

APPENDIX IV

AN INTERVIEW WITH EILEEN V. BAUMGARDNER

Eileen V. Baumgardner is the Assistant Director of the Governor's Office of Emergency Services, State of California. I interviewed her on 29 September 1990 at Yokohama Prince Hotel, Yokohama, Japan

Katayama: I've been interviewing several people who have experienced this disaster. I had an interview with Richard Eisner and I am going to do one with Paula. I am also trying to collect radio broadcast tapes. I have one from KCBS. It's about two hours from right after the earthquake occurred. What I am trying to do is reconstruct the disaster responses, recovery, and so forth from the organizational point of view and the citizens' point of view. First, I would like to know where you were during the earthquake and what you did after it.

Baumgardner: When the earthquake hit, I was in San Diego. I was down there for a workshop for businesses on preventing hazardous material emergencies including those during an earthquake. When I got to the airport for my flight home, I found out that there had been an earthquake. I was not able to get home even though Sacramento was not impacted. They diverted all airline flights from San Francisco, Oakland, and San Jose or from all the airports which were closed to Sacramento so there were too many planes on the ground. They couldn't land anymore. We eventually got a private flight, a civil air patrol flight, and I reached the operation center about 4 o'clock in the morning. So, the first twelve hours had already gone by...

Katayama: I see. So, you went to the operation center directly from the airport?

Baumgardner: Yes.

Katayama: And how was the situation there?

Baumgardner: Pretty busy. Actually, we had really good response from other state agencies. By the time I got there, there were about eighty people crammed into our operation center which is very small. We had extremely good representation from all the different state agencies that are normally involved in a response.

Katayama: What are they?

Baumgardner: Well, they are our Highway Patrol; Department of Transportation which is normally very active and certainly active this time because of all the damage to the highways; Emergency Medical Services Authority which coordinates our medical response; Department of Health Services which

assists them and does our public health response and also our toxic, hazardous materials response; and certainly, our National Guard...

Katayama: The National Guard had already been called for or...

Baumgardner: Yes. They do automatic response. What they do is send someone to our operation center to track what is going on and be there if we need them for a particular resource. And our Department of Forestry which is our wild land fire fighting people.

Katayama: Are they Incident Command System specialists?

Baumgardner: Yes, because in some counties they are contractually the fire fighting agency for the county area. They were very intimately involved because they are the fire fighting force for Santa Cruz and for other portions of Santa Clara county. We had a lot of smaller state agencies like our State Police which is responsible basically for state buildings. Our Fire Marshal's Office was there. Our State Parks people were there. Basically, they were there just by way of saying, "Tell us how we can help. We don't have a specific role in response to the disaster other than when it involves parks. We go out and check state parks. But we have all these other resources. We have people out there who are trained in law enforcement and in interpersonal reactions. We have radio systems. We have all those out there. We have parks that are near the impacted area. Tell us how we can help." Even though they did not have a specific immediate mission, they were there to provide that kind of assistance if it was necessary.

Katayama: How big is the emergency operation center?

Baumgardner: Actually, it's about as big as this room. So, it's about 10 meters by 30 meters.

Katayama: It's a permanent office or...

Baumgardner: It doubles as our conference room. We have a bunch of phones. We already have the jacks in the wall or on the floor so we can just plug them in quickly and bring in the resources we need. It was very crowded. It is really insufficient for our operations so we are looking for a new building. What we would like to do is design an operation center that is a complex of buildings where we have one room that is always set up as at least an initial operation center and where some of our staff can work and do their day-to-day planning activities. Should something happen, they would be ready to start rather than having people and their computers move in and set up the operation.

Katayama: I heard that most of the local organizations have OES (Office of Emergency Services) but they do not have a permanent place to operate, that is, an emergency operation center. Was it the problem in San Francisco?

Baumgardner: Yes. In San Francisco, it was very much so. San Francisco does not have a good operation center. San Francisco does not even have a poor operation center. I mean that for a long time, they have not had a good facility. So, for the City of San Francisco, that was very true. Other communities have centers like ours, in the sense that they are multipurpose rooms where they can set up in. In Oakland, I think it is a fire training facility. In Santa Clara county, it is an extra room in their communications building that they can use. So, San Francisco is...

Katayama: ...exceptionally bad.

Baumgardner: Well, yes. They just never had a good facility to use. They have had plans over the years to build one but it's always like it has gotten to a point and then it never happened. In fact, they had an alternate plan to use the big conference room at Red Cross as their operation center but I don't know what happened with that. At least, the bad room they use in San Francisco is next to the communication center. They could monitor radio communications. Ours is adjacent to our warning center, our radio center.

Katayama: So, many calls for assistance from various organizations or local governments had already come in at the time.

Baumgardner: Yes. Primarily, what we do is channel the request for resources through the counties. At least, we try to do that...

Katayama: The office in Pleasant Hill?

