

**EVALUATING THE NEED FOR A FIRE TRAINING FACILITY FOR
THE PEORIA FIRE DEPARTMENT AND THE WEST VALLEY**

Fire Service Financial Management

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ABSTRACT

This research project investigated the need of a fire training facility and the role it played in providing quality fire and emergency service instruction to firefighters. It also explored the concept of obtaining a fire training facility designated to the Peoria Fire Department and nine other west valley fire agencies. More specifically, this research studied the benefits the City of Peoria, Arizona fire department would have by combining efforts to form a consortium to acquire a fire training facility.

A descriptive/evaluative research technique was employed to make recommendations to the Peoria Fire Chief to help facilitate the process of acquiring a training facility for the fire department. An extensive review of literature received from the National Fire Academy's Learning Resource Center was conducted. The four following research questions were developed and evaluated for this project:

1. Does the need exist for Peoria and the other west valley fire agencies to have a fire training facility?
2. Would developing a west valley training consortium help in Peoria's ability to obtain a facility?
3. Would teaming up with either the local community college or with Police agencies help Peoria obtain a fire training facility?
4. Would a west valley fire training facility be used enough to justify the expense for building and maintaining such a facility?

An e-mail survey was conducted with seven fire departments and three fire districts within the west regional area of Phoenix, Arizona to get their perspective on the need of a west valley training facility and if they would be willing to join in a cost sharing consortium to enable the building of such a facility. The results of the research indicated that Peoria and the west valley would greatly benefit from having a training facility.

Research showed that developing a consortium and having an agreement with other west valley fire agencies would help defray the cost of providing high quality training at a consistent level of competence. This clearly would raise the service delivery to the citizens of Peoria as well as all citizens in the west valley. A west valley training facility that is developed and implemented by both the participating fire administrations and representatives of the labor union would truly improve the level and quality of fire and emergency service training and delivery in the west valley.

The recommended actions include that Peoria collaborate with interested west valley fire agencies to design and construct a training facility and provide training curriculum that would enhance firefighter readiness. These actions would ensure improved confidence in live fire training that is imperative to producing quality firefighters and improving the level of service provided to the citizens of Peoria and other west valley communities due to the fact that west valley fire agencies all participate in an automatic aid response agreement.

In addition, the construction and day to day maintenance would be more feasible if a consortium would be established of west valley Police and fire agencies in an effort to share cost. Investigating cost sharing methods is how this project was directly related to what was learned in the fire service financial management course at the National Fire Academy.

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INTRODUCTION

Problem Statement

In the twenty-three year history of the Peoria Fire Department, the department's fire training has been exclusively provided by the Phoenix fire department's regional fire academy. The City of Peoria and the fire department have experienced explosive growth over the same time period and have had trouble delivering fire and emergency service instruction to the department's firefighters. The need exists for dependable well trained firefighters that will perform flawlessly when called upon.

The training division of the Peoria fire department has had its additional set of problems keeping up with the increase of city, state and federal training mandates in conjunction with providing quality hands on live fire instruction. This is mainly due to the lack of fire training facilities in the west valley, the availability and the increasing demand for such facilities; therefore the department's firefighters have suffered from lack of training with live fires for both training recruits and company training.

Important factors like these have forced many valley fire departments, including the Peoria fire department, to evaluate the way they provide the expected training instruction needed to effectively provide fire and EMS service to all areas of the city and west valley. Additional requirements in the form of ISO ratings, NFPA standards and OSHA safety requirements help make this an arduous process.

Purpose of the Study

The purpose of this descriptive/evaluative research project was to investigate the importance and advantages of having the Peoria fire department take a more active role in

the instruction of its firefighters and provide the facilities needed to deliver quality hands on recruit and company training. The goal of this research project was to examine the benefits that the Peoria fire department and the west valley would gain by designing and building a training facility that specializes in live fire scenarios.

Additionally, the study investigated the importance of the need for cost sharing, where the benefit of the training would be shared across the west valley along with the high cost associated with taking on such a large project. It is extremely important that our firefighters throughout the west valley are receiving the professional and technical training needed to keep up with the technology of today's fire service.

Research Method

A descriptive/evaluative research method was chosen for this study. A list of recommendations will be provided to Peoria Fire Chief Robert McKibben and other city leaders in order to help evaluate the departments training needs so they can create a future course of action. This will help improve our overall fire and emergency service delivery to the citizens and provide safe, reliable and consistent training for the members of the Peoria fire department as well as the other fire agencies located in the west valley.

Research Questions

RQ-1. Does the need exist for Peoria and the other west valley fire agencies to have a training facility?

RQ-2. Would developing a west valley training consortium help in Peoria's ability to obtain a facility?

RQ-3. Would teaming up with either the local community college or with Police agencies help Peoria obtain a fire training facility?

RQ-4. Would a west valley fire training facility be used enough to justify the expense for building and maintaining such a facility?

BACKGROUND AND SIGNIFICANCE

There are several different problems when faced with the idea of implementing any type of change in the fire service in general, but more specifically involving live fire training in Phoenix and the west valley. Fire agencies on the west side of metropolitan area consist of both fire departments, which are managed by the respective cities and fire districts, which are governed by fire board members. The cities and towns in the west valley are all fairly new in their development and have experienced explosive growth over the last decade; therefore all have had to deal with varying issues concerning infrastructure and how to pay for large projects that will allow them to keep up with the citizen's demand for services.

Fire Districts on the other hand are limited to the amount of money they bring in from assessments; therefore, limit their focus to just fire and EMS service delivery and how it directly affects the citizens in their service area. Fire districts normally do not have to divide the money taken in with other departments nor compete with police agencies and other city departments for their share of the money. The Peoria fire department as well as the rest of the fire departments and districts in the west valley have continue to let the Phoenix fire department take on all the challenges and responsibility for the training of its firefighters. In taking this stance we have in a

sense become completely dependant on the Phoenix fire department for what, where, when and how our fire recruits are trained.

