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FEDERAL DISASTER POLICY AND FUTURE OF FEDERAL EMERGENCY MANAGEMENT AGENCY

Y 4. AP 6/2: S. HRG. 103-207

Federal Disaster Policy and Future... [ING

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE
ONE HUNDRED THIRD CONGRESS

FIRST SESSION

SPECIAL HEARING

Printed for the use of the Committee on Appropriations



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FEDERAL DISASTER POLICY AND FUTURE OF FEDERAL EMERGENCY MANAGEMENT AGENCY

WEDNESDAY, JANUARY 27, 1993

U.S. SENATE,
SUBCOMMITTEE ON VA, HUD, AND
INDEPENDENT AGENCIES,
COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:03 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Barbara A. Mikulski (chair) presiding. Present: Senators Mikulski, Feinstein, Gramm, and Burns. Also present: Senators Inouye and Mack.

FEDERAL EMERGENCY MANAGEMENT AGENCY

OPENING STATEMENT OF SENATOR MIKULSKI

Senator MIKULSKI. Good morning, everybody. This subcommittee will now come to order and we will be conducting a hearing on the Federal disaster policy, the future of FEMA, and, of course, what this would mean to the appropriations framework.

This Chair is pleased to welcome new members to both the Appropriations Committee and to this subcommittee. We wish to acknowledge that Senator Phil Gramm is our ranking minority and, due to other pressing leadership business, will not be able to participate. I am sure he will have a statement for the record.

We wish to acknowledge that Senator Dianne Feinstein of California is not only a new member of the Appropriations Committee, but to this subcommittee in particular.

Senator Feinstein, your experience as a mayor and your experience in representing one of the largest coastal areas of United States of America, as well as being a mayor of a big, important city that was a prime earthquake target says to this committee you bring an important area of expertise.

Senator Mack, though not on our subcommittee, represents the great State of Florida and its enormous coastal areas, the environmental problems, its hurricane vulnerability, as well as the urban challenges facing communities like Miami. We look forward to your participation not only in this hearing, but in advice and consultation as we move our legislation.

We also note that Senator Conrad Burns of Montana, representing the Western States and all of its special and unique problems,

will also be participating and, I am sure in his own way, will cause a few earthquakes on this subcommittee with his own unique style.

So, I look forward to chairing not only this hearing, but also this subcommittee in the 103d Congress.

Today the subcommittee meets to review the Federal Government's disaster policy and what would be the recommendations and insights into what the future of the Federal Emergency Management Agency should be both in terms of long range and even those issues that would be specific, immediate, and realizable.

No story grips the American people more than when America has to struggle with its own biocatastrophes. Whether it is an earthquake in California, whether it is a hurricane in south Florida, whether it is the possible disasters like at Ocean City, whether it is a hurricane or a northeaster, we must batten down and button down and prepare, or have a plan ready for the evacuation of those communities that have nuclear powerplants, regardless of what community, like in my own where we have both Calvert Cliffs in my State, but we have two powerplants up by the Susquehanna which we have already lived through the fear of a meltdown at Three Mile Island.

The American people always want their U.S. Government to have a rapid deployment, to be able to respond to 911 not only around the world, but within our own community. They want to be sure that our Federal emergency management program is as fit for duty and as ready to go 911 as is our military to rescue the people around the world.

Most recently no story gripped the American people more last year than Hurricane Andrew. We saw first hand how an act of nature quickly and thoroughly devastated the lives and communities of thousands of Americans.

Unfortunately, the Federal Government's initial response run through FEMA was widely seen by many of Hurricane Andrew's victims in Florida as a disaster itself.

We wish to acknowledge those talented, dedicated, self-sacrificing civil servants who did what they best could do in a very bad management situation. Every one in this room knows that I was enormously critical of FEMA's leadership at that time, and I continue to be critical of the way the Government has used FEMA's leadership as a source of political appointees rather than turning to the best that this Government has to offer.

FEMA was created in 1979 to bring together a variety of Federal organizations housed in many departments to deal with Federal disaster preparation, response, and recovery, to be a one-stop shop, to be a 411 information agency for local communities, and to be a 911 ready to respond to catastrophes.

Since that time, it has been called upon to provide assistance after thousands of disasters. When there are relatively small disasters, the Agency has worked well in helping towns and communities recover, and many Senators have attested to that.

But in the last 4 years, the United States has faced more than the normal pattern of disasters, and many of them have been of catastrophic proportion.

After each event, FEMA was widely criticized for its lethargic and bureaucratic response to human need.

Following many of these incidents, we have asked for reports to tell us what should be the best way for readiness, rapid response, and restoration. I believe our current disaster relief policy must be changed to make the Federal Government approach disasters on the basis of risk. We need a risk-based strategy and it must incorporate the doctrine of flexible response as its cornerstone, the same framework that we use to be a 911 around the world.

Today we will hear testimony from the National Academy of Public Administration, GAO, the assistant inspector general of FEMA, as well as those who have been the most affected to share their views. We hope this testimony and that of other witnesses will give us the recommendations that we can take to President Clinton and Vice President Gore to create a new FEMA for a 21st century rapid response, readiness, and rehabilitation.

[The statement follows:]

STATEMENT OF SENATOR MIKULSKI

The Subcommittee will come to order. Today the Subcommittee meets to review the Federal Government's disaster policy and the future of the Federal Emergency Management Agency.

No story gripped the American people more last year than Hurricane Andrew. We saw first-hand how an act of nature could so quickly and thoroughly devastate the lives and communities of thousands of Americans.

Unfortunately, the Federal Government's initial response, run through FEMA, was widely seen by many of Hurricane Andrew's victims in Florida as a disaster itself.

FEMA was created in 1979 to bring together a variety of federal organizations, housed in many departments, to deal with federal disaster preparation, response, and recovery.

Since that time, it has been called upon to provide assistance after thousands of disasters. When dealing with relatively small disasters, the agency has worked well in helping towns and communities recover.

But in the last four years, the United States has faced more than the normal pattern of routine disasters. We have suffered from the two worst hurricanes to strike us in this century, and were rocked by a major earthquake in northern California.

After each event, FEMA was widely criticized for its lethargic and bureaucratic response to human need.

Following Hurricanes Hugo, Andrew, and Iniki, the President ultimately turned to the military to take over the Federal Government's initial disaster response. And the very nature of FEMA's response to the people of Florida last fall—slow, cumbersome, and at often times confusing—has led many to call for the agency's abolition altogether.

Today, I hope we can move forward to help frame the direction of our nation's disaster response policy. We do not seek to rehash old ground or put blame on any official—past or present.

The vast majority of men and women who work at FEMA are hard working, dedicated civil servants. Unfortunately, they are now working in a system that is clearly broken, and which badly needs overhauled if it is to remain as the Federal Government's disaster coordinator.

Our current disaster relief policy must be changed to make the Federal Government approach disasters on the basis of risk. And it must incorporate the doctrine of flexible response as its cornerstone.

We have assembled a wide array of experts with varied opinions on the subject this morning, and we look forward to hearing from them.

Included among this group are officials from the National Academy of Public Administration and the General Accounting Office. Each organization was tasked by this Subcommittee with the job of reviewing federal disaster policy, and how it should be changed to fit the realities of the new world order.

We hope to use their testimony, and that of the other witnesses this morning, to make recommendations to our new President on how he should shape federal disaster policy in his Administration.

We look forward to their comments.

And we look forward to working with our new President and his team, to reinvent this aspect of the Federal Government. So it reflects the real threats communities face. And it responds to the day-to-day needs of the victims of disasters.

Senator MIKULSKI. Having said that, I wonder, Senator Mack, do you have an opening statement?

Senator Feinstein, and then we will go to our witnesses.

Senator MACK. I do have and I would ask that it be included in the record, Madam Chair. I do have some other opening comments that I would like to make. It will probably take a couple of minutes.

Senator MIKULSKI. Would you like to do that when we get to the questions and answers, or would you like to do that now?

Senator MACK. I would be delighted to wait. It is all right. If you want to go ahead and hear the other testimony, that would be fine.

Senator MIKULSKI. Senator Feinstein?

STATEMENT OF SENATOR FEINSTEIN

Senator FEINSTEIN. Thank you very much, Madam Chairman, and Senators and ladies and gentlemen. I am very pleased to join this committee and I would like to begin by acknowledging, Senator, the leadership that you have taken in this area.

I come not from hurricane territory, but from earthquake territory. I want to just begin by telling a little story.

SAN FRANCISCO EARTHQUAKE EXPERIENCE

In the middle of the 1980's, after one of my staff meetings, the director of the department of public works stayed after the meeting and said to me, Madam Mayor, I think if there were a moderate earthquake, that the rim of Candlestick Park would come down. I said, Jeff, how much would it cost, and he said I will get back to you.

He came back in 3 weeks and he said I think about \$6.5 million. I had a lot of pressures, AIDS and a lot of other things to spend money on. I thought what are the probabilities of there being an earthquake when there are people in that stadium. Nonetheless, we decided to retrofit it and we spent over 3 years about \$6.5 million.

Who would have thought that the Giants would have been in a World Series at 5 in the afternoon, the stadium had been expanded to 60,000 people, and it was jam-packed when the Loma Prieta earthquake hit? And the rim held.

I thought at that time if you are in public office and you are ever faced with a decision of whether to spend money to retrofit a public structure or not, today you have to do it. The probabilities of a major earthquake have increased dramatically in the State of California. Experts have said that the probability of a quake of a magnitude of 7 or above to hit southern California has increased 47 percent within the next 10 years. We have had increased earthquakes in the last 5 years. So, something is going on.

We have also watched the hurricanes. We have watched FEMA respond.

PREPLANNING

As a former mayor, one of the things that I know is that the success of handling a disaster is related to preplanning; it is related to professionalism. It is related to knowing what you are going to do so that everything works on reflex. You know how you are going to get your police officers into the city areas. You know how the military are going to respond. You know what the disaster relief officials are going to respond with and the time limit. I think it is preplanning where there is an enormous deficit.

I also think that FEMA needs, as you have said, to be professionalized, that there should be no one in that Agency that does not have a background in disaster preparedness, and that we must begin a massive preplanning effort to see that we have in place the infrastructure, the earth-moving equipment, et cetera.

Second, in addition to preplanning, we must begin a Federal effort to seismically help the retrofitting of critical buildings. There are places in cities in earthquake-prone areas with unreinforced brick buildings where we know there will be massive loss of life should there be a major earthquake.

So, I am very interested to be a part of these hearings to see what the experts recommend we do for the future. We have had, in 5 years, unprecedented disasters for a 5-year period, and there is every evidence and every probability that this is going to continue, particularly in the area of earthquakes.

So, I thank you. I look forward to the hearings. I am delighted to be part of this subcommittee.

