Where do the fire prevention and public education programs fit within the overall hierarchy of current priorities of the metropolitan fire departments?
3. What has been the priority of the Las Vegas Fire & Rescue (LVF&R) during the 90's?

The procedures applied were: researching the historical documents to identify the national trend; conduct a survey of the major metropolitan fire departments to identify their priorities based on their 1998 statistics; and conduct an analysis of the LVF&R's records during the 90's to identify the priorities.

The results indicated that historically suppression has been the major priority for the American fire service. Based on the 1998 statistics, the fire prevention and public education

programs are still not a high priority for the major metropolitan fire departments, and during the 90's fire prevention has not been a high priority for the LVF&R.

The fire problem is a national problem, thus the recommendation should focus on a national solution to comprehensively address the problem. In 1947, the American fire service developed national recommendations to address the problem, but neither the resources, nor the mechanisms to implement them at the local level have been available. A federal grant program to mandate local emphasis on the fire prevention and public education programs should be established to provide them with both the resources and the structured organizational mechanisms to be able to materialize those recommendations.

The recommendations for the LVF&R were merely cultural modifications that did not require additional resources for implementation. The recommendations included: providing fire prevention training for all firefighters, mandating extensive fire prevention training as a promotional requirement for the officers; focusing on career development programs; and providing promotional opportunities for the fire prevention personnel.

TABLE OF CONTENTS

INTRODUCTION

The American fire service has historically proven to be reactive in nature, due to it's strong focus on fire suppression rather than prevention. Despite the tremendous efforts that the United States Fire Administration (USFA), National Fire Protection Association (NFPA), International Fire Marshals Association (IFMA), and various other national organizations have taken, to educate the fire service about the benefits of being proactive and focusing more on the fire prevention and public education programs, there has been virtually no change in the past few decades.

Not surprisingly, the culture of the American fire service has shown resiliency toward accepting the paradigm shift that the USFA and many other fire service leadership organizations have been preaching for the past quarter of the century. Fire suppression is still the main focus and mode of operation of the American fire service and minimal attention is given to fire prevention and public education.

Simplified definition of budgeting can be described as the art of division of scarce resources for the outlined priorities. Therefore, an organization's budget is a good reflection of the organizational priorities.

> Budgets also should reflect the "mission" or purpose for a bureaucratic agency's existence. This suggests still another function of budgets, intentional or not: they reflect the priorities of those who formulated them [italics added] (*Gordon, G., & Milakovich, M., 1995, p 315*).

A brief glance at the organizational budgets for various major metropolitan area fire departments pointed out that the absolute majority of both their financial and personnel resources were devoted to fire suppression.

> Budgets are about values. We express the connections between money and values every time we tell someone that "talk is cheap" and it is time to "put your money where your mouth is." The connection between money and values is also true of government budgets. Some of what government does is symbolic, in the sense that it is a way of expressing concern for or commitment to various people or issues.... Budgeting is concerned with the translation of financial resources into human purposes.... A budget then is a concrete expression of the values of society [italics added] (*Cozzetto, D., Kweit, M., & Kweit, D., 1995, pp. 1-2*).

Based on this, since the lion's share of the resources in all of the fire departments throughout the country is tagged for fire suppression, it can be concluded that the American fire service perceives fire suppression to be it's most important priority, it's major mission, and the main purpose for it's professional existence. It might also be of interest to recognize that the proportion of the resources allocated to the fire department in each community is also an expression of the societal values.

In an era of general cut backs and limited resources available to the fire departments, fire prevention and public education programs are the ones most adversely impacted, since they are not on the highest priority list of the fire department.

> Nevertheless, in a time of shrinking budgets, it is possible that many departments will choose to cut prevention activities in order to maintain suppression capabilities-just as prevention was gaining ground. The burden of additional services makes this even more likely in some departments: whatever is not mandated by the community may have to be cut (*FEMA, FA 135, 1993, p. vi*).

These problems are national problems and all fire departments throughout the country face the same dilemma, and have to make the same tough decisions every single year, when time comes to prepare the annual budget requests.

The author attests that at the local level, his own organization, the City of Las Vegas Fire & Rescue, just like thousands of other paid and volunteer fire departments throughout this country, has also focused on fire suppression as the major priority and main purpose of organizational existence. Despite Las Vegas' incredible economic growth and construction boom of the last decade, during the 1990's the allocation of resources to the Fire Prevention Division has not been adequate to keep up with the tremendous pace of population growth that Las Vegas has been experiencing during this period.

To explore these issues, the author's intent was to first identify the historic trend, then the current national trend which applies to all fire service, and then within those global frameworks, analyze the local issues specific to Las Vegas Fire & Rescue. Therefore both the problem and purpose statements listed below first focus on identifying the global issues, and then within those parameters, address the local concerns.

Problem Statement

The problem is that the fire service's historical emphasis on fire suppression alone has proven to be inadequate, and a higher priority should be put on the fire prevention and public education programs to address the fire death statistics problem in this country.

Fire suppression has always been the most important priority for the fire service, and naturally it has consumed the majority of the available resources. Since the fire prevention and public education programs have not been focused on as high priorities, the resources allocated for them are minuscule and attest to the lack of importance of these programs in the overall hierarchy of organizational priorities.

Despite the national efforts from the leading fire service organizations such as the USFA and the NFPA to promote fire prevention and public education programs, their progressive views have yet to be accepted by the fire departments throughout this country,

Similar problems have also been experienced in Las Vegas. At the local level lack of adequate resources available for the fire prevention and public education programs have increased the demand on the existing staff, requiring them to do more with less. Clearly in order to respond to the increased quantity, and perform the additional workload with the same number of staff, it is only logical to assume that the quality of work would be adversely impacted.

The department's lack of high priority for the fire prevention and public education programs is in part the reason for the staffing levels remaining constant during the 90's, while the population has doubled during the same period.

Purpose Statement

The purpose of this descriptive paper was to evaluate the priority of the fire prevention and public education programs in the overall hierarchy of priorities of the American fire service. Evaluating the current statistics could identify the general trend and the dominant perspective in the fire service. Once the national trend was identified, then within that framework, the intent of this paper was to evaluate the current status and priority of the fire prevention programs in the Las Vegas Fire & Rescue's overall hierarchy of priorities.

In this descriptive research the historical priority of the fire prevention and public education programs in the American fire service was evaluated. Additionally by conducting a national survey and evaluating the 1998 budgeting and staffing level statistics from the major metropolitan fire departments, their degree of emphasis on the fire prevention and public education programs were documented. Also by focusing on the documents and records from 1989 until 1999, priority of the fire prevention programs in the overall hierarchy of the LVF&R was also identified. The focus of this research was to answer the following question:

1. Historically, what has been the major priority for the American fire service, and where do the fire prevention and public education programs fit within the hierarchy of those priorities?

2. Currently, based on the 1998 budgeting and staffing levels statistics, what is the priority of the of the fire prevention and public education programs for the major metropolitan fire departments?
3. Based on Las Vegas Fire & Rescue's budgeting and staffing levels statistics from 1989 until 1999, what has been the priority for the Las Vegas Fire & Rescue during the last decade?

BACKGROUND & SIGNIFICANCE

During the past four years, while attending Executive Fire Officer Program (EFOP) courses, the author has noted that the entire theme of the program was about preparing and educating the leadership of the American fire service about the art and science of management. The concepts of "paradigm shifts", "thinking outside the box", "planning", "managing change", "creativity and innovation", "prevention", and "being proactive", was the language that was preached and practiced in those classes, in the sterile academic environment of the National Fire Academy (NFA). The EFO courses were all critical of the dogmatism of the past generation of fire chiefs, and their rigidity to accept the paradigm shifts was attributed to their archaic heritage.

As most of the EFO graduates and students can attest, each time after the two weeks stay at the NFA, upon returning home, the realities of the normal daily fire service operations serves as a sobering reminder that "Toto is no longer in Kansas", and that the idealistic theories

formulated at the NFA, has little resemblance to today's realities and could only work in the virtual reality of the academia.

In all the courses that the author has attended at the NFA, the idea that "fire prevention should be a higher priority for the fire service, and that fire departments of the future would be more proactive and prevent fires rather than reactive and respond to them, have always been preached and strongly emphasized. However, the fact is that when discussing this idea with the friends and peers that have served in the fire service for more than 30 years, a concerned grin appears on their face as they explain that "they have heard it all before when they were just rookies". So, how long have these "new" ideas been around? If they have been around for a while, then why haven't they been implemented after all these years? Why is there such a significant difference between the theories and the reality? Have the fire service leadership organizations have strayed too far ahead, and have lost touch with the realities? Are the NFA and the other fire service leadership organizations incorrect to be progressive and advocate these grand ideas?

Searching for the answer (or at least some reasonable explanations !) for these questions, were the author's motive for focusing on this subject.

> Innovation theory suggests those who will be successful in the future will be the ones who set unreasonable goals for themselves-those who have the determination to go for the brass ring and not accept the status quo (*Fire Prevention 2000, Challenges & Solutions, 1998, p.12*).

In the era of "reinventing government" it might sound fashionable and intellectual to believe that by setting "unreasonable goals", not accepting the "status quo" , and "having determination to go for the brass", success is virtually guaranteed. However, how would the leadership be viewed if they formulate theories, and set "unreasonable" "pie in the sky" goals that have absolutely no relevance to the current realities? Would they be considered "innovative", or simply "out of their minds" and unworthy of leadership?

The Executive Leadership course identifies one of the important characteristics of successful executive leadership as "having the ability to create and articulate a vision that empowers others to transform vision into action".

Since in the past seven decades, the "others" (i.e. the followers) that were tasked with transforming the visions articulated by the "leadership", with respect to the fire prevention and public education programs into action, have not succeeded, does it mean that they were not "empowered", or was it the "vision" that was inaccurate?

The author believes that it is the responsibility of the leader to look far beyond the horizon to depict a successful path for the followers. The author also believes that in preaching the new theories and advocating change, NFA and other fire service organizations are fulfilling their leadership commitments to the American fire service. As the ideologues, it is their responsibility to lead, educate and arm the practitioners with the theories that could assist them in cooping with the ever changing world of management. However, it is the author's belief that the NFA and the other fire service leadership organizations might have miscalculated and underestimated the rigidity of the American fire service's culture to accept such theories, let

alone implement them. Thus, the concept of assessment of organizational culture, which was focused on extensively in the Executive Leadership course, has direct relevance to the subject matter of this paper.

LITERATURE REVIEW

Reviewing publications from the various fire service leadership organizations reveals that the need to focus on the fire prevention and public education programs is nothing new and has been advocated for decades. The fact that America has one of the worst fire loss records in the industrial world has always raised concerns and questions about the fire services' perspective in protecting their communities from the devastating wrath of fire.

> NFPA's latest annual report on fire loss reveals that, while the overall number of home fire deaths in the United States dropped in 1997, the percentage of home fire deaths rose. Eighty three percent of those who died in U.S. fires in 1997 died in the place they felt safest: their homes. The fact of the matter is we're winning the battle but losing the war [italics added] (*Miller, G., 1999, p. 6*).

National Fire Protection Association (NFPA) as a world leader in the field of fire protection has always been proactive and has advocated emphasis on both the fire prevention and public education programs, as well as encouraging installation of built-in fire and life safety systems such as the automatic fire sprinkler or fire alarm system, to address the fire loss

problem in America. NFPA's President, George Miller's emphasis on automatic fire and life safety systems is clearly depicted in his statement:

> How can we justify an annual home fire death toll in the thousands when we know what it would take to cut it to the hundreds?
>
> NFPA studies show that sprinklers in one and two-family dwellings could reduce the fire death rate by 59 percent. And if they're used in conjunction with smoke detectors, they could cut the fire death rate by as much as 82 percent- but only *if* they're present (*Miller, G., 1997, p. 8*).

Miller is also cognizant that the community's lack of awareness about the fire problem, in addition to the societal values and their perception of an acceptable risk level for their community, are important reasons for the lack of initiatives to address the roots of the fire problem in America.

> Four thousand fire deaths every year is the equivalent of a fully-loaded 737 jet crashing and killing everyone aboard every 7 to 10 days. Think about that for a moment....A jetliner crash once a week, every week. You can bet our citizenry wouldn't stand for such a persistent horror. Of course, the 4,000 people who die in their homes, in ones and twos. As a result, the stories of their loss generally land on the back page of the newspaper instead of on page one, where they'd inspire the kind of moral outrage people should express against preventable fire deaths (*Miller, G., 1997, p. 8*).

A quarter of a century before Miller's article, in 1973, the "America Burning Report" addressed the same exact lack of concern by stating that "the striking aspect of the Nation's fire problem is the indifference with which Americans confront the subject".

> Many of the Commissioners have devoted their careers to improving the Nation's fire record. We have become accustomed to public indifference to the fire problem. But we hold the hope that this attitude can be changed. It is our wish that this report will provide a turning point, by reaching-if only indirectly-the conscience of millions of Americans (*America Burning, 1973, p. XI*).

The fact that in addition to the building construction, historical, cultural, attitudinal, and societal factors also play major roles in society's overall fire protection perspective, have also been acknowledged by various other authors focusing on this subject.

> The lack of a strong cultural norm around preventing fires may explain another aspect of U.S. attitudes towards fire. Americans tend to view fires as an inevitable part of life and, unlike citizens in other countries, are more prone to characterize fires as unfortunate "accidents" (*FEMA, FA 169, 1997, p.15*).

> ....in many other countries, individuals are held accountable for their own safety. Neighborhoods and communities work actively to educate themselves and each other, and <u>local governments spend the bulk of their fire prevention dollars on public education and that's what makes the difference</u> [italics added] (*Seaton, M., 1996, p. 83*).

In this day and age there are many examples of strongly rooted cultural and societal values that have been subjected to radical changes, due to the tremendous public education efforts. A good example of a virtual reversal of the society's attitude and culture, is the acceptability of cigarette smoking. While for decades smoking was considered not only acceptable but also fashionable in the American society, by educating the public about the health hazards of smoking and the addiction to nicotine, the society has completely reversed its attitude.

Clearly if public education can change society's attitudes toward an addictive habit that was so deeply engraved in our culture, it could also change society's attitude toward hazards of fire. However, to educate the public, clear identification of the problem is the first obstacle that must be overcome.

> It is clear that American adults don't accurately perceive their risk of injury and death from fire. In most situations, they're over-confident, and in situations in which they're wary of fire, they don't do enough to protect themselves (*Grisanzio, J., 1996, p. 78*).

Clearly Americans are not well informed about the hazards of fire, thus it is not unusual to underestimate the dangers, and overestimate their capability to safely deal with the emergency situation.

> Public apathy plays a large role in keeping U.S. fire statistics as high as they are. Many adults have the notion that "fire only happens to the other fellow." Until fire strikes their home and their family, they largely ignore fire prevention information, fail to

> install and maintain smoke detectors, do not practice a fire escape plan for use in emergencies, and generally omit the other steps necessary to keep their household safe from fire.... but efforts must continue if public apathy is to be overcome (*Cote, A., & Bugbee, P., 1993, pp.16-17*).

Obviously only well structured, systematic, long term public educational programs aimed at not only informing the community about the hazards of fires, but also on emphasizing utilization of any and all available technologies such as the residential automatic fire detection and suppression systems, could reduce the number of fire deaths in America.

The reduction of fire deaths in the last two decades by about fifty percent, attest to the fact that we have come along way, but we still have a long road ahead of us. Public education and fire prevention programs such as requirement for installation of smoke detectors at the residential occupancies have proven to be effective.

> While conclusive data is yet not available, many experts feel that the <u>increased emphasis on fire prevention has contributed to the declining number of reported fires and fire deaths</u>. Fire prevention activities may become even more important in the future if fire department resources continue to decline, following the maxim, "it is cheaper to prevent a fire than to fight it." [italics added] (*America Burning Revisited, 1987, p.93*).

Ben Franklin's quote that "<u>an ounce of prevention is worth a pound of cure</u>" has proven to be true. In the past 25 years since the establishment of the United States Fire Administration (USFA) in 1974, there has been more focus on prevention of fires which has resulted in the

dramatic improvement from more than twelve thousand fire deaths in 1971, to more than four thousand fire deaths in 1997.

To paraphrase the late economist Ernst Schumacher, "the smart person solves problems, the genius avoids them". Based on this criteria, the American fire service could not even be considered "smart" let alone "genius", since we are not even focused on "solving problems" by being proactive and preventing them, instead, we are being reactive and responding to the problem. Surely, the label that might be becoming of the fire service's reactive nature could not be very flattering.