The Phoenix fire department has been more than gracious over the years in completely supporting all valley fire departments and districts in their training needs and has continued to provide it at little or no cost to any fire agency that is a member of the valley's automatic aid computer dispatch system. One growing concern is that the City of Phoenix has also experienced the same rapid growth over the last two decades and will not be able to absorb the cost of training the whole valley's firefighter recruits. They also have been hit hard with budget deficits that will restrict them from continuing to provide this service to outside fire agencies. In the recent past, the Phoenix fire department had also provided ongoing company training to the valley fire departments but had to back off due to the budget and time constraints.

The east valley fire agencies have been established longer and are blessed with a number of training facilities. They currently have four fire training facilities available to them. Training facilities are located in the cities of Mesa, Tempe, Chandler and Scottsdale. These cities share the use of these facilities with other smaller fire agencies located in the east valley and provide them with the time and equipment needed to complete recruit fire training as well as supporting their companies with ongoing training.

The West valley is not so lucky. The farthest west fire training facility in the valley is the Phoenix fire department regional fire academy located in central Phoenix. In support of the whole region, Phoenix often has fire academy classes that are quite large in the number of recruits, thus reducing the amount of opportunities an

individual would have to experience any required hands on training. The Phoenix regional fire academy is also limited because of time and space, to providing only three recruit fire academies a year maximum. The recruit academies are scheduled fourteen weeks long. When budget constraints hit the Phoenix fire department these numbers and times are often reduced. In addition, Phoenix fire training facilities are also shared with special operations training i.e.: hazardous materials, technical rescue, C-pat testing, Arizona State fire training and they also support two local community college fire science firefighter I & II operational programs. All of these factors have contributed to an overall lack of available live fire training facilities for the west valley fire agencies. Having a fire training facility in the west valley would provide increased training opportunities not only for the Peoria fire department specifically, but also, the rest of the west valley fire agencies. This would allow us the assurance of having reliable quality training when needed. West valley fire agencies would then be able to count on a consistent training schedule to give our agencies the ability to provide an increased level of service for our citizens.

The Peoria fire department has not asked for a higher level of work product from our training division due to the lack of the proper facilities needed to provide the instruction, and therefore have not been consistent in the area of quality control as is required. It is not unusual for a firefighter to go several months or even years without any live fire training. That, along with the decrease numbers of fire activity, due to an increase of both fire prevention and fire sprinkler awareness programs, causes an alarming problem of keeping all of our firefighters trained and ready for when they do have to perform their firefighting duties. The ability to recognize the need for a

training facility that specializes in live fire training and the need for a program that includes quality control and assurance is a necessity for the west valley fire departments/districts and its members and more specifically the Peoria fire department. Currently the Peoria fire department places a heavy emphasis on operational needs, the actual day to day requirement of providing fire and emergency response and places the emphasis on the time it actually takes to get to a call. It is imperative that we also take time to focus on the ability to take the appropriate action once we get there.

Peoria and the west valley fire departments/districts will need to require special certifications and training to ensure that the training academy is run efficiently and conducted in a safe operating manner. Currently the local community college operates a Firefighter Operations I & II course at the college. They handle all the administrative needs and course work that is delivered in their classrooms at the college, however, they too lack the needed facilities to provide the necessary hose, ladder and live burn evolutions. The college schedules the available time from the Phoenix fire regional academy, often they are required to hold their live burns and activities that require the facilities on nights and weekends when the demand is lower and the academy is not being used. Phoenix is growing at the same pace if not faster and is in the process of adding 10 new fire stations to provide service to their expanding borders. Also affecting the Phoenix fire department is the large and growing population of their firefighting ranks who are eligible for retirement. These factors will only continue to grow and put pressure on an academy that is already past maximum capacity.

The Peoria fire department is a relatively new department. The City's population has gone from 12,500 to 125,000 in the last 20 years. The department's area of coverage has gone from 35 square miles to over 190 square miles. Training time, space and facilities needed for the requirements for 12 individuals in 1984 verses 102 Peoria in 2002 alone causes some very interesting challenges. Variables like these make this problem an interesting and complex one. Because Peoria being relatively new, the department has not had the luxury of acquiring the capital dollars needed to build a facility to help us improve in this area. However, the increase in the number of west valley fire agencies also has been rising along with their increased need for training. With the rest of the west valley having the same training needs with no slow down in sight, we could quite possibly combine our efforts so it would help us to get ahead on our fire training needs and quite possibly save money by everyone pitching in to help defray the cost.

Instead of the keeping the current approach of letting the larger Phoenix Fire Department figure out ways to accommodate the out lying cities problems, perhaps we can take a fresh look to start figuring them out on our own. Any training effort would still be in conjunction with the current training curriculum and methods being taught by the Phoenix regional academy and be consistent with the rest of the automatic aid departments in the valley.

In addition, Peoria's new Fire Chief has set his priorities to include efficiency in all levels and divisions within the department. He wants to increase the quality of service we provide our citizens. However, this has been a challenging process in the area of live fire training because of the problems stated above.

The union has had concerns that the newest members of the department will not receive the same quality of training that they currently get now from Phoenix. Firefighter safety and consistency in training play a large role in their decision to voice their concerns. Control over the training is not the issue for our department. We share the same concerns on the issues of firefighter safety and the ability to provide our firefighters with the best up to date fire training possible.

