

EXPANDING THE LAGUNA BEACH FIRE DEPARTMENT'S RESERVE PROGRAM

Expanding the Laguna Beach Fire Department's Reserve Program to Aggressively Address
Fire Prevention Needs and Reduce Community Risk

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CERTIFICATION STATEMENT

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

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Abstract

The Laguna Beach Fire Department (LBFD) is no different than fire agencies across the nation that are tasked as first responders and with doing more work with fewer resources, while working toward community risk reduction. One way LBFD does this is through a Reserve Firefighter Program which supplements its full-time fire suppression personnel. With the increasing needs of the community and the limited resources generally earmarked for fire prevention activities, some enhancements to the program are needed.

The problem is that the LBFD Reserve Program (LBRP) does not include a fire prevention component and the fact that LBFD has extremely limited fire prevention resources currently available. This is an action research project related to establishing a fire prevention component within the existing program, and addressing the financial and legal implications therein. Extensive literature review and personal communications proved to be an invaluable resource in producing the final results, including a final action plan, which will have an immediate and long-term impact on community risk reduction.

Lastly, recommendations for future researchers to consider were discussed, which included expanding the scope of research to include a method for program evaluation.

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Introduction

The fire service of the 21st century has changed dramatically in recent years and continues evolving to a level well beyond what our brothers and sisters from the 20th century could have ever fathomed. From fighting fire in our earliest days, to the all-inclusive “community risk management,” which effectively means that the fire service responds to anything that warrants a call for help, small or large, emergency or non-emergency, life-threatening or good intention. Effectively, this includes all types of fires, from trash to vehicle, to wildland, to urban interface, to structural, to explosions, to medical aids, to paramedic emergencies, to rescues, to public service requests, to public assistance, to public education, to fire prevention, to fire alarms, to natural disasters, to urban search and rescue, to terrorism, and beyond! Simply put, there really is no area in which the fire service is not involved in, whether it is mitigation, response, recovery, or preparedness.

The city of Laguna Beach is recognized internationally as one of the most incredible places to visit in the world. Unfortunately, it is also recognized as being prone to having headline disasters of unleashed proportions on a somewhat regular basis. The Laguna Beach Fire Department (LBFD) is no different than fire agencies across the nation in its mission to reduce the loss of life, property, and the environment as first responders. Recently, LBFD completed its first year with a restructured Reserve Firefighter Program which supplements its full-time fire suppression personnel in working toward community risk reduction. The city of Laguna Beach allocates funding to the program, but with the changing needs of the community and the limited resources generally earmarked for fire prevention activities, some more enhancements to the program are warranted and need to be realized, if the program is to continue.

Simply put, the problem is that the Lbfd Reserve Program (LBRP) does not include a fire prevention component, along side of the fact that Lbfd has extremely limited fire prevention staffing and human resources currently available. As a result, the office of the Fire Chief has given the direction to develop a fire prevention component to be included in the LBRP through this applied research project (ARP). As such, this is an action research project related to LBRP.

The following research questions will be discussed in this ARP:

- a) What fire prevention content needs to be included in the Reserve training program?
- b) What field experience is needed to be included in the Reserve training program?
- c) How will the fire prevention component be included as part of the Laguna Beach Fire Department's Reserve program?
- d) What are the legal requirements that need to be included in the development of this program?
- e) What are the costs that will be associated with this program?

Background and Significance

The Lbfd is a career department located in Coastal Southern Orange County, California, sitting on the edge of the Pacific Ocean, roughly between Los Angeles and San Diego. The organization is one of twelve fire agencies within the local region, as recognized by the Orange County Fire Chiefs Association. The Lbfd has over 50 employees including, but not limited to, a Fire Chief, 3 Division Chiefs, an administrative assistant, 12 Fire Captains, 12 Fire Apparatus Engineers, 12 Firefighters, 2 Fire Prevention Officers, and 8

Reserve Firefighters working out of 4 fire stations and an administrative office. The resident population of Laguna Beach is approximately 24,000, but regularly swells to exceed 100,000 on weekends, holidays, and the summertime. This can be attributed to the area being well-known for its seasonal art festivals, the Pageant of the Masters, the city's Mediterranean climate, and being situated in a unique location situated on one of the most incredible coastlines in the world. Simply put, it is a very desirable place to live, work, and play. Moreover, the city's 8.1 square miles include beaches, high angle cliffs, majestic canyons, and heavy vegetation laid coastal hills, which can bear an extreme physical burden on even the most physically fit firefighters. Incorporated in 1927 as a general law city, the city's annual operating budget is approximately \$72.3 million. The fire department budget is approximately \$9.6 million.

The Fire Department is organized into two budgetary divisions, which include Fire Operations/Training and Fire Prevention. The Department responds to approximately 2,400 requests for emergency service. The majority (50%) of these incidents are emergency medical-related. Responses to fires in buildings, vehicles, or the wildland account for another 15% of the Department's emergency responses; 15% of emergency responses are rescues involving trapped persons as a result of vehicle accidents, falls from a cliff, construction site accidents, and weather-related incidents. The Department also responds to spills and releases of hazardous materials, public service, and other miscellaneous requests, which account for the remaining 20% of the Fire Department's incident responses. The Department maintains a fully-equipped emergency response force of twelve firefighters on duty at all times assigned to suppression, in addition to a duty officer that remains on-call after hours. Each of the four fire stations has a Fire Captain, Fire Engineer, and Firefighter working 24 hour shifts from

7:00 a.m. to 7:00 a.m. One engine company operates out of each station. Station #1 also houses a reserve unit and one utility vehicle that responds to public service calls, such as flooding and mudslides. Station #2 also houses a four-wheel drive brush unit that is specifically designed to go into the wildland interface areas, a squad that is equipped to respond to a variety of incidents, and an additional engine supplied by the Governor's Office of Emergency Services (OES), which is activated as part of the mutual aid system in the case of a major wildland fire or other emergency. Station #4 also houses one reserve unit as a backup.

All of the firefighters in fire suppression are certified as Emergency Medical Technicians (EMT's). The department also has sixteen suppression personnel with additional paramedic training who help staff two paramedic engine companies that respond from Station #1 and Station #4. These engine companies have specialized equipment for medical emergency incidents, and at least two of the three firefighters are paramedics.

Firefighters/paramedics respond to all medical emergencies within the city. In addition to fire suppression and paramedic responsibilities, fire personnel are involved in a number of other activities. They maintain the stations and associated equipment, participate in advanced and skills maintenance-training programs, and conduct fire prevention inspections annually in local businesses, as well as residences adjacent to open space areas.

The fire prevention division manages the daily fire prevention activities, including the fire inspections carried out by the engine companies; the plan review and new construction process; it also supervises the fire investigators; and oversees the vegetation management programs.

The vegetation management program is divided into two subdivisions, which include weed abatement and fuel modification. The weed abatement program reduces fire hazards that result from uncontrolled growth of vegetation on private properties. The fuel management program consists of approximately 1,500 acres surrounding the exterior of the city, along the open wildland areas, where vegetation is reduced creating fuel breaks to protect residential structures. The fuel modification program is accomplished and maintained through the use of goats.

With that being said, the aforementioned background on the city and fire department will serve as the foundation of understanding to initiate the development of a fire prevention component to be included in the LBRP.

In a conversation with LBFD second-generation veteran Fire Captain, and 50 year resident of the community, Stephen Rening (personal communication, June 1, 2008) explained that the LBRP is a result of a volunteer program that dates back to the early 1900s which ultimately evolved into a career department and ultimately, the addition of Reserves over twenty years ago. Most notable, though, was Captain Rening's declaration that until this ARP was undertaken, the LBFD has not ever considered or included any formal fire prevention component in the LBRP. He concludes stating that it has only been in the last two decades that the department has taken on a proactive role in overall fire prevention activities.