[The statement follows:]

STATEMENT OF SENATOR FEINSTEIN

I would like to thank the Chair for conducting this very important and timely hearing on federal disaster relief policy. Senator Mikulski has been in the forefront of trying to reform and restructure FEMA, and has clearly been a leader on the issue of this country's disaster relief policy.

More than three years since the devastating Loma Prieta earthquake struck the San Francisco Bay Area, nine months after the Los Angeles riots, and nearly five months since Hurricane Andrew swept across Florida and Louisiana, the evidence is overwhelmingly clear that FEMA cannot adequately fulfill its responsibilities. Before this country experiences another major catastrophic event, and lives are placed in jeopardy, it is time to reform the mammoth and ineffective federal bureaucracy responsible for disaster relief.

We in California know all too well the destructive force of disasters and realize the importance of a quick and effective response. Since October 1991, California has experienced six federally declared disasters. In some instances, such as flooding or minor earthquakes, FEMA and other federal agencies have acted quickly to provide badly needed relief. But, far too often, especially following major catastrophes, FEMA has failed in its mission. Still today, over three years since the Loma Prieta earthquake struck, hundreds of millions of dollars in eligible federal assistance needed to rebuild and restore damaged structures are still in dispute—the seismic upgrading of San Francisco City Hall will cost over \$100 million alone. Another example, following the civil unrest in Los Angeles last Spring, disaster victims waited over a week for Disaster Application Centers to open. In addition, FEMA's poor outreach to the many diverse communities throughout the Los Angeles area left many non-English-speaking victims without a Disaster Application Center for weeks.

My concern over disaster preparedness and response activity was heightened recently by a government study stating that in the next 5 years, there is a 47 percent chance of a major earthquake hitting California. Major catastrophes are going to happen, and the federal government—specifically FEMA—must be ready and able to prepare beforehand and act quickly immediately following a disaster.

It is unfortunate that none of the witnesses testifying here today are from California, especially from the hard-hit Los Angeles area where FEMA recovery efforts are

still not sufficiently providing aid to riot victims. In the future, I would be happy to provide this Subcommittee with the names of dozens of people and organizations in California that have had extensive dealings with FEMA. I'm sure that they would be more than willing to testify at hearings and work with Subcommittee staff in order to help improve our country's federal disaster relief policies.

FEMA must be restructured and our federal disaster policies must truly serve victims in times of need. FEMA must work with local leaders to develop an action plan in advance of a major earthquake or other catastrophic disaster. Logistical plans must be in place for a wide variety of scenarios before disaster strikes.

Hurricane Andrew was the last straw. The federal response following that devastating hurricane was similar to the bureaucratic nightmare that followed FEMA's response to the Loma Prieta earthquake, Hurricane Hugo in South Carolina and the Los Angeles riots. After each catastrophic disaster, FEMA claims that lessons have been learned. But, the lessons of Hurricane Andrew should be the final piece of evidence we need to realize that FEMA needs to be permanently restructured.

As a former Mayor and Chair of the Board of Supervisors of San Francisco, I have nine years of experience in emergency planning, and I've held hearings on earthquake and disaster preparedness. Through my experiences on the local level, I was in a unique position to evaluate the effectiveness of preparedness, response and recovery efforts.

Recommendations that I would ask this Subcommittee to consider are: 1) creating an ongoing peacetime military response to major domestic emergencies; 2) requiring the federal government to plan in advance, before a major disaster hits; 3) revise federal programs to focus on serving the victim; 4) encourage the president to appoint a disaster recovery expert to lead the federal effort; 5) hire only experienced disaster personnel to staff FEMA; 6) utilize the vast volunteer resources of the private sector and nonprofit organizations throughout the country to respond to a crisis; and 7) urge FEMA to invest in hazard reduction measures such as seismic strengthening. At the end of my statement, I would like to submit for the record a more detailed outline of my recommendations. I believe they are a good place to start in restructuring this country's federal disaster relief policies.

I look forward to hearing the testimony of all the distinguished witnesses and hope that they will be able to shed some light on what needs to be done to improve the federal government's role in disaster preparedness, response and recovery.

Thank you.

FEDERAL DISASTER RELIEF POLICY: A PLAN FOR ACTION

Create an ongoing peacetime military response to major domestic emergencies. We could create an effective Disaster Strike Team by identifying 4,000 to 5,000 military personnel who would be prepared to move rapidly into any part of the country when disaster strikes. The strike team could move immediately into an area, save lives and provide shelter quickly to the victims of the disaster.

Require the Federal Government to plan in advance for major disasters. The federal response to an emergency must be organized with local interests such as counties, cities, churches, hospitals and private nonprofit organizations prior to a disaster. A detailed action plan must be in place to help disaster response personnel direct emergency activities; FEMA should work closely with state and local officials to increase preparedness and recovery capabilities.

Revise Federal programs to focus on serving the victim. Currently, the application process for assistance is unnecessarily complicated and time consuming. It is nearly impossible for a victim to learn about all of the programs in a timely manner and move rapidly through the application process. The process must be simplified and streamlined.

Demand that the President appoint a disaster recovery expert to lead the Federal effort. The person selected must have extensive experience in preparedness, response and recovery efforts.

Hire only experienced disaster personnel to staff FEMA. Right now, FEMA has the highest ratio of politically appointed staff members of any governmental agency. These political operatives should not be the ones directing our emergency response during a crisis. FEMA staff members should have experience in responding to an emergency and providing immediate aid to disaster victims.

Use the vast volunteer resources of the private sector and nonprofit organizations throughout the country in response to a crisis. The private sector and leaders from nonprofit agencies throughout the country must have greater involvement in the preparation for major disasters. Through advanced planning, the federal government must contact nonprofit groups such as food banks, shelters, schools and

churches, so that when a disaster occurs these organizations can provide relief efforts immediately.

Increase hazard reduction. The federal government should encourage and assist localities in implementing preventive measures—such as seismic strengthening—to lessen the destructive effects of future disasters. An effective hazard mitigation program would reduce the risk to life and property, and could save federal, state and local governments millions of dollars in recovery costs.

Senator MIKULSKI. Thank you very much.

Senator Gramm, as our ranking minority, do you want to make a statement?

We also wish to acknowledge that Senator Inouye is here as well.

STATEMENT OF SENATOR GRAMM

Senator GRAMM. Thank you, Madam Chairman. Let me just put my opening statement in the record and say that I, too, believe that this is an important issue. We have a good list of witnesses. I want to thank the Chair for holding this hearing.

I think FEMA is one of those agencies that we need to look at. I think with anything that is done anywhere, especially in government, there is always room for improvement.

I also want to say, since this is our first meeting of the subcommittee since I became ranking member, I look forward to working with our chair. I have always enjoyed working with her. I have always found her to be a quick study. I have found her to be receptive to new ideas. So, I look forward to this work, and thank you, Madam Chair.

Senator MIKULSKI. Thank you.

Senator Inouye, did you wish to say something?

STATEMENT OF HON. DANIEL K. INOUE, U.S. SENATOR FROM HAWAII

Senator INOUE. First, Madam Chair, may I commend you for calling this hearing on this very critical area.

Second, I thank you for inviting me to participate. I would like to sit through the whole hearing, but I have my committee also.

Unlike Florida and Louisiana, as a Senator from Hawaii, I must say that we are pleased with the work of FEMA. They cut red tape, as they should. The National Guard came through with flying colors. We have had a civil defense organization that was established prior to World War II and everything seemed to work well.

Whenever we have chaos, crisis, we are bound to find that sometimes the gears do not mesh, but in the case of Hawaii, I must say that, all in all, we are very pleased.

CATASTROPHIC INSURANCE COVERAGE

We have just one problem, Madam Chair, and it is not the result of the work of FEMA. It is the insurance coverage of homes. Today it is almost impossible to get any insurance coverage for new homes because one company, as a result of Iniki, has gone out of business. Other companies are holding fast.

I will be introducing, as I did last year, a bill for coverage of catastrophic events, such as hurricanes, earthquakes, and volcanic eruptions. Otherwise, we will find places like Florida or places like Hawaii where we will not get insurance coverage.

So, with that, I thank you very much for inviting me.

Senator MIKULSKI. Thank you, Senator. As the subcommittee chairman on Defense Appropriations, we thank the military for its response in all these disasters and look forward to working with you on this and your insurance problems.

Senator Burns, did you want to say anything? We could go on and I know that Senator Mack will have something to add to Senator Graham's testimony.

STATEMENTS OF SENATORS BURNS AND D'AMATO

Senator BURNS. Thank you, Madam Chairman. I appreciate your kindness. I have a statement that I want to put in the record.

I will say my first exposure to FEMA was as an auctioneer. I got a call from the our director in Yellowstone County, MT, one time, and he said I have 2½ tons of crackers, soda crackers, that had spoiled and was in storage. So, that was my first exposure. It was the strangest auction I have ever been to in my life.

They do not pay commissions, by the way. We have got to do something about that.

I was a county commissioner and I am delighted to hear Senator Feinstein in her words—because I was a part of the modernization of Yellowstone County, of computerized response, actions taken, in other words, identifying those areas where we have possible disasters and also our response to those. So, as the California Senator from San Francisco understands, counties really get it when it comes to response time and especially through FEMA. So, I am delighted to hear what she had to say because I have been a part of that modernization of FEMA in the State of Montana. Although we do not have disasters up there in that quiet, little State—we do not want to have any, but if we do, we want to be ready.

I appreciate your kindness and I will have a statement that I will put in and I have some questions. Thank you for calling these hearings.

Senator MIKULSKI. Thank you very much.

[The statements follow:]

STATEMENT OF SENATOR BURNS

Madam Chairwoman, I am glad to be here. This hearing marks the first Appropriations Committee hearing since I became a member of the Senate Appropriations Committee. There has not been a Montanan on this Committee since Mike Mansfield served here nearly 20 years ago.

I look forward to hearing from our witnesses as a former local government official—I was a county commissioner for Yellowstone County, Montana, I dealt with agencies such as FEMA all the time. And that is how I intend to approach it this time as well—as someone who is directly responsible to the people I serve.

When you are a county commissioner your number is in the telephone book and when a constituent is upset with the delivery of a service they can get right to you.

FEMA is one of those federal agencies that has very direct contact with the citizens of our country. I look forward to visiting about how we can improve the delivery of that service.

I thank the Chairwoman.

STATEMENT OF SENATOR D'AMATO

Good morning. I would like to start by commending our distinguished Chair, Senator Mikulski, and Senator Gramm for calling this hearing today. I expect it will be enlightening and productive.

As you all know, New York State is no stranger to the natural disasters and the need for a quick Federal response. On December 11 of last year New York City,

Long Island and the surrounding areas were paralyzed by one of the worst storms to hit the area in 50 years. The "Nor'easter" destroyed homes, ruined businesses and brought area airports, roads and mass transit to a standstill.