Lastly, the City of Peoria leaders have provided money in this next year's budget for a comprehensive study to evaluate the need for a fire and police training facility. The City of Glendale has had bond money set aside for a police and fire training facility but have not headed in the direction of spending the available funds. Even if both Peoria and Glendale would be able to come up with the ability to fund their own facilities, one question still comes up on how the smaller fire agencies will be able to meet their training needs and at what cost. Therefore, the need for this study is obvious and how it relates specifically to the executive fire officer program and the fire service financial management course. The probability of the Peoria fire department benefiting by research conducted for a fire training facility will be a direct result of this study.

LITERATURE REVIEW

Historical

In the history of the fire service live fire training and other related training have always taken a back seat to the more obvious and important tasks of providing fire protection, EMS and rescue services to its citizens. Recently members in the fire service have recognized the importance of training and how it relates to safety, efficiency, injury

and cost reduction. Fire departments across the country have established requirements for training programs as well as certifications in the areas of live fire training.

Firefighters are our most important resource; firefighting personnel need to be the most technically sound and safely trained for any possibility they might face in their profession. The ultimate challenge for fire service instructors is to maximize safety, effectiveness, and scope while providing a live training environment that's as close as possible to the real thing (Evans, 1991, p.119).

Fire departments must realize, with the decline in structure fires across our country, the amount of experience a firefighter gets fighting actual structure fires is minimal compared to years past. This is also a reason that a training facility is needed. It will allow ongoing training of fire personnel as well as allowing them to gain first hand experience that they do not readily receive on the job (Shank, 2001, p.7).

Fire protection is already a very dangerous occupation without making it more dangerous through inaction. Fire departments must take on the responsibility of developing a comprehensive training program that includes live fire training scenarios. The development of a training program is becoming increasingly necessary for today's fire service.

An extensive review of literature received from the National Fire Academy's Learning Resource Center was conducted. This review proved to be fruitful as it provided the author with several professional journal articles and research projects dealing with the issues of fire training facilities and how they regard to the fire service. The findings in the literature have been broken down to three important areas as they relate to fire training facilities and how live fire training can help a fire department better serve its

firefighters and citizens. The three important areas are: The need for live fire training, combining regional efforts and the increase in quality of service provided. Each of these three areas were addressed in effort to determine the advantages or disadvantages of taking the lead in obtaining a fire training facility for the Peoria fire department and the west valley, as well as increasing the level of service to our customers.

Live Fire Training

Live fire training program is essential to the fire department mission in keeping the firefighters prepared so they can provide the highest level of service when called upon. Lowering injuries and focusing on safe consistent instruction for firefighters has an direct effect on providing efficient, well prepared responders in a timely manner to help in emergency situations. A mediocre or non existent fire training program that does not sufficiently prepare its firefighters in the fighting of live fires is increasing its chances in of a firefighter either receiving a career ending injury or firefighter fatality, must accept the liability that goes with the inaction.

Beaty (1992) writes; the dynamics of emergency service requires continual reassessment of knowledge and skills. An array of external forces affect the academic and didactic situation for emergency service responders. Issues like legislation, litigation, changing technology, research, building materials, personnel management issues provide an ever changing frontier to education. Because of these factors, use of out side training sources is needed to insure professional, technological, and managerial growth as well as decrease the ever present danger of litigation against the department and its personnel (p.7). Czerwinski (1994) agrees, the demands on today's fire service personnel are

diverse and require continuous preparation to minimize the risk of personal injury and to improve proficiency. Fire service administrators face a continual challenge in training personnel to provide maximum safety, while still providing as much realism as possible in a wide scope of training scenarios (p.1).

The fire service feels that developing a comprehensive training program should not be cost prohibitive and is necessary to provide a high level of service. Larson (1996) states, live fire exercises are an important component. The intention is not only to allow the recruits to experience actual fire under controlled conditions and put into practice the skills and techniques they have been taught in class, but to give them confidence in their safety clothing, tools and breathing apparatus (p.72). Meyer (1990) concurs; Training is a necessity in our profession. We have an obligation to educate ourselves so we can fulfill our duties to the public (p.29). Both Bentley (1994) and Lobeto (2002) feel the same about the need and availability of training facilities. Proper training has always been the top priority, and testing and training facilities have always been our sorest need (p.88). One of the most important roles in effective firefighting is firefighter preparedness. Many departments place great emphasis on training-both classroom-based lessons and hands-on exercises. Unfortunately, few departments have access to adequate training facilities and equipment (p.36).

Many departments in the fire service are actually experiencing a decrease in fires due to effective fire prevention programs, fire sprinkler requirements and quicker response time from responding units. Although this is an overall positive for the fire service it creates a unique problem for the training division. (Czerwinski, 1994) Most departments do not participate in a sufficient number of major incidents to consider themselves

prepared for every possible emergency, thus supporting the idea that realistic and organized training is essential. To provide the realism and required safety, a controlled environment is essential, and to furnish this environment a well planned training facility is the only answer (p.26). Beaty (1992) writes, the importance of training is key to a reduction of risk to municipal agencies stemming from litigation along with the need to provide optimal service to our citizens (p.3). Increasing public awareness and environmental issues coupled with evolving safety standards such as the National Fire Protection Administration's 1403 and 1500 make it difficult to provide training without sophisticated training props (p.17). (Shank, 2001, p.5) concurs, in the emergency services, both fire and law enforcement agencies rely on the development of a variety of psychomotor skills in their personnel in order to be safe and successful in their perspective professions. The development and eventual mastery of these skills is dependant upon practice and repetition. It has long been accepted that initial training consists of a formal police or fire academy held at a specific location designed for the purpose of training new professionals. Grill (1996) believes people learn best from experience. Learning practical applications such as fire stream application or salvage techniques, in theory, from a training manual falls short of actually performing the techniques and applying them to a real time scenario. One must observe the effectiveness of a particular action in order to develop the skills necessary to assess what works and what does not work (p.9).