Unfortunately, since the initial implementation of the program, the economy has seen some ups and downs in the economy, and this year, one of the most fragile economical time periods of this generation. With that withstanding, the organization has also undergone some significant philosophical and logistical changes within its administration on all levels. Further, any volatility of an economy can have adverse affects on a fire department, and

doing more with less continues to the mantra of local, regional, state, and federal public agencies. As the LBFD prepares to enter into the next era of the fire service, the need for presenting reasonable justification for the reserve program is always on the table for discussion. Combine that with the need for enhanced fire prevention needs for the organization to address the need for comprehensive community risk reduction, and the justification for this research is born.

This ARP deals with some of the key concepts in the *Leading Community Risk Reduction* course. Most notably, being mindful of incorporating the global goals of risk management and strategically applying it to the local needs and driving it “line-level” implementation, ultimately to achieve the most efficient use of resources and provide the greatest opportunity for success in reaching those goals.

Lastly, this research is linked to the “5-Year Operational Objectives” of the United States Fire Administration (USFA), which is a reduction in life and economic loss due to fire and related emergencies. Even more specifically, one of the USFA’s main goals has been a 25 percent reduction of firefighter fatalities in 5 years and a 50 percent reduction within 10 years (USFA, 2005). As such, these goals coincide with what the LBFD has undertaken to immediately address, to that end, in working to minimize the loss of life from fire-related hazards, particularly in relation to the target groups identified by USFA;14 and younger, 65 and older, and Firefighters (USFA, 2008). Additionally, it serves the goal of helping communities develop extensive all-risk reduction plans, and as this research embodies, appropriately responding in a timely manner to emergent issues, such as increased resources for our fire prevention program which serves the broad goal of community risk reduction.

Literature Review

This literature review was performed to locate and analyze information related to the research questions, to establish the importance of increasing fire prevention-related activities, and for the purpose of providing documented, credible, and comprehensive information from different, yet relevant, perspectives regarding reserve, volunteer, and intern programs, while integrating them with organizational fire prevention needs. This process included a wide-ranging investigation of research materials from the National Fire Academy's Learning Resource Center (LRC) in Emmitsburg, Maryland, the Nealley Library at SAC, and the LBFD's training and resource compilation. Additionally, numerous Internet searches were conducted to locate related articles and publications that helped to ensure a broadened and current dimension to the research.

Truly, no fire service research report can take place without, at some point, taking time to look at one of the most monumental documents in the history of the United States Fire Service (USFS). That document is *America Burning*, an extensive report which was prepared by the National Commission on Fire Prevention and Control with the primary purpose of addressing the national fire problem, specifically, the reduction of life and property loss in the United States. The Commission was created in 1971 through funding by Congress as part of legislation that had not been amended since 1901 (*America Burning*, 1973).

One of the key points to be made taken from *America Burning*, as it relates to this research, is the documented acknowledgement that there needs to be a greater emphasis on fire prevention. On a more broader perspective, that the majority of the goals and concerns established back in 1973 still hold true today. For example, one of the goals of the *America*

Burning report was the reduction of firefighter injuries by fifty percent, a worthy undertaking back then, and it is echoed in the same vein now. Moreover, it also led to the establishment of a National Fire Academy (NFA), with one of the primary objectives to increase the emphasis on fire prevention efforts, while also remaining committed to the training, health, and safety of firefighters. The most important note to be made from this, which will be apparent throughout this research, is the relevance of resources from thirty years ago that are as applicable to this research as some of the resources utilized from earlier this year.

That being said, and continuing, in the fall of 1987, an even greater effort was made by evaluating the progress made since *America Burning* was developed and implemented. The final document was the result of a three-day workshop called *America Burning Revisited* (1987). The purpose was essentially to establish some type of consensus on the current fire problem through a review of the progress of the recommendations from *America Burning*. Ironically enough, a second document that was also initially implemented that same year was published by the National Fire Protection Association (NFPA), an international nonprofit membership organization, which was established back in 1896, and whose main goal was in line with what *America Burning* was initially after reducing the loss of life and property in relation to the tragedies that result from fire. The document, NFPA 1500, originally arrived in 1987 and was the first edition of the Standard on Fire Department Occupational Safety and Health Program (NFPA 1500). To that end, the NFPA serves as one of the world's leading advocates for fire prevention and serves as an authoritative and important resource for the fire service by developing consensus standards, as well as being responsible for a number of other notable publications.

Included in the long list of substantive literature from NFPA is another significant document that many consider the Bible of the fire service, *The Fire Protection Handbook* (NFPA, 2000), which was first published over 100 years ago and continues to fill the niche as a single-source handbook for the fire service in relation to wide-ranging fire protection and fire prevention practices.

Since the aforementioned documents were published, numerous organizations and entities have emerged whose primary objectives focus on efficiently improving fire service delivery and, ultimately, community risk reduction, including, but not limited to: USFA, NFA, Federal Emergency Management Agency (FEMA), Department of Homeland Security (DHS), American Red Cross (ARC), International Association of Firefighters (IAFF), International Association of Fire Chiefs (IAFC), Occupational Safety and Health Administration (OSHA), and the National Institute for Occupational Safety and Health (NIOSH).

While fire prevention efforts have gained increased importance and attention throughout the last couple of decades within the fire service (Coleman, 1988), it must be understood that the notion of fire prevention is not a one-dimensional component of community risk management, but has a variety of applications, as included in FEMA's current 5-year Strategic Plan, 2008-2013 (FEMA, 2008). Additionally, to ensure a broader perspective, history suggests that the responsibility of community risk reduction, in whatever realm, is not limited to the confines of the fire service or the public sector, but in the private sector as well (McGee, 1992). The Risk Management Pyramid (RMP) is such a vivid example of research from the private sector's tool box that can be included as a valuable resource to help in the process of community risk reduction (Scarborough, 2003).

At the end of the day, firefighters and fire managers alike have to take on the personal responsibility of collaborating on solutions at all levels. If firefighters point fingers of blame from the peanut gallery to our fire chiefs or public administrators who continue to allocate the bulk of discretionary spending to suppression needs, when having the knowledge that fire prevention is ultimately much more cost-effective, without taking ownership and sharing a vested interest in creating solutions, then our collective expectations will be soiled (Crawford, 2008). Moreover, and along the specific lines of infusing fire prevention within a reserve or volunteer program, numerous commentaries has been shared throughout the past few decades, and it all applies to this ARP. In a report published by the International City/County Management Association (ICMA), it is clearly identified that for every dollar invested by a local, it can sometimes realize ten times that in benefits (Ulrich, 1999). While it must be acknowledged that having a volunteer or reserve working for a fire department is a win-win solution for the community/organization and the individual (Lepore, 2004), examples must be identified with which to build from. The most tangible example lies in the California Department of Forestry and Fire (CAL FIRE). Specifically, the success of the Volunteers In Prevention (VIP) program is the one for all jurisdictions to draw from. In 1980, CAL FIRE conceived, developed, and implemented a fire prevention program to supplement their resources at a minimal cost, and it has been soundly staffing and operating in many aspects of fire prevention ever since (CAL FIRE, 2008). Again, this concept is nothing new, and, like any productive program, it needs to be evaluated and analyzed periodically to ensure its continued success (Hawkins, 1989).

Just as the increasing all-risk approach that fire departments steward and ultimately serves to justify their existence, one economical solution helps fill that ever-changing need,

which is the broader utilization of reserves (Coleman, 1982). A case is also made that effective reserve programs can be developed and/or modified to meet the changing needs of a community, without adversely impacting the traditional boundaries of paid or full-time personnel (Lamm, 1996).