Baumgardner: Actually, yes. What we try to do is get individuals, if they need something, to go to the city and get cities to go to the county because the county may have something that the city can use. In the case of Santa Clara county, that was very true because only Los Gatos and the mountain areas were impacted. So, it was very easy for them to go to the county and say, "I need additional fire fighting resources or I need this." They didn't need to go all the way through the state system because what they had was local whereas San Francisco or probably a better example would be Santa Cruz county which was very widely hit did not have the resources and they had to go through the channel. So, in the early hours, the first eighteen hours or thirty-six hours, a day and a half, we were in a situation where Watsonville was going directly to Region Two, the Pleasant Hill office. The City of Santa Cruz and Santa Cruz county were also doing that. They were not working through the county. I think after about a day and a half, we tried to channel the City of Santa Cruz and the City of Watsonville to go back through the county and have the county consolidate everything. But for the first day and a half, the requests for resources were going directly from the cities as well as the county to Region Two. So, it gets a little confusing when you get a request for something from a city and then you get a very similar request from the county. You're not certain if you had two very similar problems or if it's the same request that's being asked this way as well as that way. On the second night, we got the request for tents to support the people who were camped outside in Watsonville. Actually, we got the request from three or four different channels. We were trying to figure out if we were trying to find 4,000 tents or if we were trying to find 1,000 tents four times. So, we went back to the city and said, "Okay, we got all these requests. What do you really need?" And they were able to say, "Yes, we need this." In fact, we were getting the same request from four different directions. Because people had gone outside of those channels, we had not only the city asking directly but also the county asking on behalf of the city since somebody from the city went to the county and said, "We need this." We also had a private citizen who decided that she was going to take matters into her own hands and called the Congressman who then called both the army and the navy. So, we had the same request from the army, the navy, the county, and the city to find these same tents. We finally got that narrowed down so we were only providing the request to the city. They try to get everything to work. You just don't do it that way. You go thru channels. So, we finally ended up with the system working. I think

after two days, we finally got it so that the system was working relatively well. By then, we were doing individual kind and group relief operations. We were looking for generators and vehicles that could transport and distribute potable water and these kinds of things. The request for search and rescue resources was a little less organized. I think we have figured out what the problem is and we are trying to correct it. There were really only three places where search and rescue were needed: the Pacific Garden Mall in Santa Cruz, the situation in San Francisco where it all tied into the fire fighting and the collapsed wooden structures, and the Cypress highway structure which was the biggest problem. We have three specific heavy rescue vehicles that are owned by the Office of Emergency Services and are given to three local fire departments to operate. Through the Fire Mutual Aid System, they were able to call up those resources. One was sent to Santa Cruz because the fire people asked for it. The first one, I believe, was sent to Santa Cruz because they asked.

Katayama: Where are those vehicles stationed?

Baumgardner: One is in Orange county which is outside of Los Angeles. One is in the Sacramento area. And the other one, I believe, must be somewhere in the Bay Area. It's on the outskirts of the Bay Area. The fire chief in the City of Santa Cruz is also the city's emergency manager so he knew how to ask for resources. He went directly to the Fire Mutual Aid System and said, "I need these things." That worked very well in getting the search and rescue equipment. He got that first search and rescue vehicle and it went directly to Pacific Garden Mall. At that time, he also asked for structural engineers to help in the search and in the evaluation of buildings, knowing... Well, in urban fire fighting, they call the people who basically drive the fire engines and adjust the water pressure 'engineers'. When the request for engineers went into the fire system, the fire people thought he was talking about the guys who drive the fire engines. So, they said, "We don't have any engineers but we could give you fire captains. Would you like some fire captains?" And that's when he realized that there was another system he ought to be going through. That's the other resource system in order to get the engineers. So, we are working on that. Part of the problem is that our Region Office in Pleasant Hill, which coordinates most kinds of resources, is physically separated from the region's fire coordinators who are located in Santa Rosa. We need to point out that they need to be together. They need to work more closely together so we can say, "Oh, we got this request for structural engineers here. Why don't you handle it?" and just physically hand the resource off rather than saying, "No, we can't help you. Make another call to this place." So, I think we have at least identified that there is a problem. Whether or not we can work out a solution is something different. At least, we have identified that as a problem. Now, the situation in Oakland was a little different in terms of the Cypress structure for a couple of reasons. One, it was very apparent within the first hour after the earthquake occurred how big it was and how potentially devastating it was so there was a lot of automatic response.

Katayama: You mean locally, right?

Baumgardner: Yes. Automatic response to the Cypress structure was both good and bad. One, it totally overwhelmed the system. The poor fire fighters and the police officers who were down there trying to manage not only had a rescue problem on their hands but also an incredible problem of convergent people trying to help. They were the neighbors who actually did a lot of the rescues or those from the cars that were there. That is a very industrial area.

The supply area for the East Bay Municipal Utility District which is the water district for that area is like a block away. They were able to bring in forklifts, some heavy prying tools, and things like that fairly quickly so the residents in the neighborhood and the workers in the area could help in the response. We also saw an automatic dispatch of people from the navy center that is midway on the Bay Bridge at Treasure Island as well as some of the other navy facilities in the Bay Area. They saw this and they dispatched people there automatically partly because someone would know somebody and would call him and say, "We got this problem. We need help." For instance, some poor police officer who saw this would call a buddy who works over there for help. So, things were going completely off channel. It wasn't an organized effort saying, "We need this kind of heavy equipment. We need these kinds of trained people. We need these kinds of whatever." They weren't coming in like this. So, you ended up with a lot of bits and pieces of resources that ultimately could be applied but because they were being called in in odd kinds of ways, people would show up in the scene and say, "We're here to help you." And the poor person they report to would say, "We didn't ask for you. Where do we use you?" And we were wondering why we weren't getting requests for aid from the City of Oakland for that situation.