Combining Regional Efforts

Most fire agencies in the United States fall into the same category when it come to having left over money for training, there just isn't much left after personnel and equipment cost are out of the way. One way to help fire departments secure the needed fire training facility is to look into a regional facility. Many agencies pitching in money, time and manpower to make it work seems to make a lot of sense with fire agencies facing tighter constraints on their budgets.

Czerwinski (1994) writes, as the fire service looks to the year 2000 and beyond, cooperation will continue to be essential, in the planning, financing, and development of an appropriate regional training facility (p.27). (Shank, 2001, p. 9) states, regional fire training centers are not a new concept. The development and construction of a training center is a very time consuming and costly undertaking, but the need to have a dedicated facility cannot be understated. While attempting to master those skills necessary to become and remain a viable member of a fire company there is no substitute for hands on experience. (Beaty, 1992, p.6) explains, In order to maintain the highest possible level of efficiency, emergent and non-emergent public safety services must be a concerted effort on the part of all personnel. Close coordination and cooperation within the "team" as well as adjunct public safety professionals is the key to the delivery of optimal public health, safety and property conservation. Meyer (1990) states that there is a training alternative that takes advantage of resources already available to the fire service. This is a regionalized fire service training organization. Such an organization can include several communities and counties. Or it can be characterized by certain geographical areas that have fire departments with unique training requirements (p.29). Sovick and

Gress (1999) write about the benefits of forming a consortium for training by stating, they knew that the consortium would allow each department to present programs to their agencies that wouldn't otherwise be cost-effective (p.60). Buerschen (1994) concurs; Regionalization may be the answer for many departments searching for a way to meet training needs on a lower budget (p106). Czerwinski (1994) adds, the main emphasis being on the ability to combined safety with realism, while still providing an efficient cost effective facility (p.25). Larson (1996) writes, we're practicing working together, utilizing joint resources, experiencing a reduction in cost, emphasizing camaraderie and team work (p.74). He also adds that, larger departments do benefit from the cost savings, shared instructor time, a lesser impact on their training divisions, but the major benefits are the smaller departments who may not be able to run their own academies (p.68). Buerschen (1994) wraps it up nicely; Regionalization has proven beneficial and cost-effective in providing a training facility for departments can share (p.109).

The added benefits from having a regional training academy are that you can focus on the needs in your area when it comes to hiring and training your firefighters. Sovick and Gress (1999) write, fire consortium meet the need of the internal customer, their fire personnel (p.60). They also add, consortium allows both coordinators and participants to approach issues with broad-based vision, finding creative solutions through cross-fertilization of ideas (p.62). Barnes (2001) believes that, the regional academy concept helps us "grow our own firefighters" (p.55).

Lastly, Larson (1996) writes, many departments are realizing that any loss of individual identity is more than made up for by the advantages of a mutual effort. He also relates, this concept is taking hold in training as much as in operations (p.65)

Quality of Service

Through the research of this study on fire training facilities, two premises were constantly stated throughout the literature, possessing a fire training facility combined with a consistent training program, you are bound to increase the level of service provided to your customers and increase firefighter confidence in their own abilities. Shank (2001) concluded, confidence will also received a boost since training sessions will become more frequent and take on a more realistic nature. This will in turn, enhanced customer service and job satisfaction (p.27). Beaty (1992) agrees, the quality of service delivery to the public would increase and the need for additional emergency personnel would be reduced. The limitation of growing personnel levels would be due to cross training and improved efficiency during all types of emergency services activities (p.18). The (training) center represents a major investment in the community's well being. Most obvious is our improved ability to save lives and protect property through a better-prepared firefighting force. And a better equipped, trained and proven force will keep home and business owners' fire insurance premiums down an important consideration as the area's economy grows (Bentley, 1994, p.90). Lastly, departments now offer their members more opportunities and higher quality training, and as a result, departments develop stronger future leaders. This combination leads to increased customer service to community members (Sovick and Gress, 1999, p.63).

Summary

In the literature reviewed the need for a fire training facility to provide firefighters with safe, up to date live fire simulation was definite. To have the ability to train your firefighters in a dedicated place where consistency and safety are stressed would raise the

level of competence among the firefighters and the department. It would also allow the organization to improve on its curriculum for the training division. To have a state of the art facility would increase opportunities for firefighters to sharpen their skills and become more effective on the fire ground.

Designing a fire training consortium to acquire a fire training facility makes sense for a lot of reasons. Fire agencies working in collaboration with one another can pool efforts and their funds to design, build and run a fire training facility. It would allow them to provide a wide cross section of training at a reasonable amount of cost and commitment. Regional training consortiums are able to focus on the needs of their communities and then gear the instruction to help meet those needs. It also provides fire agencies efficiency in the training division, consistency in the curriculum and competency in the firefighter's skill levels. Training among the participants would increase familiarity among the fire companies; therefore the level of emergency services provided to the community would increase.

PROCEDURES

General Methodology

First the research focused on the value the Peoria fire department places on fire training, the need for the facilities to provide the training, and how the west valley could benefit as it is related to providing excellent fire, rescue and ems services to the citizens of the City of Peoria and the citizens of our neighboring agencies where we share automatic aid with.

In effort to address the research questions specifically designed for this study a descriptive/analytical research methodology was employed. Additionally, a E-mail questionnaire was designed and ten west side Phoenix regional fire departments and districts were contacted to see how they felt about the idea of a training facility on the west side of the valley. It also asked them about the possibility of forming a west valley consortium and whether or not it would be fiscally feasible. They were asked what they thought they would be using the fire facilities for and whether or not a partnership with either a local community college or police agencies would help in acquiring a facility site.

The information received from the survey questionnaire (Appendix B) was also used in a memorandum to the fire chief (Appendix E) for recommendations of required changes needed for the Peoria Fire department's existing training program practices.