In Southern California, in addition to CAL FIRE's VIP, a number of local fire agencies have successfully put this fire prevention reservist theory into practice in different ways. For the purposes of this ARP, all neighboring counties were researched and relevant programs were included for the literature review.

Within Orange County, the specific region where the City of Laguna Beach lies, the Fountain Valley Fire Department (FVFD) has utilized reserve firefighters and senior citizens to undertake fire prevention roles focused on fire inspections on business locations having less than 3,000 square feet and an occupant load of less than 50 (FVFD, 2008). The program does not require extensive additional training and is grounded in a time efficient orientation that includes roughly four to eight hours included with follow-up "shadow shifts" that work as on-the-job (OTJ) training. The department costs are minimal and the end results of the program are proven (A. Paesani, telephone conversation, August 25, 2008). Another agency in this region, the Anaheim Fire Department (AFD), utilizes reserves for fire prevention inspections, environmental projects, and other assigned administrative duties (AFD, 2008). Also in Orange County, the Brea Fire Department (BFD) utilizes fire apprentices for fire prevention and fire suppression activities (BFD, 2008). In Los Angeles County, the Monterey Park Fire Department (MPFD) assigns reserves to their Fire Prevention or Fire Operations Division for respective duties (MPFD, 2008). In San Bernardino County, the Ontario Fire Department (OFD) utilizes reserve volunteers in fire prevention related to public

education, public relations, and disaster preparedness (OFD, 2008). In Riverside County, the Riverside County Fire Department (RCFD) utilizes the VIP model (RCFD, 2008). In San Diego County, the San Miguel Consolidated Fire Protection District (SMCFPD) utilizes reserves in a number of ways, including through participation in fire prevention and fire education programs (SMCFPD, 2008). In Ventura County, CA, volunteers are used extensively in the Ventura County Fire Department (VCFD) a number of fire prevention activities that were developed out of the VIP model (VCFD, 2008). Finally, while many agencies may participate in a reserve program that includes a fire prevention element, the core values of every jurisdiction must embrace the concept that protecting vital community services and our quality of life need to be the bottom line consideration for any city or county (Madaffer, 2008).

In terms of development and preparation of the program, the applicable organizational and fire prevention needs for LBFD are based on the current goals and objectives of the organization (LBFD Annual Report, 2008), as well as recommendations that have been echoed by nationally and regionally recognized fire service experts, including former California State Fire Marshal Ronny J. Coleman (Lewis, 1999). In all of the studies and reports that have been completed over the past decade for the fire department, one theme that was consistent and clear was that LBFD can utilize the reserves more efficiently as a tool to augment current staffing levels, which will improve the organization's operational effectiveness and, ultimately, will also improve the overall service delivery and capabilities of the organization (Reed, 2001). Some of the most relevant areas that were identified in terms of fire prevention included fire prevention inspections, Wildland Urban Interface (WUI) risk reduction, public education, and disaster preparedness (Lewis & Partners, 1999).

A major fire prevention responsibility of LBFD is the regular inspection of businesses and WUI hazard areas to ensure that they are up to the current fire codes, keeping fire and life safety as the priority. Along those lines, it has been noted by many fire service professionals that fire prevention does not need to be rocket science. Simply put, a careful, systematic approach to fire prevention inspections is the backbone to success for reducing the loss of life, property, and environment (Casey, 1989). Other areas of emphasis related to fire prevention include presenting public education programs, responding to hazard complaints, coordinating weed abatement activities, and participating in regular emergency drills with the area schools (T. Christopher, personal communication, May 13, 2008). In concert with LBFD's approach is the NFA's Leading Community Risk Reduction coursework, which includes a substantial emphasis on utilizing networking, creativity, and case studies, both locally and globally, as extremely valuable resource tools for addressing community risk reduction (LCRR, 2008).

The cost of financing is an important consideration when an organization makes plans for implementing or enhancing any reserve or volunteer program, but it should not be the only component that will drive the delivery of the program. Some type of cost/benefit analysis needs to be considered as one of the tools employed to determine the ultimate implementation or continuation of any related program (Hawkins, 1989).

The current funding for the LBRP, FY 2007-2008, includes funding projections for up to 15 reserves, which is allocated within the *Salaries and Wages section* of the fire department budget; this funding is exclusive of training and uniforms, which are both allocated from different line items within the *Maintenance and Operations section* of the fire department budget (City of Laguna Beach Budget: 2008-2009, 2008).

Other areas of consideration that were identified for this ARP included legal issues (Honea, 2003) and labor concerns (Jerauld, 1993). The expectations and impact of any personnel-related program should be addressed with the respective labor organization, whether perceived or actual (Honea, 2003). Generally, most staffing-based issues and concerns will begin with defining roles and responsibilities. In a well-managed operation, whether a full-time position or part-time position, it is that all persons working for an organization need to have a job description (Lawrence, 1992). The City of Laguna Beach has a job description for all employees, including a recently updated entry for reserve firefighter (City of Laguna Beach, 2008).

Another factor that has to be considered is the reception of the implementation or modification of a program within an organization and how the personnel will receive it, as well as how it is best implemented for the best results, as identified by Heifetz and Linsky (2002), specifically in reference to adaptive and technical change. Other related research by Magenheimer and Tackett (1994) makes the point that full-time personnel need to be assured that additional roles taken on by auxiliary or reserve staffing is not intended to take the place of any firefighter and is actually an opportunity to shape the leaders of the future.

Without a doubt, the most significant factor in determining the future success of a reserve or volunteer program is the realization and understanding that the fire service of the future is going to be dramatically different than the past and will continue to evolve. While getting more done with less has been a common theme in the public sector for many years now, it is also prevalent in the private sector, and that being said, the manner in which this premise is approached will ultimately determine the eventual success of a given organization or program. Within the framework of that conversation, one of the main jobs of Fire Chiefs

needs to be to help create an environment that attracts the right people for the right job (Coleman, 2004). The final question that subsequently evolves asks who has the courage to lead a fire organization to fulfill its mission, while creating a pathway to the future, not looking past the needs of the public, which includes leading community risk reduction (May, 2007).

Legal considerations can adversely affect a volunteer program, if the expectations of the given program are not identified and dealt with. Lawrence (1992) provides a good example about some states that require their fire inspectors to have been a certified firefighter prior to operating in this prevention capacity. Also included in this research is the discussion of the Fair Labor Standards Act (FLSA) and Internal Revenue Service (IRS) code requirements that could have an impact on a volunteer program. Along those lines, Johnson (2006) revealed that most model codes do not mandate frequency requirements for fire safety inspections within some specific occupancy types. In Fountain Valley, California, a reserve based fire prevention program confirms that a high level of importance must be accepted by entrusting fire prevention inspections to sufficiently trained and competent individuals, allowing that one of the primary benefits of any fire inspection program resides in the fact that there are no legal obligations, code mandates, or professional certifications that are required of their Reserves for fire prevention inspections and public education activities they take part in, short of adopting set standards (A. Paesani, telephone conversation, August 22, 2008). Corbett and Farr (2003) take up that conversation to make it clear that legal details are an important aspect of any fire prevention program, including the consideration of adopting NFPA standards 1031, 1033, and 1035, the three standards that are applicable to fire prevention bureaus; to include the qualifications for fire inspector, investigator, and

public educator, respectively. All of the mentioned examples can also be included as a documented substantiation for the comparable self-inspection programs that are coinciding with reserve and volunteer programs being implemented throughout the world, as far away as Belgium, Japan, and England (Ebsen, 2006).

