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## Disaster preparedness in the San Bernardino and Riverside County area school districts

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**DISASTER PREPAREDNESS IN THE SAN BERNARDINO AND  
RIVERSIDE COUNTY AREA SCHOOL DISTRICTS**

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A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Educational Administration

---

by  
Paul Edward Jamerson  
September 1993

DISASTER PREPAREDNESS IN THE SAN BERNARDINO AND  
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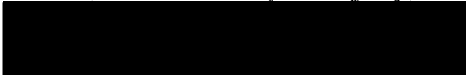
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by  
Paul Edward Jamerson  
September 1993

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Approved by:

  
Dr. David O. Stine, First Reader

  
Dr. Billie G. Blair, Second Reader

## Abstract

On June 28, 1992, the southern section of the San Andreas Fault reminded us that San Bernardino and Riverside Counties are in an area of geologic activity. The two earthquakes that happened that day have changed the way in which geologists have looked at the effects of this Earth movement. The schools are going to be involved in the event of a major disaster either providing for the students the educate or as shelters for the community they serve.

Ninety-five percent of the school districts in San Bernardino and Riverside Counties participated in a survey designed to evaluate the level of preparedness in the schools. The author's intent was to heighten the awareness that the schools are responsible for more than just the students it educates. Many local, county, and state officials were contacted and had input as to the design of the survey. These officials realize that there needs to be more specialized training to serve the needs of school districts. Each district and school site has a unique design that makes planning a more time consuming task for those responsible for emergency preparedness.

The results of the survey showed that there are many districts with a high degree of readiness and some districts that are in need of additional training for the planning staff. Current legislation will require that schools use a standardized emergency management system in the near future. School districts must make sure that they are ready for "The Big One".

## ACKNOWLEDGMENTS

The author would like to thank all of the dedicated professionals that took the time to help in the preparation and finalization of this project. The information will be forwarded to others in the field of disaster preparedness in hopes of developing a training programs designed for the specific needs of the educational system. Local police and fire officials have also had a great influence on the author. Their dedication to duty and their willingness to put their lives on the line should inspire us all. To the students that had to deal with their teacher being away from time to time. And finally to the author's parents, who put up with the mess of all the paperwork and for their support.

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## Chapter One

### Legal And Organizational Aspects Of Disaster Preparedness

The potential for a major earthquake on the southern section of the San Andreas Fault has a greater than 50% chance of occurrence within the next three decades has been the watch word since a 1980 assessment by the Federal Emergency Management Agency. However, a current report suggests that the recent earthquakes in the Landers and Big Bear area of Southern California may have brought closer a failure in the San Bernardino Mountains segment of the San Andreas fault. (Working Group on the Probabilities of Future Large Earthquakes in Southern California, 1992) This current report states that there is a probability of between 4% and 12% of a magnitude 7 or larger earthquake within the year. The date the report was released was November 30, 1992. This prediction triples the percentages of the potential "Big One" since the June 28th. quakes. If this prediction holds true, then the San Bernardino and Riverside counties area will experience major damage that will effect the area schools by the end of 1993.

In developing the study, it was the author's contention that the majority of school personnel responsible for disaster planning are not properly trained to perform the task of disaster planning. The responsibility for developing a school district's disaster plan is usually delegated to someone at the district office who may have a variety of other duties. As needs develop in other areas or as the budget reductions faced by districts requires personnel to increase the duties under their control, disaster preparedness may be pushed to the bottom of many lists because it is not a current need.

In an unpublished paper acquired from the staff of the California Specialized Training Institute in San Luis Obispo in 1992, the following was described as the problem areas:

The California Specialized Training Institute's (CSTI) experience in exercising over 40 city and county jurisdictions' emergency plans, with approximately 200 school administrators through resident Emergency Management Courses, and exercising three large school districts' emergency plans, are that schools and school districts do not comprehend what an emergency procedure system means. The language or terminology of emergency preparedness does not exist as a planning foundation. Policy and direction is not provided at the district level: the concept of an emergency operations center is not understood: therefore, the ability to centrally assess and allocate district's resources in school organizations is ineffective. This includes a lack of a comprehensive plan that tasks all the district's components with support requirements, a lack of radio communications capability, and in many cases an absence of any coordination effort with the local jurisdictions' emergency planning effort. (Earthquake Emergency Procedure Systems, (Planning and Training Needs Assessment), Prepared by the staff of the California Specialized Training Institute, 1992)

Given that schools are responsible for so many lives at any given moment of the day, it becomes ever increasingly important that schools should devote additional time and effort to the disaster planning process.

In reviewing published works on development and implementation of planning for schools, relatively little has been published by other than governmental agencies on the subject. There were two basic types of literature for this topic. The first was a review of the various laws that require the various agencies to provide disaster preparedness. The second type of literature included guides from various government agencies that explain the disaster planning process and the responsibilities of the agencies.

### **The Law and Disaster Preparedness**

Many laws have been written that defines the responsibilities of the state and its subdivisions with regard to emergency preparedness and response (California Emergency Services Act, 1970). The "Katz Bill" was signed into law January, 1985, and amended the State Education Code requiring that public and private K-12 schools with two or more classrooms, or more than 50 students, develop and maintain an earthquake emergency procedure system. (California Specialized Training Institute, 1988). The California Education Code, sections 35295, 35296, and 35297 include mandates for schools and school districts. These Education Code sections require districts to periodically hold drills and test the emergency plans.

The laws governing liability and negligence are two major laws that are of most importance to those in the field of disaster preparedness. Recent court cases have defined seven aspects of vicarious liability, or that liability which progresses up the chain-of command through supervisors, and managers, to policy makers. Two of the seven aspects particularly relate to emergency management are first, a

"Failure to Direct" by failing to have an up-to-date emergency plan and second a "Failure to Train". This would be a failure to conduct training drills, utilizing personnel, equipment, and facilities that would have to execute the plan. Both the direction and training are required as part of the Katz Act. (California Specialized Training Institute, 1988)

Negligence is defined as a breach of duty, we each have to take reasonable care to avoid foreseeable harm to another, where our conduct causes harm. (California Specialized Training Institute, Disaster Planning Workshop, 1992) In the typical negligence law suit, the plaintiff tries to introduce evidence that the defendant owed a duty to the plaintiff, that a standard of care existed for the relationship, that this standard was violated by the defendant, and that the plaintiff suffered injury as the proximate cause as a foreseeable result of that violation.

The majority of the literature relating to the disaster planning process and responsibilities comes from various governmental agencies such as the Federal Emergency Management Agency and the California Specialized Training Institute. These agencies describe the need to develop a basic plan to address an agencies "planned response to extraordinary emergency situations associated with natural disasters,..." (Governor's Office Of Emergency Services, 1985).

### **The Organization Of Disaster Preparedness**

There must be many different ways of organization within the various agencies to allow for the uniqueness of each school district. Most of the governmental documents reviewed refer to agencies other than school districts. Due to the nature of the operations of districts, special consideration must be

given to the organizational structure of the schools. (California Specialized Training Institute, 1988) It is not the authors' contention to try and dictate how the individual plans should be constructed or carried out. Later discussion will address some of the current recommendations and requirements that will effect what school districts' responsibilities will be in the future.

For the purpose of this study, disaster preparedness will be defined as the planning and testing of plans to mitigate the loss of life and property in the event of a natural or man-made disaster. The person responsible for the coordination of this disaster planning may have more than one duty or specific job title within any district. This would be especially evident in smaller districts. This person is responsible for developing the school district's emergency plans.

This study will examine the duties and level of training possessed by the person, at the various school districts, responsible for disaster preparedness. The study will cover only the 56 school districts in San Bernardino and Riverside counties. The California Specialized Training Institute had recommended, in an unpublished report, that a comprehensive survey of every district in California be done to assess the level of emergency preparedness. This was determined to be to large a task to be addressed as part of this study.

The parameters of the survey were as follows: the questionnaire in the form of a descriptive survey, a cover letter and a stamped, return-addressed envelope was to be sent to survey participants. If the response rate was below 75%, a follow-up letter and survey was to be sent to any district that had not responded by the requested due date. Additional follow-up may include a phone

calls or personal visits to those districts not responding by the second requested due date.

It is hypothesized that less than 25% of the persons responsible for disaster preparedness in school districts have the necessary training to perform that task. This figure was developed after discussions with various state, county, and local government agencies that work with school districts as part of their own emergency planning process. Many of these officials did not believe that most districts put the level of intensity into the planning process as needed. Part of the problem is the funding of the training and the acquisition of supplies for emergency preparedness

The survey results will be displayed in graphic and written formats. Results from the survey will be forwarded to the State Offices of Emergency Services and their training division The California Specialized Training Institute. Additional copies will be sent to The State Department of Education, the governor's office, and any member of the state legislature willing to sponsor additional legislation. This legislation is needed to fund the training of school district personnel in disaster preparedness.

## Chapter Two

### Design Of The Study

The survey was developed with the help of several other professionals in the disaster preparedness field. The author met with the risk managers of both San Bernardino and Riverside county schools. Local police and fire agencies were contacted to obtain their ideas. Additionally, officials of the California State Office of Emergency Services were utilized. These officials were given an opportunity to have questions included that would assist them in developing or enhancing their disaster planning and training programs.

### Method

#### Subjects

The subjects of this survey were the 56 persons responsible for disaster planning in San Bernardino and Riverside Counties school districts. In all but four cases, the person that filled out the survey was, in fact, the person at the district level responsible for disaster planning.

#### Survey

The survey was designed to address the following objectives:

- To determine which titled position at the district level is most often delegated the task of disaster preparedness.
- To determine what percentage of that title or position is devoted to disaster preparedness.

- To determine the average length of time that the person in that titled position has been performing the task of disaster preparation.
- To determine the level of expertise or training that the position/person has had in disaster preparedness.
- To determine the current status of the district and site disaster plans either current or in need of an update.
- To determine the current status of the District Emergency Operations Center and the ability to communicate with sites and local government.
- To determine the average time between testing of a school district's disaster plan.
- To determine the level to which the district level staff person assists the site level staff in the development of individualized site plans.
- To determine what percentage of those surveyed feel that district disaster preparedness should be a full time position.

In developing the survey, the author met with various city, county, and state officials in addition to several people that are actively involved with disaster planning and preparedness. Many of these people had specific information they thought should be included in the survey. Every attempt was made to devise questions that would answer the questions of these officials and meet the objectives of the survey.

### **Implementation**

This survey was mailed to the 56 school districts in San Bernardino and Riverside counties. These two counties were chosen due to the wide diversity and range of conditions present. The two county area offers large areas of



sparsely populated regions and urban cities with dense population. The terrain of the area is also highly diversified. San Bernardino and Riverside Counties have large expansive desert terrain and ranges of mountains. Another consideration was the proximity on or near active earthquake faults. The purpose of this study was to examine the level of training and duties of the people responsible for disaster planning in these two Southern California's school districts. Additionally this study will look at various elements of disaster preparedness and support services of these school districts.

On October 26, 1992, the survey was mailed to 56 school district's main offices in San Bernardino and Riverside counties. The surveys were addressed to the Coordinator of Disaster Planning, RE: Disaster Planning Survey. Because of the current budget constraints, personnel within the district office may have had their duties reassigned on an as needed basis, it was not possible to mail the survey to a specific person at the districts as there was no current listing of this specific job description.

The questionnaire, a cover letter and a stamped return-addressed envelope was sent to survey participants. Information was requested to be returned by December 4th., 1992. Since the response rate was below the 75%, a follow-up letter and survey was sent to the nineteen districts that has not responded by the requested date. By January 4th. 1993, eleven districts had not responded to the second request for the information. This produced a return rate of 80 percent. Even though this was within the original parameters of the expected response rate, the author made phone calls to each of the remaining districts to ascertain the name of the person that had the responsibility for disaster preparedness. When

possible, the author explained the purpose for the survey and asked for assistance. After those contacts were made, a third mailing was made. This time the survey was mailed directly to that person responsible for disaster planing.

On February 1st., 1993, 51 of the 56 school districts had responded to the survey. This provided an overall response rate of 91%. Of the 33 school districts in San Bernardino County, 29 had responded. This was a response rate of 88% from San Bernardino County Schools. Riverside County School had a response rate of 96% with 22 of the 23 districts responding.

On May 1st., 1993, two additional surveys were received by the author. Because of the size of these two districts, the author decided to include the responses. The final totals of the survey includes responses from 95% of the school districts surveyed. While the total from Riverside County Schools remained at a 96% response rate, San Bernardino County's response rate increased to 94%.