> The data and analyses presented here depict an unfortunate but correctable situation. The United States has one of the premier firefighting forces in the world, but we need to focus more on prevention and less on putting out fires once they have started. Time line data show that while the situation in the U.S. has improved, we still lag behind other countries in the relative loss of life due to fires. Other countries have demonstrated that it is possible to save lives by expending more energy and funding on fire prevention and fire education [italics added] (*FEMA, FA 169, 1997, p.17*).

Interestingly enough, the American fire service's lack of priority for addressing the roots of this problem has not gone unnoticed. The tax revolt impact of the last decade has meant lower revenues available to the government. Purse pinching has forced the public officials to be more fiscally alert and search for ways to reduce the expenditures.

> Perhaps the sharpest contrast between reactive and preventive government can be found in a place a few would think to look: our nation's fire departments. Most

> cities spend a fortune on their fire departments-often 20 percent of their entire general fund. Yet the United States has a terrible record. According to the National Fire Protection Association, we have the highest fatality rate from fire in the industrial world. Why? Because we spend most of our money *responding* to fires, not *preventing* them [italics added] (*Osborne, D., & Gaebler, T., 1992, p. 223*).

Except for a limited few, in the past decade the majority of the 32,000 emergency service organizations in this country have felt the budgetary pinch, and terms such as "station closures", "down-sizing", or "right-sizing" have found their way into their vocabulary.

> There was universal agreement that less money is available in general, and less money in particular for arson prevention activities such as juvenile firesetter intervention, fire education activities, and fire prevention. Money continues to be available for suppression activities and EMS; however, people worry that education and prevention will suffer disproportionately when budget cuts are needed because strong-minded individuals in many departments consistently try to direct non-suppression money toward suppression. In some departments, budget pressures are leading to the sacrifice of prevention activities in order to preserve suppression activities. Internal competition for money within departments can be divisive [italics added] (*FEMA, FA 135, 1993, p.30*).

Obviously the fire service has demonstrated their ability to fend off the budgetary assaults and still maintain their absolute focus on fire suppression. This has been accomplished

by sacrificing the fire prevention and public education programs, which interestingly enough, as an average is only about 5% of their total budgets to begin with.

> The National Commission on Fire Prevention and Control noted that fire prevention was the key to effective and efficient fire protection services. Fire prevention activities will become even more important in the future if fire department resources continue to decline [italics added] (*America Burning Revisited, 1987, p.29*).

However, rather than accepting the paradigm shift and focusing on becoming more proactive, they have displayed their reactive mentality and have proceeded on the exact opposite direction.

> In other words, fire suppression is emphasized over fire prevention in the U.S. One reflection of this is the high standards set for fire department response times and fire suppression performance.... If firefighters in other countries do not respond to fires as quickly as firefighters in the U.S., why are their fire death rates lower? Simply put, it is a function of the level of resources devoted to fire suppression versus fire prevention. Other countries place a higher premium on their ability to prevent fires rather than their ability to put them out once they occur. The data in Part I of this report detailing lower relative fire death rates in many European countries suggests that prevention is more effective than suppression in saving lives. ….The emphasis on fire suppression over fire prevention in the U.S. is evident in firefighting budget allocations and staffing patterns. Other countries spend more on fire prevention activities and dedicate more of their firefighters' time to these activities. Industrialized countries typically spend between four

> and ten percent of their fire departments budgets on fire prevention, whereas the U.S. spends only about three percent. Because individual fire departments have finite resources, they must make difficult decisions about the approximate mix of services to offer citizens. Unfortunately, there is an understandable tendency for U.S. fire departments to want to ensure that the response capabilities of their departments are not compromised in any way. The result is generally to prioritize funding to preserve or enhance emergency response times rather than to expand the level of fire prevention and public education services [italics added] (*FEMA, FA 169, 1997, pp.11-12*).

In their book "Principles of Fire Protection", Percy Bugbee, President of the National Fire Protection Association (NFPA) for more than 30 years, until his retirement in 1969, and Arthur Cote, NFPA's current Senior Vice President indicate that:

> Fire suppression by public fire departments is a vital service. It is, however, a "last resort action." Prevention, detection, automatic extinguishment, and restraints against spread of fire are, in that order, the logical steps that should precede public fire service suppression [italics added] (*Cote, A., & Bugbee, P., 1993, p. 15*).

Despite what the NFPA as one of the premier fire service organizations in this country has been advocating for decades, the fire service in this country still have their priorities in reverse order of the NFPA's.

> The primary motivation behind the organization of most fire departments has been that of suppression. It has long been felt that the fire department's obligations have been met if the department responds to and brings under control all fires to which

> it is called, and fire prevention is not generally thought of as being a part of the basic responsibility of a fire department [italics added] (*Robertson, J., 1979, p.98*).

In 1987, the USFA conducted a three-day workshop on "America Burning Revisited", to review and comment of the progress against fire since the original "America Burning Report" that was published in 1973. The participants acknowledge that after 14 years after the original report, fire prevention is still of lower priority in the fire service, and that fire service viewed suppression as their most important organizational priority.

> The National Commission on Fire Prevention and Control noted that fire prevention was assigned too frequently a much lower priority than other fire department activities, particularly suppression (*America Burning Revisited, 1987, p.91*).

In 1973, the National Commission on Fire Prevention and Control published the "America Burning Report". The report was based on two years of extensive study on the fire problem in America. Interestingly enough after more than a quarter of a century, the American fire service still has not implemented the gist of the recommendations contained in that report.

> Response to important social changes is a key to improving the Nation's record in fire protection. A consideration of equal importance is the need to change priorities in the field of fire protection. Currently, about 95 cents of every dollar spent on the fire services is used to extinguish fires; only about 5 cents is spent on efforts-mostly fire prevention inspections and public education programs-to prevent fires from starting. Much more energy and funds need to be devoted to fire prevention, which could yield huge payoffs in lives and property saved. (While fire prevention efforts would lower the

incidence of fire and, hence, might lower the costs of fire suppression, it would be essential to support fire suppression services at current levels until a marked reduction in fires had been documented) [italics added] (*America Burning, 1973, p.7*).

In his cover letter, addressed to President Nixon, dated May 4, 1973, accompanying the "America Burning Report", Richard Bland, Chairman of the National Commission on Fire Prevention and Control reports:

> The recommendations emphasize prevention of fire through implementation of local programs. This is in keeping with the very nature of the fire problem which is felt hardest at the community level. Additionally, the recommendations emphasize built-in fire safety-measures which can detect and extinguish fire before it grows large enough to cause a major disaster (*America Burning, 1973, p. IV*).

What is evident in the report is their focus on the role of the local community and therefore the importance of the local government in implementing the recommendations.

> The Commission recommends that local governments make fire prevention at least equal to suppression in the planning of fire department priorities [italics added] (*America Burning, 1973, p. 167*).

The report recommends that the local fire departments throughout the country focus more on fire prevention, hoping that collectively they can address the national fire problem in America.

> There needs to be more emphasis on fire prevention. Fire departments, many of which confine their roles to putting out fires and rescuing its victims, need to expend

> more effort to educate children on fire safety, to educate adults through residential inspections, to enforce fire prevention codes, and to see that fire safety is designed into buildings. Such efforts need to be continuously evaluated, so that the Nation can learn what kinds of measures are most effective in reducing the incidence and destructiveness of fire [italics added] (*America Burning, 1973, p. X*).

The decentralized approach advocated by the Commission, assigned the implementation responsibility to the local government. However, what if the local government was not concerned enough to address the fire problem as a high priority, or perhaps if they were, would they have had the resources to implement the recommended measures?

The workshop on "America Burning Revisited" sponsored by the USFA in 1987 faced the same exact questions. There were seven "Task Forces" formed to discuss and analyze selected chapters from the original "America Burning Report". The objectives of Task Force 1 were to identify new issues, problems and trends associated with the overall fire protection problem in the United States. This Task Force identified the most important challenge as:

> Failing to convince elected officials of the seriousness of the fire death, injury and loss statistics was considered the most serious problem because it is the path to resolving many other problems [italics added] (*America Burning Revisited, 1987, p.54*).

The fact that due to the limited availability of finite resources, the elected officials focus only on the most popular, vote winning issues, has always been an American political tradition. If because of the lack of emphasis on public education, the public was unaware and not

concerned with the fire problem, then it should not come as a surprise that the elected officials were also indifferent to the issue. Was it then reasonable for the 1973 Commission, to assume that the local elected officials and government, would put up the tab for prioritizing fire prevention to "a level at least equal to suppression"?

Leaders must first believe strongly in their own message, just as the salespersons should first buy off on their products, before they can sell it to the public. If the American fire service has failed to educate the public, and convince the elected officials about the hazards of fire, does it mean that the message is wrong, or does it reveal the fact that the American fire service does not genuinely believe in fire prevention and public education? Does this mean that quarter of a century wasn't adequate enough time for the American fire service to educate themselves about the importance of fire prevention and public education programs?

The problem isn't that the fire service in America is not aware of the fire problems. The problem is that they don't believe in the message themselves. The Presidential focus on the American fire problem in 1973 was not the first time that this issue was focused on at the national level. Yet another quarter of a century prior to the publishing of the "American Burning Report", in 1947, right at the end of World War II, during the Truman presidency, this issue was also the focus of the national attention. President Truman's statements are just as valid today as they were then, and passage of more than half a century, has not tarnished the message.

> The serious losses in life and property resulting annually from fires cause me deep concern. I am sure that such unnecessary waste can be reduced. The substantial

> progress made in the science of fire prevention and fire protection in this country during the past forty years convinces me that the means are available for limiting this unnecessary destruction [italics added] (*The President's Conference on Fire Prevention, Proceedings, 1947, p. I*).

The Conference performed detailed analysis of the American fire problem, and developed several volumes of specific recommendations and "Action Programs" to address all aspects of the fire problem in this country. The report produced is quite rare and it was by sheer accident that a couple of years back, a single copy of this report was found at the USFA. Since the majority of today's fire service personnel (just like the author before this paper) might not be aware of the gist of the recommendations contained in those priceless reports, and since these recommendations were insightful and valid still after more than 52 years, fully realizing the fact that these quotations might be too long, the author decided to incorporate them into his report, as a testimony to the vision and wisdom of the forefathers of the American fire service's leadership.

> The Conference believes that the fire service of this country is of vital importance in plans for concerted action in the field of fire prevention; that there are wide differences in the relative effectiveness of various fire departments; that much of this is due to the blind devotion of citizens and public officials to their local fire departments, and because they understand neither their responsibilities nor are aware of the possibilities of effective fire department service. Specific recommendations to this end are as follows:

- Fire departments should be regarded as fire prevention as well as fire-fighting agencies and substantial parts of their budgets be devoted to fire prevention activities, one phase of which would be educating the public.....
- All fire departments should maintain inspection service of buildings and fire-fighting equipment, enforcing necessary regulations. All members of the fire department should receive training in fire prevention work and be expected to promote fire prevention. In larger fire departments there should be a fire prevention bureau. The younger, better-educated members of the department should be chosen for permanent fire prevention assignments and specially trained for such work [italics added] (*The President's Conference on Fire Prevention, Action Program, 1947, p. 5*).

The author's research has revealed that the American fire service has been aware of the need to focus more emphasis on the fire prevention and public education programs, even two decades before the 1947 Conference!! The earliest record that the author has found, date back to 71 years ago in 1928, which was the Great Depression era!! In 1928, Chief W.D. Brosnan of Albany, Georgia, spoke on this subject at the first annual meeting of the Southeastern Association of Fire Chiefs.

Any person who is at all conversant with fire safety knows that at least eighty-five percent of fires could be prevented. It is the duty of the Fire Chief to assume leadership and point out the way for the protection of life and the conservation of property of our citizens. If the fire loss of the country is to be reduced, we must get

> away from the out-of-date methods of the old time red-shirt brigade. They thought the duties of the firemen were to sit around the engine houses waiting for an alarm of fire and then proceed to extinguish it as best they could; but the modern Fire Chief knows that he must be up and doing and prevent fires from starting, if he is to be successful in reducing the loss [italics added] (*SEAFC, 1928, p.18*).

It is not too far fetched to state that after 71 years, except for some minimal changes, the perspective of the American fire service with respect to the fire prevention and public education programs, has basically remained the same.

> Work to convince fire chiefs to increase the priority of fire prevention efforts....educate fire chiefs on why fire prevention should be reconsidered as a top priority. Negotiate to get fire chiefs to more frequently consider the needs of prevention when planning budgets, assignments, and interaction with the public and the fire department [italics added] (*Fire Prevention 2000, Challenges & Solutions, 1998, p.15*).

The above quotation from the "Fire Prevention 2000, Challenges & Solutions" which was a brainstorming workshop sponsored by International Fire Marshals Association (IFMA), focused on identifying the challenges and solutions confronting the fire prevention community at the turn of the millennium, sums it all up. It is disgraceful for the American fire service that after more than 71 years, the fire prevention community in this country, should still have to beg for the attention of the fire chiefs to consider fire prevention as a top priority, and beg for the crumbs, come the budget time. Apparently after passage of 71 years, and a couple of Presidential

National Commissions later, the American fire service still has not changed its perspective regarding the importance of the fire prevention and public education programs.

The following quotation accurately depicts the fire prevention staffing problems during the post WWII era , interestingly enough though, after 52 years, this description is still an accurate portrayal of the American fire service.

> In the average city, the fire-prevention staff consists merely of a staff of inspectors. In too many fire departments, personnel for the fire prevention bureau is selected from among the physically handicapped members of the department. This is a practice very detrimental to effective work. Few fire departments that have fire prevention bureaus use them to the best advantage. Men are assigned to do inspection work with little natural ability for it and with a definite lack of training and experience.
>
> There is need for a better selection of personnel for fire prevention bureau staffs. In general, the men should be chosen for the work from the younger firemen who have the best educational background [italics added] (*The President's Conference on Fire Prevention, Action Program, 1947, pp.15-16*).

Considering that in most departments in this country fire prevention is still considered the "red headed step child", and a "dumping ground for the unfit", one might ask, what has changed in the past half a century?

> That all members of the fire department receive training in fire prevention work and be expected to promote fire prevention; that a portion of the permanent staff of every fire department be assigned full-time to fire prevention activities, in large

> departments through the creation of a fire prevention bureau; that the younger, better educated members of the department be chosen for such work and specially trained for it; that the qualifications of members of the bureau be constantly broadened until these bureaus may provide a place where a citizen may go for comprehensive fire prevention advice [italics added] (*The President's Conference on Fire Prevention, Action Program, 1947, pp.17-18*).

The emphasis on training all members of the fire department in fire prevention work, in addition to establishing a dedicated permanent fire prevention staff, is indicative of their foresight in utilizing all available resources to educate the public, in addition to creating a shared vision for the entire department.

> The participation of fire suppression personnel in fire prevention activities is as necessary as their participation in tactical operations. Because the majority of the fire department's resources are committed to suppression activities and are systematically distributed throughout the protected area, it is important that these resources also be allocated to fire prevention efforts….The total involvement of all personnel, particularly those assigned to suppression activities, should not only decrease the incidence of fire, but should also demonstrate maximum utilization of personnel and competent management. Fire department management is responsible for maintaining highly trained and effective operational units to perform tasks involving both fire suppression and fire prevention. The degree of competency achieved by a department in these areas reflects

> well upon the abilities of a department's management [italics added] (*Carter, H. & Rausch, E., 1989, p.158*).

The amount of fire prevention training required for all of the fire department personnel is also a good indication of the degree of priority and importance that the fire department has for their fire prevention and public education programs.

> Training programs in the fire service have likewise had little emphasis on fire prevention. They have for the most part concentrated on fire suppression subjects. The average individual joining either a paid, volunteer, or call fire department has little material relating to fire prevention presented in the basic training program. It may be said that members of explorer scout groups and other scout contingents receive more training in fire prevention than does the average person joining the fire department [italics added] (*Robertson, J., 1979, p.98*).

This is a fact that applies to today's fire service, just as it did decades ago. This fact was also acknowledged by the 1987 Commission, and the recommendation was:

> Require that fire prevention education standards become a part of career paths for fire service personnel. Fifty percent of training time should be devoted to fire prevention. Service requirements should be at least two years active time for entry-level chief officers and three years active time for department chiefs [italics added] (*America Burning Revisited, 1987, p.95*).

The requirement for a fifty percent training time assigned to fire prevention is in line with the requirements of the more progressive countries such as Britain, which according to

Schaenman require junior officers to attend nine weeks of training, four of which are devoted to the prevention issues.