All of these valid considerations, in addition to the analysis and evaluation of a reserve program, are inherently important, if an individual or agency is considering the future implementation or modification of including a fire prevention component to a reserve or volunteer program.

Procedures

The procedures involved in this ARP were guided by the action research method that was utilized. Due to the nature of this research, personal observations, for example, were the basis by which this research was driven. Further, the parameters of this ARP were based on the research questions set forth.

The general components of the LBRP are comprehensive, exclusive of the fire prevention component and for the purposes of this research, the primary focus of enhancing this program will be identified through identifying the expectations of the program and the related components of other viable programs. Additionally, the fire prevention components to be recommended will also be identified. The viable resource group of comparable agencies were selected based on regional proximity, operational similarities, and active fire prevention component inclusion. In terms of the current requirements and recommendations which are considered to be hired into the LBRP, in addition to the training and operational components required thereafter, they include, but are not limited to:

1. Required educational, training, experience, certification pre-employment component:
 - a. Possession of a valid California Class C Driver's License and an acceptable driving record.
 - b. Graduation from a CSFM recognized Fire Academy or CSFM Firefighter I certification.
 - c. Current Emergency Medical Technician certification.
 - d. Successful completion (within the past 12 months) of a CPAT or Biddle Validated Physical Ability Test.

2. Desired education/skills pre-employment component:
 - a. AA/BS degree plus additional fire service related education.
 - b. Valid Class A or B California Driver's License.
 - c. Foreign Language Fluency (Spanish), Community involvement experience as well as previous experience in a diverse work environment are also desirable.

3. Pre-Employment hiring certification (includes successfully passing the following):
 - a. Application screening/review.
 - b. A physical abilities test.
 - c. An oral board appraisal interview and Chief's oral board interview.
 - d. A thorough Police background check.
 - e. A polygraph examination.

- f. Pre-placement psychological and physical exams, including a pre-employment drug test.
4. Mandatory department orientation and training academy (including the following components):
 - a. Administration, personnel, policies, and procedures.
 - b. Uniforms and personal protective equipment.
 - c. Apparatus, facilities, operations, and equipment.
 - d. Specific manipulative orientation.
 5. Ongoing shift and training requirements (including the following components):
 - a. 2-24 hour shifts per month as a fourth firefighter.
 - b. A minimum of 4 hours of training per month.
 - c. Other special activities and projects as assigned.

For the purposes of this research, the analysis will be focused on the fire prevention component to be added to the program, in particular, the content to be included, as well as the related training, legal, and cost implications therein. The areas focused on will primarily be based on the information derived from eight current reserve programs that have been in place for at least a period of the past five years. The eight agencies were derived for a greater qualitative program component development. The actual quantity of the group was ultimately based on the recommendation that is given for literature review citations in a given ARP (Becker, 2008).

For clarification purposes, let it be noted that the specific agencies that will be included in the program analysis are the following:

- Anaheim Fire Department, Anaheim, CA (Orange County)
- Brea Fire Department, Brea, CA (Orange County)
- Fountain Valley Fire Department, Fountain Valley, CA (Orange County)
- Monterey Park Fire Department, Monterey Park, CA (Los Angeles County)
- Ontario Fire Department, Ontario, CA (San Bernardino County)
- Riverside County Fire Department, Riverside, CA (Riverside County)
- San Miguel Consolidated Fire Protection District, San Miguel, CA (San Diego County)
- Ventura County Fire Department, Ventura, CA (Ventura County)

At this point, it is appropriate to provide the grounds for an objective analysis and identify some of the limitations to this research, but as with any research, it will be considered in the interpretation and final analysis of this ARP. First, relative to the available auxiliary fire staffing programs, it must be understood that interpretations of what the name of a particular program is, the elements therein may sometimes be consistent from program to program, yet, in other instances, be absolutely, unequivocally opposite. For the purposes of this ARP, and the LBRP, the utilization of the various program identification terminologies (i.e., reserve, volunteer, intern, etc.) will be considered consistent with one another. Where deviation from this is necessary, it will be so identified and discussed. Moreover, many viable fire agencies could have been added or modified for this research, including interstate and international observations, with one or more potentially providing another beneficial potential perspective to consider. However, due to the time constraints for this research, as well as the feasibility and practical application in utilizing neighboring

regional fire agencies, the fire prevention program development for the LBRP was limited to a total of eight agencies from six different counties, and within the same regional area of Southern California. Fortunately, the ultimate end of this research is to have a comprehensive evaluation that helps develop a viable fire prevention component for the LBRP. Thus, for the specific purposes of this research, the ultimate significance of the aforementioned will not be detrimental in the final analysis.

Definition of Terms

Apprentice: A trainee, especially in a skilled trade, who is usually bound through contract, similar to an intern or reserve and received on-the-job training to enhance a given skill set.

At Risk Community: An “at risk community” is defined as a community within the wildland urban interface within the vicinity of federal, state, or regional lands that are at high risk from wildfire. It is also considered a group of homes and other structures with basic infrastructure and services within or adjacent to federal land defined as an “at risk community.” “At risk communities” are areas where conditions are conducive to a large scale wildland fire disturbance event, thereby posing a significant threat to human life or property.

Auxiliary Firefighter: A volunteer or part-time firefighter that engages in related fire protection activities, including, but not limited to, emergency and non-emergency operations.

Community Risk Reduction: The comprehensive efforts and actions that are focused on reducing and minimizing the risks to a community resulting from natural and/or manmade hazards and emergencies.

Fair Labor Standards Act (FLSA): Federal legislation, dating back over fifty years, that establishes certain minimum requirements for employees' hours of work, wages, premium overtime, and payroll records.

Fire Inspection Reserve Seniors Task force (F.I.R.S.T.): A fire prevention program that is designed to allow retired persons to work side-by-side with fire personnel, both in the field and in the office. They will be meeting city staff, business owners, residents, seniors, and children as part of the many different tasks assigned to this program. They will work as a team, or be asked to work independently, depending on the assignment, and will also work in concert with the reserve fire prevention personnel.

Intern (Reserve): A part-time employee or member of an organization or group who works in a temporary position with an emphasis on on-the-job training, rather than merely employment, making it similar to an apprenticeship; either paid or unpaid.

On-the-Job Training (OJT): Training for an occupation or job skill, while on an employer's or agency's payroll (i.e., on-the-job). The employer may be in either the private or public sector. The trainee, employee, or volunteer is engaged in productive work which provides additional knowledge and skills essential to the full and adequate performance of the job, or enhancement of job skills, for which he/she is being trained for.

Reserve: A part-time employee (or member) of an organization who engages in related activities, with compensation that is limited or non-existent. Very similar to a volunteer, however, sometimes the training requirements and compensation are increased for an individual serving as a Reserve.

Reserve Coordinator: The immediate supervisor of a reserve program; generally a full-time company or chief officer.

Volunteer (Reserve): A part-time employee or member of an organization or group who engages in related activities, with compensation that is limited or non-existent.

Volunteer In Prevention (VIP): An innovative and creative fire prevention program called the Volunteers in Prevention (VIP) Program that utilizes volunteers to supplement full-time personnel for fire prevention and public education related activities. The program was developed, created, and implemented by the California Department of Forestry (CAL FIRE) in 1980 and it has over 2500 volunteers today. The program also continues to be a model that numerous local agencies throughout the state of California utilize and/or draw from.