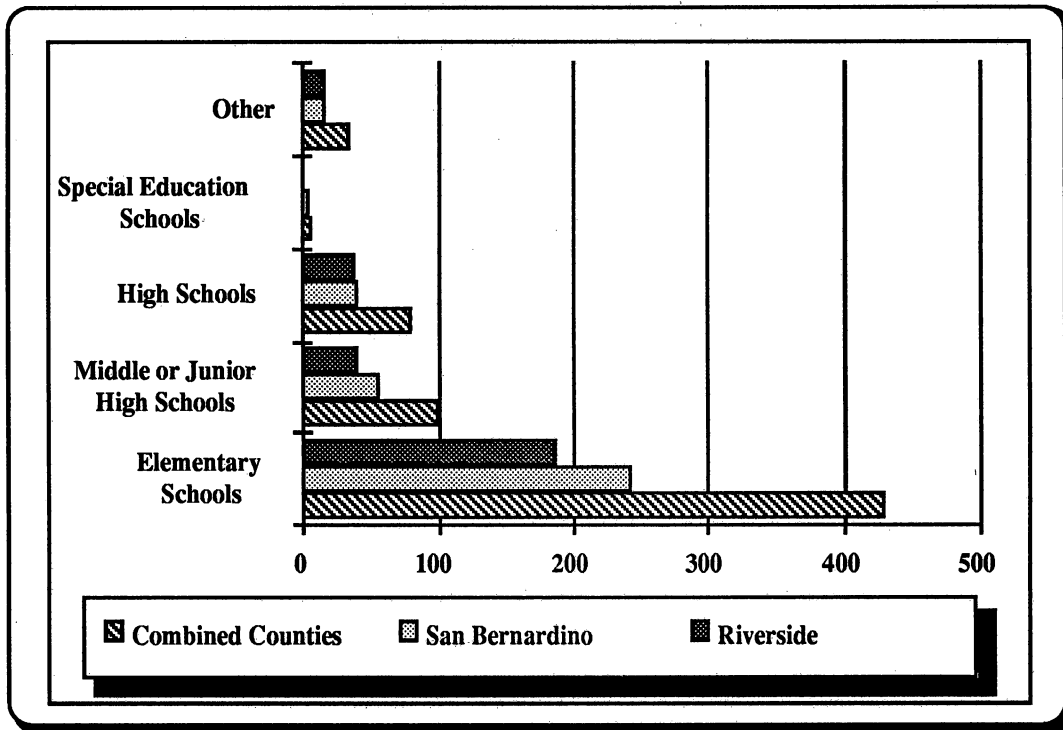
## Chapter Three

### Results Of The Survey

On February 1st. of 1993 the author determined that if responses had not been received that they would have to be excluded from the study. As of that date, 91% of the 57 school districts surveyed had responded. San Bernardino county had a response rate of 88% with 29 of the 33 districts returning surveys. A better response rate was achieved by the school districts in Riverside county with 22 of the 23 districts returning the survey for a total of 96%.

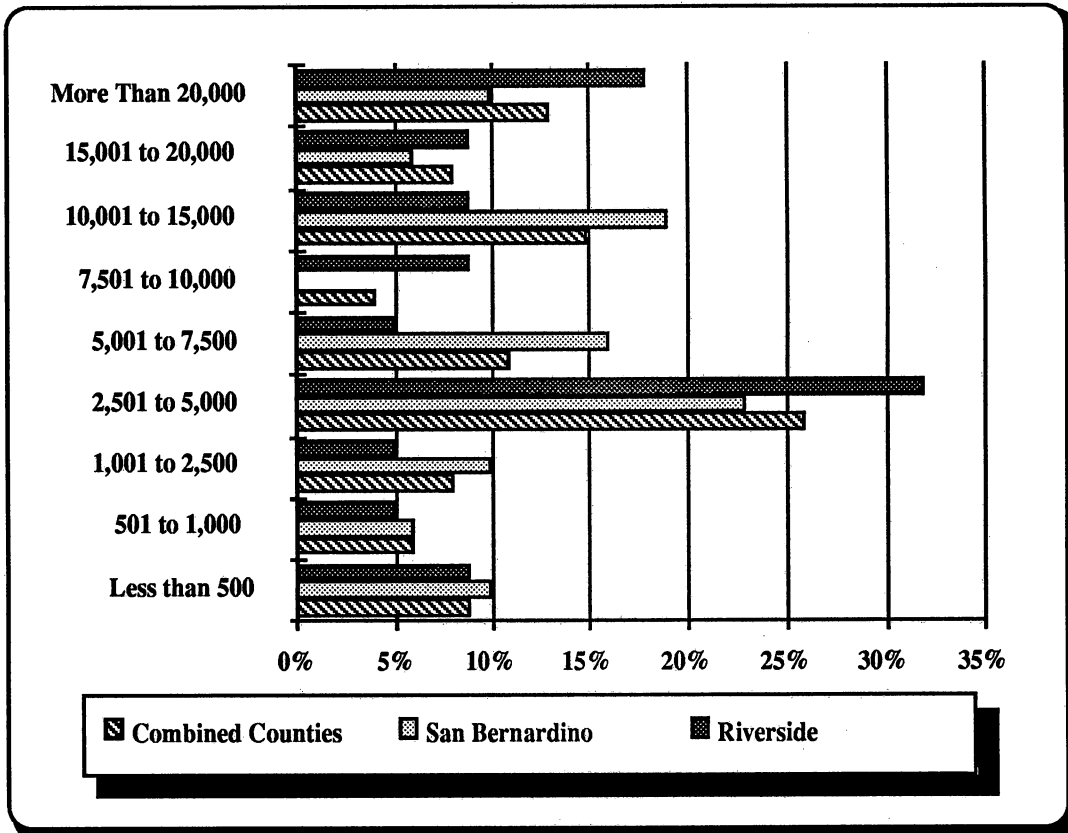
After this closing date, two additional surveys were received as of May 1, 1993. Due to the size and location of the two additional districts, the author decided to include these districts in the results. The response rate was increased to 95%. The reported response rate from San Bernardino County now stands at 31 of the 33 districts responding for a 94% rate with Riverside County's response rate remaining unchanged at 96%.

The 53 school districts were broken down into two categories. The first category used was the type of schools within each district (see Figure 1). Those surveyed were asked to divide the total number of schools in their respective districts into the different types of schools. The 53 responding districts are responsible for a total of 657 schools. This includes 431 elementary schools, 100 middle or junior high schools, 82 high schools, and 44 schools that were listed as other than traditional schools. Eight other schools were classified as special education schools. Of those 44 schools listed in the category of other, the majority were described as continuation schools.



**Figure 1. Numbers and types of schools**

The second method of grouping the districts was by average daily attendance (ADA) (see Figure 2). Responding districts were divided into one of nine groups according to the districts size. The 53 responding districts were fairly evenly spread across the groupings with districts having between 2500 and 5000 students being the largest division with 26% of the districts falling in this category. The surveyed districts are responsible for approximately 524,987 students.

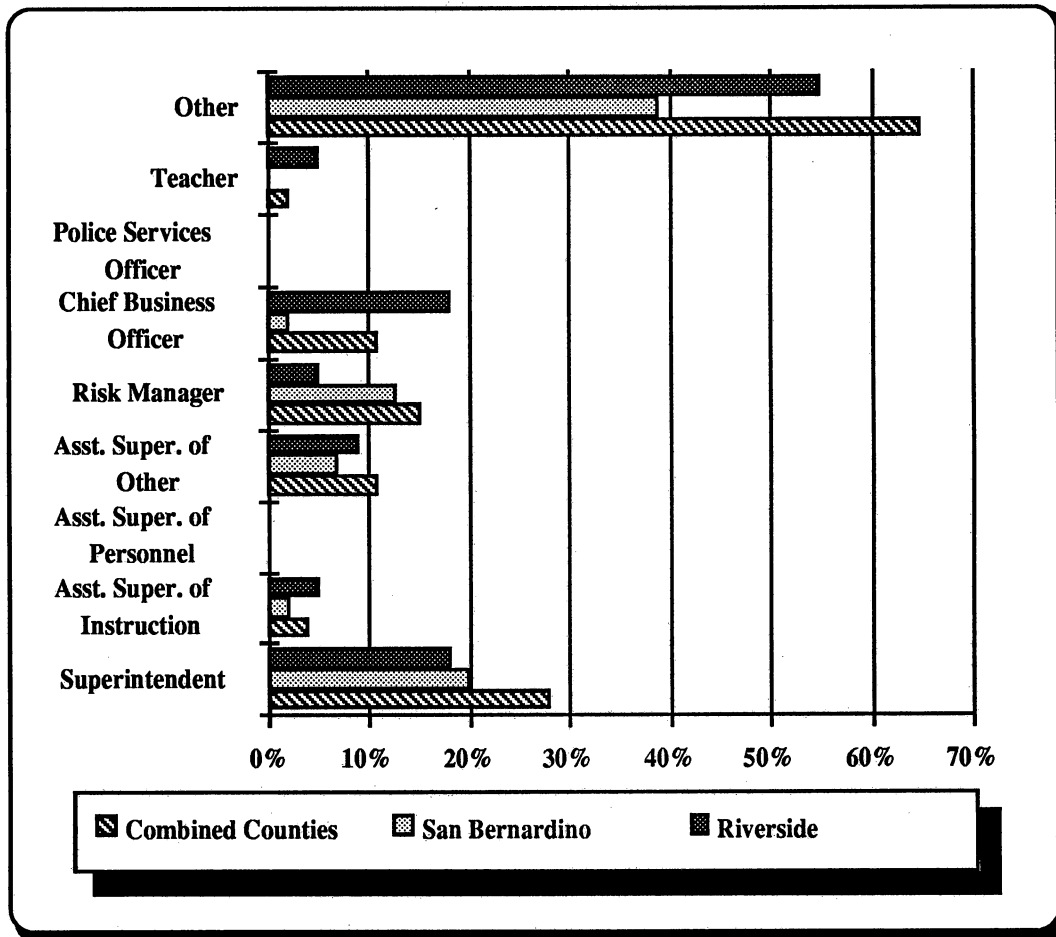


**Figure 2. School districts by size**

As mentioned previously, five districts had not responded as of February 1, 1993. But, after recording the results from the two districts surveys that were received late, this left only three school districts whose surveys had not been received by May 1st, 1993. These three districts are responsible for 25 elementary schools, 6 junior high and middle schools, and 7 high schools. The average daily attendance for these three schools totals approximately 23,775 students according to the 1992 edition of the California Public Schools Directory.

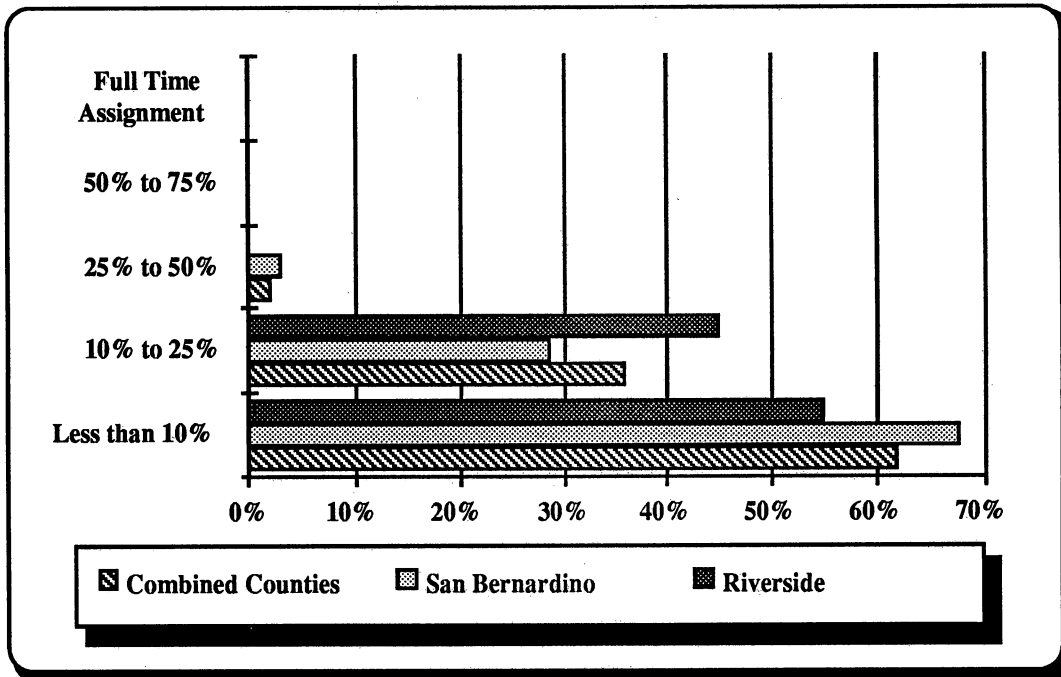
These schools were ranged in size from 2,800 total students to over 16,000 students in the district.

The fifth question of the survey dealt with the job title or current position of the person responsible for disaster preparedness at the district level. Due to multi-tasking of personnel at the district office, many respondents listed several of their responsibilities. Of the job titles listed in the survey, the superintendent had the highest percentage with 28% (see Figure 3). Other job titles not listed in the survey received an even higher percentage spread over several other job titles, of those positions, eight people were from district business offices, eight others from the maintenance, operations and transportation department, four facilities personnel, and only three people that stated their main job description as disaster preparedness coordinator.



**Figure 3. Who is responsible for disaster preparedness?**

Participants in the survey were asked what percentage of their time was involved with disaster preparedness for their districts (see Figure 4). Sixty-Two percent of those answering responded that they spend less than 10% of their time preparing the district for disaster. An additional 36% devote between 10% and 25% of their duties to disaster preparedness. There were only two people that spend more than 25% of their time doing disaster work.