Lack of priority for fire prevention and public education programs, the minimal resources allocated to them, and minimal emphasis for staff training are all indicative of an overall attitudinal and perspective problem, that have great impact on the organizational structure of the fire departments, and stem out from the culture of the American fire service.

> Historically, many fire departments have drawn a distinction between staff-line functions by considering emergency services as line, and all other functions as staff….In reviewing the staffing of most fire departments, one finds considerable support for Drucker's thesis that the pure staff-line concept may be more harmful than helpful. Two problems are immediately apparent in fire department staffing. These include the tendency to place less emphasis on certain important functions and secondly, the feelings of resentment and other problems in personnel. Both of these are closely related [italics added] (*Gratz, D., 1972, pp. 17-172*).

The fact that the American fire service perceives fire suppression as their main organizational purpose, explains the dominance of the outdated line-staff theory not only in their organizational structure, but most importantly, in their organizational culture. Since American fire service is focused on fire suppression and consider the suppression personnel as the "line" personnel, then every other non-suppression personnel are automatically considered "staff" and therefore nonessential, and in most cases treated as "second-class citizens". In that environment, it is quite natural to consider the "line's" priorities as essential, and obviously the

"staff's" priorities would then become non-important. The organization would then only focus on addressing the training, promotions and career needs of it's "line" personnel.

> Incentives are needed to reward those who fight fires with education rather than hoses. Yet, all too often, it is those who suppress preventable fires who are rewarded with promotion and other recognition, while those who work to save lives and property in a different way-of at least equal benefit to the community-are sometimes seen as second-class citizens within the department structure. National groups able to impact this problem are urged strongly to consider what they can do to foster the use of appropriate internal reward systems to equalize rewards for these different forms of community service (*FEMA, FA 135, 1993, p.38*).

Who are these "knights in the shinning armor" that are supposed to be charging in to the rescue? Why not clearly identify these "national groups" and explain exactly how they would be "able to impact this problem"?

> Similarly the value of fire prevention is reinforced in those fire services that have separate prevention bureaus or prevention career ladders. By making staff positions within those agencies relatively high status positions within the fire service as a whole, prevention work is rewarded and its value is reinforced (*FEMA, FA 169, 1997, p.15*).

Apparently in most of the fire departments that have a separate prevention bureaus, either the career ladders and promotions are extremely limited, and the "relatively high status positions" such as the fire marshal position, is routinely rewarded to the "line" personnel from the fire suppression side.

> Filling a fire marshal or fire inspector position on a short-term rotational basis from the fire suppression ranks has the disadvantage of lack of continuity and blunted motivation. If an incumbent fire marshal or fire inspector knows that the assignment is temporary and short-termed, there is a tendency not to spend extra time learning technical details that are not perceived to be important in the new assignment, such as detailed knowledge of codes, and historical safety considerations of certain occupancies. Job security and internal promotional opportunities (within fire prevention division) must be reachable rewards for motivated individuals who want to continue to work in fire prevention but do not want to sacrifice career options to do it (*Fire Prevention 2000, Challenges & Solutions, 1998, p.14*).

Fifty two years ago, the 1947 President's Conference specifically recommended that the fire departments should focus on getting "the younger, better educated members of the department" into their fire prevention bureaus. But, from the looks of things, not much success can be reported from that front either.

> Help make positions in fire prevention more desirable. Improve incentives for fire prevention personnel to remain in fire prevention and public education. Although money for higher salaries may not be possible in today's economy, it might be possible to create an award or recognition program to demonstrate how the department values its fire prevention personnel (*Fire Prevention 2000, Challenges & Solutions, 1998, p.19*).

Apparently IFMA and the fire prevention community have given up hope on the "pie in the sky dreams". In their "Christmas wish list" fort the next millennium, they are being more pragmatic and are only asking for a simple "award" or "recognition program", rather than even daring to dream about "higher salaries". Most likely the frustration of the last seven decades has had a great impact on shaping IFMA's realistic vision, and formulating their pragmatic demands.

Fear of unknown is the natural human reaction to the change and the process of transition. But how would the changes proposed impact the overall performance of the American fire service?

> These changes do not mean the end of the fire service or even the end of fire suppression. They mean only that the type and level of effort dedicated to specific kinds of services will change, and to a greater extent in some communities. For example, the effort devoted to fire prevention (including public education) will increase, while the effort needed for suppression will decrease. Suppression services will be needed to respond to the fires that do occur, even in fully sprinklered buildings. However, in such structures, firefighters seldom should have to fight a fire after it has reached flashover (*America Burning Revisited, 1987, p.19*).

Interestingly enough, none of the reports researched, indicated that by paying more attention to the fire prevention and public education programs, the demand for the fire suppression would be completely eliminated. The only change advocated has been promoting more emphasis on preventive measures in order to reduce the fire problem in America.

PROCEDURES

Historical and descriptive research methodologies were both utilized in the development of this paper. The procedures used to complete this paper included conducting a literature review of the fire service journals, magazines, and text books; conducting a statistical review of the Las Vegas Fire & Rescue's last decade's personnel level and budgetary practices from 1989 until 1999; conducting a national survey of the 1998 budgetary and personnel level practices of thirty (30) of the major metropolitan fire departments across America, and performing a statistical analysis on the collected data.

The literature review was originally initiated at the National Emergency Training Center's (NETC) Learning Resource Center (LRC), in July 1999, during the author's attendance at the National Fire Academy. Additional publications were also requested through the Internet from the United States Fire Administration (USFA), and was provided by the USFA. National Fire Protection Association's (NFPA) publications were heavily focused on as one of the main sources for the historical information. Various historical budgeting and staffing literature from both the City of Las Vegas, and Las Vegas Fire & Rescue were also the subject of this literature review. Additionally, the author's private collections were also utilized as a source for subjects such as statistical analysis, budgeting, public administration and leadership.

Comprehensive research of the author's own organizational documents and records from 1989 up until 1999, was also conducted. The department's total number of personnel

during the last decade, and it's distribution within the different divisions, was the subject of the author's review. The department's total budgeting during the 90's, and the internal allocation of these resources within the different divisions, was the main focus of the author's review.

Additionally since demographically Las Vegas has been experiencing a tremendous growth in the 90's and the population has doubled, the department's personnel and budgetary data were analyzed with respect to those figures, to identify a trend with respect to the population. Research of these documents not only identified the current budgeting and personnel priorities of Las Vegas Fire & Rescue, but when analyzed incorporating the element of time, from 1989 until 1999, and the population growth, it also revealed the dominant trend during the 90's.

Thirty (30) of the major metropolitan fire departments across America were surveyed for the purpose of identifying a national trend. In order to obtain the statistics that are truly indicative of the American fire service's current personnel and budgetary practices, the fire departments surveyed were intentionally picked to evenly represent the geographical boundaries, as well as the age of the cities. According to the NFPA's records, different regions of the country vary on their fire death statistics, based on various factors such as age of the city and the type of construction. Therefore to be accurate, the author's survey focused on six (6) fire departments from each of the the northern, southern, western, eastern, and central regions, in an attempt to depict a balanced view of the national trend.

The data collected from the national survey was analyzed to identify a national trend, with respect to the staffing levels and budgeting distribution, within those departments during their 1998 fiscal year. Statistical analysis of the budgeting and staffing levels was then utilized to depict the priority levels with respect to the fire prevention and public education programs not only within each of those departments, but also revealed a national trend.

This survey was also helpful in identifying the status of Las Vegas Fire & Rescue's fire prevention and public education programs with respect to the rest of the other major metropolitan fire departments across the nation.

Limitations

Statistical analysis of the internal staffing levels and the budgeting distribution were the preliminary means of identifying the priorities of the fire departments, with respect to their fire prevention and public education programs. One of the limitations of the budget analysis was that the allocated budgets to each of the divisions did not include capital improvement budgets, or other line item budgets, that are generally incorporated into the department's general budget. Even though most likely such items do not have a direct impact on the fire prevention budget, there is a probability that the actual allocated budget might vary slightly from the reported budget.

Another limitation could also be that different budgeting and accounting methods might have been applied in the different departments surveyed, which could also vary the results slightly.

Majority of the fire department's surveyed indicated a limited involvement of their fire suppression personnel in some aspects of fire prevention and public education programs such as school fire drills, fire engine display during fire prevention week, or participation in parades and other significant public events, etc. Since there are no mechanisms for collecting and calculating the exact man-hours and budgeting figures, this could also be considered as a limitation.

The Executive Leadership course emphasized that "culture cannot be easily measured or observed. Neither can one decipher a culture simply by relying on what people say about it. Other evidence both historical and current must be taken into account to infer what the culture is." Similarly, these factors are also considered limitations for this paper.

RESULTS

This descriptive research paper focused on identifying the degree of importance and priority of the fire prevention and public education programs for the American fire service. The research focused on first identifying the historical national trend; then determining the current national practices amongst the major metropolitan fire departments; and then locally within that frame work, depicting the past practice of the LVF&R during the 90's. The research questions and the results are outlined below.

1. Historically, what has been the major priority for the American fire service, and where do the fire prevention and public education programs fit within the hierarchy of those priorities?

The review of the historical literature, dating to as far back as 1928, clearly point to the fact that the American fire service has been well aware of the fire problem in this country. The documents from the 1947 Presidential Conference testify to the high priority of this problem, which was the focus of the Presidential inquiry in the national arena. These documents clearly point out that the American fire service has always been strongly focused on fire suppression alone, with little or no emphasis on the fire prevention and public education programs.

The 1947 Conference developed invaluable recommendations requiring more emphasis on the fire prevention and public education programs. A quarter of a century later in 1973, Nixon's National Commission developed the "America Burning Report", reiterating the same exact points. The "Report" recommended emphasis on proactive means of fire protection for the community such as the fire prevention and public education programs, rather than after the fact and reactive measure of responding to suppress the fire.

The 1987 national report "America Burning Revisited" reemphasized the same exact points as the two previous Presidential reports, which testified to the fact that after forty (40) years, only minimal changes had occurred with respect to the American fire service's perspectives.

Based on the review of the historical documents, the author believes that the American fire service is still reactive in nature and respond to the fires to put them out, rather

than focusing on preventing them. There has not been any change in the American fire service's perspective with regards to the importance of the fire prevention and public education programs, and these programs are still not at the top of their priority list.

2. Currently, based on the 1998 budgeting and staffing levels statistics, what is the priority of the of the fire prevention and public education programs for the major metropolitan fire departments?

The national survey targeted thirty (30) major metropolitan fire departments across America for the purpose of identifying a national trend. For the survey to be an accurate cross section of the American fire service and depict their current personnel and budgetary practices, the departments were picked to evenly represent the geographical boundaries, as well as the age of the cities. The author's survey focused on six (6) fire departments each from the northern, southern, western, eastern, and central regions in an attempt to depict a balanced view of the national trend.

The data collected from the national survey was analyzed to identify a national trend with respect to the staffing levels and budgeting distribution within those departments during their 1998 fiscal year. Statistical analysis of the collected data depicted the priority levels with respect to the fire prevention and public education programs within those departments, in addition to revealing the current national trend. The results of this survey is tabulated in Appendix A, and the raw data from the survey was also included in Appendix C.

To identify a measure of central tendency statistical analysis was performed. Three different types of averages were calculated. The first was the Mean, which was the arithmetic average of the observations; the second was the Median, which was the observation that fell exactly in the middle of the group when the observations were ranked in order of magnitude; and the third was the Mode, or the data that occurred with the greatest frequency.

The fire departments surveyed protect approximately 41 million or 15% of the American population. Reviewing the budget analysis results, indicated that these departments' fire prevention were only a small portion of their overall annual budget. The Mean was 3.49% and the Median was 3.01%. The results for the personnel level analysis were also similar. The Mean was 3.79% and the Median was 2.86%, which verified that fire prevention personnel were only a small percentage of the total number of personnel employed by these departments.

The only exception to the trend appeared to be the Boston Fire Department. The 1998 statistics for the Boston Fire Department identified that 9.17% of their annual budget, and 18.75% of their total number of personnel was allocated to their Fire Prevention Division. The author is unaware of all of the factors involved, but presumes that most likely the fact that Boston is the headquarters for the National Fire Protection Association (NFPA), has a significant impact on the fire prevention program being considered a higher priority in that community. Researching the historical trends in the Boston community and the Boston Fire Department (established in 1630), which is one of the oldest (if not the oldest) departments in this country, and the local impact of the NFPA as a national fire service leadership organization,

on their own community, is out of the scope of this paper and could be an interesting subject for another research paper.

But other than Boston, the general trend is basically uniform throughout the country. Even a quick glance at the tabulated results tells the whole story. Simply stated, as an average the major metropolitan fire departments surveyed allocated approximately 3.5% of their total 1998 budget to the fire prevention division. Similarly the percentage of fire prevention division's personnel was also approximately 3.8% of the total number of personnel.

> Budgets also should reflect the "mission" or purpose for a bureaucratic agency's existence. This suggests still another function of budgets, intentional or not: they reflect the priorities of those who formulated them [italics added] (*Gordon, G., & Milakovich, M., 1995, p 315*).

Therefore, quite clearly the fire prevention and the public education programs are not a high priority for the American fire service.

3. Based on Las Vegas Fire & Rescue's budgeting and staffing levels statistics from 1989 until 1999, what has been the priority for the Las Vegas Fire & Rescue during the last decade?

The author's main intent was to evaluate the degree of importance and priority of the fire prevention and public education programs in Las Vegas Fire & Rescue's overall hierarchy of priorities, during the 1990's. The results of the statistical analysis of the LVF&R records from 1989 to 1999 are tabulated in Appendix B.

The research revealed that similar to the national average, during the 1990's, on an average, approximately 5.12% of the overall fire department's budget was allocated to the fire prevention division, out of which only 0.3% was dedicated to public education.

Fire Prevention Division started 1989 with 19 staff, and in 1999 there are 23 personnel working in Fire Prevention Division. However, based on reviewing the numbers for fire prevention staff per 100,000 population, the numbers indicate a sharp drop from 7.1 in 1989, to 4.9 in 1999. Based on these numbers fire prevention personnel during this period, counted for approximately 5.23% of the overall fire department's personnel. During the same period the number of public education personnel remained constant at one (1).

It is important to recognize that even though the total staffing level for the entire department grew from 362 in 1989 to 493 in 1999, this growth was not proportional to the population growth, since in 1989 the ratio of firefighters to 1,000 population was at 1.10, and this number has decreased to 0.82 in 1999. This could explain the department's reasons for focusing mainly on altering this declining course, and trying to achieve a 1.0 firefighter per 1,000 population ratio. Once this priority was established, naturally any other priorities including fire prevention had to take the back seat.

The research revealed that the allocation of resources to the Fire Prevention Division has not been adequate to keep up with the tremendous pace of population growth that Las Vegas has been experiencing during this period. Since with the same number of personnel, the Fire Prevention Division is now serving a population base that has almost doubled in size, it could be said state that the Fire Prevention Division has been stretched thin and is required "to

do more with less". In that mode of operation, the quality of service could not remain the same and would drop as the consequence.

DISCUSSION

The very first and the most important question that must be addressed is whether the American society considers the fire death rate in this country as an acceptable loss rate, or do we perceive being only second to Hungary in having the highest per capita fire death rate in the industrial world as disgraceful and unacceptable? The answer to this important question could clearly set the objectives for the American fire service. If the answer is yes, then there is no reason to change. If the answer is no, then the fire service should reevaluate their current priorities to be able to better serve their communities.

There are plenty of reasons to celebrate since the combination effect of the fire prevention and public education programs in the last two decades have proven to be very successful and have decreased the fire death rates in half. Considering that it is not possible to completely eradicate the fire death problem in this country, the American fire service and the American society in general, should determine whether they have reached their objectives and are contented with the successful results, or should they strive for better. Obviously, if more than four thousand fire deaths per year is an acceptable statistic, then indifference could be considered a valid alternative and there are no reasons to change the status quo.

However, if they consider the numbers to be too high and unacceptable, then all of the facts point out that being reactive and responding to fires cannot reduce the numbers, therefore a more proactive approach should be taken which would require more emphasis on fire prevention and public education programs to prevent the fires from occurring in the first place.

Review of the current USFA and NFPA literature, clearly points out the fact that these organizations are aware of the fire problem in America and believe that the current fire death rate is unacceptable. They advocate that the American fire service should focus even more on the fire prevention and public education programs as a means of reducing these numbers.