Wildland Urban Interface (WUI): The geographical meeting point of two diverse systems - wildland and structures. In the WUI, structures and vegetation are sufficiently close, so that a wildland fire could spread to structures, or a structure fire could ignite vegetation. Moreover, WUI is an area within or adjacent to an “at risk community” that is identified in recommendations to the Secretary of Agriculture in a *Community Wildfire Protection Plan*. Further, a WUI is any area for which a *Community Wildfire Protection Plan* is not in effect, but is within ½ mile of the boundary of an “at risk community.” A WUI is also any area that is within 1 ½ miles of an “at risk community” and has sustained steep slopes that may affect wildfire behavior, or has a geographic feature that aids in creating an effective fuel break, or is in fuel condition class 3. (NOTE: An area classified as fuel condition class 3 implies that the current condition of the vegetation within the area would not be sustainable due to the absence of two or more natural fire cycles. In other words, an excess of vegetation and fuels has occurred due to the exclusion of fire which naturally reduces the level of forest fuels.)

Results

As part of this ARP, the results were achieved, in a general sense, through identifying the feasible content areas of fire prevention that are anticipated to be incorporated into the Laguna Beach Fire Department's Reserve Program and what the implications to getting there will include. Specifically, the results were derived from answering the following research questions:

What fire prevention content needs to be included in the Reserve training program?

After a comprehensive review, it was established that the primary fire prevention activities for LBFD are geared toward the specific needs of the community, which is focused on fire prevention inspections, WUI management, and public education activities.

This determination resulted from the analysis of the annual fire prevention inspection load and solely rests with Engine Companies to complete. This inspection quantity has about a 70-75% net completion ratio each year, primarily due to the gross quantity of inspections, which exceeds 1500 occupancies and also includes the fire prevention responsibilities related to new construction and fire protection system evaluations. Additionally, the significance of the WUI management was identified due to the case history of disasters related therein, by way of documented significant vegetation fire, flooding, and landslides that regularly make national news headlines. Moreover, with an incident volume that perennially exceeds 2500 calls for emergency assistance and one of the most disaster prone regions in the nation, the comprehensive tool that LBFD utilizes to address community risk reduction is grounded in public education, which was derived from, and in line with, FEMA's mission to reduce the loss of life and property and to protect from all types of hazards through a comprehensive,

risk-based, all-hazards emergency management program of preparedness, mitigation, response, and recovery.

In terms of the specific fire prevention elements to be included in the LBRP, the additional roles and responsibilities will be focused on conducting fire inspection in business locations that are less than 3,000 square feet and an occupant load that does not 49 persons. Other activities shall also include home safety inspections, public education, disaster preparedness, WUI program support assistance, and related projects.

Addressing the question of what field experience is needed to be included in the Reserve training program, the results indicated that three “shadow” or on the job training shifts were what initially were needed to insure success. The FVFD was the benchmark utilized for this area. While the other fire agencies that were analyzed included initial “field” training sessions in the range from 1-3 shifts, the expectations of the program would be driven by the higher standard levels of the region. The field training shifts were identified, in terms of specifics as having a minimum of 4 hours per shift or session, up to a maximum of 8 hours.

How will the fire prevention component be included as part of the LBRP? Currently, the LBRP requires the Reserves to work 2-24 hours shifts and a minimum of 4 hours of training each month, not to exceed a total 100 hours per month, and in these cases approval for additional hours call for administrative approval, all which is based on the respective needs and budgetary allocations of the department. To put this in perspective, over the course of the past year, payroll analysis indicated that the average hours worked by a given Reserve was identified at between 56-72 hours (City of Laguna Beach Annual Report, 2007-2008). With that in mind, and given that this monthly work schedule has historically been

restricted to fire and emergency medical related activities, an increase in fire prevention responsibilities unequivocally results in an increase in service. These components will be included during a 4- hour training module during the orientation academy, quarterly training included in the monthly requirements of the program that will be focused on fire prevention, and the field training that was already mentioned. Based on the current needs of the department, it has been already been determined that the initial components identified within this ARP have been given a minimum guaranteed budgetary approval for up to twelve months upon implementation.

One question that has to be answered regarding any program implementation, or in this case, modification, is in regard to legal implications, necessities, and concerns. Simply put, what are the legal requirements that need to be included in the development of this program? The primary concerns centered around additional certification requirements for the individual and FLSA related issues. The previously stated responsibilities for each Reserve will essentially be limited to lower risk business occupancies that do not exceed 3,000 square feet and have no more than 49 occupants, ultimately all authority for the fire prevention inspection component is passed down from the Fire Chief. In addition, the other public education related activities do not legally require any additional training or certification and due to the fact the LBRP is an existing and paid program, the current employment policies and procedures meet or exceed all of the local, state, and federal labor laws therein. The bottom line is that the legal requirements that have been included into the development program essentially to insure that Reserves do not exceed the authority entrusted to them by the office of the Fire Chief.

Lastly, what are the costs that will be associated with this program? The LBRP is already a working program, and the additional costs that are associated with the program will be related to payroll and training. The development of this ARP and its prospective use as a guide to include fire prevention as a component of the LBRP was already met with budgetary approval from the office of the Fire Chief that equates to an additional 4-8 hours per Reserve, per month, for the first twelve months following program implementation, and it will be re-evaluated for the duration therein. The training will all remain in-house, during staff or shift hours, meaning that no costs are projected for training at this time. The specific projected costs that will be associated with the program, including the 4 hours per month, per Reserve, and assuming all 15 Reserves are the constant personnel within the program, creates an annual projected expenditure of \$9,633.60-\$11,160.00 (i.e., \$802.80-\$930.00 monthly). The annual expenditures for the reserve coordinator, related orientation academy, and administrative costs remains the same cost of \$19,567.00, with the only additional annual costs, if needed, to include an additional four hours of training per month for the 15 reserves projected at \$9636.60 and the reserve coordinator at \$2445.00, for a total expenditure increase of \$9,878.16 (refer to Appendix A for financial summary).

From a results perspective, the significance of this program development has been identified in the increased utilization of resources, allowing fire prevention staff and Engine Company personnel more time to be allocated toward other areas of community risk reduction. Within that framework, is another significant point that is identified, as articulated by Compton (2002), or the notion that the fire service needs to utilize all of the resources available today, working toward progress in the future, without losing the important aspects

of our past. Within that concept, an example has been produced through LBFD's newest fire prevention program.

Discussion

The National Commission on Fire Prevention and Control profoundly set the direction of the fire service by emphasizing the weighted significance of including fire prevention within a fire agency by recommending that local government make fire prevention, at the least, equal to suppression in the planning of fire department priorities (*America Burning*, 1973). This dated direction is, ironically, timeless, and is in concert with the USFA's current goals of addressing a global approach to comprehensive emergency management and risk reduction (LCRR, 2008).

For the LBFD, a progressive approach is the only method that can be taken, given the historic documentations of disasters that have impacted the community throughout the years, in particular, the past two decades. Vickie Glembocki (1996), a past visitor to Laguna Beach whom witnessed more than one example of Mother Nature's fury on the pacific coast paradise, explained it best through her perspective:

Disasters don't discriminate. They don't judge. They don't punish. They have no reason or conscience. They don't make choices. They just happen. No matter what we do. No matter if we're prepared for them, or prepared to survive them. Their power is unbridled and mighty. But, our readiness can harness a piece of that power, a sense of it when we feel powerless. Control in the face of the uncontrollable. And there, in the hopeless, we can find hope.

What better way to address the discussion of community risk reduction than to develop an enhancement to a program that is already in place. The LBRP is the perfect place to start, and this perspective is verified by strategic analysis related to expanding worker roles (Lawrence, 1992). While there are several ways to deal with a comprehensive all-risk management agency, Lawrence states that the number one option is to have personnel assume the duties of those roles which have been cut back (1992). Moreover, McGee (1992) concurs with this approach and concludes that seeking fire prevention assistance in other areas of staffing validates this cause, ultimately resulting in getting more done with less.