A survey was conducted in the designed of a questionnaire; the questions were devised to help measure the validity of the research questions that were developed for this descriptive/evaluative research project. Each survey question was directly related to one of the four research questions.

Specific Procedures

A cover letter (Appendix A) was sent to each of the participants, which stated the intent of the survey and what the information was to be used for. When the survey was conducted, the participants were instructed to provide their professional opinion in answering the questionnaire as it related to their specific organization.

Participants were asked to include their views on the need for a fire training facility, on how they saw that their department would utilize the training facility and if they felt

getting out side help from either the west valley police agencies or Glendale Community College would be appropriate. The Surveys also included whether or not the other agencies would be willing to participate in some sort of cost sharing consortium for the fire training facility, personnel needed to staff the facility or provide required equipment needed. The numbers were used for the data input only and had no value assigned to them. The answers were tabulated and averages were figured.

It was anticipated that ten questionnaires would be distributed to the Fire Chiefs in fire agencies located in the west valley of the Phoenix regional area who are a part of the automatic aid consortium and are dispatched by the Phoenix fire department alarm room. Permission to conduct the survey was received from the Peoria Fire Chief two weeks prior to the distribution of the surveys.

It was estimated that the questionnaire took approximately fifteen minutes for each recipient to complete. All contacts were made with the Fire Chief of each fire agency. Nine questionnaires were completed and returned by e-mail or by fax to be analyzed within one week of the start of the survey. It is unknown why one questionnaire was not returned. Follow up phone calls were made to the lone fire agency but were not returned to the author.

Research Population/Sample

The sample population in this research paper consisted of ten Phoenix regional fire departments or districts located on the west side of the valley. The seven fire departments contacted included Glendale, Peoria, Surprise, El Mirage, Tolleson, Goodyear and Avondale. The three fire districts included Sun City, Sun City West and Daisy Mountain.

The researcher informed the participants that the results of this survey would be shared with them in the way of a report by the end of the first quarter of 2003. Explanations were given that the results would be used for the evaluation of a need for a west valley fire training facility. They were informed that all data gathered for the project would be held in strict confidence and the results of the project would not be sold, or used for any commercial profit.

Finally, they were informed that they would be helping structure the future of the training division for the Peoria fire department and the rest of the west valley fire agencies by the information that they provided in the survey questionnaire. Recommendations to the Peoria Fire Chief as well as City leaders would be made from the information gathered from the results of the survey. Participants were thanked for their participation and cooperation in this study.

Treatment of Data

Nine returned questionnaires out of ten surveyed completed with the sample population represents a very high return rate of 90%. It demonstrated that a large portion of the departments surveyed took it seriously and that they were interested in the outcome of the research. One fire agency did not respond to the questionnaire therefore was counted as a non-answer and included in the tabulation of numbers(Appendix C) and response percentages (Appendix D).

The data was entered, tabulated, and the calculated responses into percentages. Percentages were then used specifically for this research project. The information was then divided into a graph representing the questions asked (Graph 1). The graph was then

divided into categories that represented the different answers that were given on the survey. All percentages and numbers were check and rechecked for accuracy. The survey results, in percentages, were then cross-referenced with the correlating research questions that they represented to measure the results.

Limitations of the Study

The limitations of the study were commensurate with the size of this study. The questionnaire was limited to 12 questions to encourage increased participation among the respondents. A longer, more comprehensive questionnaire could have provided more in depth information.

The research population only included ten area fire departments and did not include departments from other areas of the valley to see how they handle their training programs. Therefore, the study did not represent the entire Phoenix region.

Additionally, the research population only included ten fire departments/districts in the Phoenix metropolitan area and did not look nationally on how these local training problems are handled across the nation and therefore does not represent the entire fire service. Sample populations that would have included members of other valley fire departments would have given the study more information on how fire facilities and training programs are managed in this area and how they are related to providing fire service from a more regional perspective.

Lastly, neither Glendale community college nor the west valley Police agencies were contacted to see how they felt about being involved in either a west valley consortium or

their involvement in acquiring a training facility, therefore were not reflected in this study.

A pre-study was not conducted. Many of the limitations could have been reduced or eliminated if a pre-study had been conducted.

Definition of Terms

To adequately study the research questions noted above, certain items must be defined. Terms will be defined as follows:

Fire Chief-director that is in charge of all aspects of the fire department or fire district.

Deputy Fire Chief-manager in charge of all aspects of a division within the fire department.

Battalion Chief-middle manager in charge of one of the three shifts of fire companies in the operations division. Also known as shift commander.

Fire Captain-front line supervisor that is in charge of a fire company in the fire operations division. Also known as company officer.

Fire Engineer-apparatus operator that drives the fire truck to the scenes and operates the fire suppression equipment to provide water to the firefighters.

Firefighter-the entry-level position in the operations division.

Fire Operations-the division which provides the fire suppression, emergency medical services, performs fire inspections and provides public education to its citizens.

Fire suppression-the act of extinguishing a fire.

Emergency medical service-(EMS)-paramedic and emergency medical technician services the fire department provides.

Fire Company-the four person crew assigned to either an engine or a ladder truck.

Company officer-Captain who is in charge of an engine or ladder company.

Fire Training Facility-a secure place where live fire evolutions would take place for the instruction of firefighters.

Fire ground- the scene where fire suppression activities are taking place.

Fire ground Commander-person who is in charge of fire suppression activities.

Support Services division-is the division of the fire department that is responsible for providing the operations division with equipment, training and supplies required to perform their duties.

NFPA - National Fire Protection Association.

Fire District- Fire service protection in an unincorporated area.

Fire Department- A city department within a municipality that performs fire and Emergency services for that city of jurisdiction.

ISO- Insurance Service Organization.

OSHA- Occupational Safety Hazard Association.