But the American fire service's awareness of the extent of the fire problem in this country is nothing new. The researched materials referenced in the literature review section of this paper revealed that in the past half of this century, not only the leadership of the American fire service, but also the leadership of the American government were fully aware of the fire problem in this country. Being the focus of discussions at the national level, once during the Truman's presidency more than a half a century ago in 1947, and then a quarter of a century later during the Nixon's administration in 1973, underlines the degree of importance of this issue.

Thousands of the best minds, the most dedicated and well informed professionals from the various fields related to the subject, participated in those national brainstorming sessions. For years, they dissected and analyzed the problem in detail, and developed their valuable and insightful recommendations that are considered quite progressive not only for their era, but even

with our current standards. Were they really progressive and far beyond their time, or does it just look that way to us, since we have not made a move forward yet?

An analogy might better explain the point. As an analogy, the move from depending on the horse drawn pumpers, to utilizing the steam engine pumpers was definitely quite progressive for it's era. In today's fire service, this would be considered as the ancient history, since the technological developments implemented in the fire service has far surpassed the steam engine technology. But if there had not been any progress since the turn of the century, steam engines would still be considered an advancement even in this day and age. Such is the case of the 1947 Presidential Conference. Since their recommendations pertaining to the fire prevention and public education programs have yet to be fully materialized, half a century later, they could still be considered progressive.

It should be recognized that both of those Presidential Commissions were merely brainstorming sessions and think-tanks. All that they could do was analyze the problem and make recommendations. They did not have any executive mandates to implement those recommendations. As should be clear from Truman's 1947, and Nixon's 1973 Commissions, the best of the theories and visions will not materialize without having resources and the structured organizational mechanisms to be able to transform the vision into action.

As an analogy, for thousands of years mankind had always dreamed about traveling to the moon. However, it wasn't until 1969, at the convergence point of the human desire, abundance of resources and technology advancements, that this dream became a reality.

Without allocation of adequate resources, even the most magnificent of visions will not have a chance to materialize.

The 1973 Commission's recommendation of establishment of the United States Fire Administration (USFA), successfully materialized because of the allocation of federal funds dedicated to this project. Besides, this was a recommendation from a federal Commission to the federal government, and structured organizational mechanisms with the executive powers were in place to insure it's successful implementation.

However, at the local levels, the local government did not have to implement any of those recommendations. There were no structure organizational mechanisms and executive mandates, forcing them to implement those federal recommendations in their local jurisdiction. Those were merely federal recommendations, and the local government could either accept and implement them, or completely ignore them at will. But the bigger problem was that even if the local governments were in favor of such recommendations, there might have not been resources available to implement them.

The author believes that not only both of the Presidential Commissions of the past eras, but also today's fire service leadership organizations such as the USFA, and the NFPA are absolutely correct in their assessment of the fire problem in America. As the leader of the American fire service, it is their responsibility to "create and articulate a vision that empowers others to transform vision into action". They have performed their task admirably, but it is important to realize that neither of them have executive powers to implement those visions. Therefore, the fact that those visions have not been implemented and might not ever materialize

at the local levels should not be considered as the reflection of their performance. However, underestimation of the resiliency of the American fire service to accept the paradigm shift and implement the changes advocated by their leadership, is in the author's opinion an important deficiency of their theories.

> Culture is subject to development and change because of the learning going on within the organization. Because existing basic assumptions do not change readily, such change is normally incremental and evolutionary rather than radical and revolutionary—in other words, culture is fairly resistant to major change, especially in the short term (*Executive Leadership Course, p. SM 7-5*).

While the American fire service has resisted the change, the American society has gone through a tremendous change since 1947. Take a look back. The year 1947 was just the start of the baby-boom, before the hotrods, leather jackets, greasy hair of the 50's; before the Vietnam war, psychedelics, the peace movement and the civil liberties movement of the 60's and before Neil Armstrong stepped on the moon in 1969; before bell-bottom pants and discos of the 70's; before the Reagan era's Iran-contra affairs, dismantling of the Berlin Wall, fall of the Communism and the iron curtain of the 80's; and before the information superhighway and Internet age of the 90's.

Yes, American society has experienced a tremendous cultural transformation in the past half of the century, but the American fire service culture has still remained relatively the same, still suppression oriented and reactive.

A fact that should not be ignored is that during the last several decades, one of the only few things in the American culture that has endured the erosion of time and has remained unchanged, is the dream of the little children to become firefighters when they grow up. The society's fascination and respect for their firefighters and their profession, may have a lot to do with the fire service's resistance to change. After all, why shouldn't they continue to do what they have historically done so well, that has made them an icon, and has earned them the trust and respect of the entire society? They are every little child's hero, for their turnouts and helmets, for their red fire engines and the siren. No little boy or girl wants to be a Fire Prevention Inspector when they grow up, since there is no action or glamour in being an inspector.

Clearly then for the fire service to focus more on fire prevention as a higher priority requires a paradigm shift and a cultural and attitudinal change, not only in the fire service itself, but also the American society in general. Long term and systematic public education efforts at the national level is the only means of gradually altering the society's culture and attitudes. The fire problem is a national problem and the only way to address a national problem is to invest on a long term national public education campaign. This by no means eliminates the need for focusing efforts at the local level. Simple stated "think globally and act locally". History has proven that the efforts at the local level could not come to fruition without success at the national level.

The antismoking campaign of the last decade has successfully proven that concentrated, systematic, long term national efforts can change even the most resilient societal attitudes. It

also proves that it takes a giant to kill a giant. After all, if it wasn't because of the health and insurance industries' backing of the government's antismoking program, the tobacco industry would still reign. Simply stated with their tremendous wealth and political influence, the opponents outspent and outmaneuvered the tobacco industry.

Similarly, to address the fire problem in America, there needs to be a giant to help the cause. Why do we need the giants? Because quite clearly money plays a major role in this equation. After all, the leadership of the American fire service has known about the problem for the last 71 years, and 52 years ago, developed excellent national recommendations. Clearly the theories have been formulated and the "visions" have existed for decades. However, what has been missing has been the resources and the structured organizational mechanism to "empower" the fire service to materialize this vision. Simply stated, the American fire service needs the resources to fulfill these national visions at the local level.

It is important to emphasize, that the American fire service must first start believing wholeheartedly in the fire prevention and public education programs themselves, before they can effectively educate the public. After all, if they don't believe in it themselves, they can not sell it to the public. This would require a very long term, systematic and quite expensive public education campaign. Simply stated, someone with very deep pockets must foot the bill, and mandate the local officials to transform the national visions into reality.

However, who on either the public or private sectors, would have the adequate financial resources to be able to implement the change? Either the insurance industry, or the federal government.

The financial might and the political influence of the insurance industry has had a major influence not only on the American fire service, but also in the nation's perspective toward the fire problem. However, since currently 80% of the fire deaths are one or two fatalities occurring at homes, it appears that the insurance industry is content, and considers the current fire death statistics, as an acceptable loss level.

History proves that when the insurance industry focused on reducing the commercial and industrial fire losses in America, because of their financial might and political influence, they were quite successful in developing and enforcing the more stringent fire codes and standards that decreased the property losses. Their lack of concern for the residential fire death statistics should be obvious from their position on the residential fire sprinkler system. Generally, the insurance industry considers the residential fire sprinkler system as a higher risk for water damage, rather than a life safety system.

This is one of the major reasons why only 4% of the U.S. households have automatic residential fire sprinkler protection. It is not hard to imagine that if the insurance industry was truly concerned and was determined to address this problem, increasing the fire insurance premiums by even a slight margin, would translate to an increase in the number of the households with the residential sprinklers, which in turn in the long run will have a direct impact on the fire death statistics.

So, if the insurance industry is not concerned with the fire death statistics and are content with the status quo, then the federal government appears to be the only institution with adequate financial resources to finance the long term, systematic fire prevention and public

education programs. Providing federal grants to the local communities to develop their fire prevention and public education programs is the most appropriate way of implementing federal "visions" in the local community.

On March 12, 1999, Representative Pascrell introduced the "Firefighter Investment and Response Enhancement (FIRE) Act to the House of Representatives. This bill proposes establishment of a 5 year, 5 billion dollar federal grant to the local governments "for the purpose of protecting the public and firefighting personnel against fire and fire-related hazards". Since historically federal grants have proven to be quite an effective tool for implementing the federal policies, they can also be an ideal method for financing the local fire departments efforts to implement the national measures.

It is logical to assume that the American fire service is in general agreement that they could benefit from the federal government's financial support. Similarly, the author believes that federal grants focused specifically on supporting the local fire prevention and public education programs, could be quite essential for the empowerment of the fire service to finally materialize the grand visions formulated more than half a century ago.

Once as a nation we have "put the money where our mouth is", and with the structured organizational mechanisms associated with any federal grant program, the local communities could finally implement all of the well planned fire prevention and public education recommendations that have been sitting on the shelf collecting dust for more than a half a century.

As for the author's own organization, Las Vegas Fire & Rescue would also certainly benefit from a federal fire prevention and public education grant program. However, the author is not naively holding his breath waiting for it. Obviously, just because the fire problem is a national problem requiring a national response, does not mean that certain local measures could not be taken to further improve the situation. These local measures could only be considered as cosmetic, since they can only have limited cultural and attitudinal impacts. However, in the long run, without the national measures to focus on solving the deep roots of the problem, the local measures cannot succeed either.

To determine LVF&R's general perspectives on fire prevention and public education programs, a brief review of the history of the department since it's establishment as a professional department in 1942, might be beneficial. More than half a century ago, in his interview printed in the January 16, 1949 issue of the Las Vegas Review-Journal, Harold Case, the first Fire Chief of the Las Vegas Fire & Rescue stated that:

> Prevention of fire and first-aid treatment as well as actual fire fighting last year occupied members of the city fire department, which in 1948, answered 455 fire alarms. This marked a reduction from 481 calls in 1946 and 470 in 1947, a record of pride to fire department members who worked unceasingly to reduce the number of fires by insisting on proper permits in their rigid campaign of fire prevention.... While most city fire departments use only two percent of their personnel in fire prevention work, Las Vegas uses six to eight percent in order to reduce fires [italics added] (*Las Vegas Review-Journal, January 16, 1949*).

Chief Case's perspectives fifty years ago, was not only very progressive for his era, but could still be considered more progressive that the majority of the fire departments in this country. After all, the results of the national survey conducted pointed out that even now, not that many departments have dedicated 6 to 8 percent of their personnel to fire prevention.

One thing is certain, in 1949, Chief Case was more progressive and had more foresight and vision in recognizing the importance of fire prevention programs than his heirs forty (40) years later, in 1989. In the strategic plan for Las Vegas Fire & Rescue during 1990's, titled "Fire Plan 2000", prepared under the direction of the organization's previous Fire Chief (retired in 1997), it is stated:

> The United States has been unable to prevent fires through fire prevention programs. Our Country has the worst record for fire loss of all industrialized nations in the world. It is for this reason that our cities must maintain a well manned, well trained and well equipped fire department to quickly respond to fires and other emergencies (*Fire Plan 2000, 1989, p.39*).

From the statement above, apparently fire prevention has failed to prevent fires, and that is why America has the worst fire loss record. To all those familiar with the statistics published in various USFA and NFPA publications, it should be quite clear that this statement in "Fire Plan 2000" is indicative of either sheer ignorance or malicious plagiarism. The book titled "Fire Death Rate Trends - an International Perspective" published by the USFA, clearly points to the exact opposite conclusion, that the sole focus on fire suppression, is the reason for the problem. Either way the intent of the statement was quite clearly to discredit and disregard fire prevention

programs, in favor of promoting fire suppression. Rather than focusing on being proactive and prevent fires, the focus of "Fire Plan 2000" was to be reactive and respond to fires.

Interestingly enough though, these were the perspectives of the Fire Chief of a department that after the MGM fire of 1981 and the Hilton fire of 1982, had implemented a very proactive fire prevention program and the most restrictive fire code in this country, requiring all structures higher than 55 feet or three (3) stories in height to be provided with automatic fire sprinklers.

Common sense dictates that obviously the hotel owners did not prefer spending millions of dollars on retrofitting automatic fire sprinkler systems into their existing buildings, unless it was an absolute necessity. Because of the adverse financial impact of such tragedies on the tourism and the gaming industries in Las Vegas, the community in general was in favor of spending millions of dollars in built-in automatic fire protection systems, and by utilizing preventive measures, reducing the probability of yet another disaster. At that time, being proactive and focusing on fire prevention was the community's main focus. After the MGM fire in 1981, the entire country was following the lead, but still was far behind Las Vegas in fire prevention programs. Now with these facts in mind, was the desecration of the USFA's fire death statistics in the "Fire Plan 2000", an act of sheer ignorance or malicious plagiarism?

The statement from "Fire Plan 2000", that "the budget is a quantitative expression of a management plan" was indeed a very descriptive and accurate depiction of the "management's plan". The records indicate that within that era, the statistics for fire prevention budgets and personnel fluctuated at its lowest point.

Under the "Fire Plan 2000", the total fire prevention personnel of twenty two (22) at the start of the "Plan" in1990, was supposed to increase by three (3) inspectors in1992, two (2) inspectors in 1993, and one (1) inspector in 1995. Based on this "Plan", Fire Prevention Division was supposed to have twenty eight (28) personnel right now, which would have been an increase of six (6) new positions from the twenty two (22) positions in 1990.

None of the predictions in this "Plan" ever materialized for fire prevention, and at the end of 1996, there were still twenty two (22) fire prevention personnel. If the real outcome of months of brainstorming to write a strategic plan, is a net gain of zero, then why even bother to write a plan? Most likely the strategic plan was written just to look fashionably progressive and please the superiors. The author believes that a plan that is not followed through is not even worth the paper that it is written on.

A couple of years ago, in 1997, under the direction of the present Fire Chief, "Fire Plan 2003" was prepared to serve as the department's new five year strategic plan. Under the "Fire Plan 2003", the total fire prevention personnel of twenty two (22) in1997, was supposed to increase by five (5) in1999, three (3) in 2000, four (4) in 2001, and four (4) in 2002. Based on the "Fire Plan 2003", the Fire Prevention Division is forecasted to have thirty eight (38) personnel, which will be an increase of sixteen (16) new positions from the original twenty two (22) positions at the start of "Fire Plan 2003", in1997. Thus far only a single position has been added and the total number of fire prevention personnel is currently twenty three (23).

Will "Fire Plan 2003", follow the same path as the "Fire Plan 2000", and be an absolutely worthless document as it relates to the fire prevention and public education

programs? This might be the case, but the outlook is bright. Contrary to the previous management, the present Fire Chief's perspective is quite progressive, which is the reason for the author's optimism that positive things are in store for not only the Fire Prevention Division, but the entire department.

> It's official, we are now ***Las Vegas Fire & Rescue***. At the last City Council meeting, a measure was adopted to allow a change of name from the Department of Fire Services to our new moniker. Aside from just changing with the times, it's important to note that our new name is the best way to convey exactly how broad our mission is. Thanks to an aggressive fire code and uniform enforcement, the number of fires which we respond to has stayed constant for several years. Last year, we actually saw a decline in fires, which is a testimony to our fire prevention efforts. The number of Emergency Medical Service responses, however, has continued to rise and easily makes up for 80% of our volume. In addition, there is an increasing variety of other emergency roles that we play, including; Swift Water Rescue, Confined Space Rescue, Heavy Rescue, High-Angle Rescue, Hazardous Materials Response, Emergency Preparedness, and Terrorism Preparedness, just to name a few. One thing remains constant, when someone is in need, we will be there to make the *rescue* [italics added] (*Fire Flash, 1999, p.1*).

The significant difference of outlook should be quite obvious. The statement that "the United States has been unable to prevent fires through fire prevention programs", clearly depicted the previous leadership's perspective with regards to the fire prevention and public

education programs. The current Fire Chief though has recognized the value of the fire prevention efforts in reducing the number of fires. Even more importantly though, the current Chief realizes the value of task diversification in the fire service.

The change of name to Las Vegas Fire & Rescue is indicative of diversity of the variety of other tasks that the organization provides for it's community. This reflects a departure from the past perspective that fire suppression was the only priority. This view is different from the one blaming fire prevention for the reduction in the number of fires, thus causing a reduction in the number of fire suppression staff. This is a view that has recognized that the reduction in the number of fires will not eliminate firefighter jobs, but instead will allow them to focus more on their immediate task of emergency response which, as the numbers indicate, are more than 80% of the total call volume. This view is focused more on the global picture of how the community can be provided with the highest level of service, delivered most efficiently and effectively.