We all saw on television images of Manhattan streets looking like the canals of Venice. We saw communities like Sea Gate in Brooklyn, and Bayville in Nassau County devastated by the awesome power of Nature. Homes along Long Island's South Shore were literally wiped out.

The storm toll was put at well over \$230 million. State and local officials have for the most part expressed satisfaction with the cooperation and promptness with the local FEMA response. Even as we sit here today, FEMA is working in several centers across Long Island processing claims for assistance from individual New Yorkers, small businesses and local non-profits. They are working with state and local officials to get an accurate assessment of the total damage to make appropriate financial assistance available.

Yet it is clear that in "catastrophic" disasters like Hurricane Andrew, one of the worst natural disasters to hit the United States, FEMA and the Federal response has shown itself in need of improvement. We all know the stories that came out of South Florida of delays in providing hundreds of thousands of citizens with emergency shelters and food. We know of the jurisdictional disagreements between state, FEMA and military officials. We know about the finger pointing between different government officials over who was to blame for these shortcomings.

I am encouraged by these distinguished members of the panel who have agreed to appear before this committee today. I am impressed by the depth of their knowledge and the breadth of their experience. It is important that we hear about the problems of disaster response from national, state and local perspectives. I am hopeful that this hearing can shed new light on the causes of these problems and, more importantly, that it will act a guide to meaningful, thoughtful solutions.

Thank you Madam Chair.

STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM FLORIDA

Senator MIKULSKI. Senator Graham, we now turn to you for your testimony. Proceed.

Senator GRAHAM. Thank you very much, Madam Chairman. I appreciate the opportunity to present my comments, which I would like to file in the form of a written statement and then speak extemporaneously for the time allotted.

I, too, wish to commend you for the leadership that you have provided on this issue over a long period of time, including calling this hearing, and with your other colleagues, look forward to working with you in making the Federal Government's response to emergencies a more effective and citizen-oriented process.

CRISIS PREPARATION

I want to indicate the focus of my remarks. I consider that in disaster planning, there are essentially three phases. There is the predisaster phase, the preparation before the event. There is the immediate crisis phase, the hours and days immediately after the event, and then there is the longer term rebuilding.

My focus today is going to be on the second of those three stages; that is, what occurs in the hours immediately after the crisis, and it is going to be focused on what I would describe as the megadisaster, those events—earthquakes, hurricanes, major disasters—that are beyond that which is normally contemplated.

I am going to suggest that our problem is more than just the functioning of FEMA, that we have a systemic problem as it relates to the crisis phase for a megadisaster. That is that the Agency that we have assigned that responsibility, or any other agency like it to which we might assign that responsibility, even operating at the highest level efficiency, would be unlikely to be able to meet the challenge that it would face.

The basic assumptions upon which civilian disaster preparation are predicated, and that is, if there is going to be some infrastructure of transportation, of communication, a neighborhood structure, a cushion of time—all of those are eliminated in a megadisaster. There needs to be an institutional response other than FEMA or a subsequent civilian agency in order to provide the necessary assistance which the citizens affected by those megadisasters will require.

The statistics of Hurricane Andrew were laid out well in the inspector general's report, which I am certain will be discussed later when the Office of the Inspector General reports. But in the report entitled "FEMA's Disaster Management Program: A Performance Audit after Hurricane Andrew," the report stated the State of Florida reported 40 hurricane-related deaths, which coincidentally is an amazingly low figure given the scale of this disaster. If there had not been effective preplanning, that first phase, the deaths would have been in the hundreds or thousands.

Proceeding on with the report. Over 25,000 homes were destroyed and about 130,000 homes damaged.

Dade County, the county in which the principal thrust of the hurricane hit, reported 85,000 jobs lost. They predict that it will take 3 years for the economy to recover, a period that I consider to be quite optimistic, and more than 7 years for jobs to return to prestorm levels.

The American Insurance Service Group estimated 610,000 insurance claims, calculated insured losses at \$10.7 billion, a number which has now been substantially increased.

That is the scale of the circumstance that was left to be dealt with after the August 23 hurricane.

MILITARY AS PRINCIPAL RESPONSE AGENCY

In my own judgment, the only entity which is capable of responding to a megadisaster in the crisis period is the military. The effectiveness of the military was demonstrated when it did arrive after Hurricane Andrew. The military was able to bring in self-contained facilities for itself and immediately began to provide for the most urgent needs of the citizens affected—shelter, water, food, medical supplies. There would have been no other entity capable of providing such a range of services and to such a large number of people other than the military. Therefore, it is my basic recommendation that the military should be thought of as the principal response agency in the crisis period to major disasters.

There will be some requirements in terms of implementing this recommendation. Requirements of the military will include that in its training, in its equipping, and in its field-based exercises, that these type of activities be considered as a regular, ongoing part of its responsibilities.

We now have our military deployed in Somalia providing humanitarian assistance and security almost halfway around the world as not only the only agency in the United States, but virtually the only agency globally capable of performing that kind of humanitarian function. To me that indicates the appropriateness of the military to provide domestically that kind of support.

The second issue within the use of the military is who should have the political responsibility and accountability for the military. As a former Governor, I am sensitive to issues of State rights, responsibilities, and gubernatorial prerogatives, but I believe that in a disaster of the scale of Hurricane Andrew that the President should have the authority to immediately call the military to use.

To me that has two principal benefits. One is a clear line of responsibility. There would be no loss of time in a debate over who should make that decision.

Second, the President would be in a position to do some early preparation. Hurricane Andrew had already devastated parts of the Bahamas. Its severity was known before it impacted the coast of Florida. Ideally, the President, knowing that he had this authority and responsibility, could have started the process of deploying the military before the hurricane hit so that the number of hours that would be required before they could be on scene delivering services would be minimized.

Madam Chair, that is my principal recommendation. There are some areas of improvement within FEMA that relate to what I would call the more standard disasters which has been called upon, and I think the comments made by Senator Inouye in a positive sense toward FEMA would be consistent with the kind of reports that one might receive in an event of a lesser scale than Hurricane Andrew.

I would say that there are some areas of observation within FEMA's performance in those standard events, one of which, as you have already stated, the need to professionalize FEMA, to see it as an agency much like the military that has an ongoing professional cadre of individuals whose test is their ability to perform prior to and during crisis situations.

There also is the need for a greater, what I would call, consumer or citizen friendliness. As an example in Hurricane Andrew, they were serving a population in which many people spoke Spanish or Creole. Yet, in the early days, there were no FEMA officials who spoke either of those languages. So, you had great difficulty just communicating with the people who were most in need of services.

There were also procedural complexities, logistical inconvenience. People had to travel 20 to 25 miles to get certain services when they did not have transportation in the first instance, or where their transportation had been damaged by the hurricane.

So, there are areas of FEMA improvement, but the fundamental message that I leave is that there is a scale of events in which a civilian response is, in my opinion, systemically incapable of meeting citizen needs. This Congress, this subcommittee, should give leadership to looking at a new responsibility for the military to respond in those instances with new authority for the President to call upon those national resources.

Thank you, Madam Chairman.

[The statement follows:]

STATEMENT OF SENATOR GRAHAM

Last December, America impressed the world by how fast it mobilized a force in unfamiliar terrain to assist a devastated country called Somolia.

That was half-way around the world.

Last August South Florida was devastated, by a force named Andrew—as powerful as bombs and armies.

According to the recently released Federal Emergency Management Agency's Inspector General's report entitled: "FEMA's Disaster Management Program: A Performance Audit After Hurricane Andrew"; which said, "The State of Florida reported 40 hurricane-related deaths, over 25,000 homes were destroyed and about 130,000 damaged. Dade County officials reported 85,000 jobs lost. They predict it will take three years for the economy to recover, and more than seven years for jobs to return to pre-storm levels. The American Insurance Services Group estimated 610,000 insurance claims and calculated insured losses at \$10.7 billion." The estimated cost for FEMA expenditures is around \$1.8 billion. The total federal expenditures to date are estimated to be in the \$7-8 billion dollar range.

Response efforts for Hurricane Andrew provided over 55 million square feet of plastic sheeting for roofs, over 11 million cubic yards of debris were removed and around 172,500 applications for individual assistance were received.

After a typical storm passes through an area there is usually a temporary breakdown in transportation and communication which can be quickly brought back on-line. The response mechanisms that are predicated on experience indicate that there is a cushion of time after the storm to get things prepared before the storm hits and the victims need assistance. Also after a typical storm the affected victims can get immediate assistance from and work together with their neighbors who were not impacted.

After a mega-storm like Hurricane Andrew, nothing worked. There was a total break down in transportation and communication for an extended period of time. Power was out to over 50,000 homes for weeks. Communications were provided by the Goodyear Blimp and the military handing out battery powered radios. Two thousand-plus traffic signals in Dade county were blown down.

There was no cushion of time to get assistance to the new victims. People needed immediate help since they were exposed to the weather. And there were no neighbors to help each other since blocks and subdivisions had been devastated.

One of the clear lessons we've learned from this disaster is to redefine the federal role in emergency responses, including the military. Our nation must recognize that disasters of the magnitude of Hurricane Andrew are national emergencies, not just state and local matters to which state and local governments can turn to the federal government for emergency assistance.

The federal government and Congress need to review and reassess the ability to mobilize the military after catastrophic mega-disasters before invitation of state or local governments. I propose that the President be able to declare a national emergency when a natural or man-made catastrophe reaches a scale beyond that which state and local governments can be expected to respond.

As a former governor, I view this not as an intrusion, but rather as an acknowledgement that a catastrophe on the scale of Hurricane Andrew is beyond community response. I want to draw a distinction between those disasters that are within the scope of planning and emergency resource deployment for the typical storms from those that are beyond the scope of response ability of the local community and fall within the mega-disasters.

Thus an earlier federal emergency declaration means that more men and materials can be deployed to the pending disaster scene earlier to provide timely public assistance.

Overall, the FEMA employees who worked the disaster should be credited with doing a good job. They worked hard and it made a difference.

Disaster assistance comes in three stages: disaster planning; post crisis; and rebuilding. FEMA did well in the disaster planning area. Three-quarters of a million people were evacuated and fortunately only 40 deaths occurred. In my opinion the disaster planning stage handled by FEMA and perhaps augmented by the military would be effective for both the mega-storms and the typical storms.

Post crisis FEMA did poorly. It is not a matter of FEMA being incompetent so that its response efforts could be improved, rather a different resource provider—the military—is needed for the response. Thus for mega-storms the military would provide the appropriate response mechanism during this phase. For typical storms, a FEMA or FEMA-like organization would be suitable.

The Rebuilding stage also needs a FEMA or FEMA-like organization used for both mega-storms and typical storms. However, the organization should be "victim friendly."