Katayama: When did it come?

Baumgardner: The formal request came eighteen hours into it. And it was all these infused resources there because Oakland was impacted and really the rest of Alameda County wasn't. There was some activity going on in Berkeley and things like that. But those areas south of Oakland like Fremont and Hayward that were not impacted did automatic response. They ended up with a very large contingent of fire people as well as law enforcement people helping out at the scene just because of the internal system within the county. There is a problem in Oakland and San Francisco. These large cities are used to being suppliers of mutual aid. They are used to being the ones who are called and hear, "We need fire engines and so forth..." They are not used to calling and asking for help. I think in a lot of ways, they forgot that they could ask for resources. As we pointed out in our training, we need to work more closely with them to make sure that they ask. I mean, they just have to ask for it and we'll tell them if we can't supply it. Instead of having people ask for specific things, we would like them to describe the problem they are facing so we would be able to give them something which may meet their needs. That's why about a day and a half into this, we finally sent somebody down. Well, it was actually about twelve hours into it because it was that evening or about the same time the following day that one of our people who was working on search and rescue stuff actually went down to the Cypress and said, "Things are a mess down here." So, what we did was we sent a group from the Department of Forestry not to do the actual incident commands and the operations activities but to do those other elements - somebody who could manage all the resources they had, somebody who could keep financial and logistical track of what pieces of equipment were there, where they were going, who was there, and how much time they spent so they could recover some things, some people who could do some operational planning and who could say, "Here is what the fire people were doing, what the policemen were doing, what the medical units were doing," and so on. The way they divided the incident was by segments of the freeway. So, they said, "Here we are tackling this, here we are doing this, etc." I think being able to send that group to assist the City of Oakland worked very successfully. However, because they were forestry people who wore very distinct

uniforms that they didn't look like urban fire fighters, there was a perception that the state was upset with the City of Oakland so they were sending a state team to take over. This was not the case. We were sending them to help the City of Oakland. I think the City of Oakland understood that although there were some ruffled feelings at first. Next time, I think we would bring in people with the same skills but are from other local fire departments, e.g., Los Angeles fire department. We would put them on a plane and bring them in. We had to do that for the other ones. We brought them from the northern part of the state. If the Los Angeles fire people came to help next time, the Oakland fire fighters would know that they were not there to take over. Where there is a perception that the state is sure to take over, I think we would do things differently. And one of the things that that kind of raised, too, was when we started to bring in these kinds of resources where there would be incident command people to help in Oakland or to bring support to some of the smaller heavily-impacted communities, particularly Santa Cruz county and Watsonville. When these new, fresh, and energetic people came in, the people who have been working for eighteen, twenty-four, thirty-six, and sometimes forty-eight hours without sleep had the feeling that they came in because we perceived that the community was not doing a good job. I think we need to find another way of doing that. I think one is to make sure that the jurisdiction knows that we are supplying those basically to help, i.e., to basically follow and do the little thing that he or she cannot do, and that the person who is going in is not too enthusiastic. Actually, we had a case where the individual wanted to help so much that he overwhelmed the community he went into.

Katayama: When you say that the assistance should be practical, what do you mean by that?

Baumgardner: For us to think that if we were in their shoes, what would we need? Or in the case of search and rescue, e.g., if there is a magnitude seven on the Hayward Fault, we know that there is a lot of unreinforced masonry buildings in Berkeley, Oakland, etc. So, we know that there is going to be a need for search and rescue resources. Let us mobilize these people and get them not to a particular site but to a staging area on the fringe of the impacted area. So when the Berkeley fire department calls and says, "We have four downed buildings," we can send resources there. They would not be twelve hours away by the time they request it but only five or six hours away. We're trying to encourage jurisdictions to really think about it so they will be here already and just an hour away. At least, we are not simply waiting and reacting. We try to think out those kinds of things that they'll need particularly in search and rescue and in medical where we know that we only have twenty-four hours or forty-eight hours in good cases because if you find somebody after forty-eight hours, his chances of being alive are very poor.

Katayama: Did calls for assistance from smaller communities come earlier?

Baumgardner: Yes, because they are not used to having all the resources they need. Also, it helps that Santa Cruz had been through three other presidentially declared disasters five or six years before this earthquake. But they weren't earthquakes. They were floods and landslides. So, they knew procedures, how the system works, and that if they call, they would get anything they ask for. This particularly helped in the recovery stage. That's why I think the recovery is going much better in those counties than in San Francisco and Oakland which are not used to dealing with the system and also

granting that their problems were a bit more difficult. I think it is also because the Santa Cruz area just knew the system whereas the City of Watsonville may not have necessarily known the system as well because they had not specifically experienced anything.