Given the fact that LBFD has never exceeded a fire prevention staff of two, which includes a fire marshal, whom wears a number of other hats, as well as holding the role of a modified-shift Battalion or Division Chief, and one other part-time fire prevention staff member, any increase in staffing will be well-received. As such, the LBRP becomes the most viable resource pool to draw from and, relative to the related research, provides ample justification that now is the time to incorporate the fire prevention components into the reserve program. With the current economy woes forecasted to mirror the post 1980s economic collapse, McGee indicates that it must be obvious that these approaching challenges require new solutions and they need to take place sooner, rather than later (1992).

Throughout this research, it became evident that fire prevention program models which utilize reserves, volunteers, and/or interns do not need to be implemented or incorporated in their entirety for successful outcomes to occur. The various fire agencies that have built similar programs out of CAL FIRE's VIP model is a perfect example of this, including Ventura County's modified VIP (VCFD, 2008) and Fountain Valley's comparable prevention program (FVFD, 2008).

The overall nature of the model programs discussed included fiscal and legal considerations in deciding those program elements which would be cost-effective, practical, and able to be implemented in a timely manner, without challenging any legal preconditions within the LBFD. The verified track record of other agencies providing these resources that were already in place at little or no additional cost automatically enhances the program (Coleman & Granito, 1988). LBFD's only cost will be related to any additional increases in payroll hours, which have been approved for a twelve-month period, upon program implementation. The stop-gap for budgeting, given the worst case scenario (i.e., retracting the budgetary allocation for the fire prevention component) becomes moot, if the fire prevention hours are redistributed within the budgetary parameters of the previous fiscal year. Simply stated, if needed, the current 2-24 hours shifts and 4 hours of required training can be modified to include fire prevention for a 4-8 hour block, without significant loss of operational effectiveness. Other concerns related to labor laws will not apply in the case of LBRP, because FLSA permits the cross-training of personnel and the utilization of personnel outside the scope of fire suppression and, as it relates here, there are no legal certifications or licenses that are required to perform the identified roles and responsibilities (Honea, 2003). This is in line with LBFD's philosophy, which is that the intent of the program is fundamentally geared toward the basic aspects of fire prevention and public education, also not requiring extensive training or a significant specialized skill set.

In this vision, the adaptive and technical change related to implementing a new component to the reserve program needs to be promoted as an opportunity to hold on to the best of the past, while working to utilize what is considered to be essential and what can be deemed as expendable (Heifetz & Linsky, 2002). The LBFD took the approach of these two

similar perspectives with the implementation of the new components of the program by making it a collaborative and transparent process.

Simply put, whenever a new program or modification to a program takes place, it is incumbent on those stakeholders involved in and around the process, that they are vested in the notion of an ongoing, dynamic process of development and implementation, utilizing various aspects or components of a given program to best fit the needs of the community or cause and, subsequently, applying them as a work in progress, making adjustments as you go. This thought process can be a useful starting point for just about any program, in any walk of life, public or private, professional or personal, and it was best articulated by Gray (2006):

If you wait until your plan is complete – till every contingency is covered – you will never get anywhere. Progress, not perfection, is the goal... Build feedback loops into your execution mechanisms, so you can improve as you move... (Use) feedback... to enrich your thinking and improve your understanding of the situation. Feedback is the most important and often neglected piece of the puzzle. When you first contextualize, you are guessing. When you incorporate feedback and use it to re-contextualize, you are improving... Success does not come from perfect execution, but from a fast-moving cycle of continuous improvement. The faster you go, the more you learn. The more you learn, the stronger you get.

Recommendations

Based on the research presented for this project, the next step for LBFD is to implement the new component of fire prevention into the current reserve program with the inclusion of the following three recommendations for consideration, including: the addition

of initial orientation training that includes basic fire prevention inspections and the areas associated with community risk reduction, a minimum of quarterly training that is focused on fire prevention activities and ongoing on-the-job training (OJT), and, ultimately by actual hands-on application of individual fire safety inspections and community risk reduction activities. After program implementation, an evaluation of the program will be conducted by the office of the Fire Chief to determine its effectiveness.

The first recommendation comes in terms of adding a fire prevention module to the initial orientation training and will be done during, or in addition to, the four-day orientation that takes place and will consist of a 4-hour module including, but not limited to: conducting fire prevention inspections, public education, and community risk reduction. This will be the first priority and will lay the groundwork for the level of success for the updated program.

The second recommendation is in regard to training requirements. Specifically, OJT will be take place from the onset of the program and will include a minimum of three “shadow shifts,” whereby the individual will accompany a company officer and/or a fire prevention staff member during a day (4-8 hours) of fire safety inspections, with directed mentoring from the fire prevention bureau and fire suppression company officers. Additionally, the minimum monthly program requirements for training will be re-scheduled to ensure that formal fire prevention training will be built into those requirements on a quarterly basis (refer to Appendix B for action plan summaries).

The third and final recommendation comes in terms of utilizing the training in actual field applications. The newly cross-trained fire prevention reserve will conduct scheduled fire safety inspections, public education presentations, and participate in other community

risk reduction activities, as assigned by the fire prevention bureau through the Reserve Coordinator.

Lastly, after the program has been implemented, the office of the Fire Chief will evaluate the effectiveness of the program and make adjustments and modifications as needed.

Ultimately, with all of the recommendations set forth herein, the progress and improvement will be the final product in terms of organizational benefits, more clearly identified by increases in resource production and, on a global level, aggressively addressing the need to transform fire and emergency services organizations from being reactive to proactive; with an emphasis on leadership, prevention, and making a tangible impact community risk reduction.

In conclusion, the final five recommendations for future researchers considering replication of this study in part, or in its entirety, are as follows:

- 1) Be certain that you identify relevant and viable reserve and volunteer programs to draw from.
- 2) Consider the specific needs of your agency, department, and/or geographic region.
- 3) Make certain to identify the organization's financial and legal considerations that will impact the implementation of a new or modified program or program component.
- 4) Identify and address the different levels of local, state, and federal requirements that may affect program implementation (i.e., FLSA, IFC, etc).
- 5) Develop an evaluation tool to gauge the success and progress of the program.

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Appendix A: Comparable Reserve Program Summary 2008

Summary of Financial Costs

Allocated (estimated) annual expenditures from last budget (FY 2007-08)

Reserve Payroll:

365 days of coverage by Reserves (15) @ \$13.38 hr. (\$321.12 per shift):	\$117,209.00
4 hours of training per month (15) @ \$13.38 hr. (\$53.52 per shift):	\$9,6336.60
Total Reserve Budget:	\$123,545.60

Full-Time Staff Payroll:

Reserve Coordinator @ 4 hours of training per month (48 hours):	\$2,445.00
Reserve Coordinator @ 96 hours of additional administrative duties:	\$4892.00
Reserve Coordinator & Assistant for mini academy @ 120 hours each:	\$12,230.00
Total Full-time Staff Budget:	\$19,567.00

Additional proposed annual expenditures for next budget (FY 2008-09)

Additional expenditures (**these proposed expenditures are assuming we increase the hours of training, in lieu of modifying it*):

4 hours of training per month (15) @ \$13.38 hr. (\$53.52 per shift):	\$9,633.60
Reserve Coordinator @ 4 hours of additional training per month (48 hours):	\$2,445.00
Total Additional Proposed Budget:	\$9,878.16

Total FY 2007-08 (Estimated) Expenditures: \$143,112.60

Total FY 2008-09 Additional (Proposed) Expenditures: \$9,878.16

TOTAL FY 2008-09 (PROPOSED) BUDGET: \$152,990.76

Appendix B: Action Plan Draft Copy

Laguna Beach Reserve Firefighter Program:
Including a Fire Prevention Component;
A Working Action Plan

Laguna Beach Fire Department
Laguna Beach, California
Contact: Daniel Stefano, Fire Captain

October 2008

The information herein is provided as an internal departmental action plan and does not supersede previous legal policies and procedures. The City assumes no liability for any legal consequences arising out of the action plan until which time it is formally approved and implemented in accordance with the mission of the Laguna Beach Fire Department, the City of Laguna Beach, as well as all related municipal, state, and federal guidelines.