Highest priority goes to human life and life-supporting services that provide food, shelter and medical help. These services should be "victim friendly," recognizing that often those who are hurt the most have the least. I found that FEMA was not always "victim friendly" during Hurricane Andrew. For example:

I visited a disaster center in the Homestead area that served Spanish and Creole-speaking victims. None of the relief officials spoke either.

Victims had to travel long distances to fill out the assistance forms without the aid of regular transportation.

FEMA's signs were not understood by the victims. They did not know the acronyms of the federal agencies.

FEMA inspectors who had to visit home sites could not get in contact with homeowners. The families would remain for days in some cases in a dangerous structure waiting for the FEMA inspector to arrive.

With the Cold War all but gone, our military is shrinking and refocusing its mission. Part of this transformation should include a new mission for the military which they should accept. This mission reflects the assistance the military has been providing both for Hurricane Andrew victims and currently in Somalia. The new mission would mean a reorientation to train military personnel for disaster response; including planning, field exercises and equipment.

This change would be a win-win situation for the military and the civilian population it serves. The military—with its speed and discipline—is uniquely able to augment disaster response efforts.

Plus, the expanded role would broaden the constituency for the military at a time when our traditional foreign threat is fading.

The idea—to create a national disaster response mechanism involving the military—is not new. It has been suggested by, among others, Charleston (S.C.) Mayor Joseph P. Riley, Jr., whose community was hit by Hurricane Hugo in 1989.

Mayor Riley testified to Congress in May of 1990, but unfortunately, his advice has not been heeded. Two years ago, in the aftermath of Hugo, Mayor Riley said: "What is needed that does not now exist is a pro-active, hands-on, immediacy attitude that begins before the hurricane hits.

"When a disaster hits, it's like going to war. When you have no power, no water, no stores open . . . it is not time for an assessment. What the federal government needs to do is to change the situation so that in the immediate days—and I think it's best handled by the Army—someone is in charge who hates paperwork and who sees it as a challenge to provide whatever is needed."

Fast forward from Hurricane Hugo in 1989 in Charleston to our own reactions when the first military units arrive in South Florida four to five days after Hurricane Andrew smashed South Dade. We said: "Send more. Now."

The President did so, to our applause. The military was a welcome addition to a community in ruin.

Not only should the military be able to move in quicker after disasters, but it should be allowed to do more.

Under current practice, the military can do cooking, food distribution, set up tents and perform other non-security functions. The National Guard helps with security.

Why shouldn't the military be authorized to direct traffic? Why shouldn't the military be allowed to help detain looters until local law enforcement can make arrests?

Everywhere I went during those first weeks—Homestead, Kendall, Florida City and points in between—I saw that police were over-burdened by the security needs after the hurricane.

The military could do more, without crossing the line and becoming a domestic police force.

A second key lesson we should learn from Hurricane Andrew is to stop under-funding FEMA, the Federal Emergency Management Agency.

FEMA has been consistently underfunded, which means it needs infusions of funds after disasters.

In my view, the White House and Congress have underfunded FEMA on purpose. One obvious reason: to hold down spending. One not-so-obvious reason: the powers that be like it that way.

If FEMA doesn't have enough disaster funds, then those who fight for more money are seen as heroes. This pattern of consistent under-funding is tailor-made for the worst kind of politics that exploits human misery.

Since 1989, Congress has approved three massive "supplemental" appropriations after disasters, including Hurricane Hugo, the Loma Prieta earthquake, Hurricane Bob, flooding in downtown Chicago and riots in Los Angeles.

Take 1989 as an example. The President's budget requested \$200 million for the Disaster Relief Fund administered by FEMA. After Hurricane Hugo struck the Carolina coast in September, Congress approved a "supplemental" appropriation nearly six times that amount: \$1.1 billion.

The recent pattern is all too familiar. Actual spending after disasters far exceeds what the President had requested for the disaster relief fund or what Congress had appropriated. Even though average actual outlays for disaster assistance for fiscal

years 1989, 1990 and 1991 were \$806 million per year, the President requested and Congress appropriated less than a fourth of that amount for 1992.

Hurricanes Hugo and Andrew should be exceptions to the norm, but our disaster fund should be adequately stocked so we don't have to resort to supplemental appropriations.

If we can figure out where hurricanes are going, and when they're going to hit land, then we can do a better job of figuring out the likelihood of disaster losses. The Disaster Relief Fund at FEMA should be treated more like an insurance fund, with a cold, sterile assessment of potential losses, not an underfunded sham that invites political gimmickry.

Table 1.—REQUESTS, APPROPRIATIONS, AND OUTLAYS, THE DISASTER RELIEF FUND, FISCAL YEARS 1984–93

[In thousands of dollars]

Fiscal year	Administration request ¹	Appropriations			Actual outlays
		Original	Supplemental	Total	
1984					243,014
1985	100,000	100,000		100,000	191,683
1986	194,000	100,000	250,000	² 345,700	335,444
1987	100,000	120,000		³ 120,000	219,112
1988	125,000	120,000		120,000	186,901
1989	200,000	100,000	⁴ 1,108,000	1,208,000	140,316
1990	270,000	98,450	1,150,000	⁵ 1,250,950	1,433,959
1991	270,000				⁶ 844,800
1992	⁷ 185,459	185,000	4,136,000	⁸ 4,321,000	⁶ 659,911
1993	292,000	⁹ 292,095	N/A	¹⁰ 292,095	⁶ 734,873

¹ Information in this column represents first request made each year by the Administration in submitting its budget to the Congress. Does not include amended requests or requests submitted at other times.

² According to FEMA, in fiscal year 1986 a sequester of \$4.3 million was applied to the total appropriations.

³ Public Law 100–202, the Continuing Appropriations Act for Fiscal Year 1988 (101 Stat. 1329–200), appropriated \$120 million for disaster relief. According to information provided by FEMA, the original appropriation for that fiscal year was \$125 million, but \$5 million was transferred, pursuant to instructions, to the Department of Labor for "low-income agriculture workers."

⁴ Supplemental appropriated in Public Law 101–100, a continuing appropriations bill enacted after Hurricane Hugo struck in September, 1989. According to FEMA, this amount was "referred to as a 'supplemental' but was technically an increase in the original appropriation during a continuing resolution."

⁵ Public Law 101–130, enacted after the Loma Prieta earthquake to make further continuing appropriations, appropriated \$1.1 billion for the disaster relief fund. In addition, \$50 million was appropriated to the disaster relief fund in Public Law 101–302, dire emergency supplemental appropriations legislation. Also, according to FEMA, total appropriation includes \$2.5 million transfer from President's Unanticipated Needs Fund.

⁶ Current estimate.

⁷ Does not include budget amendment of \$90 million submitted by the Administration after action taken by House Appropriations Committee.

⁸ Includes \$185 million original appropriation, \$943 million dire emergency supplemental approved in Public Law 102–229 (H.J. Res. 157), enacted in the fall of 1991 after Hurricane Bob, \$300 million for the Los Angeles riots, flooding in Chicago, and other needs, appropriated in Public Law 102–302 (H.R. 5132) and \$2.893 billion in Public Law 102–368 (H.R. 5620) for the response to Hurricanes Andrew and Iniki, Typhoon Omar, and other disasters.

⁹ Of the total appropriated, no more than \$95,000 was authorized to be transferred to FEMA's direct loan account for administrative expenses and subsidies.

¹⁰ As of January 1993.

NOTE.—The appearance of a deficit between outlays and appropriations is misleading because this table is a partial funding history. This table does not include appropriations made prior to 1984 and therefore available for future outlay.

Sources: FEMA Justification of Estimates in: U.S. Congress, House, Committee on Appropriations, Subcommittee on VA, HUD, and Independent Agencies, Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations. Hearings, fiscal years 1984–92. Washington, U.S. Govt. Print. Off. and Appropriations legislation as cited in preceding notes.

STATEMENT OF HON. CURT WELDON, U.S. REPRESENTATIVE FROM PENNSYLVANIA

Senator MIKULSKI. Congressman Weldon, we welcome you and understand that you bring a unique background and insight into emergency preparedness. Why don't you proceed?

Mr. WELDON. Thank you, Madam Chairman. I, first of all, want to thank the subcommittee for allowing me the opportunity to tes-

tify and for your leadership role both as a committee and you, Madam Chair, on issues involving fire and life safety.

I come as the chairman of the largest caucus in the Congress, the Congressional Fire and Emergency Caucus, which currently has 427 members of the House and the Senate and whose purpose for the last 4 years has been to focus on fire and life safety and emergency response issues.

My personal background has been totally involved in emergency response. I was a fire chief in my local hometown, and while working for the CIGNA Corp., I developed a national risk management program for governmental entities which I delivered across the country.

I was a local mayor for 5 years, as well as a county commissioner of a county of 600,000, and chairman of that commission for 5 years. So, I understand local government's role.

I have been personally involved in the last 6 years in every major disaster in America. I was up on the Valdez with Don Young and the two Senators following that incident.

I was at Loma Prieta, Madam Mayor and Senator, with your fire chief from San Francisco and the fire chief from Oakland and spent 2 days there after the incident reviewing what occurred.

I was in the wildlands fires in Yellowstone, Senator, with your officials from Montana and neighboring States and meeting with the forestry officials in that incident and looking at the way we respond to those disasters.

High-rise fires in Philadelphia, and I was at Hurricane Andrew. I spent Labor Day weekend living in the Homestead tent city because I had been part of delivering 500 tons of relief supplies that we had assembled in the Philadelphia area primarily for the Metro Dade Fire Department, with whom I have a very close working relationship. We also delivered a 14 by 70 foot incident command center that is currently being used in southern metro Dade County which was provided at entirely no cost to the taxpayers, but not directly through FEMA, although FEMA was cooperative in allowing us to bring the equipment down there.

PROBLEMS WITHIN FEMA

As you have pointed out, there have been problems with FEMA since its inception and I want to talk about some of them since the consolidation. FEMA has had the perception among America's domestic defenders, the first responders, the 1.5 million men and women who man our 32,000 fire and emergency response departments in this country, that FEMA is a civil defense, fallout shelter mentality organization. That has been a major problem.

During the Reagan years—and I'm a Republican—we had problems convincing the administration of that effort. As a matter of fact, during Ronald Reagan's tenure, as you know, there were attempts made to totally wipe out funding for the U.S. Fire Administration and the Fire Academy, and it was only because of Congress stepping in that we were able to stop that. That was a very short-sighted decision that we finally were able to change when George Bush came in, and for the 4 years of George Bush, we got increases each year in funding for those agencies.

So, the emergency response network in America has been totally frustrated with what they see at FEMA, and I am talking about rank and file, 1.5 million emergency responders.