Automatic Aid-Agreement with fire departments that share boundaries to send the closest available appropriate unit to the call ignoring jurisdictions.

Consortium-group of fire agencies that have combined their effort regionally for training and response purposes.

CAD-Computer aided dispatch system.

Phoenix dispatch-Phoenix Fire Department alarm room.

Labor Union- Local 493, Peoria Chapter, United Firefighters.

C-pat-Candidate physical ability test.

RESULTS

General Results

The small number of fire agencies contacted verses the number of questionnaires completed confirmed that there were no duplications of responses.

The questionnaires were distributed by e-mail to the sample population for their individual input on their professional opinion. Nine questionnaires of the ten sample population selected were returned by either e-mail or by fax.

Results

RQ-1 was measured by question number one of the survey. Of the nine fire agencies who responded to the survey all nine strongly agreed with question number one on the survey, which represented 100% of the respondents. RQ-2 was measured by questions number two, nine, ten and eleven of the survey. The number of respondents that strongly agreed with survey question number two were five, three responded that they agree, and one neutral response was recorded. On survey question nine, six strongly agreed and three agreed. On survey question ten, five strongly agree and four agreed. On survey question eleven, five strongly agreed and four agreed. RQ-3 was measured by survey questions number six, seven and eight. On survey question number six, four respondents strongly agreed, three agreed and two remained neutral. On survey question number seven, two strongly agreed, four agreed and three remained neutral. Survey question number eight respondents were divided, two strongly agreed, one agreed, two remained neutral, two disagreed and two strongly disagreed. RQ-4 was measured by survey questions number three, four, five and twelve. On question number three of the survey, six strongly agreed, one agreed, one remained neutral and one disagreed. On survey

DISCUSSION

Conclusions

The twelve questions asked in the survey (Appendix B) were divided up to correlate with the four research questions asked in this paper. Question one directly relate to RQ-1 and show there is a definite need in the west valley for a fire training facility. Question two related to RQ-2 and shows a west valley consortium would be welcomed by the west valley fire agencies. Questions three, four, five are directly related to RQ-4 that showed the facility would be used and justified the value of a fire training facility. Questions number six, seven and eight are directly related to RQ-3 concerning involvement of Glendale Community College and west valley police agency participation. The west valley was divided on letting Glendale Community college run the day to day operations of the facility. It is assumed that the fire agencies feared lack of control of the facility if the college were running it. Questions nine, ten and eleven are related to RQ-2 and show that each fire agency would be willing to support a west valley training consortium in some form or fashion. Question twelve was directly related to RQ-4 and supports the utilization of the fire training facility and that the investment would be worth the initial outlay.

In addition, the data gathered through this study demonstrated that the west valley regional fire agencies recognize the importance and benefits that can be obtained from acquiring and maintaining a fire training facility. Future leaders in the west valley and more specifically the Peoria fire department will be better qualified with training received from having their own training facility and training program. The leaders of the Peoria Fire department will have the background to be able to make the complex decisions that

they need to make in managing the fire department training requirements efficiently and safely. Additionally, safety of the departments training is also valued in the Peoria fire department, the rest of the west valley and should be included in the training program criteria.

The Peoria fire department and the other west valley fire agencies would welcome participation from the west valley police agencies and would also welcome some form of participation from Glendale Community College. A west valley training consortium would be welcomed and highly supported by Peoria and the other fire agencies.

Finally, when speaking on the enhancement of the Peoria Fire department and the west valley's training needs, it was concluded that by combining efforts of west valley fire agencies along with acquiring a fire training facility that specializes in live fire training is essential in lowering the cost directly to the Peoria Fire Department. Thus, increasing the level of standards of professionalism in the fire and emergency service provided to the citizens of Peoria and the west valley. Lastly, it was concluded (via the literature review) that the need for participation from all fire agencies is imperative for the survival and growth of a successful west valley fire training site. More interactions with the various west valley agencies are needed to enhance the area of quality control of the work being performed on the fire ground as well as in live fire training in the first place. Fire service leaders have to be able to continually assess the needs of the community and the goals of the consortium to make sure that they are aligned. The City of Peoria Fire Department needs to strategically manage change in the area of live fire training and look for ways to acquire a fire training facility.

If the City of Peoria takes a proactive stance on this issue and follows the recommendations of this study, this could help bring a fire training facility and a west valley training consortium goals to fruition.

This study was significant due to the fact that both the Peoria fire department and the other west valley fire agencies feel the strong need for improvement in the areas of recruit and company training. With the rapid growth in the west valley comes the need to acquire a fire training facility to provide the instruction needed for firefighters to not only maintain but improve service to our citizens.

There are three stations in the planning stages, projected to be built in the next five to ten years. Along with that, the fire department will be experiencing the need to establish a plan that is both comprehensive and economical in the area of fire training requirements for the department. This program is now incumbent on the fire department management team. The department must immediately start developing the plan to provide the facilities required to take the training division of the fire department in the right direction for the future.

This research project will be utilized as a basis to construct a comprehensive report on fire department training needs for the fire chief and provide the needed recommendations for developing a consortium of west valley fire agencies that will provide the training facilities required for the optimal live fire training that are available to the participating west valley fire agencies to maintain and improve firefighter readiness.

The Peoria fire department administration will then take the results of this report and share them with the labor union. Through the labor/management process the two will come up with guidelines to help put the plan into effect. This should give the department

a chance to raise the expectations of the ranks. It will also give employees a concise target for what they will need to accomplish in the areas of training and safety. A fire training facility should provide the department with higher quality of live fire training. Confidence in our firefighting performance would then filter through to the rest of the organization and eventually to the citizens that they serve.