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Introduction

The City of Laguna Beach is recognized internationally as one of the most incredible places to visit world-wide. Unfortunately, the city is also recognized as being prone to having headline disasters of unleashed proportions on a somewhat regular basis. The Laguna Beach Fire Department (LBFD) is no different than fire agencies across the nation in its mission to reduce the loss of life, property, and the environment as first responders. Recently, LBFD completed its first year with a restructured Reserve Firefighter Program which supplements its full-time fire suppression personnel in working toward community risk reduction. The city of Laguna Beach allocates funding to the program, but with the changing needs of the community and the limited resources generally earmarked for fire prevention activities, some more enhancements to the program are warranted and need to be realized if the program is to continue.

Simply put, the problem is that the LBFD Reserve Program (LBRP) does not include a fire prevention component, along side of the fact that LBFD has extremely limited fire prevention staffing and human resources currently available. As a result, the office of the Fire Chief has given the direction to develop a fire prevention component to be included in the LBRP.

Background and Significance

The LBFD is a career department located in Coastal Southern Orange County, California, sitting on the edge of the Pacific Ocean, roughly between Los Angeles and San

Diego. The organization is one of twelve fire agencies within the local region, as recognized by the Orange County Fire Chiefs Association. The LBFD has over 50 employees including, but not limited to, a Fire Chief, 3 Division Chiefs, an administrative assistant, 12 Fire Captains, 12 Fire Apparatus Engineers, 12 Firefighters, 2 Fire Prevention Officers, and 8 Reserve Firefighters working out of 4 fire stations and an administrative office. The current Reserve program is not involved with any formal fire prevention activities, such as independent fire safety inspections, public education presentations, or community risk reduction activities. Additionally, the Fire Prevention bureau only consists of the Fire Marshal, whom also shares time as a Division Chief and Shift Duty Chief. His staffing is extremely limited, by all accounts, having 1 and sometimes 2 part-time staff members to assist, in addition to limited assistance from the suppression engine companies.

It is clear, the fire prevention and community risk reduction activities that the department current takes part in are stretched too thin and a viable alternative, including ready-to-go resources, are available to address the issue and justify its benefit therein. Those ready-to-go resources are the LBRP!

Mission of the Program

Historically, the mission of the LBRP has generally been to support the organization as a whole, through focused participation as a fourth person on a suppression apparatus. In a global sense, the mission of the LBRP is to make every effort to protection life, property, and the environment from hazards, either immediate or forthcoming, and preparing the

community through prevention, education, and presentation activities. As such, the mission of the program is to increase comprehensive “all-risk” community risk reduction activities by modifying the roles of the reserves, without losing the valued aspects of the past, and evolving for the needs of the future.

Research & Discussion

For the purposes of this research, an extensive analysis was conducted on the fire prevention component to be added to the reserve program, in particular, the content to be included, as well as the related training, legal, and cost implications therein. The areas identified were based on the information derived from eight current reserve programs that have been in place for at least a period of the past five years. The eight agencies were derived for a greater qualitative program component development and as such, the specific agencies that were included in the program analysis are the following:

- Anaheim Fire Department, Anaheim, CA (Orange County)
- Brea Fire Department, Brea, CA (Orange County)
- Fountain Valley Fire Department, Fountain Valley, CA (Orange County)
- Monterey Park Fire Department, Monterey Park, CA (Los Angeles County)
- Ontario Fire Department, Ontario, CA (San Bernardino County)
- Riverside County Fire Department, Riverside, CA (Riverside County)
- San Miguel Consolidated Fire Protection District, San Miguel, CA (San Diego Cnty.)
- Ventura County Fire Department, Ventura, CA (Ventura County)

The grounds for an objective analysis and identification to the limitations presented were considered in the interpretation and recommendations. First, relative to the available auxiliary fire staffing programs, it must be understood that interpretations of what the name of a particular program is, the elements therein may sometimes be consistent from program to program, yet, in other instances, be absolutely, unequivocally opposite. For the purposes of this action plan, the utilization of the various program identification terminologies (i.e., reserve, volunteer, intern, etc.) will be considered consistent with one another. Moreover, many viable fire agencies could have been added or modified for this research, including interstate and international observations, with one or more potentially providing another beneficial potential perspective to consider.

For this action plan, the feasibility and practical application in utilizing neighboring regional fire agencies was analyzed and, relative to the fire prevention program development for the LBRP, it was limited to a total of eight agencies from six different counties, and within the same regional area of Southern California. Ultimately, the culmination of this research provided a comprehensive evaluation that provided the avenue to develop a viable fire prevention component for the LBRP.

Recommendations

Based on the research presented for this project, the next step for LBFD is to implement the new component of fire prevention into the current reserve program with the inclusion of the following three recommendations for consideration, including: the addition

of initial orientation training that includes basic fire prevention inspections and the areas associated with community risk reduction, a minimum of quarterly training that is focused on fire prevention activities and ongoing on-the-job training (OJT), and, ultimately by actual hands-on application of individual fire safety inspections and community risk reduction activities. The cost of increasing the program will imply a budgetary increase from 0-5% (refer to Appendix A: the summary of financial costs for specific cost projections). Finally, after program implementation, an evaluation of the program will be conducted by the office of the Fire Chief to determine its effectiveness.

The first recommendation comes in terms of adding a fire prevention module to the initial orientation training and will be done during, or in addition to, the four-day orientation that takes place and will consist of a 4-hour module including, but not limited to: conducting fire prevention inspections, public education, and community risk reduction. This will be the first priority and will lay the groundwork for the level of success for the updated program.

The second recommendation is in regard to training requirements. Specifically, OJT will be take place from the onset of the program and will include a minimum of three “shadow shifts,” whereby the individual will accompany a company officer and/or a fire prevention staff member during a day (4-8 hours) of fire safety inspections, with directed mentoring from the fire prevention bureau and fire suppression company officers. Additionally, the minimum monthly program requirements for training will be re-scheduled to ensure that formal fire prevention training will be built into those requirements on a quarterly basis.

The third and final recommendation comes in terms of utilizing the training in actual

field applications. The newly cross-trained fire prevention reserve will conduct scheduled fire safety inspections, public education presentations, and participate in other community risk reduction activities, as assigned by the fire prevention bureau through the Reserve Coordinator.

Lastly, after the program has been implemented, the office of the Fire Chief will evaluate the effectiveness of the program and make adjustments and modifications as needed.

Ultimately, with all of the recommendations set forth herein, the progress and improvement will be the final product in terms of organizational benefits, more clearly identified by increases in resource production and, most importantly, in terms of making an impact with community risk reduction.

Implementation

Given that this action plan is based on the fact that it is specific, measurable, results oriented, and time bound, the implementation of this program will take place at the time of the next reserve orientation academy and upon approval of the office of the Fire Chief.