In the 1980's, they were outraged, and they felt that they weren't being listened to because the Fire Academy was pulled away from the Fire Administration. The Fire Administration was put one place and the Fire Academy someplace else, and none of them at FEMA were listening to these emergency responders locally.

The emergency responders felt they were not involved and, in my opinion, they weren't involved. They were not the people who were helping to write the policies and to make the decisions, and yet they were the ones who were responding in every one of these situations.

But, Madam Chairman, I have to also say Congress has been part of the problem. Congress passed SARA title III a few years ago. Sounds good in Washington. Mandate certain levels of training and resources for dealing with hazardous material incidents. We didn't give any money for it. What good is it to mandate something on a city or a town to have a certain level of training when there is no dollars to implement it? As a result of that, we estimate that 90 percent of the municipalities in America were out of compliance with SARA title III because they had no resources to implement the requirements that we forced upon them. We can't do that.

JURISDICTION PROBLEM

FEMA has a jurisdictional problem. Do you realize that FEMA comes under the jurisdiction of 20 separate subcommittees? How in the world can we expect FEMA to get a coherent message when FEMA has to answer to 20 separate subcommittees in the House and the Senate that determine what it is supposed to be doing. So, we have to look at our own selves.

Finally, the administration and the Congress, in terms of the attempts to cut USFA and, for instance, in the case of Florida, one of the most successful operations down there was the use of the DMAT units, the prepositioned medical health service units that established medical care immediately. We almost eliminated funding for that a few years ago, the funding that provides volunteers from across the country to go into a disaster area and respond very quickly.

Even with these problems, FEMA alone cannot solve America's emergency response/preparedness problems and concerns. We have to understand that disaster planning, as was mentioned by Senator Feinstein, starts at the local level. If I compare Hurricane Andrew to Loma Prieta, I can tell you in California the response to Loma Prieta was overwhelming, and it was because California, in my opinion, is the most well-prepared State in the Nation to deal with disasters. Six months before Loma Prieta, they had had a full, hands-on exercise, a massive exercise involving thousands of people in southern California for exactly the kind of situation that occurred there. They were ready. They knew what to do and they organized themselves properly. I will have to be somewhat critical here and say that I do not think the local planning in Florida was what it should have been.

I will include for the record, if you will allow me, newspaper articles from the Miami papers where they detailed the lack of a detailed working plan in metro Dade County for emergency response and coordination.

[The information follows:]

(From the Miami Herald)

WIND EXPERTS FAULT FLIMSY CONSTRUCTION

By DON FINEFROCK
Herald Staff Writer

Shoddy construction was responsible for much of the damage caused by Hurricane Andrew, a national team of wind experts has concluded.

"A great many people are homeless, and they need not have been homeless but for want of a few nails," Peter Sparks, an engineering professor at Clemson University and a member of the Wind Engineering Research Council, said Thursday.

Sparks praised the South Florida Building Code and said much damage would have been avoided had it been followed.

"The shame was that the code was really quite good," he said. "The code was so good, in fact, that it was very easy to tell when it was not being followed."

Sparks and nine other members of the council, a national organization of experts on wind construction techniques, toured South Dade in the wake of Hurricane Andrew. While cautioning that their report is preliminary, the council said "some systematic deficiencies in the code and/or general construction practices are apparent."

The council's observations generally supported those of structural engineers who inspected the destruction last week at The Herald's request. Those experts found that many damaged homes had missing or misplaced nails, improperly placed wall braces and inadequately secured hurricane straps.

Ken Ford, an official with the Washington-based National Association of Home Builders who has toured the damage, said he was not surprised by the coun-

cil's findings. "From what I've seen, there were some flaws in construction. It wasn't widespread, it was random," he said. "You're going to find that. You can find good stuff, and you can find bad stuff."

The council's report did not single out any particular housing development or contractor. Last week, builders defended construction techniques, saying the damaged and destroyed houses weren't intended to withstand winds as strong as Andrew's.

But the council's report disputed suggestions that Andrew's winds were unusually strong and compared them to other recent storms, including Hurricane Hugo, which struck South Carolina in 1989. "The types and levels of damage do not support the suggestions . . . of gust speeds approaching 200 miles per hour," the report said.

The report said that while precise wind speed data is not available, evidence "suggests wind speeds . . . of between 110 and 125 miles per hour." Sparks noted that those speeds are lower than readings reported by the National Hurricane Center in Coral Gables. But he said the hurricane center's measurements were taken 150 feet above the ground, while engineering standards are set for winds at a height of 33 feet.

The report noted that South Florida's building code requires that houses withstand winds of 120 mph. Problems occurred when the code was not followed, Sparks said.

"My estimate is that you probably could have had winds of 200 mph and these houses could have resisted, if they were built according to code," he said.

"I think the code was very good," he said. "A great success, I think, were the masonry walls, the block walls. Even when the roofs had come off, the walls stayed in place. In most places in the country, those walls probably would have collapsed and killed a great many people. So I think you have to look at that as a great success."

Among the research council's other findings:

- It was unlikely that the storm strengthened as it moved inland. The council said neighborhoods inland from the coast probably sustained heavier damage because of the lack of sheltering trees and deficiencies in the way those houses were built. Homes in coastal areas tended to be sheltered by heavy tree cover.

- "The other thing that made it worse was that you had large tracts of housing," Sparks said. "The strange thing was you saw the exact same failure occur again and again (in houses), often on the same street. This was the first time we had seen a major hurricane go across tract homes."

- Roof coverings, overhangs, glassed areas and garage doors were the weak points in many homes, the council found.

- Plywood sheathing on roofs was often lost when that sheathing was attached by staples, the group said.

- Mobile homes and other types of manufactured housing should be considered "expendable" in storms like Andrew.

- Houses "need to be constructed with a high level of attention to details" if they are to withstand storms such as Andrew. "Omissions can provide the weak link, which leads to major damage," the report said.

(From the Miami Herald)

SHODDY WORK? DADE TO PROBE WHY BUILDINGS FAILED

By DON FINEFROCK
And KIMBERLY CROCKETT
Herald Staff Writers

Metro-Dade officials vowed Friday to discipline builders and county inspectors whose negligence contributed to the devastation from Hurricane Andrew and moved to ban some building materials that failed to hold up in the storm.

County officials also acknowledged that the massive South Dade reconstruction effort about to begin is more than Metro's inspection force can handle.

The Board of Rules and Appeals, a panel of architects, engineers and contractors that oversees the South Florida Building Code, called on the Metro Commission to impose an immediate ban on the use of pressed board and staples in roofs. Structural engineers say the widespread failure of those materials during Hurricane Andrew played a key role in the devastation of many homes.

Making sure homeowners don't rebuild their roofs in the same flawed manner "is the No. 1 concern," said Tom Utterback, the chairman of the board's roofing committee. "We're trying to deal with the future."

The county's chief building official also vowed to investigate any past negligence that may have contributed to the collapse of homes. County inspectors who failed to do their job may be fired, while contractors and subcontractors who performed shoddy work could have their licenses yanked, said Carlos Bonzon, director of building and zoning.

Earlier this week, the national Wind Engineering Research Council issued a report blaming poor construction for much of the damage caused by Andrew.

Structural engineers who inspected some of Dade's worst-hit neighborhoods at The Herald's request also found numerous construction flaws in the rubble.

Those flaws have angered thousands of people left homeless in the wake of the storm and raised concerns about the rebuilding effort.

As more and more Dade homeowners begin to patch up their homes, concern is growing about

the quality of that work and the county's ability to police the massive reconstruction.

Rules relaxed

Metro-Dade has relaxed its rules for builders and homeowners who are anxious to start construction — and possibly opened the door to some of the same abuses that left many of South Dade's homes vulnerable to Andrew's fury.

Homes that weren't built to code before Andrew struck may now be rebuilt with similar flaws — or worse.

Bonzon said the county will seek to inspect as much repair work as it can. But others say Metro-Dade inspectors — stretched thin even in the best of times — are facing impossible odds.

"Who are we kidding if we say the county is going to inspect all this work?" asked Bert Warshaw, the chairman of the Board of Rules and Appeals.

"If it has been a problem making adequate inspections in normal times, then it is a fact — it might be circumstantial, but it is a fact — that there is no way we can give adequate inspections on all this reconstruction."

Metro-Dade has told builders and homeowners who can't wait for the county to resume inspections to hire their own inspectors to review the work.

Build now, inspect later?

In some cases, Metro-Dade building officials also are telling homeowners to begin repair work now — and worry about getting a permit later.

The Board of Rules and Appeals endorsed those emergency measures Friday, and moved to expand the scope of work that can be done by private inspectors, although some expressed reservations about that expansion.

"That's my concern," said Charles Danger, the head of code enforcement in Dade. "If we have everybody in town doing inspections, there is no way to control that."

The Board of Rules and Appeals also voted to:

- Prohibit the use of pressed board materials, including composite wafer board, oriented strand board and structural particle board on roofs.

The action, if adopted by the Metro Commission, would mean that roofers would have to use plywood on roofs.

The board endorsed the ban over the objections of Steve Conwell, a lumber merchandiser for Home Depot in Tampa. Conwell told the board that suppliers couldn't ship enough plywood to meet the demand in South Dade.

The board was unmoved. "Find a way to get it in here," Warshaw said.

- Prohibit the use of roofing staples. Roofs held together with staples instead of nails performed poorly during the storm, structural engineers have said.

- Require the use of heavier, 30-pound roofing felt. The code currently allows use of 15-pound felt.

Inspectors dispatched

Bonzon said county teams have already been dispatched to inspect some of the county's heavily damaged neighborhoods, including the Hampshire Homes and Lakes by the Bay communities built by Lennar Corp. and Arvida's Country Walk.

Bonzon said code violations will result in disciplinary action. The county's construction trade qualifying board is empowered to fine, suspend licenses or reprimand contractors.

In cases where intentional or willful violations of the code can be proven, the county will work with the State Attorney's office.

Dade State Attorney Janet Reno said her office is checking whether criminal charges can be filed against contractors who acted negligently.

Inspectors who were also negligent could be reprimanded, suspended or dismissed, Bonzon said.

"Anybody who feels without a doubt there has been a violation in construction should call," Bonzon said.

(From the Miami Herald)

WHY HELP TOOK SO LONG

By JEFF LEEN and SYDNEY P. FREEDBERG
Herald Staff Writers

It was as if the emergency disaster planners wrote a superb Act I — the evacuation — then forgot to script Act II — the recovery.

What went wrong?

A lot.

Mobile hospitals and bulldozers arrived late. Vital phones and radios jammed. Food deliveries and National Guard units got snarled in traffic. Roadblocks turned away volunteers. Police didn't control intersections. City managers pleaded for help. Nobody activated the Army.

To be sure, thousands of good people labored heroically, monumentally, to establish order from a type of chaos that no one had ever seen before.