Creating a plan for the whole organization that maps out the strategies for a west valley fire training facility should give the fire agencies involved a common direction as well as provide the west valley a solid base to improve on for the future. Finally, having the ability to implement a plan that affects the entire rank and file of the west valley fire agencies and by including them in the process should only enhance and solidify the relationship between labor and management. By including west valley fire agencies in the participation will also only improve relations and familiarity among the units who are already running calls together. If they become more comfortable with each other during training exercises, they would without a doubt see the benefits during fire and medical emergencies.

Future research could investigate several areas in which this study did not examine in detail. This study did not investigate what other fire departments/districts or regions that have gone through similar rapid growth problems. Fire chiefs and members of fire departments that have experienced a similar level of growth could have provided valuable information to any future study.

A study of other fire departments' and districts in the country and how they address these same issues (and what are the benchmarks for the industry) would have provided more valuable information in the study for comparison and relevancy.

RECOMMENDATIONS

The Peoria fire department is currently at an organizational crossroads regarding the fire training program and the development of a fire training facility. It can take the easy way out and say that we already have a training facility in Phoenix and leave it at that or we can say these are important factors and issues in becoming a professional fire department. The Peoria fire department can embrace these recommendations and become a leader in the fire service, specifically, in the west valley by providing quality high level hands on live fire training to its fire department and increase safety for its firefighters.

The Peoria fire department should take the necessary steps to improve its effectiveness in the area of its live fire training. If the current system is left in place to provide this service, a high number of firefighters will continue to lack the necessary live fire training needed to be proficient at their skills. This will not only cause us service delivery problems in the future but also severe labor issues due to lack of confidence in the training division because of concerns on safety.

Additionally, consistent basic live fire training needs to be addressed when considering our fire department needs. Having someone whom knows what he or she is doing and also completing the task safely and in a timely manner is invaluable. This will ensure the service we provide our citizens is done correctly the first time, therefore, being done more efficiently, which happens to be a goal of the fire chief. Providing a high level of hands on training will also measure the knowledge gained by the fire fighter, therefore implementing required quality control for the training division.

Finally, the Peoria fire department and the west valley fire agencies must take the lead in developing a consistent way to administer the day to day functions of the training

facility to serve each fire agency equally and be used, as a guide for our firefighters to achieve the optimal skills required doing the job with a high success rate. This should raise the comfort level of the whole organization with its leaders and should, therefore, provide the citizens with a higher level of service.

The following recommendations are suggested:

1. That the Peoria fire department and the west valley fire agencies devise a clear and concise plan to provide live fire training for fire recruit and company training.
2. The Peoria fire department and the west valley recognizes the need to develop a west valley training consortium that will consist of participating fire agencies.
3. The Peoria fire department and west valley fire agencies implement incremental increase in training for our fire companies to ensure that they stay current on today's equipment and tomorrow's technology.
4. That both the fire departments/districts administrations and the labor union work together to come up with acceptable plan that will benefit the organization and ensure firefighter safety and training consistency.
5. The City of Peoria Fire department and the west valley fire agencies developed a comprehensive cost sharing plan that will be both fair and equitable to each fire agency that participates in the consortium.
6. That the Peoria Fire Department and west valley fire agencies develop a board of directors to include representation from each agency and to provide guidance to the fire training facility.

7. That the Peoria Fire department and the west valley fire agencies get together with west valley police agencies to possibly collaborate in the effort to obtain a training facility.
8. That the Peoria Fire department and the west valley fire agencies team up with the local community college to provide a higher level of training that may also earn college credit for firefighters who are working towards a degree.
9. A west valley regional live fire training committee consisting of participating fire agencies and Glendale community college fire science program be assembled and address training curriculum for recruit firefighters that will be consistent with the Phoenix regional academy and evaluate the needs for ongoing company training.

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APPENDIX A COVER LETTER

ATTENTION: West Valley Fire Chiefs

Dear Chief:

My name is Larry Rooney and I am a Deputy Fire Chief for the City of Peoria Fire Department. I am required to complete a research paper as part of the requirements for an executive fire officer course taken at the National Fire Academy. I have chosen to research the possible need for a Westside fire training academy. Please take a few minutes of your time to complete the enclosed questionnaire. Your professional opinion on this subject is a necessary part of this research paper. All data gathered will be held in strict confidence. Your name and any other information are not requested. The results of this survey or project will not be sold, or used for any commercial profit.

I know that this is holiday season and that your time is extremely valuable. I appreciate you taking the time to do this and am sure that you share in my view that it is imperative to have every fire agency on the west side of the valley represented and to have their professional opinions reflected in this project.

Lastly, please feel free to answer and return this questionnaire in a manner which would be most convenient for you. You may reply by e-mail to LawrenceRooney@aol.com, print the questionnaire and fax it to (623) 773-7620 to my attention, or mail it directly to my home at the address above. Please feel free to give me a call at (xxx) xxx-xxxx if you wish to discuss either the survey or the project or if you have any questions. If it is not too much trouble, I would like to tally up the final results by Monday, December 30, 2002. Your quick response would be greatly appreciated.

Thank you again for your time Chief.