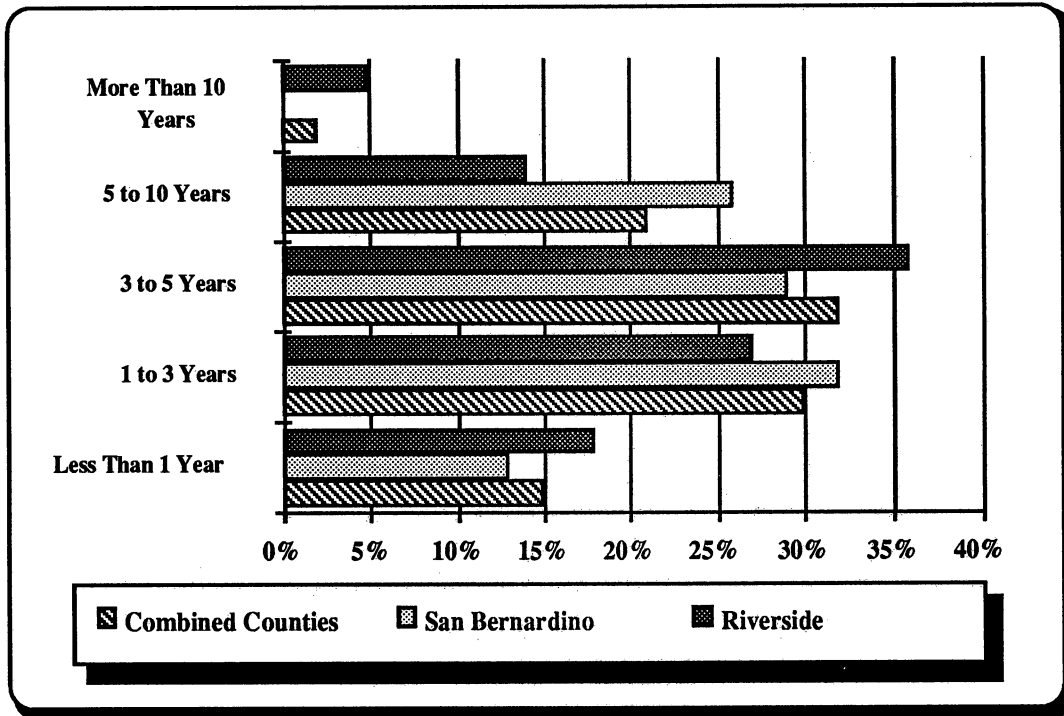
**Figure 4. How much time is spent on disaster preparedness?**

Another question of the survey asked what the prior assignment of duties were for the person responsible for disaster preparedness. This question elicited the most diverse responses of the survey. Responses were wide-spread, from superintendent to classroom instructor. The wording of the question did not allow for indication of a time factor which would have indicated when this change happened.

The length of service in the position of disaster preparedness coordinator was addressed by the survey with the following results (see Figure 5). Fifteen percent had been responsible for disaster preparedness for less than one year. Thirty percent of those responding have been involved with the duties for one to three years. Thirty-two percent had been in charge of the planning tasks for three

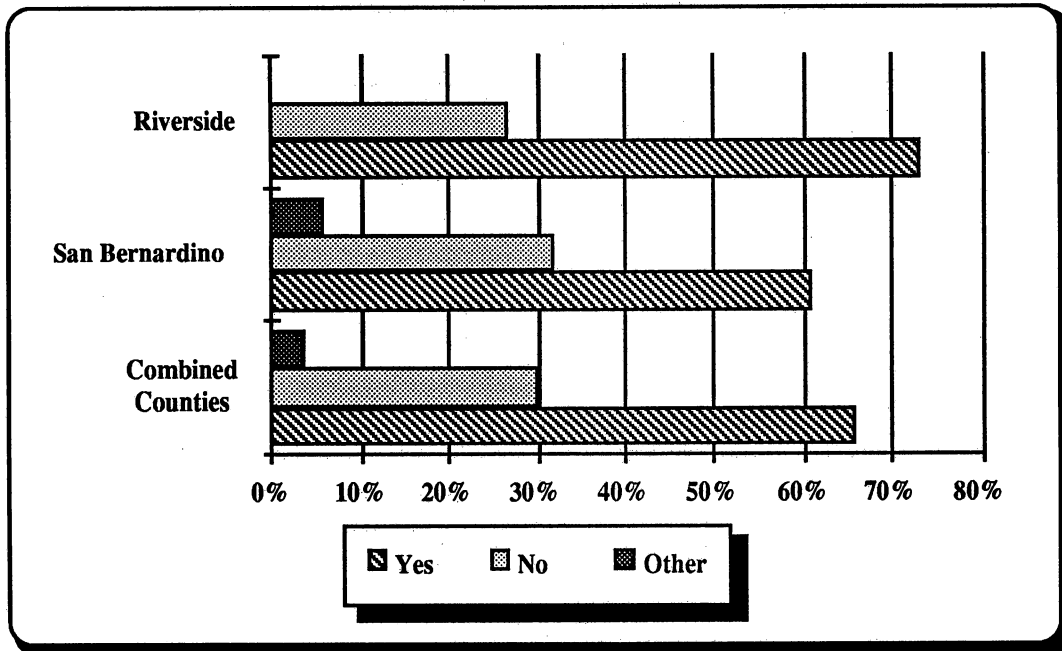


to five years. Personnel totaling 23% reported having five or more years of service in disaster preparedness coordination.



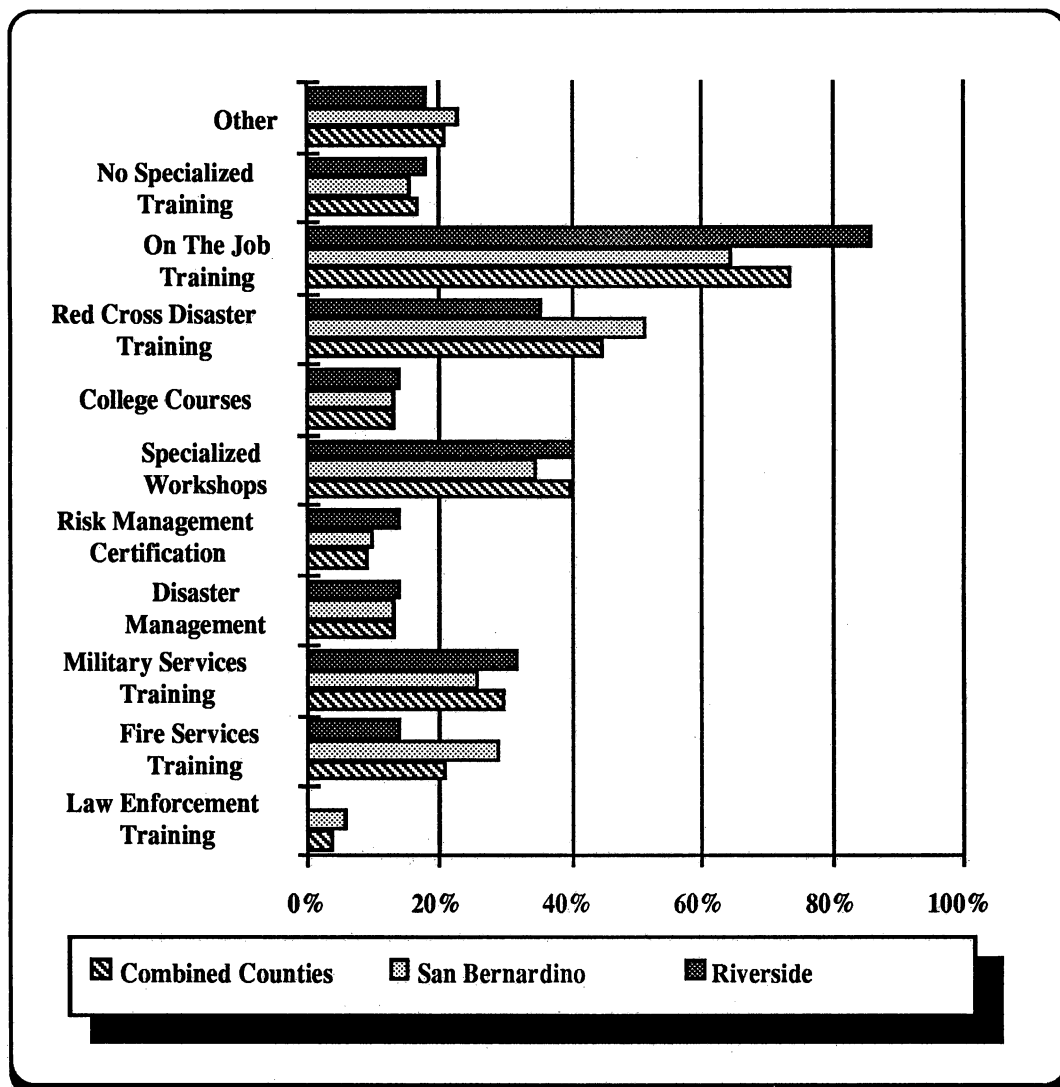
**Figure 5.** How long have you been responsible for disaster preparedness?

When asked if the respondents believed they had enough training to perform the duties required for disaster preparation, 66% stated they felt the level of training they have was sufficient (see Figure 6). The remainder of the survey group, 34%, believed that they did not have the level of training necessary to properly carry out their jobs or believed that one can never have enough training.



**Figure 6. Do you have enough training?**

The type of training that the people surveyed had was addressed in terms of specialized training for disaster planning (see Figure 7). Again respondents were asked to mark all that applied allowing for answers. Seventy-four percent of those answering this question listed "on the job" training as one element of their training. Forty percent of the group had received training at specialized workshops such as those offered by the California Specialized Institute in San Luis Obispo, California. Only 17% of the surveys stated that they had received no specialized training in the field of disaster planning.

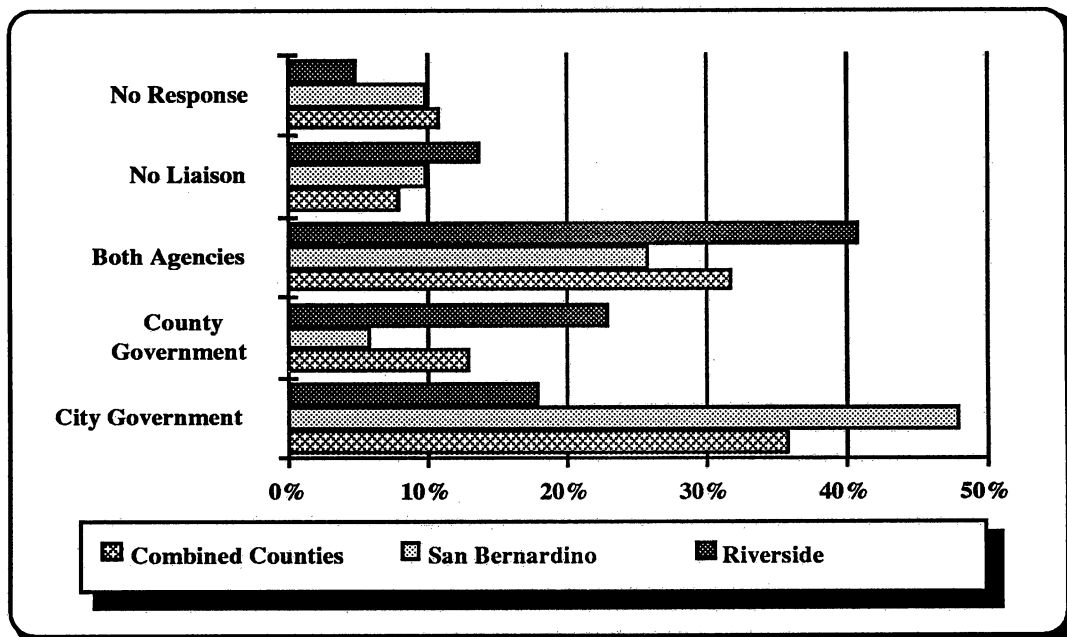


**Figure 7.** What type of training do you have?

After the respondents to the survey had completed the section about the specific information on their own training, the survey looked at the duties of the district disaster planners. When asked about actively working with all school sites in disaster planning, the majority, 75%, answered that they do work with each

site. Additionally, 87% of those surveyed stated that they also assist each site in obtaining needed materials and disaster supplies. Seventy-seven percent of the participants in the survey stated that they assisted in arranging for in-service training of district personnel.

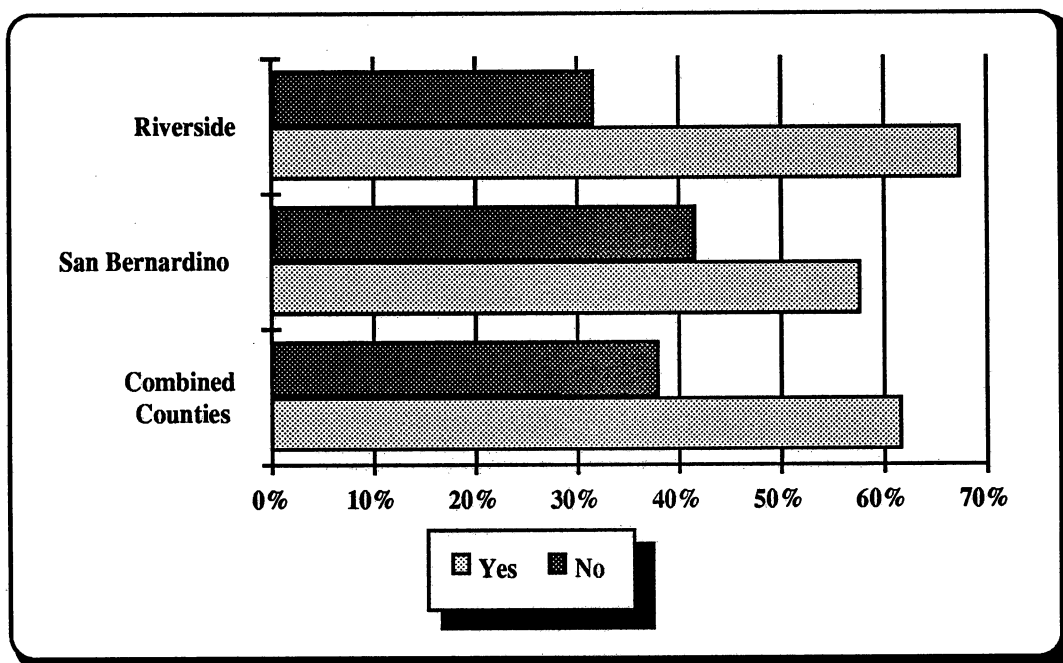
When asked about working with other local government agencies, 81% responded that they had a liaison with either city or county government (see Figure 8). Eight percent responded that there was no direct connection with their district and outside agencies. Of those answering that they had a liaison, 32% had an affiliation with both city and county offices of emergency services. Thirty-six percent worked with only the local city agency and 13% worked with just the county emergency operations center.