As such, the program implementation will be initiated with basic instruction in conduction fire safety inspections and community risk reduction activities within the orientation academy and supplemented through on-the-job training (OJT). Additionally, while the reserves will maintain their current suppression shift assignments and training requirements, additional individual fire prevention assignments and activities will be incorporated therein, including, but not limited to monthly shifts (i.e., 4-8 hours per shift) and

a minimum requirement of quarterly fire prevention based training, facilitated through the reserve coordinator. Monthly, quarterly, and annual performance evaluations will be conducted in accordance with departmental policies and procedures.

Reference

This action plan is the product of an applied research project (ARP) conducted through the coordination of the National Fire Academy (NFA) in Emmitsburg, Maryland. The ARP, *Expanding the Laguna Beach Fire Department's Reserve Program to Aggressively Address Fire Prevention Needs and Reduce Community Risk* (Stefano, 2008), is available through the NFA's Learning Resource Center and can be accessed online at <http://www.lrc.fema.gov/starweb/lrcweb/servlet.starweb>.

Appendix A: Comparable Reserve Program Summary 2008

Summary of Financial Costs**Allocated (estimated) annual expenditures from last budget (FY 2007-08)**

Reserve Payroll:

365 days of coverage by Reserves (15) @ \$13.38 hr. (\$321.12 per shift):	\$117,209.00
4 hours of training per month (15) @ \$13.38 hr. (\$53.52 per shift):	\$9,6336.60
Total Reserve Budget:	\$123,545.60

Full-Time Staff Payroll:

Reserve Coordinator @ 4 hours of training per month (48 hours):	\$2,445.00
Reserve Coordinator @ 96 hours of additional administrative duties:	\$4892.00
Reserve Coordinator & Assistant for mini academy @ 120 hours each:	\$12,230.00
Total Full-time Staff Budget:	\$19,567.00

Additional proposed annual expenditures for next budget (FY 2008-09)

Additional expenditures (**these proposed expenditures are assuming we increase the hours of training, in lieu of modifying it*):

4 hours of training per month (15) @ \$13.38 hr. (\$53.52 per shift):	\$9,633.60
Reserve Coordinator @ 4 hours of additional training per month (48 hours):	\$2,445.00
Total Additional Proposed Budget:	\$9,878.16

Total FY 2007-08 (Estimated) Expenditures: \$143,112.60

Total FY 2008-09 Additional (Proposed) Expenditures: \$9,878.16

TOTAL FY 2008-09 (PROPOSED) BUDGET:	\$152,990.76
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Appendix B: Updated Reserve Program Orientation Training

Day 1		LAGUNA BEACH RESERVE PROGRAM ORIENTATION ACADEMY
	0800	Division 1 Briefing - Receive Orientation Manuals
	0830	City Clerk - Swearing In, New Employee Orientation
	900	Division 2 Briefing Personal Protective Equipment distribution Police Department, Lifeguards, and Target Hazard Orientation
	1200	Lunch
	1300	Dispatch, City, Fire Station
	1400	New Employee Orientation Conf. Rm. A Insurance Paperwork Employee Association signup
	1530	PPE Distribution, SCBA's, & EMS
	1700	Off Duty
Day 2		LAGUNA BEACH RESERVE PROGRAM ORIENTATION ACADEMY
	800	Meet Your Mentor
	900	Lbfd Culture and Expectations of New Firefighters
	1000	Administration, Review Orientation Manuals, Probationary Requirements
	1200	Lunch
	1300	Power tools, chain saw, cut quick, generators Auto extrication safety, air bags
	1700	Off Duty
Day 3		LAGUNA BEACH RESERVE PROGRAM ORIENTATION ACADEMY
	800	FIRE PREVENTION COMPONENT* & COMMUNITY RISK REDUCTION ORIENTATION Fire Prevention Inspections, Public Education, & Community Risk Reduction
NEW MODULE	1200	Lunch Car cut @ Laguna tow yard
	1700	Off Duty
Day 4		LAGUNA BEACH RESERVE PROGRAM ORIENTATION ACADEMY
	800	Introduction to hose and appliances Hand Signals, Backing Policy Single and Dual Forward hoselays Reverse hoselays
	1200	Lunch Pre-connects Bundles, short loop - shoulder fold and carry
	1700	Off Duty
Day 5		LAGUNA BEACH RESERVE PROGRAM ORIENTATION ACADEMY
	800	Hose continued, Apartment Lay Master Streams Advancing Hose Up Ladders
	1200	Lunch 2 1/2" Attack Lines Standpipes, FDC's Sprinkler Connections Care and testing of hose / Scheduling Assignment
	1700	Off Duty

Appendix C: Comparable Reserve Program Summary 2008

**Group : FIRE RESERVE
PROGRAM COMPARISON
Fiscal Year : 2007-2008**

FIRE AGENCY	Anaheim FD	Brea FD	Fountain Valley FD	Monterey Park FD	Ontario FD	Riverside County FD	San Miguel FPD	Ventura County FD	Laguna Beach FD
Type of Program	Reserve	Apprentice	Reserve	Reserve	Volunteer	Volunteer	Reserve	Volunteer	Reserve
Pre-Employment Requirements	18+, HSG, FFI Academy Graduate or FT Student, & VCDL	18+, HSG, FF1 Academy Graduate, EMT, & VCDL	18+, HSG, Academy Graduate or Student, & VCDL	18+, HSG, Academy Graduate, EMT, & VCDL	18+ & VCDL	18+ & VCDL	18+, HSG, FF1 Academy Grad, EMT, & VCDL	16+ years of age	18+, FF1 Academy Graduate, EMT, & VCDL
Hiring Process Components	A, O, B, & M	A, W, PAT, O, B, & M	A, PAT, O, B, & M	A, PAT, O, B, & M	A, O, B, & M	A, O, & B	A, PAT, O, B, & M	A, O, & B	A, W, PAT, O, B, & M
Compensation (Excluding Uniforms and Equip.)	None	\$7.50 hourly	Meal Stipend	None	None	None	None	None	\$13.38-15.50 hrly.
Job Schedule Assignment (Monthly Hours)	8-24 hours	56-61 hours	48-72 hours	96-120 hours	5-20 hours	3-72 hours	8-48 hours	20-120 hours	52-100 hours
Orientation/Academy Fire Prevention Components	General Prevention	General Prevention	General Prevention	General Prevention	General Prevention	General Prevention	General Prevention	General Prevention	None
Orientation/Academy Duration	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days	Approx. 1-3 Days
Basic Job Responsibilities	Prev., Admin., Public Ed., & Training	Suppression, Prevention, & Public Education	Suppress., Prev., & Pub. Ed.	Suppress., Prev., & Pub. Ed.	Prevention & Pub. Ed.	Prevention & Pub. Ed.	Suppress., Prev., & Pub. Ed.	Public Ed. & Comm. Risk Reduction	Suppression, Prevention, & Public Education
Current Fire Prevention Responsibilities	Inspections, Administration & Projects	Assist with Inspections & Public Education	Assist with Inspections & Public Education	Assist with Inspections & Public Education	Assist with Inspections & Public Education	Assist with Inspections & Public Education	Assist with Inspections & Public Education	Assist with Inspections & Public Education	Assist with Inspections & Public Education
Current Cert. Requirements Related to Fire Prevention	None	None	None	None	None	None	None	None	None
Current Training Reqs. Related to Fire Prevention	Misc. on the job training	Misc. on the job training (OTJ)	Misc. on the job trng	Misc. on the job training	Misc. on the job training	Misc. on the job training	Misc. on the job trng.	Misc. on the job training	Misc. on the job training (OTJ)
Projected Additional Fire Prevention Responsibilities	None	None	None	None	None	None	None	None	Independent inspections & other prevention duties.
Projected Additional Fire Prevention Training Requirements	None	None	None	None	None	None	None	None	Monthly prevention hourly and quarterly requirements (4/4)