Sincerely,

Lawrence Rooney

Deputy Fire Chief
Peoria Fire Department

Attachment: Training Academy Questionnaire

APPENDIX B

Questionnaire

Please circle the number that best describes your professional opinion on the preceding statement. Your choices are:

- | | 1 | 2 | 3 | 4 | 5 |
|---|-------|---------|----------|-------------------|---|
| Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | |
| <hr/> | | | | | |
| 1. There is a definite need in the west valley for a fire training facility. | 1 | 2 | 3 | 4 | 5 |
| 2. A west valley consortium would be the best way to fiscally obtain a training facility. | 1 | 2 | 3 | 4 | 5 |
| 3. Your fire department/district would use this training facility for recruit fire training. | 1 | 2 | 3 | 4 | 5 |
| 4. Your fire department/district would use this training facility for on going company training. | 1 | 2 | 3 | 4 | 5 |
| 5. Your fire department/district would use this training facility for special operations training. | 1 | 2 | 3 | 4 | 5 |
| 6. A partnership formed with Glendale Community College would be a useful way to acquire a training facility. | 1 | 2 | 3 | 4 | 5 |
| 7. A partnership formed with west valley Police agencies would be a useful way to acquire a training facility. | 1 | 2 | 3 | 4 | 5 |
| 8. A partnership with Glendale Community College would be an ideal way of the day to day running, scheduling and maintaining of the facility. | 1 | 2 | 3 | 4 | 5 |

- 9.** Your department/district would be willing to put “capital” money towards a
west side training facility. **1 2 3 4 5**
- 10.** Your department/district would be willing towards providing the personnel to staff
the west side training facility. **1 2 3 4 5**
- 11.** Your department/district would be willing to help purchase equipment towards
running the west side training facility. **1 2 3 4 5**
- 12.** The west side training facility would be utilized enough by participating fire
department/districts to make the total investment worth the initial outlay.
1 2 3 4 5

APPENDIX C—TABULATIONS

1	2	3	4	5
Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1. 9	0	0	0	0
2. 5	3	1	0	0
3. 6	1	1	1	0
4. 7	2	0	0	0
5. 6	1	2	0	0
6. 4	3	2	0	0
7. 2	4	3	0	0
8. 2	1	2	2	2
9. 6	3	0	0	0
10. 5	4	0	0	0
11. 5	4	0	0	0
12. 5	2	2	0	0

Survey Questions

APPENDIX D

Survey Questions Responses Percentages

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	NA
1.	90%					10%
2.	50%	30%	10%			10%
3.	60%	10%	10%	10%		10%
4.	70%	20%				10%
5.	60%	10%	20%			10%
6.	40%	30%	20%			10%
7.	20%	40%	30%			10%
8.	20%	10%	20%	20%	20%	10%
9.	60%	30%				10%
10.	50%	40%				10%
11.	50%	40%				10%
12.	50%	20%	20%			10%

APPENDIX E**M E M O**

*From the desk of
Larry Rooney, Deputy Fire Chief*

Date: 12/31/2002

To: Robert McKibben, Fire Chief

Subject: Recommendations for Fire department Training Division

The following recommendations are based on the results of a study that was conducted choosing several west valley fire agencies, evaluating the need for a live fire training facility that would support the Peoria fire department's training program. Survey questionnaires were completed along with a review of literature obtained from the National Fire Academy resource learning center. The study was developed to help our department implement a program for a west valley fire training facility as well as completing a required research project for the National Fire Academy, Executive Officer Program. These recommendations will enhance the Peoria fire department's training program needs as well as provide safer more reliable firefighters to provide fire and emergency services to our citizens and neighboring fire agencies.

It is imperative that the Peoria fire department and the west valley develop a program regarding live fire training for both our fire recruits and ongoing company training. Research completed in this study should provide the department with the vital information concerning the best way to accomplish the goal of forming a west valley training consortium and the acquisition of a fire training facility. By comprising a

balanced approach that will include training curriculum and ways to measure firefighter performance will raise the level of expectations as well as firefighter competence in the area of live fire training, therefore giving the firefighters a higher level of training and a better chance of being successful in their duties.

The following recommendations are suggested:

1. That the Peoria fire department and the west valley fire agencies devise a clear and concise plan to provide live fire training for fire recruit and company training.
2. The Peoria fire department and the west valley recognizes the need to develop a west valley training consortium that will consist of participating fire agencies.
3. The Peoria fire department and west valley fire agencies implement incremental increase in training for our fire companies to ensure that they stay current on today's equipment and tomorrow's technology.
4. That both the fire departments/districts administrations and the labor union work together to come up with acceptable plan that will benefit the organization and ensure firefighter safety and training consistency.
5. The City of Peoria Fire department and the west valley fire agencies developed a comprehensive cost sharing plan that will be both fair and equitable to each fire agency that participates in the consortium.
6. That the Peoria Fire Department and west valley fire agencies develop a board of directors to include representation from each agency and to provide guidance to the fire training facility.

7. That the Peoria Fire department and the west valley fire agencies get together with west valley police agencies to possibly collaborate in the effort to obtain a training facility.
8. That the Peoria Fire department and the west valley fire agencies team up with the local community college to provide a higher level training that may also earn college credit for firefighters who are working towards a degree.
9. A west valley regional live fire training committee consisting of participating fire agencies and Glendale community college fire science program be assembled and address training curriculum for recruit firefighters that will be consistent with the Phoenix regional academy and evaluate and address the needs for ongoing company training.

APPENDIX F

BIOGRAPHY

Lawrence Rooney is a 19-year veteran of the Peoria Fire Department, Peoria, Arizona. He serves as the Deputy Fire Chief responsible for the Support Services division, after completing a tour as the Operations Deputy Fire Chief. He has served in each rank and position of the Peoria Fire Department starting as a firefighter, engineer, engine and ladder captain, technical rescue technician and recruit training officer assigned to the Phoenix Fire Department Regional Fire Academy. He has also served in the capacity both as the battalion chief in charge of operations as well as a shift commander within the operations division. He has been responsible for both promotional testing and firefighter recruitment for the department for the last twelve years. In addition, he has served as an instructor of fire science courses at Glendale Community College. He earned an Associate Arts degree in 1980 in General Education from Orange Coast College, an Associate Science degree in 1982 in Fire Technology from Santa Ana College, a Bachelors of Science degree in Public Safety Administration from Grand Canyon University in 1999 and has also completed his Masters Degree in Educational Leadership at Northern Arizona University in 2002.