**Figure 8.** With which government agencies do you have liaisons?

Question 15 of the survey was a two-part question dealing with whether or not those surveyed felt disaster preparedness should be a full time position or not. In the first part of the question, 11% responded that the position of disaster planning should be a full time position. Seventy-two percent felt that "full time" disaster preparedness was not necessary and 15% responded other than full time with 20% not responding to the question. The second part of the question had a flaw in the wording that invalidated the question from being used as intended. However, of those that did respond to the question of how much time should be devoted to this position, 11% felt it should be 25% of a person's duties with an additional 11% believing that disaster preparedness should be at least 50% of their assigned duties. Due to the miss-worded question, 72% of those surveyed did not respond to this question. The majority of the districts that responded that this does not need to be at least 50% of their duties were from smaller districts

The survey asked if each of the districts have committees to help in disaster planning (see Figure 9). Sixty-two percent responded that they do use committees while the other 38% did not. In matching this data with the size of the districts that responded in the negative, there was no correlation between the size of a district and the use of a disaster committee. Districts both large and small choose not to use the team concept.

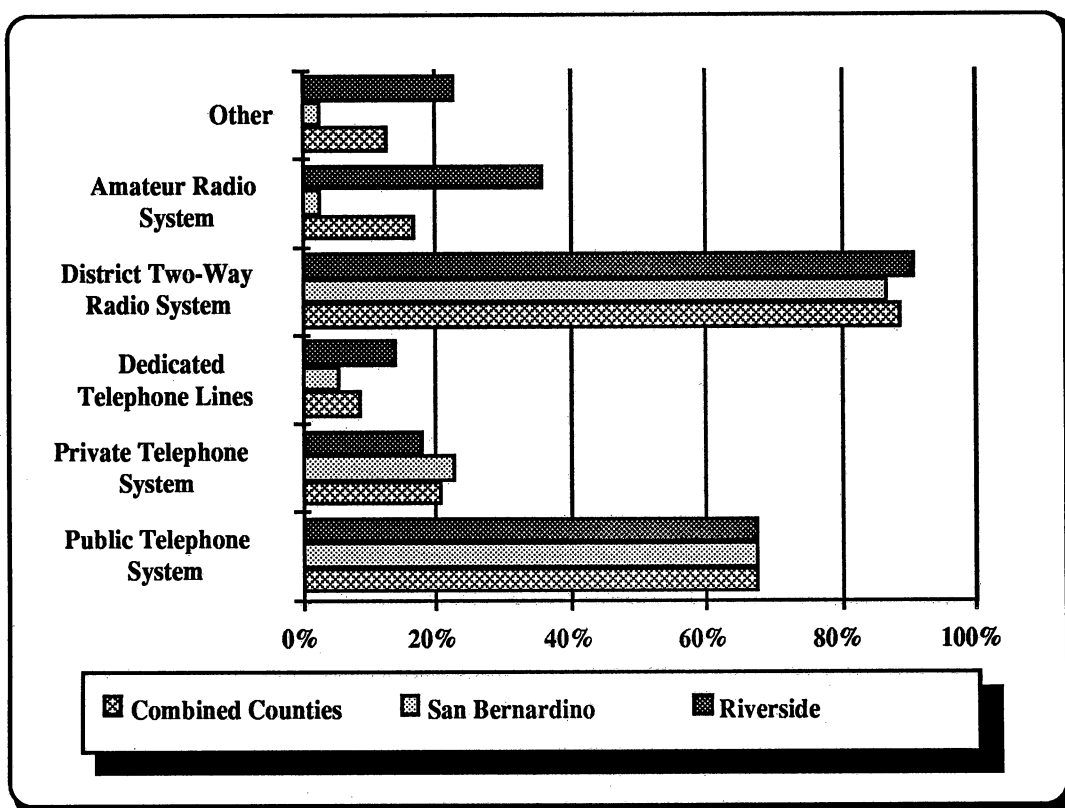


**Figure 9. Does your district have a disaster committee?**

An emergency operations center (EOC) is the main communications center for a district during a disaster. Of the respondents, 62% had a district EOC. In a majority of those districts, the EOC was located at the district office or at a district support building such as the maintenance or transportation office. Thirty-eight percent of the reporting districts do not have a district emergency operations center.

Communications during a disaster was the topic of questions 18 and 19. The disaster coordinators of the districts were asked what type of communications they would utilize in the event of a disaster. According to the results of the survey, most communications within the school districts could be carried out by district two-way radio systems (see Figure 10). Eighty-nine percent of the

districts responded that they had these systems at their disposal. In addition to the two-way radios, some of the districts (17%) have the capability of being able to communicate to the school sites by using amateur radio systems. Although only 68% of the schools listed public phones as a communications capability, the districts would have this at their disposal if the phone company lines were intact. Additionally, some of the districts have private (21%) or dedicated telephone systems(9%) that could be used if available.

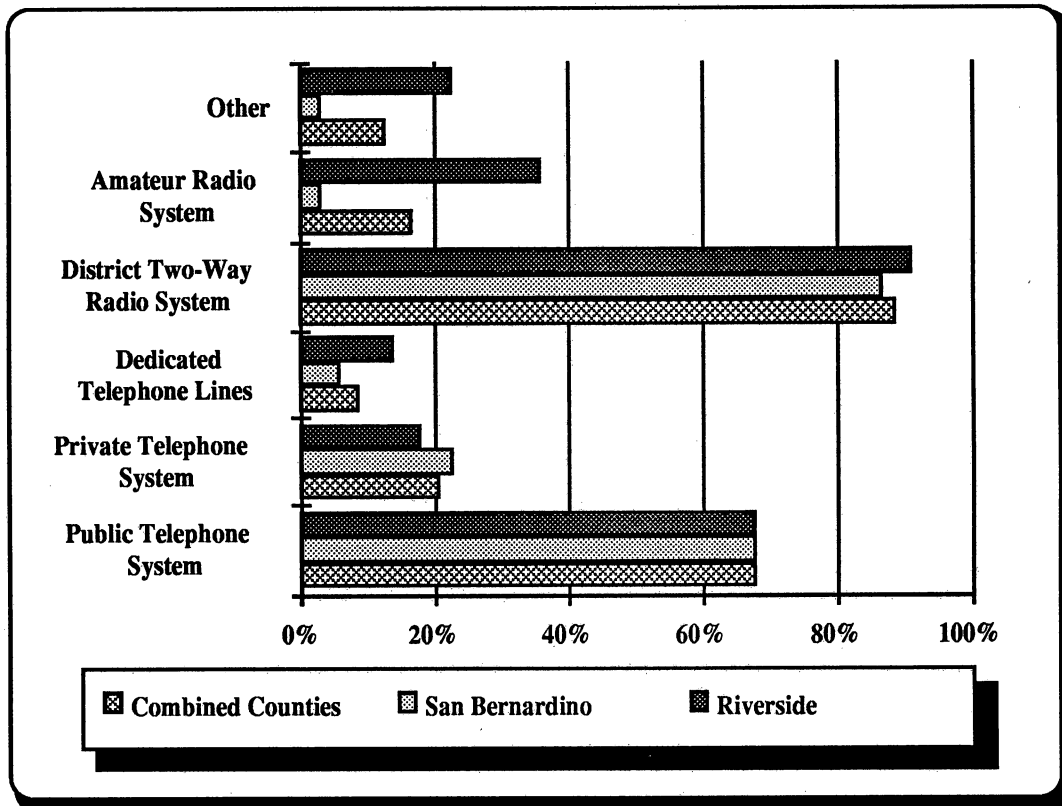


**Figure 10.** What types of communications do you have between schools?

When it came to district communications with outside local government agencies, 81% of the districts would rely on public telephone systems while a total of 15% would use private or dedicated telephone services (see Figure 11). Forty percent of the districts have the capability of using the district two-way systems when communicating with local government. Amateur radio systems could be used by 23% of the districts.

From the evaluation of the data collected, it appears that Riverside County has developed a greater reliance on amateur radio systems than has San Bernardino County. 36% of the school districts in Riverside County have the capability of using amateur radio between schools as compared to San Bernardino's 3%. Communications with local governments via amateur radio was also greater in Riverside County. Thirty-six percent of the districts in Riverside County could use these radio systems as compared to only 14% in San Bernardino County.

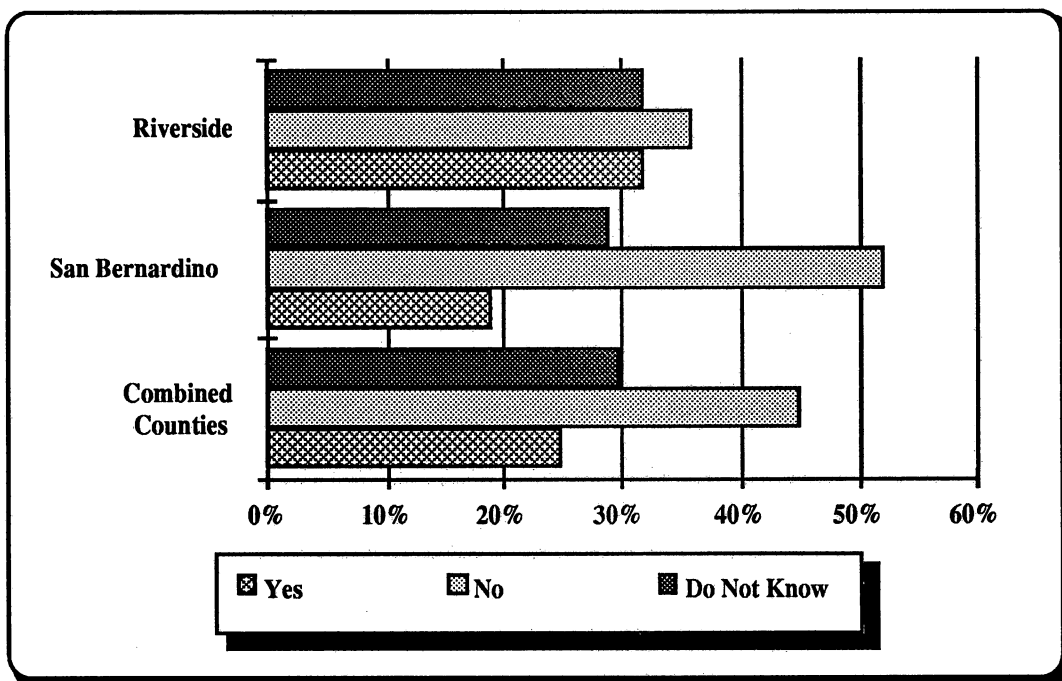




**Figure 11.** What types of communications do you have with outside local government agencies?

Another topic of concern asked to be addressed by state and local governmental agencies was the type of command system language utilized by the various districts (see Figure 12). When asked whether or not the districts used what is known as "incident command system" (ICS) language, 25% of the districts responded "yes" with 75% of the districts did not know if the incident command language was used or were not using the ICS language. The Incident Command System is an emergency management, response and recovery system used by various state, county, and local governmental agencies. This allows any

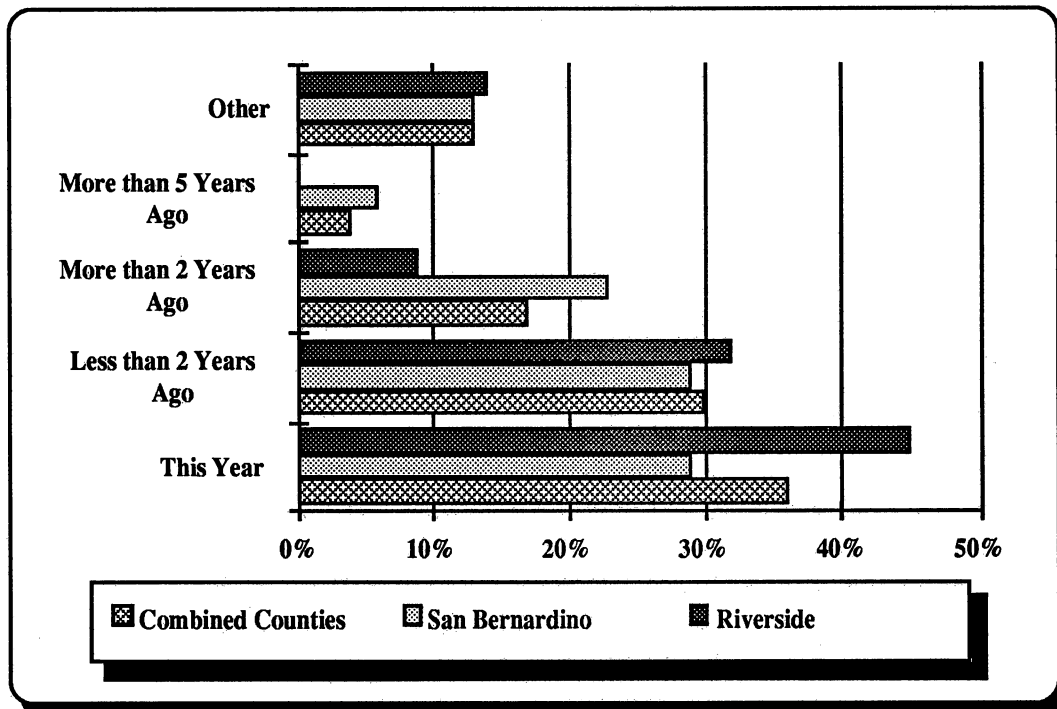
agency to adjust the organizational structure and response to address any size of emergency incident. This system allows agencies to talk to each other in the same language during emergencies. Because of the flexibility of the ICS, an organization only activates those parts of that organization that have a need to be alerted to deal with each emergency are activated. In December of 1994, this will be required.(Senate Bill No.1841)



**Figure 12.** Does your district use the incident command system language?

One of the major components of this survey was information on the disaster plans developed by all of the districts (see Figure 13). Sixty-six percent of the districts disaster plans had undergone major updates within the last two years. Many of the districts responded that they update the disaster plans yearly.