Katayama: So, when you arrived at the office early next morning, there was a lot of people in the office. Did they know that there were isolated areas in the South and more problems there?

Baumgardner: Yes. I don't think we were able to clearly state that. By the time I got to the office, I think it was very apparent that we had this big problem with the collapse of the Cypress structure. At that time, it was the only damage we knew about in any of the East Bay area. We had the fires in San Francisco. But by the time I got back, they were out. So, we knew that all the attention needed to be focused on the search problem in the Cypress and on the problems going on in the South Bay. But the media was still reporting on this at that time because it was dark so they could not see what was going in the South Bay. Unfortunately, the people in the South Bay also had that same impression. They could see what was happening there but all they would hear on the media was about San Francisco and Oakland and the devastation that was up there. And so the people down here...

Katayama: ...thought there was worse damage in San Francisco and Oakland.

Baumgardner: They thought that everything between there and here was gone but in fact, nothing had been damaged in between. In talking to the Watsonville, Los Gatos, and Santa Cruz communities afterwards, all of them had that sense. So, I think it is incumbent on us at the state level whose role is to bring the big picture together to make sure that information gets back to the impacted jurisdictions. We can say, "Yes, here is the situation and because the damage is localized here and here, you can ask for resources from the state." I think it also means that we have to be more suggestive to local jurisdictions rather than appearing that we are directing local activities. We must not say, "Why don't you apply these resources for this situation?" Instead, we can say, "We have these kinds of resources. Do you want some of these things?" That may lead them to the same conclusion. In that way, we are just giving them the tools they need to make a decision. We need to remember that the local role is very important in California and in most places in the United States. Certainly in California, we did not want the local people to think that the state was taking over the role of the local governments.

Katayama: In San Francisco and Oakland, the Red Cross and the Salvation Army were very notable. How about their activities in the isolated down south?

Baumgardner: Ultimately, they were very strong. I am saying 'ultimately' because they got off to a shaky start down there but not so much in the City of Santa Cruz because they have a very strong Red Cross organization. They were strong because of the old hippie connotations. The City of Santa Cruz is also community oriented so there was a lot of volunteer activities within the city. Previously, Watsonville had its own Red Cross Chapter but it merged with the Santa Cruz Chapter. In fact, Watsonville was left with no community-based Red Cross organization about two months before the earthquake. The Santa Cruz people had to remember that they were responsible for Watsonville as well. That took some time. Also, they were hurt in the sense that a lot of the very strong, and there are some very strong and capable people within the Santa Cruz and Monterey Red Cross

organization, were helping on the East Coast due to Hurricane Hugo. So, they had to bring in people from other areas or people who have not yet been trained in disaster operations. That took some time to get started. Ultimately, there were some problems in the South Bay area with the Red Cross in particular because they brought in people from the East Coast who were not really sensitive to the cultural needs. Watsonville is particularly very Hispanic so they had different needs. They were not your basic West Virginia or Kansas flood victims. The earthquake was a special problem and the cultural differences were also a special problem. I think it took the Red Cross a while to figure out how to deal with those kinds of problems. But there were some other organizations within the community that turned out to be very strong players in the response. One was a community-based health organization. Basically, they did vaccinations for kids and counselling for pregnant women and aged people. But it was really oriented toward dealing with the Hispanic community and dealing with the migrant workers. They were used to dealing with that kind of community. They spoke Spanish and they were a familiar part of the community. They turned out to be a real focal point for human service-related recovery activities beyond just the health issues. So, there was a lot of volunteering community organizations which played really critical roles beside the Red Cross and the Salvation Army. The Salvation Army was great because they took a very low-key stance. They just said, "Here's our center. We have food. We have clothes. Just come and get them." They didn't operate the shelters which became an irritating issue. I think that's why the Red Cross got kind of a bad rap because they were trying to operate the shelters for much longer than people should have been in them. But there was nowhere else to put those people. There is very little vacant housing in those areas as opposed to San Francisco where the Marina District people weren't in the shelters for more than a day because they could find replacement apartments and hotels to put them in. Those replacement apartments and hotels did not exist in Watsonville. And if they did, they were destroyed along with the rest of the low-cost housing. When Paula said yesterday that it was a series of local disasters, it really was because each one of the impacted communities had a very different character to it. The problem in Watsonville was actually very different from the problem in Santa Cruz which was different from the one in San Francisco which was different from the one in Oakland and San Benito. They were all very different. They have different characteristics and they call for slightly different tones for the response.

Katayama: I have listened to the KCBS tape many times and when this anchor person, Jan Black, first contacted your office in Sacramento, the response was very cool or rather cold. They said the disaster was local and there had been no call for assistance from any organization. And the atmosphere in the beginning seemed that the people in the office were just waiting for calls for assistance to come. But the story changed because of the gravity of the situation...