But for 100 critical hours after Andrew struck, governments reeled, and no one was in command. No hurricane czar, no Norman Schwarzkopf.

Thousands of people found themselves without shelter, food and, in some instances, vital medical supplies. For days, they lived in the ruins of their homes, terrified of looters, waiting for help to come.

So desperate was the need for water in Florida City that its police department hijacked a tanker headed for Homestead.

Government officials now are trying to play down those first chaotic four days, describing the initial confusion as "history."

Yet understanding the reasons for that confusion is crucial to averting greater disaster in the future. A bigger storm just a few miles north would have struck far more densely populated areas, where a 72-hour delay in rescue efforts could cost scores, if not hundreds, of lives.

A review of minute-by-minute emergency-operations logs obtained by The Miami Herald from the state of Florida and the National Guard, as well as interviews with some key players, chronicle the

inner workings of a system that was seriously understaffed, underequipped and underprepared.

The logs show that only 500 National Guardsmen were in Miami for several hours after Andrew's eye hit. Planners had scrambled to get cellular phones, but they were rendered useless when the storm knocked out microwave towers.

Eight hours after the hurricane landed, a stunned Gov. Lawton Chiles emerged from a Black Hawk helicopter and described South Dade as looking bombed out. But only 18 hours after that, according to the Guard's own log, a Guard major — incredibly, in retrospect — gave the following briefing to a U.S. Army counterpart:

"Florida has not requested any support from other states or federal agencies, nor do we project a need."

That was just one of the miscalculations in those first four days. Another was even more telling: Dade County's emergency manager said the governor's office — after getting a quick disaster declaration from the president —

suspended the county's assessment of damage before planners could fully report what had been destroyed or how pressing the need would be for food and water.

"If I had one thing to do over, I would never have listened to them on that," Kate Hale, the county's emergency operations manager, said several days later.

Before the storm: Heads up

The response to Hurricane Andrew was much like the storm itself: It started slowly, picked up speed and then quickly exploded into a fury of frenzied activity.

As late as 4:25 p.m. Friday, Aug. 21, there was no threat to Dade residents, according to the county's emergency planning office. Andrew was just a tropical storm, a still-distant swirl of wind more than 850 miles east of Miami.

By 6 a.m. Saturday, with Andrew a strengthening hurricane, the first mobilizations began. Metro-Dade police put its officers on 12-hour shifts, the American Red Cross alerted disaster teams, and the Coast Guard sent its seven cutters

steaming into the Caribbean, fleeing the storm. NASA tied down its rockets on the launch pads at Cape Canaveral.

By 8 a.m. Sunday, the battle against Hurricane Andrew was joined. Disaster planners activated emergency operations centers in Tallahassee and Dade.

For the next 19 hours, they focused their resources and energy on getting people out of the danger zones. The effort paid off. Although there were a few snafus it was arguably one of the best-coordinated evacuations in American history. Before nightfall Sunday, 84,361 had flocked to 229 Red Cross shelters across Florida.

All the attention spent on the evacuation exacted a serious toll. Not enough preparations were made for the storm's aftermath.

"Sunday we were trying to evacuate people. Nobody was thinking about disaster recovery," said Thomas Herndon, Chiles' chief of staff. "We weren't thinking about: Is there going to be food on Wednesday?"

At 9 a.m. Sunday, with Andrew on a "relentless course" toward South Florida, Chiles gave a "heads-up" to the National Guard, placing units on alert throughout the state.

The Guard, however, underestimated what would be required. One log entry shows that officers thought they would need only 366 additional soldiers after the storm struck. (Eventually, more than 6,000 would be dispatched.)

There were problems equipping the troops: Guard officers scrambled for such essentials as radios, rations, cots and water. They had only 15 30-hour batteries for 13 field radios. "Not enough gas in bulk available," a Guard official noted in the log at 10:30 a.m. "No cellular phones are available in the Miami area," another entry said.

Guardsmen urgently asked for 5,000 work gloves, 4,000 flashlights, 20,000 batteries and 6,000 pounds of ice.

Andrew's eye struck Florida City at 4:52 a.m. Monday. A momentary euphoria swept Miami: We survived. The storm everyone was waiting for — with a great tidal wave drowning Miami Beach — hadn't happened.

"The storm surges were not as bad as anticipated," Jim McClellan, a spokesman for the governor, said Monday morning.

In Dade's emergency opera-

tions center, planners' energy shifted to surveying the damage and providing security. For local law officers, protecting targets of opportunity became a priority. In retrospect, however, the looting turned out to be only "sporadic."

By Monday night, the police had made 200 looting and curfew arrests.

Damage assessments trickled in more slowly, and less accurately, than the planners would have liked. The state got its first indication of serious trouble in South Dade at 7:50 a.m. when the Florida Department of Law Enforcement reported:

"Coral Gables south heavily damaged, railroad track torn up. Shopping centers leveled in Homestead area."

At 8:15 a.m., the log noted: "No large number injured ... hospitals operational ... debris on roadways."

A better picture emerges

It was at 9 a.m. that a better picture emerged: "Homestead — 60 percent destruction." At 12:15 p.m., the state log noted, "initial reports note that little if any flooding exists as a result of the hurricane. Storm damage has occurred to structures in the Homestead area. A group of personnel are trying to make their way there from Miami."

It wasn't until 2:05 p.m. that the Guard got the word from Homestead City Manager Alex Muxo: "90 percent wiped out. 20,000 to 30,000 homeless. Won't have water until next week. Biggest need is port-o-lets."

The damage was hard to assess for several reasons. Trees and power lines blocked roads, delaying police and repair crews trying to reach the hardest-hit areas. Street signs were down. The winds destroyed four Metro-Dade helicopters that could have been used to survey the damage. Communication was virtually impossible.

Traffic was also a serious obstacle. Evacuated citizens returning down the Florida Turnpike gridlocked the road planners intended as their main route into the disaster area. Traffic control was all but nonexistent: Fewer than 1,000 Metro police were on the streets — far fewer than the number of intersections where Andrew's winds had downed lights; 1,908 of 2,300 traffic signals, or 83 percent of all the signals in the county, were knocked out.

Shortfalls of heavy road-clearing equipment complicated matters. In the early hours after the storm, 15 Florida Department of Transportation crews cleared debris — but only in North Dade. In South Dade, 65 DOT

trucks — 40 percent of its fleet — were destroyed.

Conceivably, the National Guard could have picked up the slack, but it had no engineering units in South Florida immediately after the storm. At 4:45 p.m., the order was given to activate the 153rd Engineering Company, the first military engineers on the scene. But they would not arrive at Ground Zero for more than two days.

By Monday night, the Guard was getting requests from all over for wreckers, low-boys, trucks, bulldozers, pavers, dump trucks, tractors, front-loaders. They were requests it couldn't fill.

At 1:26 a.m. Tuesday, the Guard's engineering units reported equipment problems of their own: trailers without tractors; vehicles in need of maintenance before they could move.

Adding to the problem was the widespread homelessness among the people designated to help: 128 Metro-Dade police; 100 Miami police; 35 Florida Highway Patrol and 25 Florida City police — the entire force.

The losses left the relief effort physically and psychologically depleted almost from the start.

Guard: 'Mission thinned'

With only 500 troops on hand immediately after the storm, the National Guard struggled to handle a growing number of missions from assorted county, state, even federal agencies.

8:45 a.m. Monday: "Mission #7" — support Metro-Dade in roadblocks and traffic control from Cutler Ridge to Homestead to Turkey Point.

9:15 a.m.: "Mission #8" — security and road blocks for a 15-block area described as encompassing "Bay Side and Coconut Grove."

Three battalions — 1,008 troops — ordered to secure South Dade got stuck in traffic. A bus carrying troops to Miami broke down. Another got stopped by a "traffic tie-up at the Turnpike entrance."

By 2 p.m. Tuesday, the Guard had received 27 missions, from delivering food to providing generators to making helicopters available for VIPs.

It wasn't until 3 p.m. Tuesday — 34 hours after the storm — that the Guard got "mission #28" — "provide 50 personnel for security support to Florida City." A day and a half after Andrew, one of the poorest and most devastated areas received its first help from the Guard.

The strain showed. "The south area command is being missioned thin," an officer noted in the log at 10:35 Monday night.

"Soldiers complaining they're guarding businesses and not helping people," an entry at

11:15 p.m. Tuesday stated.

Burdened with the most missions, the Guard became everybody's whipping boy, blamed for the problems that followed.

"I can tell you right now there's 100 Guardsmen sitting here waiting for assignments," Muxo told a radio reporter on Thursday. "We go to them and say, 'We want to assign you here, there and there,' and they say, 'We can't. We gotta get approval.' Well, approval might take three days."

Chiles flies to South Dade

The morning Andrew hit, Gov. Chiles tried to assume the role of hurricane czar, directing his overwhelmed state troops from the emergency operations center in Tallahassee.

As calls for state assistance flooded in, Chiles realized that Homestead was "hit very, very hard." He asked for help from the U.S. Coast Guard, ordered up more Guardsmen and talked to President Bush about federal disaster assistance.

The president initiated the call. "He wanted to help in any way he could," Chiles told reporters.

At 1:45 p.m. Monday, the governor's twin-engine Beechcraft touched down at Opa-locka Airport. A half-hour later, he was in the air again, helicoptering through the damage with federal and state disaster planners.

As the chopper flew farther south, the landscape of roofless houses, downed trees and then flattened houses grew grimmer.

On the ground again at 3:40 p.m., the governor reported, "It's like an air bomb went off."

"It's worse than Desert Storm," a Guard spokesman declared.

The governor reiterated the need for federal presence, but he said nothing about the U.S. Army.

President Bush's entourage arrived at Opa-locka at 5:56 p.m. Chiles joined the caravan.

Bush could have taken a chopper over the damage area, but his aides decided instead on a ground survey. He climbed into a bullet-proof Jeep Cherokee, followed by a bus full of photographers and members of the White House press corps.

The president passed overturned tractor-trailers, walked through a parking lot littered with dead birds and toppled palms, posed for a photo in front of a fallen tree on Miller Road, dropped in at a shelter and stopped in front of Peach's at Cutler Ridge Mall, where he read a speech from note cards. He pledged to declare Florida a disaster area, making it eligible for federal aid.

"There will be 27 agencies of the government then ready to

help in any way that the federal government can help," Bush declared.

But Bush never saw the hardest-hit areas, and local Florida reporters who had already seen the damage were excluded from his entourage.

At 7:26 a.m. Tuesday, the first mobile FEMA hospital arrived at the county government center in South Dade. The second medical team arrived at 11:45 a.m. — half a day late because, according to the state, the feds couldn't find a transport plane.

Less than 12 hours after the federal hospitals opened, they were out of surgical supplies. New supplies had to be brought in from Palm Beach County; they arrived five hours later.