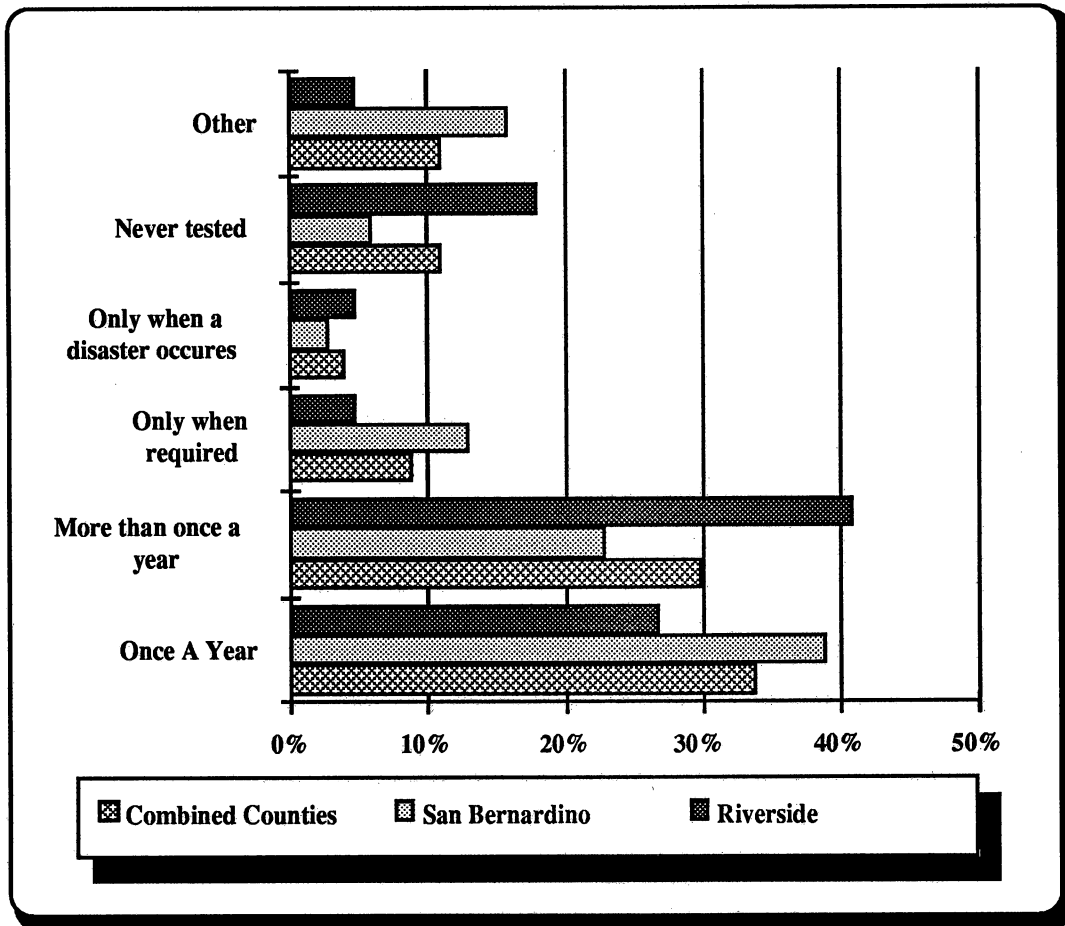
Seventeen percent of the district's plans were two years but under five years old with 4% of the districts having plans that were over five years old. Thirteen percent of the districts responded that their plans did not fit into the categories listed.



**Figure 13.** When was the last time your disaster plan was updated?

Testing of the district's disaster plans in 64% of the districts occurs at least once a year with 9% of the districts testing only when required (see Figure 14). Eleven percent of the districts answered with an answer different than the choices given. Examination of their responses to the survey showed that these districts also tested at least once a year. Assuming that the districts that only test when required follow the Department of Education guidelines, this brings the total of

districts testing at least once a year to 85%. Districts that have never tested their disaster plans or that will only test their plans in the event of a disaster totaled 15% of the districts surveyed.



**Figure 14.** When was the last time that the district's disaster plan tested?

In order to evaluate a plan before an actual emergency, the plan must be tested. There are three basis types of the testing, these include table top exercises, functional exercises, and full scale exercises.

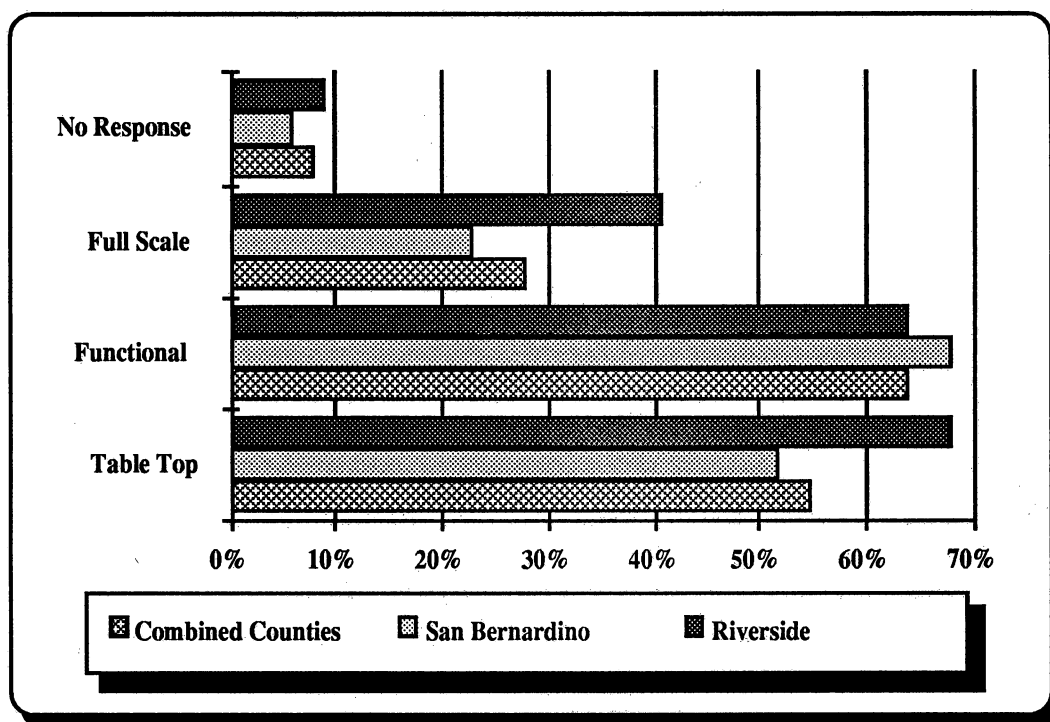
Table top exercises are activities in which those people that have emergency management responsibilities gather to discuss simulated emergency situations. As in all testing of emergency plans, the purpose of testing is to evaluate the plans and procedures developed to deal with any situation. Table top exercises are usually a non threatening in their format and should have a small stress factor. These drills should be a minimum of four hours in duration. (California Specialized Training Institute, 1992)

Functional exercises are designed to evaluate the capability of one or more functions of the disaster plan. This testing is usually under a time constraint with an evaluative process at the end of the drill. These drills usually last from four to eight hours and are very stressful. Functional exercises may take place in the emergency operations center, in the field or both. (California Specialized Training Institute, 1992)

The most extensive type of drill or testing is the full scale exercise. This drill is designed to evaluate the operational capability of the emergency management systems. This drill includes the mobilization emergency personnel and resources and the actual movement of those resources. This is the most labor intensive type of drill in that it should last at least eight hours. The full scale drill tests to the limits the emergency response plans and therefore becomes a highly stressful environment. (California Specialized Training Institute, 1992)

The type of testing utilized most often by school districts was the functional type of drill (see Figure 15). Sixty-four percent of the districts used that type of drill. Table top discussions came in with 55% of the districts using

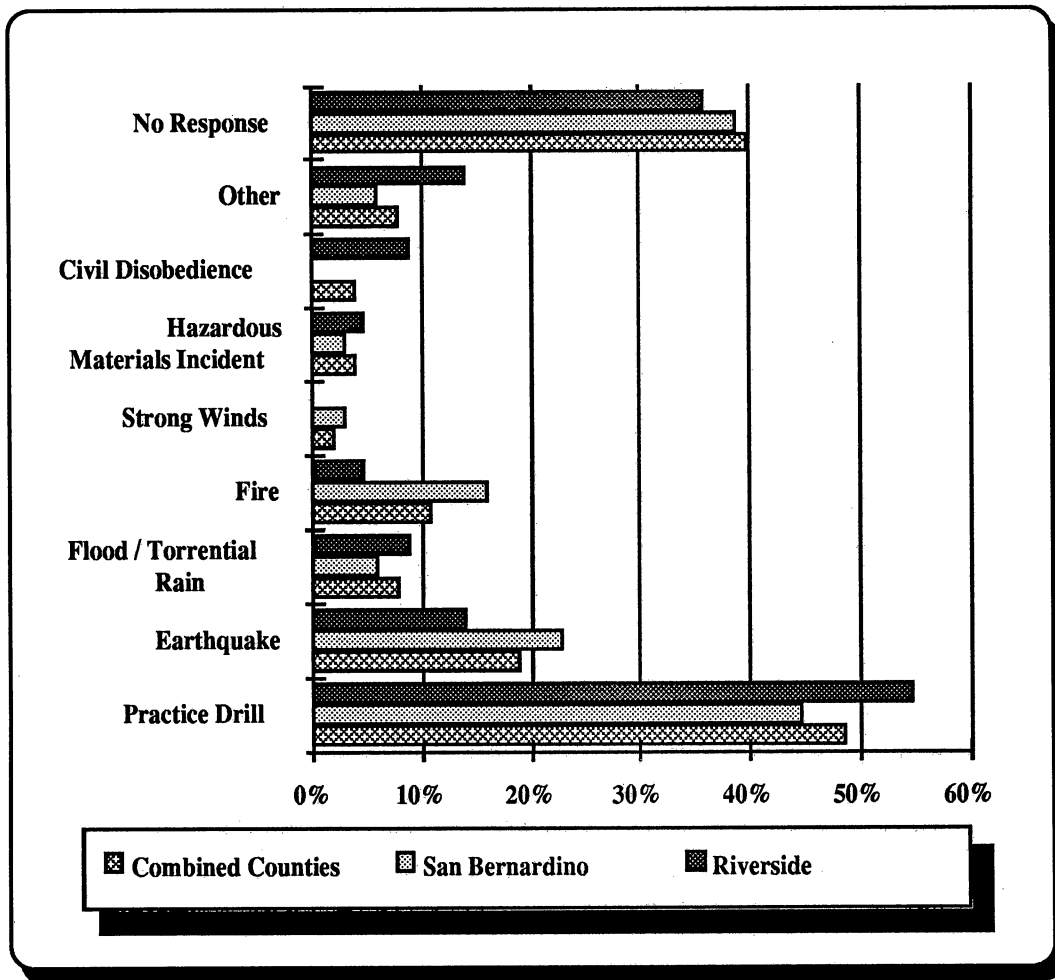
this form of preparedness while 28% of the districts had used full scale drills as their type of testing. Eight percent of the districts had no response to the question.



**Figure 15. What type of testing does your district utilize?**

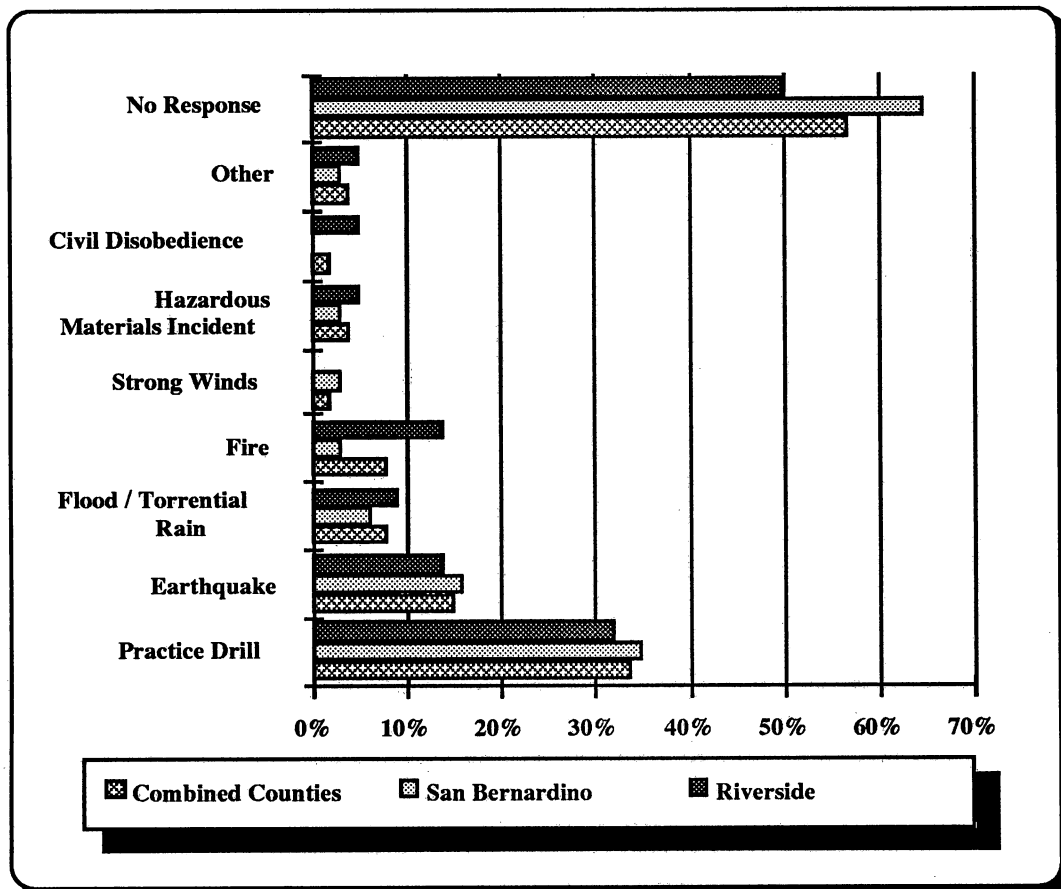
The districts were asked when and for what reason they have activated the district emergency operations center (EOC). Full activation requires that all personnel on the emergency management team be alerted and are expected to respond to the command center to perform their assigned duties. As to when the districts fully activate their EOC, most of the districts responding to this question activate during the month of April which coincides with Earthquake Preparedness Month in the state. The reasons for activation were varied (see Figure 16). Forty-

nine percent of the districts responding stated that the activation was part of a practice drill. Other reasons included earthquakes(19%), flood or torrential rain(8%), fire(11%), strong winds(2%), hazardous materials incident(4%), civil disobedience(4%), and other reasons(8%). Forty percent of the districts did not respond to this question.