Baumgardner: I think the critical thing is just getting the information. What we are trying to tell our jurisdictions is that going out and doing search and rescue activities or doing medical activities or fighting fires is very important and should be a priority but equally important is getting the overall picture of what had happened, i.e., not only what is broken but also what is still working, to us so we would know and do some of the activities. We can't merely even start to mobilize the resources until we know there is a problem. That is one of the things we should have been doing, i.e., at least being able to see Cypress. We had the Department of Transportation people

there who knew really fast that there had been a problem. They said, "We have a double decker freeway that is collapsed and we are going to need search and rescue resources," and started moving. That was our problem for not having been more active in that way. But we need to have that information come up from the local level even if it is just a first call to say, "We have a real problem here. We don't know what we might need but we are definitely going to need help." Even if it is just that idea, at least it starts things moving. We also think that one of the responses that we are going to have from now on is to send somebody from our office down to each one of the impacted counties - maybe one of ourselves and either a Department of Forestry person or a National Guard person who is knowledgeable about resources or just getting stuff not to take over but to be there to report back to us. We don't have to depend on a county person taking time to do that. But there should also be a person who can say, "We have these kinds of things. Do you think you can use them?" or "This is how you proclaim a local emergency. This is something you don't request a gubernatorial declaration of an emergency." So, I think being able to do that both ways will give us a quicker view of the magnitude of what has happened although it will still take several hours to get people out to those jurisdictions. We can encourage people to report back to us faster with a flash report, "What is it that you see?" We can also sensitize media to the fact that it is going to take a couple of hours before we have the whole picture of what had happened. Because up until that time, the media had anecdotal information where they had a person here and a person there. You know what has happened here but not here. I think it is important to at least get them to understand that we can provide the whole picture ultimately but it is going to take some time. We can figure it out within the first couple of hours but it is going to be scratchy. You are going to have anecdotal information. But we need to get it together better so at least we have things in line.

Katayama: Somebody also told me that in that particular disaster, all information went through the region office in Pleasant Hill and it was not efficient.

Baumgardner: Yes. We are struggling with that because we have one plan for regular emergencies and another plan for catastrophic earthquakes. For the latter plan, that region office ceases to exist. It is folded into the overall state office because we figure that they won't have communications. That is why the regional office is suspended and sort of merged into the state office. The Loma Prieta event really fell in between. It was neither a regular small one or two-community event nor was it a catastrophic event because we still had communications with the regional offices. You can say that it became a bottleneck because they just passed the information up through the state level. You can also say that at the state level, we usurped some of the things that really should have been going on at the Region Office and that in fact, instead of abandoning the Region Office, we should have pushed more of what was going on in Sacramento down to Pleasant Hill so that it was occurring here as opposed to here. It is just like whether you view a glass as half-empty or half-full when you are trying to determine whether or not they were the bottleneck or we were the ones causing that. We are struggling to resolve that because you can't automatically say that you are going to abandon the Region Office because when would you do that? Do you do it when two communities are impacted? Three or four? Do you do it when two communities are greatly impacted or when a dozen are impacted like what occurs during heavy storms? It gets to be a real fine line as to when do you do that and when do you not do that. We are still struggling with that. But that information flow was really very inefficient. We are trying to find ways of making it more efficient which we can do by

a stronger reliance on computers. There is no reason why a city has to write its situation report, fax it to the county, and then have the county write a new report incorporating facts from the cities' reports. It takes time. All the counties then fax them to the region who then has to write an overall report using all the counties' reports. It takes up more time. By the time we receive the information at the state level, it will be more than four hours old. That is unacceptable. We think that by doing a common format, doing it on computer, being able to send it on modem, and the next computer automatically consolidating them save time. If nothing else, instead of having to look at the situation description in each report, you can now have one report that has at least all of them and you can look at any county you want. It makes something shorter since it condenses that from something about four pages to half a page. We at the state level would take that stuff from the impacted region and combine it with the information gathered from the state agencies like from the California Department of Transportation which had a good sense of what was happening on the highways and different information of what was happening with the Cypress or at a variety of other state agencies and compile them into the overall report that is then given to the governor or sent back to jurisdictions and so on. So, I think we can smooth the flow of information by relying more on modern technology. But the issues of whether or not the Region Office is a stumbling block, whether or not it was essential, and what role it played are still not really resolved. For people who were looking at it from the outside, they very much viewed it as a constraint. I think some of the jurisdictions understood how the system works. Some viewed it as a constraint and others did not. But I think that is something we need to get our house in order and make sure that we and other state agencies are providing sufficient support to the region that they can handle as much as they can handle at that level and then only those things that cannot be handled that way will move up.

Katayama: One of the big problems was the electric power disruption. No, it was not disruption. But there was big facility damage in some of the transformer stations and I understand that an army or navy plane was flown to bring replacement transformers.

Baumgardner: Evidently, these things are like the size of a house...

Katayama: How did you ask for the military?