Las Vegas Fire & Rescue has set it's goal and is thriving on assuming the leadership status of this country's fire service. Uniformly, the entire management team is focused on performing at a level expected of such position. Because of the historic dichotomy in the fire service, both fire suppression and fire prevention are inseparable functions, essential to the overall success of the department. Therefore, it should be obvious that the fire prevention and public education programs are important factors in this equation.

The goal of becoming a leader in the American fire service cannot be accomplished without the department as a whole running full throttle, on all cylinders. Fire prevention cannot limp behind, if the rest of the department is zooming ahead in the warp speed. Sweep the

problem under the carpet today, and we will land on our head, tripping over it tomorrow. Ignoring fire prevention today will translate into devastating fires of tomorrow. How should the LVF&R focus on developing the fire prevention and public education programs to empower them to perform at a level expected of an organization at the leadership position of the American fire service?

The first step is the leader's vision and progressive leadership characteristics that could mobilize the organization to focus on the goals, accomplish the objectives and transform the vision into reality.

The second step, which is the most important ingredient in accomplishing any and all goals throughout the entire universe, is having the adequate resources on both the budgetary and personnel level to be able to accomplish the task. Simply stated, "the money should be put where the mouth is". At times, because of the unavailability of the limited resources for the competing priorities, it is natural that the leader must make the tough decision of appropriately dividing and allocating the resources. But the key point to recognize, and should always be the guiding light for the leadership, is that there are no competing priorities in an organization that is focused on reaching to the peak. There is only one priority, reaching the peak as a team, pure and simple.

It has been said that it is a "dog eat dog world", "every man for himself", "territorial warfare", etc. etc. These are concepts applicable to entities with competing interests, not for an organization where reaching the leadership position of the fire service is it's common interest. Besides all that, there should not be any competing interests when the entire organization is

focused to serve and protect it's community. Las Vegas Fire & Rescue's "Mission Statement" states:

> "Protect life and property by providing fire prevention, suppression, investigation, emergency medical services, hazardous materials, and explosive device management to the Las Vegas community."

No one can dispute that elimination or reduction of emphasis on any of the tasks identified above could only mean that the organization as a whole has failed to accomplish it's mission of protecting and serving it's community. Any good team focuses on developing all it's players to be able to perform their task with optimum efficiency and maximum productivity.

As an analogy, in a football team, defense is as important as offense, or having a good quarterback is just as important of having a good offensive line. The point is that no one in any position can single-handedly change the game's outcome, and they either win or loose as an entire team. Quite clearly, the quarterback, the running back, or the receiver have more financial gratification than the lineman or the kicker, based on the importance of their position, and the team's priority. No one, including the author, is naive enough to dispute the hierarchy of ranks and priorities in any organization including a football team. But the point is, that if every single year during the draft, the team' manager focuses on picking only the quarterbacks, the success of the team in the long run would be rather doubtful. It is easy to visualize that the very first play, of the very first game of the season, will result in career ending, serious injures to all of the eleven quarterbacks dressed up as the team. The point is that a team needs the highly paid

quarterback just as much as the lower paid offensive line. And the focus should be on having a well organized, coordinated, and balanced team.

Based on this analogy, it is quite natural that at times during the annual budgeting preparation ritual, because of the resource limitations, different divisions might not be able to receive the desired allocation levels. However, if the leader is focused on the overall long term organizational goals, the annual budgeting games would become a "give and take game", where the one that was short changed the year before, could make up for it in the following fiscal year, and so forth. This will keep an overall balance and will keep everyone on board on the road to materializing the organizational vision. Constant favoring of one division over the others in the long run will only create an imbalance which, as all of the references in the Literature Review section of this paper point out, is the story of the American fire service today.

Clearly the intent is not to completely reverse the current budget imbalance in favor of the fire prevention and public education programs. Instead, the author is rather pragmatic and believes that focusing more resources on the fire prevention and public education programs, should achieve a budgeting increase of not more than 2% or 3%. In other words, fire suppression will still have the lion's share of the budget, but will have 93% rather than 95%.

Even though providing adequate resources is the most essential step toward recognizing fire prevention as an important organizational priority, it is not enough and should be accompanied by additional attitudinal and cultural modifications. As indicated in the Literature Review section of this report, many other important factors such as requiring additional fire prevention training for the suppression personnel, mandating extensive fire prevention training as

a promotional requirement for the officers, focusing on career development and promotional opportunities for the fire prevention personnel, are also important issues that need to be addressed. Addressing these issues, in the long run, could result in the cultural and attitudinal paradigm shift that would lead to recognizing fire prevention as a higher priority.

Currently there are no fire prevention training modules for the fire suppression personnel. This should be evident from the inability of the majority of the fire suppression crews to properly operate a simple hardwired fire alarm panel, let alone a complicated addressable fire alarm system, or a complex smoke control system. Fire prevention training should be provided on operation of the modern built-in automatic fire detection, suppression and life safety systems, as well as on public education.

This education could enhance the firefighters capabilities in performing their jobs better, by utilizing the available built-in technologies to their advantage. Additionally, such training will educate the suppression personnel about the level of knowledge and technical expertise required of the fire prevention personnel. This could also change the national historical trend of "dumping" the "unfit" or "least desired" personnel into the fire prevention division, since the original perception has been that not much knowledge and expertise was required of them. Fire Prevention training would also provide an opportunity to enhance communication, coordination, and the concept of the team work between the fire prevention and fire suppression personnel, erasing the "redheaded stepchild" image of fire prevention.

Career development program and promotional opportunities for fire prevention personnel is absolutely minimal. Focusing on the past decade alone, from 1989 until 1999, all

of the three (3) Fire Marshals assigned to direct the Fire Prevention Division came from the fire suppression background, with absolutely no fire prevention experience at all. Since the Fire Marshal position is an appointive, "Deputy Chief" level position, during the 90's and most likely even prior to that, the appointees had all been assigned to the task, as a reward, so they can "coast", and "unwind" during the last few years of their career, and retire on a higher pay scale.

This practice is completely opposite of the recommendations of the 1947 Presidential Conference, referenced in the Literature Review section. How could it logically be explained?

Obviously, the department's leadership at that time, believed that technical competency and work experience were absolutely irrelevant for the Fire Marshal position, and having limited management skills, was all that was required. Needless to say, the leadership at that time obviously did not believe that any of the fire prevention personnel had the required management skills, and competence, to run their own division, therefore the Fire Marshal had to be imported from the suppression side.

If based on their work experience and training levels, the suppression personnel are so well educated on the contemporary management skills, that they are the only ones possessing the necessary management skills to run the Fire Prevention Division, maybe as a career development program, the department's leadership should also provide the same level of training for their fire prevention staff.

There would have been no room for criticism, if the appointed Fire Marshals were highly educated, experienced, and competent managers, that in spite of their inexperience in the

field of fire prevention, they served the department to the best of their abilities, and fought for the needs of the their division. However, a quick glance at the statistical review of the past decade contained in the Appendix B, and a review of the strategic plans "Fire Plan 2000" and "Fire Plan 2003", reveals that the Fire Prevention Division's resources has remained constant and has not been proportional with the growth.

Logically, this only points to the fact that with the number of personnel remaining at a constant level, in order to keep up with the increase in the quantity of work load, the quality of delivered service could not go anywhere else but down. The fact that the Fire Prevention Division did not receive the allocation of resources outlined in those "Plans" could also point out that the division's leadership was most likely more interested in not making waves, and "coasting" during the remaining years before retirement, rather than putting up a fight and defending the division's needs during the budget times. Either way, the drop in the quality of service, and incapability to secure and provide the adequate resources for their division, by most accounts can neither be viewed as a successful track record, nor an indication of outstanding management skills.

The fact that the none of the fire prevention staff have ever been promoted to the highest management level in their own division, points to the fact that either they are all considered incompetent; or that they have not been provided with the quality of management training to be able to serve in that position; or lastly, that they have reached the cultural "glass ceiling" that will not offer them the growth opportunity.

Either way, the idea that a career in fire prevention is a dead-end, without any prospect of upward mobility, has been a demoralizing problem for fire prevention personnel, and should also be addressed by the department's leadership. Additionally, this point has been identified as a departmental goal in the organization's strategic plan. Objective B of Building Block 2 from the "Fire Plan 2003", clearly state that the department should "provide career development opportunities, allowing members to reach their maximum potential".

Obviously it is the leadership's prerogative to promote the candidate of their choice. However, if the leadership's desire is to have the suppression personnel manage the Fire Prevention Division, it would only be logical and beneficial to the department as a whole, to require a higher degree of fire prevention training for both the junior and the senior level officers, as it is done in England.

Mandating extensive fire prevention training as a promotional requirement for all officers would be beneficial to the department as a whole, since it will produce a cadre of well trained qualified officers, that could serve the department in any and all fields. Furthermore, the cadre of officers would have more appreciation for the fire prevention and public education programs. This training would also be beneficial for eliminating any cultural barriers and could bring the two sides closer to the common goal of serving their community, most effectively and efficiently.

The author's recommendations for his own department are neither new nor original. They seem new and radical, since just like a gem, they have been unearthed after 52 years. As outlined in the Literature Review section of this report, these recommendations were all

identified more than a half a century ago, in the 1947 Presidential Conference, with the intent of focusing more and prioritizing the fire prevention and public education programs nationally.

The author's recommendations for his own organization, are merely cosmetic attitudinal and cultural modifications, that should be achievable without any additional financial burdens. Simply stated, what is recommended is only a change of perspective. A perspective that after 52 years, has still not been accepted by the American fire service. Perhaps Las Vegas Fire & Rescue, as an organization with the national leadership aspirations, could initially implement these recommendations internally, and then become an advocate for such a paradigm shift nationally.

RECOMMENDATIONS

The reference materials reviewed clearly emphasized that even though the fire death rates per capita has dropped by 46%, the current national fire death statistics in America is still deemed to be as unacceptable. Reliance on fire suppression as a reactive response to the fire cannot address the problem, and a more proactive approach such as the fire prevention and public education programs should be focused upon, in order to address the fire problem in this country.

The fire problem is a national problem, thus only a national solution could address this problem comprehensively. The American fire service has been aware of the fire problem and has developed specific recommendations to address the problem, as far back as more than half

a century ago, in 1947. The American fire service has formulated the theories and developed the national vision, but they did not have the resources and the structured organizational mechanisms to implement them locally.

To address this problem, the author believes that a federal grant program to mandate more local focus and emphasis on the fire prevention and public education programs should be established. This will provide the local authorities with both the resources and the structured organizational mechanisms to be able to materialize the grand visions outlined in the 1947 Presidential Conference report.

The author's recommendations for his own organization, is focused on attitudinal and cultural modifications that could enhance the organization's overall perspective toward fire prevention and public education programs. Providing fire prevention training for all of the fire suppression personnel, focusing on the built-in automatic fire protection and life safety systems, as well as the public education programs, could be not only essential for more effective fire suppression operation, but could also enhance the cooperation and coordination between the fire suppression and the fire prevention personnel. Fire prevention training should also be mandated as a promotional requirement for the officers.

The department should also focus on career development programs for the fire prevention personnel. Additionally, the department should remove all of the existing cultural obstacles and provide the promotional opportunities for the fire prevention personnel to be able to ascend to the highest levels of the divisional and the departmental ranks. These recommendations are simply cultural and cosmetic in nature and are not dependent on any

additional resources for their implementation, thus they can be implemented rather easily and expeditiously.

A budget increase of only 2% or 3% could provide the division with the resources required to be able to keep up with the tremendous population growth. The organization should also be cognizant of the fact that to be able to fulfill the commitments outlined in the strategic plan “Fire Plan 2003”, the required resources should also be provided.

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APPENDIX A

National Statistics 1998

National Survey Results -1998
Annual Budget Distribution

Fire Department	1998 Population	*Annual Budget*			
		Total	Suppression	Prevention	Pub. Ed.
Atlanta	395,000	$48,202,307	$38,959,934	$1,085,312	$ 335,676
Baltimore	700,000	$96,000,000	$61,000,000	$1,404,000	Included
Boston	600,000	$109,000,000	$80,000,000	$10,000,000	$1,000,000
Chicago	3,800,000	$298,365,835	$203,324,423	$8,991,475	$790,489
Cincinnati	358,709	$53,485,520	$37,790,000	$544,160	Included
Cleveland	510,000	$64,763,000	$53,105,660	$3,043,861	Included
Dallas	1,054,700	$120,640,568	$97,138,339	$3,332,221	Included
Denver	500,000	$65,452,600	$46,565,115	$2,538,048	Included
Detroit	1,000,000	$88,308,204	$82,000,000	$5,960,137	$348,067
Houston	1,800,000	$210,107,900	$157,143,645	$10,917,119	$879,814
Indianapolis	400,000	$46,716,088	$35,315,666	$437,861	Included
Kansas City	538,000	$63,000,000	$62,000,000	$999,000	$60,000
Las Vegas	448,244	$43,443,389	$35,255,026	$2,537,032	$135,767
Los Angeles	4,500,000	$343,000,000	$222,000,000	$21,000,000	$2,000,000
L.A. County	3,514,135	$518,161,000	$328,000,000	$17,967,000	$ 408,000
Miami	2,000,000	$166,392,000	$108,000,000	$3,654,372	$1,155,469
Minneapolis	368,383	$35,683,906	$33,054,714	$1,177,432	Included
New Orleans	450,000	$53,082,058	$30,242,014	$559,555	$ 234,869
New York	7,322,564	$998,244,727	$701,135,066	$16,578,184	$1,250,000
Philadelphia	1,500,000	$135,000,000	$96,000,000	$1,400,000	Included
Phoenix	1,215,351	$121,347,917	$79,000,000	$2,800,000	$1,033,555
Pittsburgh	369,000	$45,955,760	$43,888,271	$555,431	Included
Portland	509,856	$58,228,893	$43,267,409	$3,891,815	$444,451
Sacramento	440,000	$49,820,000	$37,017,000	$1,800,000	$96,000
Saint Louis	2,548,238	$31,164,477	$30,037,728	$672,374	$454,375
Salt Lake City	175,000	$23,235,400	$17,084,742	$727,834	$503,791
San Diego	1,300,000	$83,293,556	$59,739,900	$3,682,947	$1,542,220
San Francisco	788,000	$169,344,660	$165,289,070	$4,055,590	Included
San Jose	893,969	$64,817,277	$59,604,027	$5,160,250	$53,000
Seattle	532,900	$80,509,265	$69,049,966	$3,801,952	$210,676
Washington D. C.	578,000	$110,469,000	$63,520,000	$2,296,000	Included

Table A-1

National Survey Results -1998
Percentage of Budget Distribution

Fire Department	Percentage of Total Budget		
	Suppression	Prevention	Pub. Ed.
Atlanta	80.83%	2.25%	0.70%
Baltimore	63.54%	1.46%	Included
Boston	73.39%	9.17%	0.92%
Chicago	68.15%	3.01%	0.26%
Cincinnati	70.65%	1.02%	Included
Cleveland	82.00%	4.70%	Included
Dallas	80.52%	2.76%	Included
Denver	71.14%	3.88%	Included
Detroit	92.86%	6.75%	0.39%
Houston	74.79%	5.20%	0.42%
Indianapolis	75.60%	0.94%	Included
Kansas City	98.41%	1.59%	0.10%
Las Vegas	81.15%	5.84%	0.31%
Los Angeles	64.72%	6.12%	0.58%
L.A. County	63.30%	3.47%	0.08%
Miami	64.91%	2.20%	0.69%
Minneapolis	92.63%	3.30%	Included
New Orleans	56.97%	1.05%	0.44%
New York	70.24%	1.66%	0.13%
Philadelphia	71.11%	1.04%	Included
Phoenix	65.10%	2.31%	0.85%
Pittsburgh	95.50%	1.21%	0.00%
Portland	74.31%	6.68%	0.76%
Sacramento	74.30%	3.61%	0.19%
Saint Louis	96.38%	2.16%	1.46%
Salt Lake City	73.53%	3.13%	2.17%
San Diego	71.72%	4.42%	1.85%
San Francisco	97.61%	2.39%	Included
San Jose	91.96%	7.96%	0.08%
Seattle	85.77%	4.72%	0.26%
Washington D. C.	57.50%	2.08%	Included
Mean	76.79%	3.49%	
Median	74.30%	3.01%	