**Figure 16.** For what reason was the district's emergency plan fully activated?

There were fewer districts responding to the question regarding partial activation of the emergency operations centers. There was no pattern as to when the EOC was opened (see Figure 17). The reason for activation was also varied. Fifty-seven percent of the districts did not respond to this question. Partial activation includes only those people on the emergency management team that have a need to be activated. In many cases this may only be two or three personnel.



**Figure 17.** For what reason was the district's emergency plan partially activated?



## **Chapter Four**

### **Discussion and Conclusion**

The author was overwhelmed and pleased by the response to the from the 56 school districts surveyed. There was never any contention about the level of concern when dealing with the health and safety of the students and employees of the districts. The problem was the concern about the level of training the people at the district level possess with regards to disaster planning.

#### **The Need for Specialized Training**

This survey came about after the author had attended several conferences at the California Specialized Training Institute (C.S.T.I.) in San Luis Obispo, California. At those conferences, the author talked to many state, county , and local government agency representatives with regards the involvement of the school districts in the disaster planning at the various levels. Many of the emergency services staff members from the same city as the author were not aware of who had the responsibility for disaster preparedness for the school district. These city staff workers told the author that the school district representative was not always the same person at the emergency operations center meetings. Additionally, in talking with the state officials at C.S.T.I., they said the participation by school personnel was very sparse. The author decided to attempt to evaluate the level of readiness in a small portion of the state.

The staff of C.S.T.I. believe that there is a need to develop specialized training for school districts due to the unique structure of the schools. With regards to disaster planning, unlike government centralized command structure,

school utilize a more decentralized structure with each site primarily responsible for their own planning for disaster. Officials from the state believe that their should be more support from the district office in overseeing the planning stages of preparedness. In two separate, unpublished documents, the state officials expressed a desire to expand the training at C.S.T.I. to include special training designed just to meet the needs of schools. As with the school districts themselves, the state budget problems have prevented C.S.T.I. from offering this specialized training. For now, C.S.T.I. will continue to include schools training within their emergency management courses for local governments.

#### **District Size and Level of Preparedness**

In reviewing the raw data from the survey, there did not appear to be any correlation between the size of the district and the level of preparedness of that district. However when it came to who was in charge of disaster planning, size differentials became evident. When the district was relatively small, the superintendent was the person most likely to do the planning for the district. This is mainly because there are fewer people to delegate duties to. Many of these superintendents also double as principals, personnel directors, and head of any other task needed. As the districts grow in size, the job of disaster preparedness is given to others. Many of the districts utilize risk and safety managers to do the district's planning while others tend to rely on managers of other district services such as maintenance, operations, and transportation. The author does not contend that there is any correlation between the level of preparedness and who at the district level oversees that task. It ultimately comes down the elected school board members and superintendents responsibility to see that their district has

taken all necessary steps to prepare for any potential man-made or natural disaster. The school board and superintendent must make sure that this person has been given all the necessary training needed to properly perform the duties of the extensive task.

### **Time Spent on Planning**

The amount of time spent by personnel on disaster preparedness did not necessarily increase as the size of the district increased. The personnel that spent the most time on preparedness were those with the job title of risk managers. Most of the others spent less than 10% of their duties preparing the district disaster plans and seeing that all schools were in compliance with state education codes. With the eminent danger of major earthquakes and the rise of other intangibles such as civil disobedience, the author feels that in the mid to larger districts, the amount of time spent in preparing for a disruption of services, caused by a major disaster, needs to be increased. A majority of the people responsible for preparedness had been executing those duties form one to five years. Here again the length of time in this position does not reflect on the capabilities to the person doing the planning. It has come to the attention of the author that many of disaster planers are doing so many other tasks within the districts that disaster planning gets pushed aside.

When asked about the amount and type of training that they had to enable them to do disaster preparedness planning, nearly two-thirds of those surveyed responded that they had enough training to do their job properly. The original contention of the author was that less than twenty-five percent of the personnel responsible for disaster planning had enough training to carryout that task.

Review of the raw data shows that there has been an effort towards proper training of staff. Many of the people surveyed had multiple types of training in emergency preparedness. The author was surprised to find that forty percent of those surveyed had specialized training like that offered by C.S.T.I.

### **Types of Training**

In reviewing the other types of emergency training with state and local emergency officials, it was learned that most of the other types of training deal with a reactive posture after the event has occurred. These other types of training spend very little time on pre-event planning. Almost none of the other types of training deal with the specialized needs of school districts. Nearly three-fourths of those surveyed said that they had "on-the-job training". The survey did not distinguish exactly what was meant by on the job training. Several state officials believe on-the-job training has its place and can be an extremely useful tool in disaster planning if used properly. If those people responsible for planning get together after an event and discuss what happened, what went right in their respective plans, and what went wrong with their plans, then on the job training works as a planning tool. Working with other personnel, from other districts, can be a very important part of pre-event training as well. Districts could enter into mutual aid agreements with other districts, local governments, and businesses to lock-in materials that would be needed immediately after a major event.

The unfortunate part of the responses to this part of the survey were those that said that they had no specialized training. These are the people that have the responsibility for making sure that our school districts are able to take care of its students and employees. The districts must take responsibility to insure the public

it serves that the people placed in the positions of disaster planning have received enough training to carry out the duties of that job.

### **Emergency Operations Center**

The majority of school districts have established a location within the district to serve as the district's Emergency Operations Center (EOC). This facility is usually a multi-purpose room that can be turned into a center of communication with all sites and outside agencies in the event of a disaster. The EOC is where all the various departments of the school district makes the decisions on who, what, when, where, and how to send needed support to the various school sites. Outside agencies and school district liaisons, located at other governmental EOCs, are able to contact a centralized command to assess the damage to and the availability of the schools that may be utilized as shelters. Each district should have a site designated as their EOC. Each member of the emergency response team should be aquatinted with the tasks that other people are responsible for. This would allow for others to substitute in a task that was not previously assigned to them until the entire staff has had time to check into the EOC.

### **Liaison with Local Governments**

Another vital link in times of disaster is the capability of working with the local governmental agencies that serve each district. Whether the schools are in the cities or in the counties, a representative of the district should be located at that agency to help in the coordination of assistance. This person should have a working knowledge of the district policies and recommendations of the elected officers of the district. Additionally, this person should have been in touch with

the local agency as to the potential assistance needed from the district. The placement of a liaison at the local agency increases the lines of communication with outside sources, thereby increasing the capabilities of both agencies to recover faster from the event.

### **Communications**

The type of communication with the sites and local government agencies is one of the most widely talked about areas because of the need to find out and process information about the extent of the damage and personal injuries to the surrounding communities. Communications are vital in obtaining information that will speed needed services to various areas. The phone company has stated many times that the public telephone system will suffer major disruptions during a large quake. The public telephone system is not a reliable source of communication. Likewise, private telephone systems will be enabled to an even greater extent because of the ability of the service and repair agencies to make major repairs in the event of a disaster.

The telephone companies offer several types of special services for emergency situations. Among these systems, dedicated telephone lines are high on the telephone companies priority list as those services to be restored as soon as possible after an event. These phone lines should be considered by all school site and district offices as a major communications link to the outside.

Another telephone system that will have limited use will be cellular telephones. These mobile telephones depend on a system of relay towers that take the weaker signal of the cellular telephone and boost that signal to be transmitted

to other relay towers and on to the final destination. The cellular telephones will have a limited local use only.

There are two highly reliable types of communication that should be utilized. These systems include private two-way radio equipment and amateur radio systems. A majority of the districts surveyed have the capability of utilizing two-way radios. These radios can be used by administrators or their designees to inform the district offices of the current status and needs of each site. Additionally, district vehicles in the field, equipped with two-way radios, will be able to radio in communications about the different sites and could be dispatched to sites where additional help is needed. In the event of a needed evacuation, busses with radios could be notified the safest routes to take the students and staff. Another positive side to two-way radios is that a school district liaison located in the local governments emergency operations center would be able to communicate the districts needs to that local government agency.

Two-way radios have limitations as well. Most of the systems require larger antenna systems and electrical power to broadcast information. Even hand-held units do not have an unlimited power supply. These hand-held units need to be recharged after every 12 hours of operation. Unless the district has made arrangements for a portable power source, two-way radios will have a limited use.

The most reliable and versatile type of communications device is the amateur radio system. These systems are, in some cases, able to transmit very long distances. Although they operate similar to two-way radio systems, amateur radios are able to change frequencies to enable the operator to communicate with several different agencies or sites with only one radio. Due to the federal

licensing of the amateur radio operators, these radios may not be operated by just anyone. Many of the operators carry more than one types of licenses allowing greater versatility in communicating with outside contacts.

Many of the limitations that apply to two-way radios will also apply to amateur radios. They also need a power source and external antenna to increase the range of the radios. The biggest advantage of having an amateur radio operator at each school site and district office is that almost all government agencies utilize radio amateurs as part of their emergency operations center. This gives districts an additional line of communication with governmental agencies. Radio amateurs have had world wide experience in dealing with natural and man-made disasters. Their actions and tireless efforts have brought needed services to damaged areas and they have united family members that have been separated. Districts should utilize any current amateur radio operators in the district and assist other interested employees in earning their license.

### **Incident Command Language**

Another aspect of the communication process is the ability to understand the specific language utilized by the various agencies such as police and fire. The most common type of emergency language is called incident command language. This language has within its usage specific terms which are universal to all agencies utilizing this communication. Senate Bill 1841, also known as the Petris Bill, was signed by Governor Wilson. The importance of this bill will have a vast effect on the ability of all local agencies including school districts. In effect, this bill will require all local agencies and schools to adopt a standardized emergency management system.



By December 1, 1994, a plan will be developed by various agencies. By December 1, 1996, all state agencies shall use the new standardized emergency management system. If any local agency or school district is not using that system in the described time frame, the agency stands a chance of not being able to recover a majority of the costs involved with recovering from a major disaster. The time for schools to act is at hand. The incident command language should be recognized as part of current plans. This will give staff time to learn the language prior to needing it.

### **Testing the Disaster Plan**

The most important part of the task of disaster planning is the creation, updating, and testing of the district's disaster plan. Schools are governed by several laws that require the schools to update their plans on a yearly basis. Most of the school district's surveyed had undergone a major update to their plan within the last two years.

As the schools age, plans need to take into account changes to those structures as well as the construction of new facilities or entire schools. Not only the construction of school facilities, but the construction around the community that affects the schools in more ways than would a major earthquake. The only way to insure the safety of the students is to take an active stance into the development standards in the community they serve.

Testing insures that the plan is workable. Testing can be in several forms from tabletop to functional to full scale drills. Each of these types serves a specific purpose. The command staff should be asked how to handle specific tasks in a low stress drill such as the tabletop. This type of drill allows the

command staff to discuss how they would react to given scenarios. There is no risk to life or property and this allows the staff to work through specific problems without the fear of making mistakes.

The other two types of testing involve the utilization of resources other than those found at the command level. These types of testing increase the level of stress almost to the level of that experienced by those that deal with the actual event. In many cases these larger scale drills will last longer and involve not only school employees but, will include local agencies that also need to test their emergency plans.

Districts must realize that testing of the emergency plans is an extremely important part of the plan itself. As personnel test, they become more familiar with the workings of the everyday aspects of that plan. This allows these routine procedures to become part of the person, allowing that person to concentrate on the more serious or unexpected developments of the real disaster.

### **Disaster Plan Activation**

The school districts were asked when and for what reason the district's disaster plan was activated. Most of the districts responding reported that they test during the month of April. This coincides with the annual disaster month throughout the state. Half of these districts had utilized the activation for the purposes of testing their plans. Many of the others reported that they had activated their Emergency Operations Centers for actual events.

### **District's Duties**

The districts need to take a proactive rather than a reactive position in preparation for a major disaster. The person responsible for preparedness should

be under the direct supervision of the superintendent. This position should be filled by a person that is not afraid to work hard and can work well with people at all levels in the district, community, and surrounding areas. As many of the districts employees live outside of the community, it would be an advantage to the district if the person were a local resident and familiar with the surrounding community.