Baumgardner: Actually, we have that worked out pretty well. We have an on-going relationship with our utilities. We have a group that is called the Utility Policy Committee and it gets together. Fortunately, there are only three or four electric utilities in California. When you are talking about gas, there are really only two. They have mutual assistance arrangements between themselves. They also have mutual assistance arrangements with utility companies outside of California. The situation was this: they knew that they had a problem about a couple of substations being down in the Santa Cruz area where they had lost very large pieces of equipment that they did not have on the West Coast. They had them in Tennessee or Pennsylvania or some place. And these needed to be flown out on one of those huge military planes, the C130s. In fact, the military and all the federal agencies kept on asking us and telling us, "We want something to do! Please give us something to do!" So, we said, "Okay, we got something. We got something that's bigger than a bread box that needs to get out here." And they said, "We will do it." In retrospect, this is really beyond the fact that this is a private or a profit utility. But they are not really like a private

business. Utilities are special. You have people who are disrupted and really cannot get their lives back together. They shut down the electricity in San Francisco not because of damage to the system but because of the danger of fires. They were afraid of all the natural gas breaks. They had a situation where they had a phone - one of the central switching offices for the phone in the financial district but they were running low on battery power. They were operating quite a while on battery power and they were able to by working thru our office, with the electric utility people, with the phone utility people, and with the natural gas utility people. The electric and gas are the same people so it was easy. But to say, "Okay, we have a problem. Go in and check it out," we have to subdivide this electric circuit that services the whole financial district area to just this one which is necessary to bring in the phone system back up and restore the electric utilities to the phone switching station so that we don't, on top of this, lose the phones because they had not lost the phones at that point. So, it was a good example of how, by bringing these various people together pre-emergency since they have done a lot of work together pre-emergency, they were able to engineer a solution because they knew the right people to work with and they were comfortable working with each other.

Katayama: I heard there was a problem in the City of San Francisco especially in the OES office. Did the citizens actually know about that?

Baumgardner: Before or after?

Katayama: Before and after.

Baumgardner: Well, no. Because beforehand you could say, "Yes, we are going to cut these positions out of the offices of emergency services," but at the same time, they are cutting these positions out of the health office, these positions out of law enforcement, and these positions out of fire because of the financial straits the City of San Francisco was in. They were suffering a lot of cuts. You know, cutting some people out of the Office of Emergency Services is not a big deal, particularly when you don't know that that is actually half the office. The offices of emergency services in most communities are not really visible unlike the fire department or the police department. With regard to difficulties after the actual response, the mayor took such an active stance about being out there and saying how wonderful they were and what a great job they have done even though it was well known, I think, in the emergency management community that there were problems. It has been stated by several people, I think most vocally by Rich Eisner. He has made some comments about the city's preparedness which I don't think I would have the nerve to make. I just don't think it is one of those things that are of particular interest to anybody because they came out okay. They muddled through.

Katayama: But they changed...

Baumgardner: Yes, they have changed now...

Katayama: The mayor changed...

Baumgardner: I think the mayor saw the advantage of having a stronger program. That's ...

Katayama: And that is good for him...

Baumgardner: Yes. That's interesting because the people he hired have experienced working in federal recovery programs. I still think they are ignoring the immediate prevention and response activities although I don't know if Paula would have the same impression. But I do. They are still ignoring these and they are putting all their eggs in the recovery basket. The police department and particularly the fire department have a special historical significance in the City of San Francisco. The fire department sustains this belief by saying, "Don't worry. We can take care of anything. We can do everything." Well, with the loss of the water system, they were really close to not having that to be true. So, I think they are putting on a lot of response things and saying, "Our fire and police people will take care of it or we will be able to get resources from other places, e.g., the army in order to help us get to that point. The important thing is to make sure that we are getting our fair share or greater than our fair share of the restoration funds." So, I think that is sort of the direction they have taken which may ultimately prove to be at least satisfactory, maybe not the most efficient but at least satisfactory. They have always had a close relationship with the US Army at the presidio in San Francisco. Well, the presidio is closing so the army will no longer be in San Francisco. They will be in Colorado. When that relationship is gone, I think they may have to rethink how they respond. The City of Oakland, for example, has been much more involved in the preparedness activities and certainly in the idea that they need to strengthen their community preparedness and what the individual community does. And really, that's self-sufficiency. Then, we will worry about the recovery when it comes. Emphasis is on doing much more of the prevention activity than on the response side. So, it's just a different philosophy.

Katayama: As far as the number of specialists is concerned, there were not so many even in Oakland.

Baumgardner: I think the City of Oakland now has five. Before, they had three. I think that they now have five which is about the same as the City of San Francisco.

Katayama: San Francisco used to have seven...

Baumgardner: They used to have six. Then, it was down to two. Now, I think they are back to five or six.

Katayama: Including the people getting money from outside...

Baumgardner: Well, two aren't. One is a communication person and the other is a public information officer who deals in preparedness activities. In Oakland, there are more emergency planners who are really on the side of planning and the training types of things. It is just a matter of different management styles, i.e., how much you plan out versus how much you just do. You become very skilled in crisis management. There is something to be said for people who are skilled in crisis management because you never know exactly what kind of problems you will be facing. If you are absolutely set, if our planners say we have to respond exactly in this way but the problem is not exactly as you anticipated, and if you don't have people who are skilled in crisis management or other things, you may not have the adaptability. So, I think there is something to be said for each approach. I think, they are just very different as to the kinds of approaches to cities of fairly similar size now. I mean, San Francisco always used to say they were much larger than Oakland. Actually, San Francisco is shrinking in size and I think it is becoming about the same with Oakland.