Table A-2

National Survey Results -1998
Annual Budget/Capita

Fire Department	*Budget Per Capita*			
	Total	Suppression	Prevention	Pub. Ed.
Atlanta	$ 122.03	$ 98.63	$ 2.75	$ 0.85
Baltimore	$ 137.14	$ 87.14	$ 2.01	Included
Boston	$ 181.67	$ 133.33	$ 16.67	$ 1.67
Chicago	$ 78.52	$ 53.51	$ 2.37	$ 0.21
Cincinnati	$ 149.11	$ 105.35	$ 1.52	Included
Cleveland	$ 126.99	$ 104.13	$ 5.97	Included
Dallas	$ 114.38	$ 92.10	$ 3.16	Included
Denver	$ 130.91	$ 93.13	$ 5.08	Included
Detroit	$ 88.31	$ 82.00	$ 5.96	$ 0.35
Houston	$ 116.73	$ 87.30	$ 6.07	$ 0.49
Indianapolis	$ 116.79	$ 88.29	$ 1.09	Included
Kansas City	$ 117.10	$ 115.24	$ 1.86	$ 0.11
Las Vegas	$ 96.92	$ 78.65	$ 5.66	$ 0.30
Los Angeles	$ 76.22	$ 49.33	$ 4.67	$ 0.44
L.A. County	$ 147.45	$ 93.34	$ 5.11	$ 0.12
Miami	$ 83.20	$ 54.00	$ 1.83	$ 0.58
Minneapolis	$ 96.87	$ 89.73	$ 3.20	Included
New Orleans	$ 117.96	$ 67.20	$ 1.24	$ 0.52
New York	$ 136.32	$ 95.75	$ 2.26	$ 0.17
Philadelphia	$ 90.00	$ 64.00	$ 0.93	Included
Phoenix	$ 99.85	$ 65.00	$ 2.30	$ 0.85
Pittsburgh	$ 124.54	$ 118.94	$ 1.51	Included
Portland	$ 114.21	$ 84.86	$ 7.63	$ 0.87
Sacramento	$ 113.23	$ 84.13	$ 4.09	$ 0.22
Saint Louis	$ 12.23	$ 11.79	$ 0.26	$ 0.18
Salt Lake City	$ 132.77	$ 97.63	$ 4.16	$ 2.88
San Diego	$ 64.07	$ 45.95	$ 2.83	$ 1.19
San Francisco	$ 214.90	$ 209.76	$ 5.15	Included
San Jose	$ 72.51	$ 66.67	$ 5.77	$ 0.06
Seattle	$ 151.08	$ 129.57	$ 7.13	$ 0.40
Washington D. C.	$ 191.12	$ 109.90	$ 3.97	Included

Table A-3

National Survey Results -1998
Personnel Distribution

Fire Department	*Personnel*			
	Total	Suppression	Prevention	Pub. Ed.
Atlanta	1,062	876	27	6
Baltimore	1,700	1,450	24	Included
Boston	1,600	1,200	300	100
Chicago	4,881	3,716	158	13
Cincinnati	793	782	11	Included
Cleveland	975	900	26	3
Dallas	1,899	1,537	51	Included
Denver	892	750	30	7
Detroit	1,271	1,229	40	2
Houston	3,362	3,164	184	14
Indianapolis	744	710	4	Included
Kansas City	778	758	19	Included
Las Vegas	493	382	23	1
Los Angeles	3,003	2,700	300	6
L.A. County	4,096	2,410	132	3
Miami	1,554	1,338	51	8
Minneapolis	483	460	8	Included
New Orleans	865	723	15	6
New York	15,578	11,133	437	26
Philadelphia	2,340	2,034	18	Included
Phoenix	1,470	1,198	31	17
Pittsburgh	896	868	14	Included
Portland	729	665	54	5
Sacramento	529	495	16	1
Saint Louis	693	666	19	8
Salt Lake City	357	282	14	5
San Diego	1,222	808	35	1
San Francisco	1,850	1,505	53	1
San Jose	826	770	55	1
Seattle	1,040	880	53	3
Washington D. C.	1,764	1,171	62	Included

Table A-4

National Survey Results -1998
Personnel Distribution Statistics

Fire Department	% of Total Personnel			Personnel Per 1,000 Population		
	Supp.	Prev.	Pub. Ed.	Supp.	Prev.	Pub. Ed.
Atlanta	82.49%	2.54%	0.56%	2.2177	0.0684	0.0152
Baltimore	85.29%	1.41%	Included	2.0714	0.0343	Included
Boston	75.00%	18.75%	6.25%	2.0000	0.5000	0.1667
Chicago	76.13%	3.24%	0.27%	0.9779	0.0416	0.0034
Cincinnati	98.61%	1.39%	Included	2.1800	0.0307	Included
Cleveland	92.31%	2.67%	0.31%	1.7647	0.0510	0.0059
Dallas	80.94%	2.69%	Included	1.4573	0.0484	Included
Denver	84.08%	3.36%	0.78%	1.5000	0.0600	0.0140
Detroit	96.70%	3.15%	0.16%	1.2290	0.0400	0.0020
Houston	94.11%	5.47%	0.42%	1.7578	0.1022	0.0078
Indianapolis	95.43%	0.54%	Included	1.7550	0.0100	Included
Kansas City	97.43%	2.44%	Included	1.4089	0.0353	Included
Las Vegas	77.48%	4.67%	0.20%	0.8522	0.0513	0.0022
Los Angeles	89.91%	9.99%	0.20%	0.6000	0.0667	0.0013
L.A. County	58.84%	3.22%	0.07%	0.6858	0.0376	0.0009
Miami	86.10%	3.28%	0.51%	0.6690	0.0255	0.0040
Minneapolis	95.24%	1.66%	Included	1.2487	0.0217	Included
New Orleans	83.58%	1.73%	0.69%	1.6067	0.0333	0.0133
New York	71.47%	2.81%	0.17%	1.5204	0.0597	0.0036
Philadelphia	86.92%	0.77%	Included	1.3560	0.0120	Included
Phoenix	81.50%	2.11%	1.16%	0.9857	0.0255	0.0140
Pittsburgh	96.88%	1.56%	0.00%	2.3523	0.0379	0.0000
Portland	91.22%	7.41%	0.69%	1.3043	0.1059	0.0098
Sacramento	93.57%	3.02%	0.19%	1.1250	0.0364	0.0023
Saint Louis	96.10%	2.74%	1.15%	0.2614	0.0075	0.0031
Salt Lake City	78.99%	3.92%	1.40%	1.6114	0.0800	0.0003
San Diego	66.12%	2.86%	0.08%	0.6215	0.0269	0.0008
San Francisco	81.35%	2.86%	0.05%	1.9099	0.0673	0.0013
San Jose	93.22%	6.66%	0.12%	0.8613	0.0615	0.0011
Seattle	84.62%	5.10%	0.29%	1.6513	0.0995	0.0056
Washington D. C.	66.38%	3.51%	Included	2.0260	0.1073	Included
Mean	85.10%	3.79%		1.405	0.0640	
Median	85.29%	2.86%		1.4573	0.0416	

Table A-5

National Survey Results -1998
Operational Statistics

Fire Department	Population	Established	ISO Rating	Square Miles	# Stations	Total # of Runs	# of Fire Calls	# of EMS Calls	% Fire Calls	% EMS Calls
Atlanta	395,000	1851	2	131	35	53,321	4,290	31,865	8%	60%
Baltimore	700,000	1859	NA	92	45	171,000	61,000	110,000	36%	64%
Boston	600,000	1630	NA	47	34	74,629	45,945	28,684	62%	38%
Chicago	423,000	1832	NA	229	111	423,000	177,000	246,000	42%	58%
Cincinnati	358,709	1853	2	77.8	26	59,305	7,365	51,940	12%	88%
Cleveland	510,000	1863	3	75	26	54,883	4,975	31,898	9%	58%
Dallas	1,054,700	1872	2	378	55	227,819	96,598	131,221	42%	58%
Denver	500,000	1882	NA	165.0	31	59,433	3,307	31,561	6%	53%
Detroit	1,000,000	1856	NA	143	49	160,444	35,444	125,000	22%	78%
Houston	1,800,000	1895	3	617	86	276,345	98,169	178,176	36%	64%
Indianapolis	400,000	1859	NA	93.0	26	49,212	13,408	35,804	27%	73%
Kansas City	538,000	1848	3	317	34	44,000	17,201	26,800	39%	61%
Las Vegas	448,244	1942	1	109.3	10	54,736	2,286	42,787	4%	78%
Los Angeles	4,500,000	1886	1	460	103	299,000	65,000	233,500	22%	78%
Los Angeles County	3,514,135	1924	NA	2,280	149	211,051	8,868	137,774	4%	65%
Miami	2,000,000	1935	3	2,000	56	160,582	7,620	123,793	5%	77%
Minneapolis	368,383	1880	NA	58.7	20	33,065	10,703	22,362	32%	68%
New Orleans	450,000	1891	2	299	34	14,071	3,576	7,997	25%	57%
New York	7,322,564	1865	NA	321.8	221	451,022	126,070	324,952	28%	72%
Philadelphia	1,500,000	1871	NA	128	60	257,000	90,000	167,000	35%	65%
Phoenix	1,215,351	1886	2	473.2	45	120,351	15,269	94,089	13%	78%
Pittsburgh	369,000	1870	4	55	35	30,901	11,201	19,700	36%	64%
Portland	509,856	1883	2	149.5	26	57,483	4,791	39,314	8%	68%
Sacramento	440,000	1850	2	142.5	22	55,000	14,300	40,200	26%	73%
Saint Louis	2,548,238	1857	1	61.4	30	96,525	35,247	61,278	37%	63%
Salt Lake City	175,000	1883	2	110	13	23,680	6,020	16,273	25%	69%
San Diego	1,300,000	1906	NA	331	43	79,935	5,000	63,500	6%	79%
San Francisco	788,000	1849	NA	46.7	42	106,295	52,558	53,737	49%	51%
San Jose	893,969	1854	NA	206	31	58,572	2,466	39,184	4%	67%
Seattle	532,900	1894	2	91	34	68,685	16,594	52,091	24%	76%
Washington D. C.	578,000	1871	NA	69	33	209,378	110,293	99,085	53%	47%
Mean									**25%**	**66%**
Median									**25%**	**65%**

Table A-6

APPENDIX B

Las Vegas Fire & Rescue Statistics 1989-1999

LAS VEGAS FIRE & RESCUE
ANNUAL BUDGETS
FISCAL YEARS 1989 TO 1999

Fiscal Year	*Las Vegas Population*	*Annual Budget*			
		Total	Suppression	Prevention	Pub. Ed.
1989	266,096	$ 18,590,502	$15,934,678	$ 823,131	$ 60,644
1990	275,636	$ 20,326,396	$17,131,939	$1,025,266	$ 65,918
1991	298,321	$ 21,716,873	$18,323,255	$1,195,138	$ 71,650
1992	310,197	$ 23,389,604	$19,907,106	$1,238,152	$ 77,880
1993	330,472	$ 24,525,426	$20,916,564	$1,194,293	$ 84,652
1994	352,305	$ 27,382,029	$23,457,318	$1,253,965	$ 92,012
1995	374,239	$ 28,684,410	$24,231,855	$1,445,550	$100,014
1996	405,517	$ 32,296,525	$27,235,128	$1,643,239	$108,949
1997	422,884	$ 35,130,838	$29,327,042	$1,917,804	$120,478
1998	448,244	$ 38,533,470	$31,978,756	$2,000,842	$125,816
1999	467,579	$ 43,443,389	$35,255,026	$2,537,032	$135,767

TABLE B-1

LAS VEGAS FIRE & RESCUE
ANNUAL BUDGETS
FISCAL YEARS 1989 TO 1999

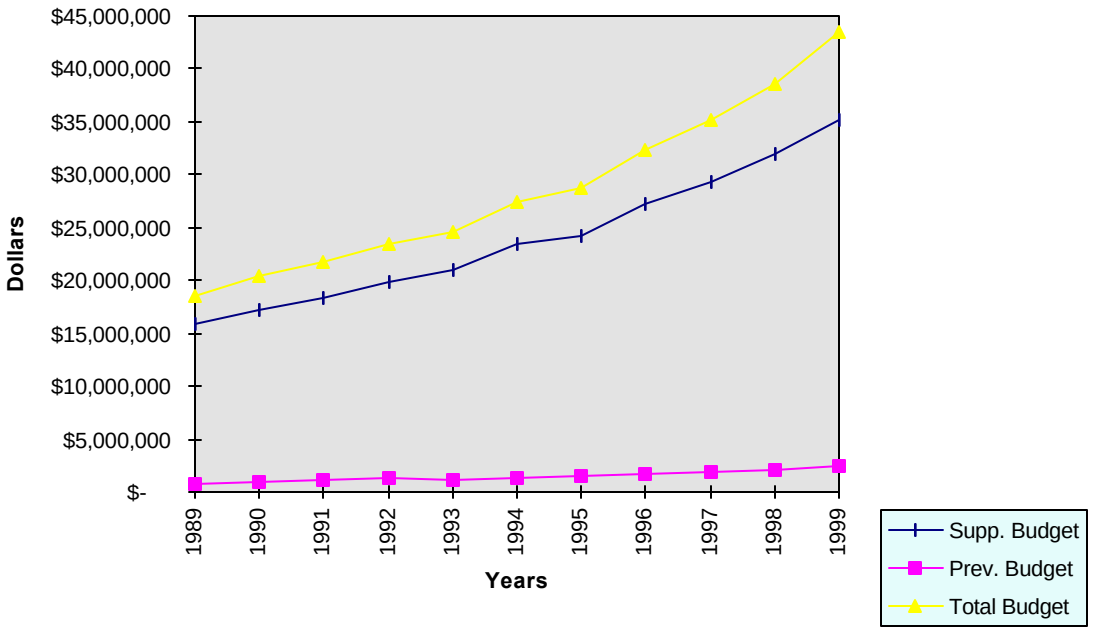

FIGURE B-1

LAS VEGAS FIRE & RESCUE
DISTRIBUTION OF THE ALLOCATED BUDGET
FISCAL YEARS 1989 TO 1999

Fiscal Year	*Percentage of Total Budget*		
	Suppression	Prevention	Pub. Ed.
1989	85.7%	4.4%	0.326%
1990	84.3%	5.0%	0.324%
1991	84.4%	5.5%	0.330%
1992	85.1%	5.3%	0.333%
1993	85.3%	4.9%	0.345%
1994	85.7%	4.6%	0.336%
1995	84.5%	5.0%	0.349%
1996	84.3%	5.1%	0.337%
1997	83.5%	5.5%	0.343%
1998	83.0%	5.2%	0.327%
1999	81.2%	5.8%	0.313%

TABLE B-2

LAS VEGAS FIRE & RESCUE
DISTRIBUTION OF THE ALLOCATED BUDGET
FISCAL YEARS 1989 TO 1999

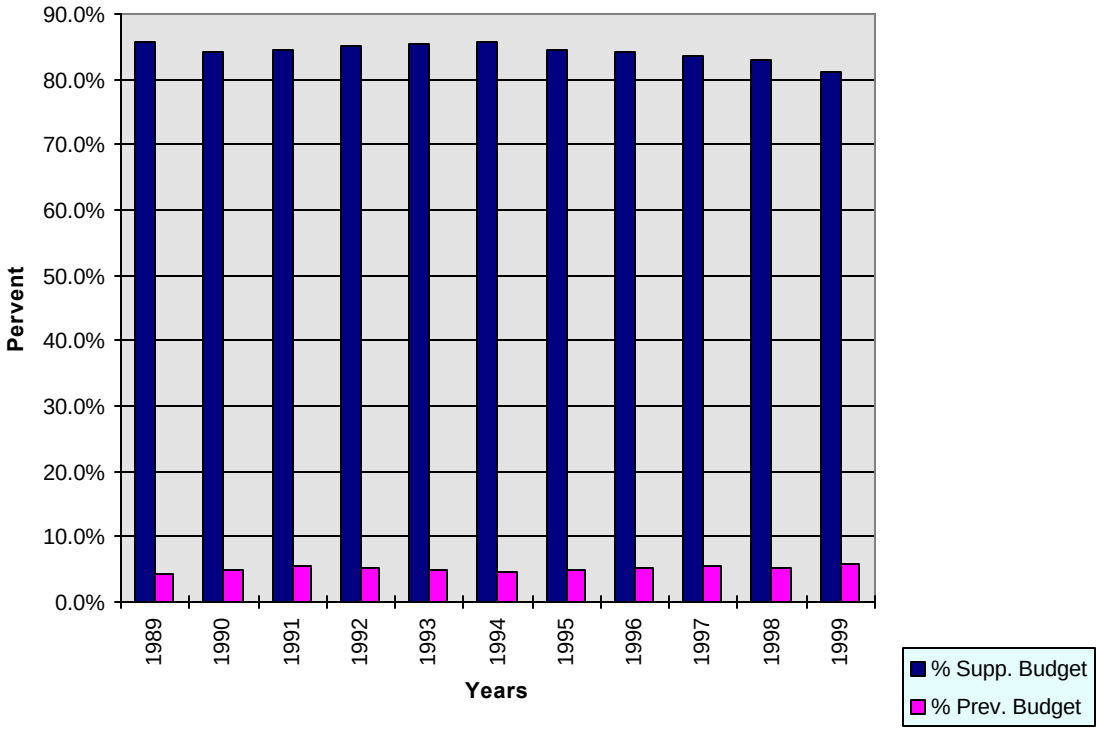

FIGURE B-2

LAS VEGAS FIRE & RESCUE
BUDGET PER CAPITA
FISCAL YEARS 1989 TO 1999

Fiscal	*Budget Per Capita*			
Year	Total Budget	Suppression	Prevention	Pub. Ed.
1989	69.86	59.88	3.09	0.228
1990	73.74	62.15	3.72	0.239
1991	72.80	61.42	4.01	0.240
1992	75.40	64.18	3.99	0.251
1993	74.21	63.29	3.61	0.256
1994	77.72	66.58	3.56	0.261
1995	76.65	64.75	3.86	0.267
1996	79.64	67.16	4.05	0.269
1997	83.07	69.35	4.54	0.285
1998	85.97	71.34	4.46	0.281
1999	92.91	75.40	5.43	0.290