The following suggested duties to be performed by a person filling this position have been based on guidelines suggested by the State Office of Emergency Services staff at the California Specialized Training Institute.

Recommended duties for the disaster person:

- Work with the district planning staff and disaster committee to develop a comprehensive, general disaster plan to be followed by the entire district. Make sure that the district disaster plan is in the hands of every district employee.
- Work with all school sites to assist them in developing a site plan that conforms to the established district guidelines. This would also include revisions.
- Work with police services in developing a disaster plan for all special after-school events such as football games and plays.
- Maintain and update the disaster plan on a continuing basis, making sure all additional updates are made available to each site in the district.
- Explore all avenues to obtain the necessary supplies and equipment needed by each site. This person should actively seek grants and gifts from civic groups, local businesses, and developers in Fontana.

- Work to see that the district maintains a reliable communications system including dedicated telephone lines and two-way radios at all school sites. This includes establishing the communications network in conjunction with the city emergency operations center.
- Work at the city's emergency operations center (when activated) as a liaison between the city and the district administration. Cooperation with the city is vital.
- Attend all local and regional meetings dealing with disaster response and preparedness. This includes city, county, and county schools meetings.
- Work with outside agencies (Red Cross, police, fire, military, etc.) to establish local contracts and contingency plans.
- Work in anticipation of any disaster to establish a supply line for needed services and supplies from local corporations and businesses. Memorandums of Understanding with these suppliers will insure the quick recovery of the district.
- Work with state and federal officials for training programs, grants, and plan review. (This is offered by the staff if the California Specialized Training Institute, the training division of the Office of Emergency Services for California.
- Work with all district staff to see that they receive all necessary training related to their duties during a disaster at both the district and site level. Examples of this would include First Aid, CPR, fire extinguisher operation, and rescue techniques.

- Organization of the district-wide disaster drill involving city staff, local law enforcement, and fire agencies.
- If certificated, this person or designee, could go to individual sites and talk to the students of our district about what is expected of them during a disaster.
- Work closely with district police services, when the need arises, to use school site for shelters.

Ideally this position should be a full time position. However, with budget constraints, the following could be considered as a low cost alternative. A classroom teacher could be released from a portion of his / her site duties (preferably a teacher with duties other than classroom time) and be reassigned to work at the district level. This person should also be compensated for any additional time spent on district preparedness (such as meetings with government officials and school site teams). Compensation could be done in the form of an hourly adjustment or possibly as a stipend similar to that received by mentor teachers or football coach. The person could be afforded the privilege of attending all of the courses dealing with disaster preparedness that would be beneficial to the district, including the courses offered by CSTI.

Another possibility would be to combine related duties such as accident prevention, hazardous materials management, and disaster planning into this specific job title. This person would also head the district's disaster and safety committees as no one person could possibly do all of the necessary planning and preparation to deal with all contingencies.

## Conclusion

Based on the findings, the author's initial estimate of the readiness of the schools in the two county area of San Bernardino and Riverside counties is greater than first expected. Even with all the work that has been done, it appears that there is a lot more to be done in this field. The state officials recommend that there needs to be a training program developed that specifically looks at the specialized needs of schools. Many good contacts have come from the writing of this report. Many of these people have been instrumental in providing comments and asking questions that lead to further research.

The down side of this research was the lack of information on how schools can best be prepared. Almost none of the literature from state and federal offices addressed any of the specialized needs that schools have. It is recognized that each school is a unique site with unique situations, but, guides on the planning process are very limited. With the diversity of the schools, direction on the planning has to come from the district level. Schools in each district should be operating from the same overall plan with adjustments made for each site.

Additionally, many of the people surveyed called to ask for additional information on how to go about the task of planning for emergencies. There needs to be a source of information that can be utilized by these planners. This could be done at the county level and should be done at the state level. Currently there are very few locations or sources for those people that have been given the task of planning. Many of those disaster preparedness planners had been given the task recently and did not have the necessary training to carry out the responsibilities.

There is a need for all school districts to be prepared for the next major disaster. The community has always depended on the schools to be there. Our responsibility to the community we serve, the students we instruct, and our fellow employees is to be as prepared as possible and to return to normal operation as quickly as possible after the event.

The latest prediction places the location of "The Big One" on a section of the San Andreas directly North of Fontana, in the Cajon Pass. If the prediction is accurate, major damage will occur in the surveyed area and beyond. Schools will play a major role in the recovery of the area. Not only will the schools be used to house those displaced by the event, but they will still be educating the youth of the community. If the event occurs during school hours, the schools will become a place of family reunions and gatherings. Many will come to find their child or to use the school as a shelter because they have been displaced by the damage. Schools officials need the training that will allow them to deal with more than the occasional irate parent. The schools will be flooded with parents wanting their children and will be utilized by local governments as staging areas for equipment and shelters.

The one thing that has always been there, are the schools. The sooner the schools recover, the sooner a sense of normalcy returns to the area.

**APPENDICES**



**Appendix A**  
**Survey Cover Letter**

Paul E. Jamerson  
17123 Manzanita Dr.  
Fontana, Ca. 92335  
(714) 822-2374 - Home  
(714) 823-1219 - Message  
(714) 357-5567 - Work

October 12, 1992

Re: Disaster Preparedness In The San Bernardino And Riverside County Area School Districts:  
Disaster Preparedness: Are Our Schools Really Ready For The Big One?

Coordinator of Disaster Planning

Enclosed is a survey on disaster preparedness practices in the public schools that is being sent to each of the 56 school districts in San Bernardino and Riverside Counties. The purpose of the survey is to measure the level of expertise within the school districts in San Bernardino and Riverside Counties as it relates to disaster planning.

This survey, along with its analysis is the final requirement of my Master's in Educational Administration graduate research project before being graduated from the California State University at San Bernardino. As a teacher at Fontana High School, I have seen the need for this survey to assist us in planning for any disaster.

It would be appreciated if you would take a few minutes to complete the enclosed survey and return it in the enclosed self-addressed stamped envelope. It would also be appreciated if you could mail the survey back no later than **December 7, 1992**.

I have spoken to the county school officials in San Bernardino and Riverside Counties. Mr. Bob Bulman (San Bernardino County Schools Risk Manager) and Dr. Charles Lawrence (Riverside County Schools Risk Manager) have both expressed the need for such a study and are waiting for the results. The results will also be forwarded to several state and local government agencies in an effort to increase the level of preparedness in our schools.

If you are not the appropriate person to complete this survey, please forward the survey to the proper staff member within your district who is knowledgeable on the school district's disaster preparedness planning.

Thank you for your time and cooperation, it is greatly appreciated. If you have any questions, please feel free to contact me at (714) 822-2374. If you would like to receive a copy of the survey results, Please mark the appropriate line at the end of the survey.

Sincerely,

Paul E. Jamerson

Enclosure

**Appendix B**  
**Disaster Preparedness Survey**

**DIRECTIONS:** Read each question and **CHECK ALL APPROPRIATE RESPONSES**. If you have any additional information, feel free to write any comments on the back of this survey. Please return the completed survey in the self-addressed stamped envelope supplied.

1. District \_\_\_\_\_
2. County \_\_\_\_\_
3. Number and types of schools
  - a. Elementary \_\_\_\_\_
  - b. Middle or Junior Highs \_\_\_\_\_
  - c. High Schools \_\_\_\_\_
  - d. Special Education \_\_\_\_\_
  - e. Other \_\_\_\_\_ (Please Specify) \_\_\_\_\_
4. Total ADA for 1991/92 School year \_\_\_\_\_
5. Who is primarily responsible for disaster preparedness in your district?
  - a.  Superintendent
  - b.  Assistant Superintendent of Instruction
  - c.  Assistant Superintendent of Personnel
  - d.  Assistant Superintendent of (Please Specify) \_\_\_\_\_
  - e.  Risk Manager
  - f.  Chief Business Officer
  - g.  Police Services Coordinator
  - h.  Teacher
  - i.  Other (Please Specify) \_\_\_\_\_

6. **In your estimation what percentage of that person's time is devoted to disaster preparedness?**
- a.  Less than 10%
  - b.  10% to 25%
  - c.  25% to 50%
  - d.  50% to 75%
  - e.  Full Time Assignment
7. **What was this person's assignment before being assigned to the responsibilities of disaster preparedness?**
- a.  Superintendent
  - b.  Assistant Superintendent of Instruction
  - c.  Assistant Superintendent of Personnel
  - d.  Assistant Superintendent of (Please Specify) \_\_\_\_\_
  - e.  Risk Manager
  - f.  Chief Business Officer
  - g.  Police Services Coordinator
  - h.  Teacher
  - i.  Other (Please Specify) \_\_\_\_\_
8. **How long has this person been responsible for the task of disaster planning?**
- a.  Less than 1 year
  - b.  1 to 3 years
  - c.  3 to 5 years
  - d.  5 to 10 years
  - e.  More than 10 years
9. **Has the person responsible for disaster planning received enough training to perform the duties of disaster preparation?**
- YES                       No

- 10. What type of specialized training has the person responsible for disaster planning received?**
- a.  Law Enforcement Training
  - b.  Fire Services Training
  - c.  Military Service Training
  - d.  Disaster Management Certification
  - e.  Risk Management Certification
  - f.  Specialized Workshops (i.e. California Specialized Training Institute)
  - g.  College Courses in Disaster or Risk Management
  - h.  Red Cross Disaster Training
  - i.  On the Job Training
  - j.  No Specialized Training
  - k.  Other (Please Specify) \_\_\_\_\_
- 11. Does the person responsible for disaster planning actively work with disaster planning at all school sites?**
- YES                       No
- 12. Does the person responsible for disaster planning assist the schools in the district to obtain the needed supplies for a disaster?**
- YES                       No
- 13. Does the person responsible for disaster planning act as a liaison between the City or County Office of Emergency Services during disasters?**
- YES                       No
- If yes to question 13, which agency(s) do you have a liaison?**
- City Government                       County Government                       Both
- 14. Does the person responsible for disaster planning arrange for in-service training of district personnel with regard to disaster plans?**
- YES                       No

15. Do you feel that the disaster planning position should be a "**FULL TIME**" position?

- YES                       No                       Other

If you answered yes or other to question 15, what type of position should this be?

- 50% of a person's duties  
 25% of a person's duties  
 10% or less of a person's duties  
 Other (Please Specify) \_\_\_\_\_

16. Does the district have a disaster planning committee?

- YES                       NO

17. Does the school district have an Emergency Operations Center (EOC) at the district level?

- YES                       NO

If YES to question 17, where is the EOC located?

- a.  Police Services  
b.  District Office  
c.  At a School Site  
d.  Other (Please Specify) \_\_\_\_\_

18. What type of communications does your district have between the schools?

- a.  Public Telephone System  
b.  Private Telephone System  
c.  Dedicated Telephone Lines  
d.  District Two-Way Radio System  
e.  Amateur Radio System  
f.  Other (Please Specify) \_\_\_\_\_

19. **What type of communications does your district have with local government agencies?**

- a.  Public Telephone System
- b.  Private Telephone System
- c.  Dedicated Telephone Lines
- d.  District Two-Way Radio System
- e.  Amateur Radio System
- f.  Other (Please Specify)\_\_\_\_\_

20. **Does your school district use the Incident Command System Language during a disaster?**

- YES                       NO                       Do Not Know

21. **When was the last time the district's general disaster plan underwent a major update?**

- a.  This year
- b.  Less than 2 years Ago
- c.  More than 2 years Ago
- d.  More than 5 Years Ago
- e.  Other (Please Specify)\_\_\_\_\_

22. **How often is the school district's disaster plan tested?**

- a.  Once a year
- b.  More than once a year (Please Specify)\_\_\_\_\_
- c.  Only when Required
- d.  Only when a disaster occurs
- e.  Never Tested
- f.  Other (Please Specify)\_\_\_\_\_

23. **What type of test does the district use to test the disaster plan? (Check all that apply)**

- a.  Table Top (Discussion of Problems and their solutions)
- b.  Functional (Utilization of only limited resources at the site level)
- c.  Full Scale (Utilization of ALL resources including local government agencies)

**24. When and for what reason was the district's disaster plan activated?****a.  Full activation of disaster plan**

When activated (Month/Year) \_\_\_\_\_

Reason for full activation:

- Practice Drill
- Earthquake
- Flood/Torrential Rain
- Fire
- Strong Winds
- Hazardous Material Incident
- Civil Disobedience (Drive By Shootings, Riots, etc.)
- Other (Please Specify) \_\_\_\_\_

**b.  Partial activation of disaster plan**

When activated (Month/Year) \_\_\_\_\_

Reason for partial activation:

- Practice Drill
- Earthquake
- Flood/Torrential Rain
- Fire
- Strong Winds
- Hazardous Material Incident
- Civil Disobedience (Drive By Shootings, Riots, etc.)
- Other (Please Specify) \_\_\_\_\_

**c.  Not activated in the last three years.****d.  Unknown if activated****e.  Other (Please Specify) \_\_\_\_\_**

25. **Name and Title of the person filling out this survey.**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

26. **Are you the person responsible for disaster preparedness for your district?**

YES       NO

27. **Phone number where you may be reached for further information.**

( \_\_\_\_\_ ) \_\_\_\_\_

Area Code      Phone Number

28. **If you would like to receive a copy of the results of this survey, please check the appropriate response.**