Katayama: As far as communications is concerned, there were no problems...

Baumgardner: Not really...

Katayama: Could you use telephones without any difficulty?

Baumgardner: Yes. You know, you may have had to dial the number three or four times in order to get through. But if you were persistent, you could do it. We ended up with systems that we have actually used during the Whittier Norrows Earthquake. If we really needed to talk to, for instance, the Region Two Office, we'd call them on the radio and say, "Call us," because it was easier for them to get a line out to us and the phone quality was better. A lot of times, we were putting people on speaker phones and things like that. You need to have a good quality connection to be able to do that. We had better quality if they called us rather than if we called them. A community that often gets forgotten in this is Hollister, San Benito area which we forget even on a day-to-day basis. We sort of forgot about them during the earthquake, too. We did lose communications there but then we also lose communications during good times because the phone system just isn't good. We have difficulty reaching them with cellular because there is a range of hills that blocks a portion of that area from the cells. So, we did have some trouble there. We were able to get around that a lot of times by using radio. After the first eighteen hours, except for one aftershock, that really settled down. That really was not nearly the problem that was. But we know that we were very lucky.

Katayama: That is what I have heard repeatedly. The earthquake was a lucky one...

Baumgardner: Yes. It was big enough. I am sorry that as many people died as they did and that there was the kind of damage that occurred but it was a really good reminder to us that folks, this is small. This is not anywhere near what we are going to experience if we have one of the same size right here underneath the developed area of the Bay Area or Los Angeles instead of being here in a rural area. Los Angeles has taken a lot of precautions as a result of this. So, it is a good reminder for everybody that things are going to be a lot worse the next time. I think a lot of people heeded that both. We see a lot more preparedness activities by local governments going on now. Certainly at the state level, we have been able to get resources for a redundant communication system for a satellite base which we really should be able to have. We have also been able to get money for search and rescue training and some money to do some additional work for the interface between local government and state government.

Katayama: What did the Federal Emergency Management Agency (FEMA) do?

Baumgardner: They were in the situation of just having come out of Hurricane Hugo where they really got burned for not being there and being able to supply a generator within thirty seconds. So, they were basically on our case. When I got back to the office, a FEMA person and a Sixth Army person were there. FEMA had its operation center set up both in San Francisco and in Washington. We were getting calls that night saying, "Give us something to do. We want something to do. We want to be able to show that the federal government is doing something." But other than moving these big transformers or substation parts or some specific expertise that came from the Federal Department of Transportation and the Army Corps of Engineers to evaluate the Bay Bridge structure and to look at some of the alternatives

in the development of the ferry system, we really did not have a need for lots of federal resources.

Katayama: In the immediate hours...

Baumgardner: Yes, in the response phase. They were there and were more than willing to help. It's just that we really did not need them. Actually, they became kind of a pain because of constantly asking, "Give us something to do. Give us something to do." The army was just as bad in asking if we needed any assistance. As we got two days into this, FEMA took a much stronger role because they have the recovery money. Within four days, which I think was very quickly, we set up the disaster field office which is the main office that coordinates all recovery activities. On the fifth day, we were able to open at least five of the disaster application centers. Within the following week, we held the initial briefings for public officials on the individual assistance and on the public assistance as well, i.e., the funds they can go to government to help repair lost roads and pipelines and things like that as well as response cost. They were really quick to set up these kinds of operations. In fact, almost too quickly. We need to balance the need that the federal government has to demonstrate to both the public at large and Congress that they are out there doing something and that they are ready to go...

Katayama: This is something like the developed countries giving money to the developing countries and...

Baumgardner: Yes, you want to show that it is there but you do it before they are ready to accept it. I think that is largely the way our communities work because they were really still trying to respond. On the one hand, there was the demand to show that they were concerned and that they were taking applications. On the other hand, the communities were not ready to provide the support that was necessary to do that. So, I think it is two-fold. One, we have to make sure that we take over the burden about setting up disaster application centers as much as possible at the state level away from local jurisdictions instead of constantly harping "We need you to do these things..." Two, we have to get them to think ahead of time. For instance: If you have a disaster in your community, we need to set up a disaster application center. What we need is a building of X square feet that has these kinds of resources. Let's work now to identify a list of those potential places in your community. In that way, they are not struggling with this when things are happening. All they have to do is say, "Okay, this is our first choice. Is this building structurally sound?" Some engineers have to check it out. Does it have the requisite facilities? Bingo! We are going to use it. We need to do some additional preplanning to make that transition easier. Also, we need to do more of that work for the community to be able to. I think by sending people to assist jurisdictions and really waiting on the public assistance briefings, we can do some of that stuff. The engineers are still out there trying to figure out what damage they have. They really don't want to hear about all the paperwork they have to fill out until they have a good sense of what they are filling it up for, i.e., for one project or sixty five projects. I think we can do better sensitivity to that. But it's a real strong balancing act between the perception the public wants to have that something is occurring and the needs of that particular jurisdiction. It's going to be tough to find that balance and you are always going to upset somebody. But I think we can do a better job and upset fewer people.

Katayama: What is the damage still remaining at this time?