TABLE B-3

LAS VEGAS FIRE & RESCUE
BUDGET PER CAPITA
FISCAL YEARS 1989 TO 1999

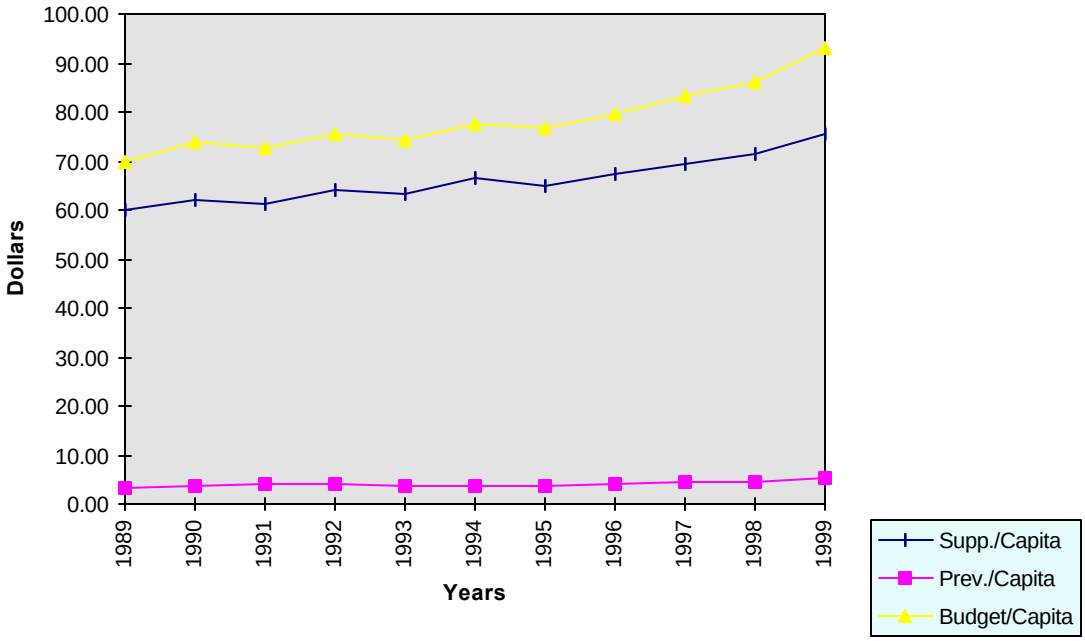

FIGURE B-3

LAS VEGAS FIRE & RESCUE
NUMBER OF PERSONNEL
FISCAL YEARS 1989 TO 1999

Fiscal	*Personnel*			
Year	Total	Suppression	Prevention	Pub. Ed.
1989	362	293	19	1
1990	378	293	22	1
1991	382	292	22	1
1992	389	299	23	1
1993	389	299	21	1
1994	389	299	21	1
1995	413	320	22	1
1996	435	338	22	1
1997	436	339	22	1
1998	453	353	22	1
1999	493	382	23	1

TABLE B-4

LAS VEGAS FIRE & RESCUE
NUMBER OF PERSONNEL
FISCAL YEARS 1989 TO 1999

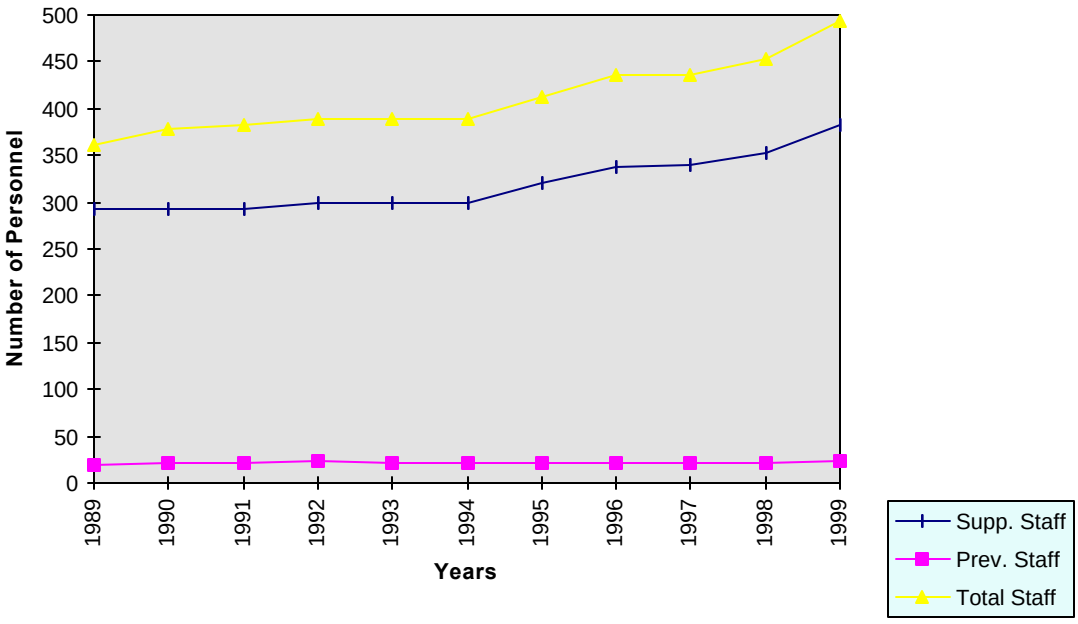

FIGURE B-4

LAS VEGAS FIRE & RESCUE
DISTRIBUTION OF THE PERSONNEL
FISCAL YEARS 1989 TO 1999

Fiscal	*% of Total Personnel*		
Year	% Suppression	% Prevention	% Pub. Ed.
1989	81%	5%	0.276%
1990	78%	6%	0.265%
1991	76%	6%	0.262%
1992	77%	6%	0.257%
1993	77%	5%	0.257%
1994	77%	5%	0.257%
1995	77%	5%	0.242%
1996	78%	5%	0.230%
1997	78%	5%	0.229%
1998	78%	5%	0.221%
1999	77%	5%	0.203%

TABLE B-5

LAS VEGAS FIRE & RESCUE
DISTRIBUTION OF THE PERSONNEL
FISCAL YEARS 1989 TO 1999

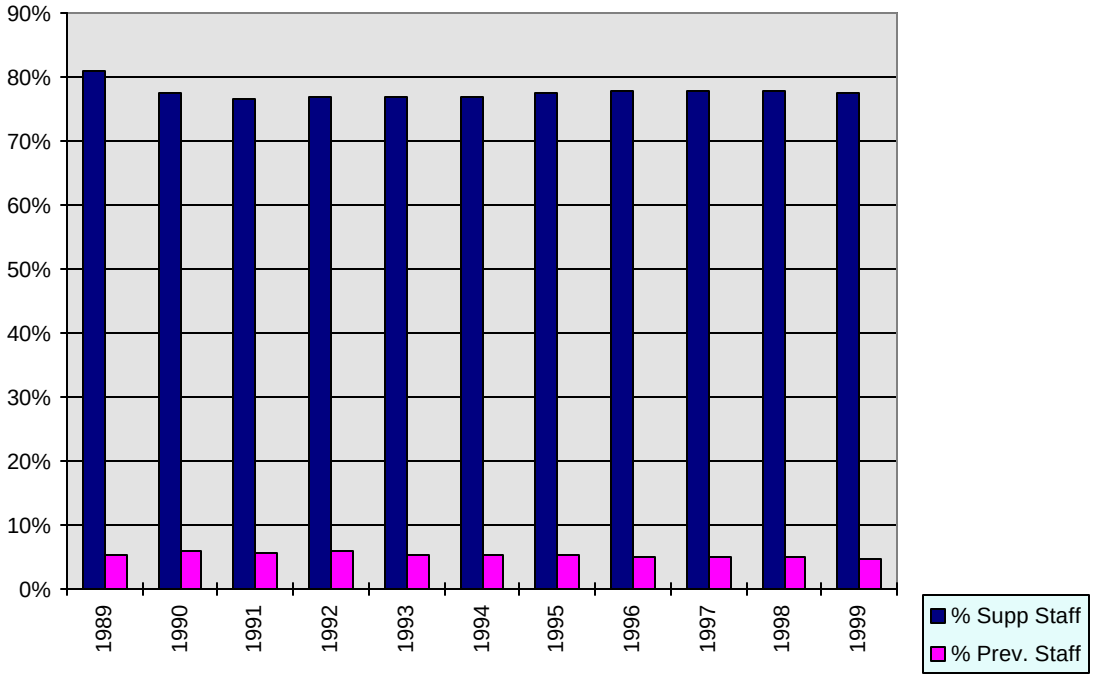

FIGURE B-5

LAS VEGAS FIRE & RESCUE
PERSONNEL PER 1,000 POPULATION
FISCAL YEARS 1989 TO 1999

Fiscal	*Personnel*	*Per 1,000*	*Population*
Year	Suppression	Prevention	Pub. Ed.
1989	1.10	0.071	0.0038
1990	1.06	0.080	0.0036
1991	0.98	0.074	0.0034
1992	0.96	0.074	0.0032
1993	0.90	0.064	0.0030
1994	0.85	0.060	0.0028
1995	0.86	0.059	0.0027
1996	0.83	0.054	0.0025
1997	0.80	0.052	0.0024
1998	0.79	0.049	0.0022
1999	0.82	0.049	0.0021

TABLE B-6

LAS VEGAS FIRE & RESCUE
PERSONNEL PER 1,000 POPULATION
FISCAL YEARS 1989 TO 1999

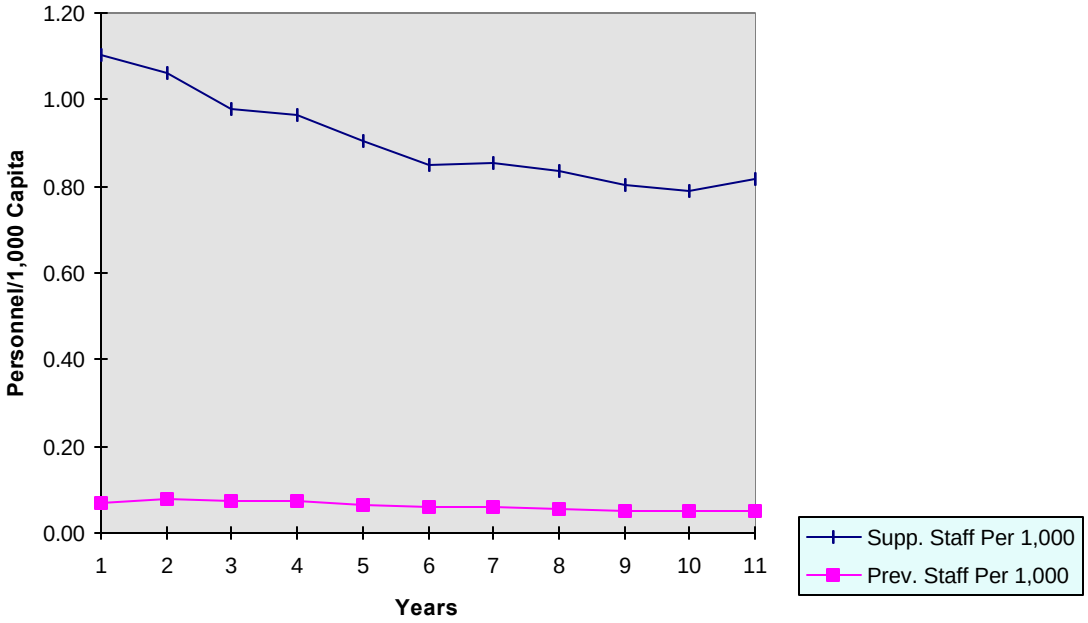

FIGURE B-6

LAS VEGAS FIRE & RESCUE
FIRE PREVENTION DIVISION'S
PERSONNEL REQUEST
OUTLINED IN
FIRE PLAN 2000

Total Fire Prevention personnel before the plan (Fiscal Year 90-91): 22

Requested for F/Y 91-92 - **0** (none was requested)

Requested for F/Y 92-93 - **3** Fire Inspectors

Requested for F/Y 93-94 - **2** Fire Inspectors

Requested for F/Y 94-95 - **0** (none was requested)

Requested for F/Y 95-96 - **1** Fire Inspector

Total additions requested by the end of the plan (Fiscal Year 96-97): 6

Anticipated number of Personnel by the end of the plan (Fiscal Year 96-97): 28

Actual number of Personnel by the end of the plan (Fiscal Year 96-97): 22

LAS VEGAS FIRE & RESCUE
FIRE PREVENTION DIVISION'S
PERSONNEL REQUESTS
OUTLINED IN
FIRE PLAN 2003

Total Fire Prevention personnel before the plan (Fiscal Year 97-98): 22

Requested for F/Y 98-99 - **0** (none was requested)

Requested for F/Y 99-00 - **5** Total (4 Fire Inspectors and 1 Senior Inspector)

Requested for F/Y 00-01 - **3** Fire Inspectors

Requested for F/Y 01-02 - **4** Total (3 Fire Inspectors and 1 Senior Inspector)

Requested for F/Y 02-03 - **4** Total (3 Fire Inspectors and 1 Plan Checker)

Requested for F/Y 03-04 - **0** (none was requested)

Total additions requested by the end of the plan (Fiscal Year 03-04): 16

Anticipated number of Personnel by the end of the plan (Fiscal Year 03-04): 38

Current number of Personnel (Fiscal Year 99-00): 23

APPENDIX C

Raw Data From The National Survey

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: City of Atlanta Fire Department

What Year was your Fire Dept. established: 1851
Population: 395,000 ISO Rating: 2
Area of Coverage: 131 Square Miles Number of Station: 35

Total Number of Runs: 53,321

Number of Fire Calls: 4,290
Number of EMS Calls: 31,865

Total Annual Budget for 1998: $48,202,307

Fire Suppression Budget: $38,959,934
Fire Prevention Budget: $1,085,312
Public Education Budget: $335,676

Total Number of Personnel: 1,062

Fire Suppression Personnel: 876
Fire Prevention Personnel: 27
Public Education Personnel: 6

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Baltimore City Fire Department

What Year was your Fire Dept. established: 1859
Population: 700,000 ISO Rating: NA
Area of Coverage: 92 Square Miles Number of Station: 45

Total Number of Runs: 171,000

Number of Fire Calls: 61,000
Number of EMS Calls: 110,000

Total Annual Budget for 1998: $96,000,000

Fire Suppression Budget: $72,388,000
Fire Prevention Budget: $1,404,000
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 1,700

Fire Suppression Personnel: 1,450
Fire Prevention Personnel: 24
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Boston Fire Department

What Year was your Fire Dept. established: 1630
Population: 600,000 ISO Rating: NA
Area of Coverage: 47 Square Miles Number of Station: 34

Total Number of Runs: 74,629

Number of Fire Calls: 45,945
Number of EMS Calls: 28,684

Total Annual Budget for 1998: $109,000,000

Fire Suppression Budget: $80,000,000
Fire Prevention Budget: $10,000,000
Public Education Budget: $1,000,000

Total Number of Personnel: 1,600

Fire Suppression Personnel: 1,200
Fire Prevention Personnel: 300
Public Education Personnel: 100