At 9:20 a.m. Tuesday, a National Guard officer noted in the log that the U.S. Army had been briefed "on the current situation."

"Florida has not requested any support from other states or federal agencies [sic], nor do we project a need."

'We need food'

That would have been news to Dade County. By Monday evening, the county knew it was in deep trouble. County officials told FEMA about it in a meeting at the Dade Emergency Operations Center with Kate Hale.

"They were here. They knew what we needed. We talked about it," Hale said. "We said, 'What kind of requests do you need?' They were all taking notes."

Hale asked for the works: "We need food, we need water, we need medical," she told them. "We said we've got to have [Army] quartermaster units to handle everything, food and water. We also said we need everything you've got. All the help you can send us."

She never asked them to bring in the cavalry — a massive infusion of U.S. troops — but she felt she shouldn't have had to.

"That's like saying you've been hit by a car, and you should specifically get up and walk to the hospital and order your own medical treatment. I'm not a doctor. When I go to the doctor, I just say, 'I don't feel good.'"

The recovery was uncoordinated. Although everybody had a hurricane evacuation plan, there was no grand hurricane recovery plan for local, state and federal governments to follow.

"The biggest lesson of all is that everybody needs to have integrated recovery plans, because 90 percent of the work is after the storm," Hale said.

Dade's small disaster office — seven workers and a \$612,000 budget, cut \$61,000 in the past year — did have its own local recovery plan. But during the hurricane there was but a single

draft copy, stored in a box in unbound sheets.

Hunger and thirst grow

As early as Tuesday, the flaws in the food-distribution system started showing. By Thursday, they were glaring.

Seventeen hours after the storm, the Red Cross reported five trucks with 48,000 meals stuck on Florida's Turnpike, between Plymouth, Fla., north of Orlando, and Miami. "Are these trucks being held up because of curfew?" the Red Cross asked.

At 4 a.m. Tuesday, according to the National Guard log, the U.S. Department of Agriculture couldn't even locate two of its trucks with 26,000 meals.

By Tuesday evening, the state of Florida gave the National Guard mission impossible: "to deliver these items to distribution centers to support approximately 650,000 people."

Getting food and water into Dade wasn't the problem; getting it into South Dade was.

At 8:30 p.m. Tuesday, according to the state log: "Water tanks were sent to Homestead. The tankers were to be emptied and returned to Lake City to be refilled. The police in Florida City made the driver leave the water in Florida City."

Mayor Otis Wallace himself stood outside City Hall distributing the water to hundreds of people.

At 7 a.m. Wednesday, FEMA reported, 30,000 U.S. Army MREs (Meals-Ready to Eat) sat "awaiting instructions" on trucks in Tamiami Park because of "distribution site identification" problems. Thursday morning, people showed up at some South Dade feeding sites, and there was no food.

'There have been problems'

"There have been problems with missed deliveries," Michelle Baker, a county disaster planner, admitted then. "There have been problems with long lines."

The demand was massive: In the first 24 hours alone, 907 Red Cross volunteers in South Florida served 153,819 meals.

Corporations and volunteers helped with supply. By Wednesday, Zephyrhills and Publix contributed more than 200,000 gallons of water.

Food and water were not the only donations. Southern Bell provided reflective orange vests to law enforcement to wear while doing traffic control. Texaco donated "30,000 gallons of whatever is needed." Xerox agreed to loan copy machines, computers and fax machines. Northern Telecom loaned telephone equipment. Theo-Chem provided cleaning supplies. Motorola donated 1,500 two-way radios.

Aquatics Unlimited offered four aquanogs — floating vessels moved by paddle wheels with hydraulic arms for lifting and moving debris.

But so many unorganized volunteers poured into the disaster area that they jammed the roadways and were turned away by M-16-toting National Guardsmen. Other donors could not find any place to drop their offerings.

"We've got a load of free ice that's dying," said a trucker trying to give it away at South Dade High School. "We've already lost half of it because nobody knows where to send us."

The blowup

By Thursday morning, everyone in the relief effort was beyond exhaustion.

Metro firefighters, famed around the world for their disaster work, needed a bailout.

"We've been in Mexico, we've been in Armenia, now it's our turn to ask for help," said Wilfredo Alvarez, an assistant Metro Dade fire chief.

People in the streets and on radio talk shows compared the mess here with the military's logistical miracle in the Gulf War. If the U.S. military could do that for Kuwait, why couldn't it bring food and water to South Dade?

Chiles went on radio Thursday with a soothing message: "As we get the FEMA office set up, you're going to see a lot of change." His words brought derision. The Y-100 host urged listeners to "give the president a call," dispensing the number.

At 10:30 a.m., in the Dade Emergency Operations Center, Kate Hale stood on a chair in the middle of the room, trying to keep it all together.

"Everybody was getting ready to drop," she recounted eight days later. "The citizens were getting angry, and the press was coming at us with questions: 'Why aren't you doing anything?' And we were doing everything we possibly could. And that was only going to make us crack quicker."

What's more, she was upset at the slow response of the National Guard and the federal government and mad about the rosy picture Red Cross chief Elizabeth Dole had painted on *Larry King Live* the night before.

"What she did was create the impression to the world that all this aid was in here, and we're just fine, thank you," Hale said.

Hale knew the reality was far different. Striding purposefully into the press room, she told the cameramen:

"I want this live."

'Enough is enough'

As the cameras rolled, she denounced Washington. "Enough is enough. Quit playing like a bunch of kids. . . . Where in the hell is the cavalry? For God's sakes, where are they? We're going to have more casualties because we're going to have more people dehydrated. People without water. People without food. Babies without formula."

Hale's eyes brimmed with tears. "We need food, we need water, we need people down here. We're all about ready to drop, and the reinforcements are not going in fast enough."

She blasted the Guard. "We need better National Guard down here. They do not take orders from me. They take requests from me. . . . I am not the disaster czar down here. President Bush was down here. I'd like him to follow up on the commitments he made."

Kate Hale got the attention of the Oval Office and everybody else.

Within an hour, Bush's emissary, U.S. Transportation Secretary Andrew Card Jr., came into the operations center and promised the Army within 24 hours.

"Help is on the way," Card said.

He said Chiles had only asked for the troops two hours earlier.

Chiles vehemently disagreed. His aides said Florida repeatedly asked for federal help before and after the storm. The state's version: Hours after the storm, in a face-to-face meeting with an Army colonel, the state verbally requested Army field hospitals and engineering support though the governor did not specifically ask for thousands of airborne rangers. Like Hale, the state didn't feel it had to.

"If they said they wanted written requests, we, I'm sure, would have complied," said Herndon, Chiles' chief of staff. "We weren't having the time to write out written requests and invitations."

The White House version: Since no formal request came, the president didn't order a massive troop callup. The 18th Airborne Corps, with more than 20,000 troops, was put on alert Monday, but Bush didn't activate them until Thursday — after Hale's blowup.

Lt. Gov. Buddy MacKay publicly blamed "chains of command in the military."

Said another source familiar with the snafu, "The governor didn't say the magic word."

Kate Hale blamed the damage assessment that was suspended by the governor's office on Monday, after the president had designated Florida as a national disaster area. With a clearer idea of the damage earlier and in writing, top officials "might have acted sooner," she said.

"I think maybe that would have given them a better picture or they could have forwarded the paper on," Hale said. "Apparently this whole thing is dependent on little pieces of paper."

"Even without that paper everyone knew."

At 9:15 a.m. that Friday, a U.S. Army C-5A landed at Homestead Air Force Base loaded with Army field kitchens. Red-bereted rangers quickly restored order, driving around in their Humvees fresh with mustard-colored Desert Storm paint.

A week later, 16,000 U.S. Army troops and Marines were on the ground, with 11,000 more on the way.

"It starts with a trickle that turns into a torrent and finally becomes a flood," said FEM spokesman Jay Eaker.

(From the New York Times, Sept. 5, 1992)

SNARL OF RED TAPE KEEPS U.S. CHECKS FROM STORM AREA

MIAMI, Sept. 5 — The Federal Emergency Management Agency, the Government's lifeline to people caught in disasters, is so understaffed and consumed by paperwork that tens of thousands of victims of Hurricane Andrew are unlikely to get immediate financial help when they need it most. Few have seen a check yet, and many others have been told that it will be weeks more before they can even apply for aid.

The main problem seems to be red tape that keeps even the most dedicated agency workers from doing more than helping the hurricane victims fill out forms.

16 Centers for Thousands

Of scores of people interviewed over the last week, not one had yet received a Government check, and many others were still trying to apply for one. A major Homestead bank that has been operating since the day after the storm hit on Aug. 24 said it had seen numerous checks from insurance companies but no Federal relief checks.

The emergency management agency has set up 16 temporary Disaster Assistance Centers in Dade County, most in tents, where several hundred registrars help people fill out forms for subsistence and home-repair grants. The registrars also steer people to other workers at the centers who can help, including counselors from the Small Business Administration, which provides loans to qualified businesses and homeowners, and the Internal Revenue Service, the Department of Veterans Affairs, the Red Cross and the Salvation Army.

The management agency also takes information for grant applications by telephone, although working telephones are hard to find in badly battered communities like Homestead, Florida City and Cutler Ridge. And some centers have begun dispatching bilingual aides into neighborhoods where people are clinging to the ruins of their homes.

But many of the estimated 200,000 people left homeless have still not been reached, and when lines build up at the assistance centers, the storm victims are given appointments to come back days and even weeks later.

"What do we do in the meantime?" Juanita Mosley said after she was told to come back between 10 A.M. and noon on Sept. 26.

The agency said that by Wednesday it had paid out \$500,000 in several hundred checks to grant applicants in Florida, for an average payment of less than \$2,000. The five disaster centers in Louisiana, a state that took less of a hurricane blow than Florida, had dispatched 169 checks totaling \$228,000.

"We are writing checks faster than in any other disaster," said Andrea Booher, a spokeswoman for the emergency management agency.

As he rushed off from a quick inspection of an assistance center in Homestead, Antonio Perez, an associate director of the agency, said, "F.E.M.A.'s

doing just great despite what your newspaper is reporting."

No Checks at a Bank

Whatever the amounts, it is almost impossible to find anyone who has received a check from either the emergency management agency or the Small Business Administration. Likely people to come across the checks are cashiers at the First National Bank of Homestead, whose main office reopened the day after the storm. Through a week when nearly all other banks remained out of commission, First National cashed checks and took deposits for all comers, customers or not.

"We are not seeing any Government checks," Bob Jensen, a First National vice president, said late this week.

Mr. Jensen said that he was seeing checks only from insurance companies to policyholders and that the first of those to show up were for immediate living expenses, typically \$2,500 to \$5,000. Lately, he said, he was seeing much larger amounts for the full value of homes that were destroyed.