Baumgardner: I think it is sort of three-fold. Certainly, we have a big problem in the transportation system with the roads still being closed in San Francisco, with Cypress structure now being gone, and with that piece of the freeway system not replaced. We really should work with the knowledge that we will have the same problem on Highway 17 again if something else happens. So, I think it is trying to come to grips with not only how we rebuild these structures but in several cases, if we rebuild these structures. As for the Cypress structure, we are still struggling with whether or not to rebuild it at all. There is a nice alternative there and the community does not want it back. They did not like it in the first place which had nothing to do with the earthquake. The same thing is true in San Francisco with the Embarcadero Freeway which has been under debate for ten years as to whether or not to get rid of it. Well, after voting a couple of months before the earthquake, it was decided that we are not going to get rid of this freeway. Now having the freeway damaged and a source of money they can use to replace it and the city does not have to come up with it all on its own, maybe we will get rid of it now. Even though the discussion may not be an earthquake related activity, they are still very visible reminders of the damage. There is also the damage to housing. There are long term housing issues in two very different situations. One is for the people in Oakland and San Francisco and to some degree in the City of Santa Cruz who are living in these residential hotels. They were very old unreinforced masonry buildings that had to be destroyed. And how do you provide replacement housing for these people? We don't just go out and build them a house. To start with, these are people who were not living in a house for a reason, i.e., either they could not afford it or a lot of these people are mentally or emotionally unstable and they do not want to live with other people. They want to live in their own little room which gives them a sense of security. So, because of economic reasons or whatever reasons, our normal procedure of building them a new house or giving them a trailer or whatever is not going to work. No one is building these single room occupancy buildings anymore. So, I think there is a struggle with how to find them replacement housing and then again to see how that gets all confused with our homeless problem. There is that whole cadre of housing issues. Then, there are the housing issues in Watsonville. What you lost were some very poorly constructed or old, i.e, probably constructed or built in the late 1800s or early 1900s, houses which fell down and where people were already overcrowded with two or three families in a single house because there was just no low-cost housing in the community. And how do you provide housing resources for those people? That problem was easier to handle initially because of the trailers which were a good solution for those people because they have families and more than probably need three rooms. Now, it's a question of whether we leave those trailers there, spruce them up a bit, and say, "Okay, it's a perfectly acceptable dwelling. Here it is," or do you find different housing or how, if you keep that temporary housing as permanent housing, should we do a better job of siting it right after the emergency so that it would be in a more acceptable spot and not in some of the places where they have it now and where they really want to do something else with the property. So, they would like to get those people in the trailers out of there and move them somewhere else. So, I think those are two very different housing issues but housing is still a significant problem. And the third one is disruption of the business community like in downtown Santa Cruz.

Katayama: Small businesses?

Baumgardner: Mostly small businesses, particularly those which need rental business space and even bigger ones such as Ford's Department Store which is a big employer. How do you bring that back? How do you get that business started again? What do you do for the community which is losing all of that tax revenue that they need to rebuild because the business is either not there or just not selling nearly as much as it had been? So, I think it is the issue of business recovery planning. Is there a way to make it smoother? And how do we go about rebuilding some of these downtowns so they do not look like the garden variety malls but retain some of their character which they had before because most of these are old historic communities. So, I think there is a lot of physical development issues that are still out there. There is also the issue of heightened preparedness. What do we do? Knowing that this was a warning, how do we prepare ourselves, whether we are government, individual businesses, families, or schools, more adequately?

Katayama: Is everyone taking this problem very seriously?

Baumgardner: Yes. In a lot of ways, they see it in their economic best interests to do so. They see how much it is going to cost them to rebuild damaged facilities or how much it is going to cost them in lost business time because some of the businesses do not only do business in the Bay Area but also in New Jersey and Japan. They are big companies. Even though the problem is localized, that is, this office maybe down, if they're down for a long period of time, they will lose market share in New Jersey, Japan, China or anywhere it happens to be. It is to their benefit to do better planning, to do better redundancy and things in their system.

Katayama: So, maybe they are the ones who are considering the problem in a more realistic way...

Baumgardner: Yes, I think they had already started that thinking based on that First Interstate fire that happened in a highrise in downtown Los Angeles two years ago. Even though they lost a significant number of offices, First Interstate was able to operate the next day and to actually make money the next day because of the earthquake planning redundancy. They are very keen in pointing that out - "Not only were we able to resume operations but we also made money the following day." So, it was possible to do both. I think the businesses have seen the value of it and are really doing a lot more.

Katayama: Thank you very much.

Baumgardner: You're welcome. I can talk about this forever. We learned so much and we were so lucky that I just hope we have both the time and the will to incorporate a lot of these things which we have learned and to really make the changes and not just to recognize them. By simply recognizing you have a problem, you are at least aware of its presence even though you have not made a definitive solution. That is one of the things that the exercise really did for us. Right before the actual event, we haven't had a chance to fix our problems. But at least, we were aware that we had the problem. We thought, "What do we do about this? Even though we don't have an automatic way of doing it, let's think of something else." At least, we were aware of our problems and able to deal with them rather than being surprised by them.