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Chicago Fire Department

What Year was your Fire Dept. established: 1832
Population: 3,800,000 ISO Rating: NA
Area of Coverage: 229 Square Miles Number of Station: 111

Total Number of Runs: 423,000

Number of Fire Calls: 177,000
Number of EMS Calls: 246,000

Total Annual Budget for 1998: $298,365,835

Fire Suppression Budget: $203,325,523
Fire Prevention Budget: $8,991,475
Public Education Budget: $790,489

Total Number of Personnel: 4,881

Fire Suppression Personnel: 3,716
Fire Prevention Personnel: 158
Public Education Personnel: 13

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Cincinnati Fire Division

What Year was your Fire Dept. established: 1853
Population: 358,709 ISO Rating: 2
Area of Coverage: 77.8 Square Miles Number of Station: 26

Total Number of Runs: 59,305

Number of Fire Calls: 7,365
Number of EMS Calls: 51,940

Total Annual Budget for 1998: $53,458,520

Fire Suppression Budget: $37,790,000
Fire Prevention Budget: $544,160
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 793

Fire Suppression Personnel: 782
Fire Prevention Personnel: 11
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Cleveland Fire Department

What Year was your Fire Dept. established: 1863
Population: 510,000 ISO Rating: 3
Area of Coverage: 75 Square Miles Number of Station: 26

Total Number of Runs: 54,883

Number of Fire Calls: 4,975
Number of EMS Calls: 31,898

Total Annual Budget for 1998: $64,763,000

Fire Suppression Budget: $53,105,660
Fire Prevention Budget: $3,043,861
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 975

Fire Suppression Personnel: 900
Fire Prevention Personnel: 26
Public Education Personnel: 3

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Dallas City Fire Department

What Year was your Fire Dept. established: 1872
Population: 1,054,700 ISO Rating: 2
Area of Coverage: 378 Square Miles Number of Station: 55

Total Number of Runs: 227,819

Number of Fire Calls: 96,598
Number of EMS Calls: 131,221

Total Annual Budget for 1998: $120,640,568

Fire Suppression Budget: $97,138,339
Fire Prevention Budget: $3,332,221
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 1,899

Fire Suppression Personnel: 1,537
Fire Prevention Personnel: 51
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Denver Fire Department

What Year was your Fire Dept. established:
Population: 500,000 ISO Rating: NA
Area of Coverage: 165 Square Miles Number of Station: 31

Total Number of Runs: 59,433

Number of Fire Calls: 3,307
Number of EMS Calls: 31,561

Total Annual Budget for 1998: $65,452,600

Fire Suppression Budget: $46,565,115
Fire Prevention Budget: $2,538,048
Public Education Budget: Included in Community Safety

Total Number of Personnel: 892

Fire Suppression Personnel: 750
Fire Prevention Personnel: 30
Public Education Personnel: 7

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Detroit Fire Department

What Year was your Fire Dept. established: 1856
Population: 1,000,000 ISO Rating: NA
Area of Coverage: 143 Square Miles Number of Station: 49

Total Number of Runs: 160,444

Number of Fire Calls: 35,444
Number of EMS Calls: 125,000

Total Annual Budget for 1998: $88,308,204

Fire Suppression Budget: $82,000,000
Fire Prevention Budget: $5,960,137
Public Education Budget: $348,067

Total Number of Personnel: 1,271

Fire Suppression Personnel: 1,229
Fire Prevention Personnel: 40
Public Education Personnel: 2

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Houston Fire Department

What Year was your Fire Dept. established: 1895
Population: 1,800,000 ISO Rating: 3
Area of Coverage: 617 Square Miles Number of Station: 86

Total Number of Runs: 276,345

Number of Fire Calls: 98,169
Number of EMS Calls: 178,176

Total Annual Budget for 1998: $210,107,900

Fire Suppression Budget: $157,143,645
Fire Prevention Budget: $10,917,119
Public Education Budget: $879,814

Total Number of Personnel: 3,362

Fire Suppression Personnel: 3,164
Fire Prevention Personnel: 184
Public Education Personnel: 14

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Indianapolis Fire Department

What Year was your Fire Dept. established: 1859
Population: 400,000 ISO Rating: NA
Area of Coverage: 93 Square Miles Number of Station: 26

Total Number of Runs: 49,212

Number of Fire Calls: 13,408
Number of EMS Calls: 35,804

Total Annual Budget for 1998: $46,716,088

Fire Suppression Budget: $35,315,666
Fire Prevention Budget: $437,861
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 744

Fire Suppression Personnel: 710
Fire Prevention Personnel: 4
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Kansas City Missouri Fire Department

What Year was your Fire Dept. established: 1848
Population: 538,000 ISO Rating: 3
Area of Coverage: 317 Square Miles Number of Station: 34

Total Number of Runs: 44,000

Number of Fire Calls: 17,201
Number of EMS Calls: 26,800

Total Annual Budget for 1998: $63,000,000

Fire Suppression Budget: $62,000,000
Fire Prevention Budget: $999,000
Public Education Budget: $60,000

Total Number of Personnel: 778

Fire Suppression Personnel: 758
Fire Prevention Personnel: 17
Public Education Personnel: 2

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Las Vegas Fire & Rescue

What Year was your Fire Dept. established: 1942
Population: 448,244 ISO Rating: 1
Area of Coverage: 109.25 Square Miles Number of Station: 10

Total Number of Runs: 54,736

Number of Fire Calls: 2,286
Number of EMS Calls: 42,787

Total Annual Budget for 1998: $43,443,389

Fire Suppression Budget: $35,255,026
Fire Prevention Budget: $2,537,032
Public Education Budget: $135,767

Total Number of Personnel: 493

Fire Suppression Personnel: 382
Fire Prevention Personnel: 22
Public Education Personnel: 1

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Los Angeles City Fire Department

What Year was your Fire Dept. established: 1886
Population: 4,500,000 ISO Rating: 1
Area of Coverage: 460 Square Miles Number of Station: 103

Total Number of Runs: 299,000

Number of Fire Calls: 65,000
Number of EMS Calls: 233,500

Total Annual Budget for 1998: $343,000,000

Fire Suppression Budget: $222,000,000
Fire Prevention Budget: $21,000,000
Public Education Budget: $2,000,000

Total Number of Personnel: 3,006

Fire Suppression Personnel: 2,700
Fire Prevention Personnel: 300
Public Education Personnel: 6

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Los Angeles County Fire Department

What Year was your Fire Dept. established: 1924
Population: 3,514,135 ISO Rating:
Area of Coverage: 2280 Square Miles Number of Station: 149

Total Number of Runs: 211,051

Number of Fire Calls: 8,868
Number of EMS Calls: 137,774

Total Annual Budget for 1998: $518,161,000

Fire Suppression Budget: $328,000,000
Fire Prevention Budget: $17,967,000
Public Education Budget: $408,000

Total Number of Personnel: 4,096

Fire Suppression Personnel: 2,410
Fire Prevention Personnel: 132
Public Education Personnel: 3 + 60 Volunteers

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Metro-Dade Fire Rescue

What Year was your Fire Dept. established: 1935
Population: 2,000,000 ISO Rating: 3
Area of Coverage: 2,000 Square Miles Number of Station: 56

Total Number of Runs: 160,582

Number of Fire Calls: 7,620
Number of EMS Calls: 123,793

Total Annual Budget for 1998: $166,392,000

Fire Suppression Budget: $108,000,000
Fire Prevention Budget: $3,654,372
Public Education Budget: $1,155,469

Total Number of Personnel: 1,554

Fire Suppression Personnel: 1,338
Fire Prevention Personnel: 51
Public Education Personnel: 8

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Minneapolis Fire Department

What Year was your Fire Dept. established: 1880
Population: 368,383 ISO Rating: NA
Area of Coverage: 58.7 Square Miles Number of Station: 20

Total Number of Runs: 33,065

Number of Fire Calls: 10,703
Number of EMS Calls: 22,362

Total Annual Budget for 1998: $35,683,906

Fire Suppression Budget: $33,054,714
Fire Prevention Budget: $1,177,432
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 483

Fire Suppression Personnel: 460
Fire Prevention Personnel: 8
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: New Orleans Fire Department

What Year was your Fire Dept. established: 1891
Population: 450,000 ISO Rating: 2
Area of Coverage: 299 Square Miles Number of Station: 34

Total Number of Runs: 14,071

Number of Fire Calls: 3,576
Number of EMS Calls: 7,997

Total Annual Budget for 1998: $53,082,058

Fire Suppression Budget: $30,242,014
Fire Prevention Budget: $559,555
Public Education Budget: $234,869

Total Number of Personnel: 865

Fire Suppression Personnel: 723
Fire Prevention Personnel: 15
Public Education Personnel: 6

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: New York Fire Department

What Year was your Fire Dept. established: 1865
Population: 7,322,564 ISO Rating: NA
Area of Coverage: 321.8 Square Miles Number of Station: 221

Total Number of Runs: 451,022

Number of Fire Calls: 126,070
Number of EMS Calls: 324,952

Total Annual Budget for 1998: $998,244,727

Fire Suppression Budget: $701,135,066
Fire Prevention Budget: $16,578,184
Public Education Budget: $1,250,000

Total Number of Personnel: 15,578

Fire Suppression Personnel: 11,133
Fire Prevention Personnel: 437
Public Education Personnel: 26

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Philadelphia Fire Department

What Year was your Fire Dept. established: 1871
Population: 1,500,000 ISO Rating: NA
Area of Coverage: 128 Square Miles Number of Station: 60

Total Number of Runs: 257,000

Number of Fire Calls: 90,000
Number of EMS Calls: 167,000

Total Annual Budget for 1998: $135,000,000

Fire Suppression Budget: $96,000,000
Fire Prevention Budget: $1,400,000
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 2,340

Fire Suppression Personnel: 2,034
Fire Prevention Personnel: 18
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Phoenix Fire Department

What Year was your Fire Dept. established: 1886
Population: 1,215,008 ISO Rating: 2
Area of Coverage: 473.2 Square Miles Number of Station: 45

Total Number of Runs: 120,351

Number of Fire Calls: 15,269
Number of EMS Calls: 94,089

Total Annual Budget for 1998: $121,347,917

Fire Suppression Budget: $79,000,000
Fire Prevention Budget: $2,800,000
Public Education Budget: $1,033,555

Total Number of Personnel: 1,470

Fire Suppression Personnel: 1,198
Fire Prevention Personnel: 31
Public Education Personnel: 17

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Pittsburgh Bureau of Fire

What Year was your Fire Dept. established: 1870
Population: 369,000 ISO Rating: 4
Area of Coverage: 55 Square Miles Number of Station: 35

Total Number of Runs: 30,901

Number of Fire Calls: 11,201
Number of EMS Calls: 19,700

Total Annual Budget for 1998: $45,955,760

Fire Suppression Budget: $43,888,271
Fire Prevention Budget: $555,431
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 896

Fire Suppression Personnel: 868
Fire Prevention Personnel: 14
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Portland Fire Department

What Year was your Fire Dept. established: 1883
Population: 509,856 ISO Rating: 2
Area of Coverage: 149.5 Square Miles Number of Station: 26

Total Number of Runs: 57,483

Number of Fire Calls: 4,791
Number of EMS Calls: 39,314

Total Annual Budget for 1998: $58,228,893

Fire Suppression Budget: $43,267,409
Fire Prevention Budget: $3,891,815
Public Education Budget: $444,451

Total Number of Personnel: 729

Fire Suppression Personnel: 665
Fire Prevention Personnel: 54
Public Education Personnel: 5

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Sacramento Fire Department

What Year was your Fire Dept. established: 1850
Population: 440,000 ISO Rating: 2
Area of Coverage: 142.5 Square Miles Number of Station: 22

Total Number of Runs: 55,000

Number of Fire Calls: 14,300
Number of EMS Calls: 40,200

Total Annual Budget for 1998: $49,820,000

Fire Suppression Budget: $37,017,000
Fire Prevention Budget: $1,800,250
Public Education Budget: $96,000

Total Number of Personnel: 529

Fire Suppression Personnel: 495
Fire Prevention Personnel: 16
Public Education Personnel: 1

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: St. Louis Fire Department

What Year was your Fire Dept. established: 1857
Population: 2,548,238 ISO Rating: 1
Area of Coverage: 61.37 Square Miles Number of Station: 30

Total Number of Runs: 96,525

Number of Fire Calls: 35,247
Number of EMS Calls: 61,278

Total Annual Budget for 1998: $31,164,477

Fire Suppression Budget: $30,037,728
Fire Prevention Budget: $672,374
Public Education Budget: $454,375

Total Number of Personnel: 693

Fire Suppression Personnel: 666
Fire Prevention Personnel: 19
Public Education Personnel: 8

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Salt Lake City Fire Department

What Year was your Fire Dept. established: 1883
Population: 175,000 ISO Rating: 2
Area of Coverage: 110 Square Miles Number of Station: 13

Total Number of Runs: 23,680

Number of Fire Calls: 6,020
Number of EMS Calls: 16,273

Total Annual Budget for 1998: $23,235,400

Fire Suppression Budget: $17,084,742
Fire Prevention Budget: $727,834
Public Education Budget: $503,791

Total Number of Personnel: 357

Fire Suppression Personnel: 282
Fire Prevention Personnel: 14
Public Education Personnel: 5

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: San Diego Fire & Life Safety Services

What Year was your Fire Dept. established: 1906
Population: 1,300,000 ISO Rating: NA
Area of Coverage: 331 Square Miles Number of Station: 43

Total Number of Runs: 79,935

Number of Fire Calls: 5,000
Number of EMS Calls: 63,500

Total Annual Budget for 1998: $83,293,556

Fire Suppression Budget: $59,739,900
Fire Prevention Budget: $3,682,947
Public Education Budget: $1,542,220 Also Includes Training

Total Number of Personnel: 1,222

Fire Suppression Personnel: 808
Fire Prevention Personnel: 35
Public Education Personnel: 1

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: No

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: San Francisco Fire Department

What Year was your Fire Dept. established: 1849
Population: 788,000 ISO Rating: NA
Area of Coverage: 46.7 Square Miles Number of Station: 42

Total Number of Runs: 106,295

Number of Fire Calls: 52,558
Number of EMS Calls: 53,737

Total Annual Budget for 1998: $169,344,660

Fire Suppression Budget: $165,289,070
Fire Prevention Budget: $4,055,590
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 1,850

Fire Suppression Personnel:
Fire Prevention Personnel: 53
Public Education Personnel: 1

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: San Jose Fire Department

What Year was your Fire Dept. established: 1854
Population: 893,969 ISO Rating: NA
Area of Coverage: 206 Square Miles Number of Station: 31

Total Number of Runs: 58,572

Number of Fire Calls: 2,466
Number of EMS Calls: 39,184

Total Annual Budget for 1998: $64,817,277

Fire Suppression Budget: $59,604,027
Fire Prevention Budget: $5,160,250
Public Education Budget: $53,000

Total Number of Personnel: 826

Fire Suppression Personnel: 770
Fire Prevention Personnel: 55
Public Education Personnel: 1

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: Seattle Fire Department

What Year was your Fire Dept. established: 1894
Population: 532,900 ISO Rating: 2
Area of Coverage: 91 Square Miles Number of Station: 34

Total Number of Runs: 68,685

Number of Fire Calls: 16,594
Number of EMS Calls: 52,091

Total Annual Budget for 1998: $80,509,265

Fire Suppression Budget: $69,049,966
Fire Prevention Budget: $3,801,952
Public Education Budget: $210,676

Total Number of Personnel: 1,040

Fire Suppression Personnel: 880
Fire Prevention Personnel: 56
Public Education Personnel: 3

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes

Fire Departments Survey
Budget & Personnel
Fiscal Year 1998

Fire Department: District of Columbia Fire and EMS Department

What Year was your Fire Dept. established: 1871
Population: 578,000 ISO Rating: NA
Area of Coverage: 69 Square Miles Number of Station: 33

Total Number of Runs: 209,378

Number of Fire Calls: 110,293
Number of EMS Calls: 99,085

Total Annual Budget for 1998: $110,469,000

Fire Suppression Budget: $63,520,000
Fire Prevention Budget: $2,296,000
Public Education Budget: Included in Fire Prevention

Total Number of Personnel: 1,764

Fire Suppression Personnel: 1,171
Fire Prevention Personnel: 62
Public Education Personnel: Included in Fire Prevention

Do Fire Suppression personnel perform Fire Prevention or Public Education functions on a regular basis: Yes