**NO.** I do not wish a copy of the results.

**YES.** Please send me a copy of the results.

Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Appendix C

### Districts Responding to the survey by county

#### **San Bernardino County**

Adelanto Elementary  
 Alta Loma Elementary  
 Apple Valley Unified  
 Baker Valley Unified  
 Barstow Unified  
 Central Elementary  
 Chaffey Joint Union High  
 Chino Unified  
 Cucamonga Elementary  
 Etiwanda Elementary  
 Fontana Unified  
 Helendale  
 Hesperia Unified  
 Lucerne Valley Unified  
 Morongo Unified  
 Mountain View Elementary  
 Mt. Baldy Joint Elementary  
 Needles Unified  
 Ontario-Montclair Elementary  
 Oro Grande Elementary  
 Redlands Unified  
 Rialto Unified  
 Rim Of The World Unified  
 San Bernardino City Unified  
 Silver Valley Unified  
 Snowline Joint Unified  
 Trona Joint Unified  
 Upland Unified  
 Victor Elementary  
 Victor Valley Union High  
 Yucaipa Joint Unified

#### **Riverside County**

Alvord Unified  
 Banning Unified  
 Beaumont Unified  
 Coachella Valley Unified  
 Corona-Norco Unified  
 Desert Center Unified  
 Desert Sands Unified  
 Hemet Unified  
 Jurupa Unified  
 Lake Elsinore Unified  
 Menifee Union Elementary  
 Moreno Valley Unified  
 Murrieta Valley Unified  
 Nuvview Union Elementary  
 Palm Springs Unified  
 Palo Verde Unified  
 Perris Elementary  
 Perris Union High  
 Riverside Unified  
 Romoland Elementary  
 San Jacinto Unified  
 Temecula Valley Unified

## Appendix D

### Survey Results

#### Q1 Responses by county.

	Combined Counties	San Bernardino	Riverside
	53 of 56	31 of 33	22 of 23
	95%	94%	96%

#### Q3 Numbers and types of schools.

	Combined Counties	San Bernardino	Riverside
Elementary Schools	431	244	187
Middle or Junior High Schools	100	57	43
High Schools	82	42	40
Special Education Schools	8	5	3
Other	36	18	18

#### Q4 District Size (ADA) for 1991/92 School Year

	Combined Counties	San Bernardino	Riverside
Less than 500	9%	10%	9%
501 to 1,000	6%	6%	5%
1,001 to 2,500	8%	10%	5%
2,501 to 5,000	26%	23%	32%
5,001 to 7,500	11%	16%	5%
7,501 to 10,000	4%	0%	9%
10,001 to 15,000	15%	19%	9%
15,001 to 20,000	8%	6%	9%
More than 20,000	13%	10%	18%

#### Q5 Who is primarily responsible for disaster preparedness in your district?

	Combined Counties	San Bernardino	Riverside
a. Superintendent	28%	20%	18%
b. Asst. Superintendent of Instruction	4%	2%	5%
c. Asst. Superintendent of Personnel	0%	0%	0%
d. Asst. Superintendent of Other	11%	7%	9%
e. Risk Manager	15%	13%	5%
f. Chief Business Officer	11%	2%	18%
g. Police Services Officer	0%	0%	0%
h. Teacher	2%	0%	5%
i. Other	65%	39%	55%

**Q6 In your estimation, what percentage of that person's time is devoted to disaster preparedness?**

	Combined Counties	San Bernardino	Riverside
a. Less than 10%	62%	68%	55%
b. 10% to 25%	36%	29%	45%
c. 25% to 50%	2%	3%	0%
d. 50% to 75%	0%	0%	0%
e. Full time Assignment	0%	0%	0%

**Q7 What was this person's assignment before being assigned to the responsibilities of disaster preparedness?**

	Combined Counties	San Bernardino	Riverside
a. Superintendent	11%	16%	5%
b. Asst. Superintendent of Instruction	2%	0%	5%
c. Asst. Superintendent of Personnel	0%	0%	0%
d. Asst. Superintendent of Other	7%	9%	5%
e. Risk Manager	4%	3%	5%
f. Chief Business Officer	9%	6%	14%
g. Police Services Officer	0%	0%	0%
h. Teacher	0%	0%	0%
i. Other	57%	53%	64%
j. No Response	9%	13%	5%

**Q8 How long has this person been responsible for the task of disaster planning?**

	Combined Counties	San Bernardino	Riverside
a. Less than 1 year	15%	13%	18%
b. 1 to 3 years	30%	32%	27%
c. 3 to 5 years	32%	29%	36%
d. 5 to 10 years	21%	26%	14%
e. more than 10 years	2%	0%	5%

**Q9 Has the person responsible for disaster planning received enough training to perform the duties of disaster preparation?**

	Combined Counties	San Bernardino	Riverside
Yes	66%	61%	73%
No	30%	32%	27%
Other	4%	6%	0%

**Q10 What type of specialized training has the person responsible for disaster planning received?**

	Combined Counties	San Bernardino	Riverside
a. Law Enforcement Training	4%	6%	0%
b. Fire Services Training	21%	29%	14%
c. Military Services Training	30%	26%	14%
d. Disaster management Certification	13%	13%	14%
e. Risk Management Certification	9%	10%	14%
f. Specialized Workshops	40%	35%	41%
g. College Courses	13%	13%	14%
h. Red Cross Disaster Training	45%	52%	36%
i. On The Job Training	74%	65%	86%
j. No Specialized Training	17%	16%	18%
k. Other	21%	23%	18%

**Q11 Does the person responsible for disaster planning actively work with disaster planning at all school sites?**

	Combined Counties	San Bernardino	Riverside
Yes	75%	77%	73%
No	25%	23%	27%

**Q12 Does the person responsible for disaster planning assist the schools in the district to obtain the needed supplies for a disaster?**

	Combined Counties	San Bernardino	Riverside
Yes	87%	84%	91%
No	11%	13%	9%
No Response	2%	3%	0%

**Q13 Does the person responsible for disaster planning act as a liaison between the city or county office of emergency services during disasters? If yes, which agencies?**

	Combined Counties	San Bernardino	Riverside
City Government	36%	48%	18%
County Government	13%	6%	23%
Both Agencies	32%	26%	41%
No Liaison	8%	10%	14%
No Response	11%	10%	5%

**Q14 Does the person responsible for disaster planning arrange for in-service training of district personnel with regard to disaster plans?**

	Combined Counties	San Bernardino	Riverside
Yes	77%	77%	77%
No	23%	23%	23%

**Q15 Do you feel that the disaster planning position should be a "FULL TIME" position?**

	Combined Counties	San Bernardino	Riverside
Yes	11%	13%	9%
No	72%	65%	82%
Other	15%	19%	9%
No Response	20%	3%	0%

**Q15a What type of position should this be? (this question was mis-worded)**

	Combined Counties	San Bernardino	Riverside
50% of duties	11%	13%	9%
25% of duties	11%	13%	9%
10% of duties or less	2%	0%	5%
Other	4%	6%	0%
No Response	72%	68%	77%

**Q16 Does the district have a disaster planning committee?**

	Combined Counties	San Bernardino	Riverside
Yes	62%	58%	68%
No	38%	42%	32%

**Q17 Does the district have an Emergency Operations Center (EOC) at the district level?**

	Combined Counties	San Bernardino	Riverside
Yes	62%	53%	73%
No	36%	44%	27%
Other	2%	3%	0%

**Q17a If, Yes, where is the EOC located?**

	Combined Counties	San Bernardino	Riverside
a. Police Services	4%	6%	0%
b. District Office	40%	28%	55%
c. At a School Site	6%	6%	5%
d. Other	13%	13%	14%
e. Not Applicable	30%	38%	23%
f. No Response	8%	9%	9%

**Q18 What type of communications does your district have between the schools?**

	Combined Counties	San Bernardino	Riverside
a. Public Telephone System	68%	68%	68%
b. Private Telephone System	21%	23%	18%
c. Dedicated Telephone Lines	9%	6%	14%
d. District Two-Way Radio System	89%	87%	91%
e. Amateur Radio System	17%	3%	36%
f. Other	13%	3%	23%

**Q19 What type of communications does your district have with local government agencies?**

	Combined Counties	San Bernardino	Riverside
a. Public Telephone System	81%	77%	86%
b. Private Telephone System	9%	13%	9%
c. Dedicated Telephone Lines	6%	6%	5%
d. District Two-Way Radio System	40%	35%	45%
e. Amateur Radio System	23%	13%	36%
f. Other	15%	10%	18%

**Q20 Does your school district use the Incident Command System Language during a disaster?**

	Combined Counties	San Bernardino	Riverside
Yes	25%	19%	32%
No	45%	52%	36%
Do Not Know	30%	29%	36%

**Q21 When was the last time the district's general disaster plan underwent a major update?**

	Combined Counties	San Bernardino	Riverside
a. This Year	36%	29%	45%
b. Less than 2 years ago	30%	29%	32%
c. More than 2 years ago	17%	23%	9%
d. More than 5 years ago	4%	6%	0%
e. Other	13%	13%	14%

**Q22 How often is the school district's disaster plan tested?**

	Combined Counties	San Bernardino	Riverside
a. Once a year	34%	39%	27%
b. More than once a year	30%	23%	41%
c. Only when required	9%	13%	5%
d. Only when a disaster occurs	4%	3%	5%
e. Never tested	11%	6%	18%
f. Other	11%	16%	55

**Q23 What type of test does the district use to test the disaster plan?**

	Combined Counties	San Bernardino	Riverside
a. Table Top	55%	52%	68%
b. Functional	64%	68%	64%
c. Full Scale	28%	23%	41%
d. No Response	8%	6%	9%

**Q24a When and for what reason was the district's disaster plan "fully" activated?**

	Combined Counties	San Bernardino	Riverside
a. Practice Drill	49%	45%	55%
b. Earthquake	19%	23%	14%
c. Flood / Torrential Rain	8%	6%	9%
d. Fire	11%	16%	5%
e. Strong Winds	2%	3%	0%
f. Hazardous Materials Incident	4%	3%	5%
g. Civil Disobedience	4%	0%	9%
h. Other	8%	6%	14%
i. No Response	40%	39%	36%

**Q24b When and for what reason was the district's disaster plan "partially" activated?**

	Combined Counties	San Bernardino	Riverside
a. Practice Drill	34%	35%	32%
b. Earthquake	15%	16%	14%
c. Flood / Torrential Rain	8%	6%	9%
d. Fire	8%	3%	14%
e. Strong Winds	2%	3%	0%
f. Hazardous Materials Incident	4%	3%	5%
g. Civil Disobedience	2%	0%	5%
h. Other	4%	3%	5%
i. No Response	57%	65%	50%

**Q24cde Additional responses to question on activation.**

	Combined Counties	San Bernardino	Riverside
c Not activated in the last three years	9%	16%	14%
d Unknown if activated	4%	6%	5%
e Other	2%	3%	0%

**Q26 Are you are the person responsible for disaster preparedness for your district?**

	Combined Counties	San Bernardino	Riverside
Yes	92%	87%	95%
No	8%	13%	5%

**Q28 Would you like to receive a copy of the survey results?**

	Combined Counties	San Bernardino	Riverside
Yes	92%	87%	91%
No	8%	13%	9%



### References

- Bennett, W. (1991). Earthquake survival skills. Disaster Preparedness Division of San Bernardino County Fire Agency, San Bernardino, Ca. Central Valley District.
- Bennett, W. Disaster Preparedness Coordinator, Central Valley Fire District, Station 2, Fontana, Ca. Interview, June 1992.
- California Specialized Training Institute. Emergency management workshop: disaster planning. San Luis Obispo, Ca. 93403, California Specialized Training Institute, 1992.
- California Specialized Training Institute. Emergency management workshop: earthquake. San Luis Obispo, Ca. 93403, California Specialized Training Institute, 1991.
- California Specialized Training Institute. Emergency management workshop: emergency operations center, design and function. San Luis Obispo, Ca. 93403, California Specialized Training Institute, 1991.
- California Specialized Training Institute. Earthquake emergency procedure systems (planning and training needs assessment), San Luis Obispo, Ca. 93403, California Specialized Training Institute, February 1992.
- California Specialized Training Institute. Earthquake emergency procedures: a model for districts and sites. California School Board Association, 1988 Annual Conference, San Luis Obispo, Ca. 93403, California Specialized Training Institute, 1988.

- Costello, J. California Specialized Training Institute, Training Division of the California State Office of Emergency Services, San Luis Obispo, Ca. 93403, Interviews, June 1992 and March 1993.
- Federal Emergency Management Agency. An assessment of the consequences and preparations for a catastrophic California earthquake: findings and actions taken, Washington, D. C.: Federal Emergency Management Agency Publication, November 1980.
- Federal Emergency Management Agency. Emergency operating centers handbook. Washington, D. C.: Federal Emergency Management Agency Publication No. CPG 1-20, May 1984.
- Federal Emergency Management Agency. Natural disaster assistance act, Washington, D. C.: Federal Emergency Management Agency Publication, April 1989.
- Federal register, Vol. 51, No. 125, Monday, June 30, 1986.
- Governor's Office of Emergency Services, Multi hazard functional planning guidance, Sacramento, Ca.. State of California Publication, 1985.
- Lawler, Bonham, and Walsh, School law bulletin # 6, Legal Line, May 1992.
- Moorman, C. California Specialized Training Institute, Training Division of the California State Office of Emergency Services, San Luis Obispo, Ca. 93403, Interview, July 20, 1992.
- Patroni, J. California Specialized Training Institute, Training Division of the California State Office of Emergency Services, San Luis Obispo, Ca. 93403, Interview, July 20, 1992.

Petris, N. Senate Bill 1841 (Petris) - Emergency Management System, California  
State Legislature, 1992

Schmidt, John. Emergency Services Coordinator, City of Fontana, Fontana, Ca.  
Interview, May 1992.

Working Group on the Probabilities of Future Large Earthquakes in Southern  
California, Future seismic hazards in Southern California, November 1992