One day this week, Juanita Mosley, whose Southern Gentleman barber shop in Cutler Ridge is shut down and strewn with the debris of a collapsed ceiling, joined the line of 20 people at the assistance center in the parking lot of Cutler Ridge Mall. Ms. Mosley, who has owned the shop for 22 years, said she could not find her landlord to ask if he would rebuild the barber shop space. She had recently let her insurance expire while she looked at other policies.

"I don't have a business," Ms. Mosley said. "I don't have a home. I don't have an income."

Many people here do not buy insurance other than personal liability coverage for their cars. This is a low-wage economy of clerks and farm workers who typically do not own much personal property or have the disposable income to pay for insurance.

At the center, operating from folding tables and chairs under two candy-cane-striped canopies, 10 counselors worked patiently, most straight through lunch in 90-degree heat filling out the emergency agency's 29-question Disaster Assistance Registration/Application forms. One of the smaller centers, it is also the most productive in putting through applications quickly, agency figures show.

'Mass of People' in Need

"I'm finding that we have a mass of people that need help now," said Jimmy Wheeler, the center's manager, who stood at his post all day greeting people. "We try to find out what type of assistance they need."

But there is little the counselors can actually do. The center cannot approve applications or shed light on how much money applicants might get, when they will get it or whether they will get any at all.

There was still less the center could do for Ms. Mosley. When she came to the front of the line after a 20-minute wait, Mr. Wheeler gave her an Appointment Information form inviting her back on Sept. 26.

Yet Ms. Mosley was luckier than people who came later. By mid-afternoon, when Margaret McBean, 37, got

in line, appointments were backing up, and she was asked to come back on Oct. 2.

"Four kids and they put you on hold," said Ms. McBean, a medical secretary who is separated from her husband.

"I can't go to work," she added. "My car's windshield is broke. We don't have no electricity or water. I need to move somewhere. I don't have savings. I live from paycheck to paycheck, like everybody else."

"You listen to the radio saying the Government is going to help you. Where do they help you? Go fill out this application and wait. I can't wait one month, two months."

Ms. Mosley and Ms. McBean might have been immediately served if they had gone to one of the centers that, because of their remote locations, have been getting little business.

"They're not limited to going to that center in their neighborhood," said Jim Aguirre, a spokesman for the emergency management agency. But at the Cutler Ridge center, no one advised people to try elsewhere.

In general, information of the centers is spread by word of mouth and by radio. But most of the centers are so poorly marked that a person could pass by without realizing they are there. There is little uniformity in appearance or organization.

In addition to location, luck is a factor in getting processed. On a recent day, the counselors at Mr. Wheeler's center were told that if long lines formed appointments were to be given for Oct. 7, but rain cut down on the number of visitors to the center, allowing counselors to meet with all comers.

Bureaucratic Caution

What seems to be involved here is a conflict between compassion and caution, with the emphasis on caution. The emergency management agency and the Small Business Administration want to be alert to fraud and the criticism of taxpayers and Congressmen. "We don't have someone willy-nilly writing checks," Mr. Aguirre said.

But because of the scrutiny given to applications, the agency can violate another of its missions: helping people quickly and making sure that, as an agency filer puts it, "people have a safe place to live until their homes can be prepared."

Both agencies are also under budget constraints that prevent them from sending enough counselors and investigators into the area to speed the work. And as big organizations, they can be slow in responding to the ever-changing needs of people here.

Although F.E.M.A. has dealt with scores of disasters in the 13 years since President Jimmy Carter established it, the agency is learning as it goes in confronting what is proving to be the costliest natural disaster in the nation's history. On Thursday, for example, the agency told its registrars to disregard 14 of the 29 questions on the assistance form.

Adapting to Needs

Typically at the centers here, a hurricane victim approaches the manager, who makes a quick assessment of the person's needs and assigns him to a

registrar. If the registrars are backed up, the manager sets up an appointment to return.

The registrar first helps fill out the disaster application form and tries to see if the applicant has enough income to carry a Small Business Administration loan for up to \$100,000 for home repairs or up to \$500,000 to re-establish his business. If the applicant qualifies, he is sent home with a big manila envelope, addressed to the S.B.A., that contains other forms and requests for documents like tax returns, even though for many people such records blew away with their roofs.

People with little or no income and little insurance can apply for grants of up to \$11,500 to repair their homes. And every person with a damaged home, whatever his or her income, can apply for a grant to pay for three or four months rent, based on rental costs in the area and the emergency management agency's determination of the family's housing needs.

Each grant seeker is told that in 8 to 10 days an inspector will contact him to set up a time to visit and verify his claims. The applicant is also given an (800) telephone number with which he can track his application's progress or report a new address. Once an applicant finds a working phone, however, the (800) number is often busy.

Paper, but No Money

A few people seem fed up with their visits to the assistance centers. An unshaven man who appeared to be in his late 50's booted from the big center in Homestead, saying, "Yeah, I got help. A lot of paper but no money."

Another man, Jerry Beard, who wanted a small-business loan to replace lost equipment, seemed befuddled by the paper chase the Homestead center was sending him on. "I was here 40 minutes, and I've got enough stuff to keep me busy for a month," said Mr. Beard, who owns Jerry's Pest Control.

David Banks stopped at a center, waited in line for an hour, gave up and then came upon another, in the parking lot of the Naranja Park Baptist Church. That center is one of the more remote ones, and with no one in line, Mr. Banks was able to sit down with a registrar immediately.

Like many people here, Mr. Banks lost both his home and his business, a auto-repair business in which he went to people who would call him or send him a fax. He still has his truck but his home was demolished. He has moved to an apartment in Miami but has not been able to get his phone numbers transferred and so cannot get work. In addition, he said, he has lost a lot of his tools.

Mr. Banks's house was insured, and the insurance company has given him \$2,000 in living expenses. He used

but \$132 of that to get his temporary apartment — \$619 for a month's rent and the rest for security and a deposit.

The registrar chided him for spending so much of the money, Mr. Bar said, adding, "They know nothing about rents around here. That just means four walls to live in."

The registrar gave Mr. Banks form and told him to come back when the insurance company contacted him reimbursing him for the loss of his home. "Then another guy here said 'Forget that. Come back tomorrow,' Mr. Banks said. "I'm coming back tomorrow."

"What angers me most," he continued, "is that their favorite answers are 'Wait a minute,' and 'I don't know. Nobody has any idea of when the money is going to be available. One guy says seven days. Another guy says ten weeks. I expect it to be a long, long time.'"

Getting On With Life

With the immediate trauma of a hurricane over, many people apply for aid seen worn down but working to reassemble the order of their lives, many say they get sympathetic feelings at the assistance centers.

"We don't have a check, but at least we have a number now," said Fran Blackwelder, whose home and furniture store were destroyed.

Mr. WELDON. Nothing will succeed if the local folks haven't done their job in planning. It is easy to say, well, you can't plan for an Andrew. It's impossible. I was the mayor of a town of 5,000 people where we had the largest fire in America in 1975, the collision of two supertankers. Twenty-nine people died, \$100 million of property damage. Every local official has to plan for the worst and you have to be ready to respond to it. I think that was a shortcoming in Florida.

CODES AND CODE ENFORCEMENT

The other thing we have to look at—and this is true in the Florida situation. Codes and code enforcement are critical. The Miami papers did a whole series of articles on code enforcement in metro Dade County and the lack of followup. That is not something that we can control from Washington. Those steps have to be taken at the local level.

In the case of Andrew, FEMA had some gross embarrassments. For instance, one of their staffers had to pay his own way in to be there on the scene when the hurricane occurred because FEMA did not have the bureaucracy in place to have that person assigned as an authorized representative of FEMA before the incident occurred. That's outrageous. There isn't a need for us to reorganize and look at the way FEMA operates.

Another incident that I would like to mention to you which occurred out in California. FEMA needs to have a computerized inventory available for local officials on scene immediately to see what is necessary. When I was out in Loma Prieta, they were searching for bodies. The day after we were there, they found one fellow who was still in the collapsed freeway. They were using dogs to sniff out the bodies. I said why don't you use the thermal imagers which we use in the Navy on all of our Navy ships. No one

was aware the Federal Government had thermal imagers that they could make available to San Francisco and Oakland for free. We do not have and FEMA did not have at that time a computerized inventory of all of the multitude of resources that this country has that can be brought in immediately, whether it's civil engineers, whether it's contractors, whether it's equipment, or whatever.

They have taken some efforts in the last couple of years to address that problem, but my legislation, which I introduced 4 years ago in the House, would, in fact, have mandated them in that regard immediately.

Finally, let me say that now is the time for a thorough review of emergency response. I agree with Senator Inouye in terms of the need for a new national disaster insurance program mechanism of the type introduced in the House by Congressmen Al Swift and David Dryer. In fact, we held hearings on that last year. It would pick up, similar to what we do with flood insurance for natural disasters. I would encourage the Senate to look at that legislation as possibly something to build upon in establishing a new national Federal response so we don't have to pay all this money out once the incident occurs in the form of loans and grants.

Let me also say that I think two of the most important recommendations that perhaps I can give to you today that are more general and more macro in nature would be, one, we need to sit back and have Congress hold hearings like the one you are having today, hopefully, during the entire year of 1993. As a matter of fact, Madam Chairman, in the House Rob Andrews and I have introduced legislation to create a select committee on disaster preparedness and response.

There are 58 national associations that sit on my advisory board that deal with life safety and disaster issues in this country. Each of those organizations needs to be listened to, the firefighters, the fire chiefs, the ambulance association, the urban search and rescue people. We have not listened to them in the past. They need to be the ones that we take our advice from, not the paramilitary, ex-military, fallout shelter mentality bureaucrats who have run this emergency response network in the past. If we do that, we will be successful.

Either Congress can play that role—and you have been a leader in that regard—or we can ask President Clinton to establish a Presidential task force on emergency planning and response. That would be something else that I would present to you for your possible consideration.

Let me finally say please don't forget, regardless of what you hear today, the people who respond to every disaster in America, whether it's the wild lands fires in Yellowstone, Loma Prieta earthquake, the highrise fire in Philadelphia, whether it's the downing of the DC-10 in Sioux City, the Avianca crash in Long Island. Every one of those incidents, the first responder is not some paid bureaucrat. It is a fire and emergency response official. There are 1.5 million of them and 32,000 organizations across this country. They are the background of the country, and they have been ignored too long.

Thank you.

Senator MIKULSKI. Thank you, Congressman Weldon, for that content-rich and spirited testimony.

[The statement follows:]

STATEMENT OF CONGRESSMAN CURT WELDON

INTRODUCTION

Thank you for the opportunity to testify at this morning's important hearing on the role of the Federal Emergency Management Agency (FEMA) and the federal response plan. First, I want to commend the Subcommittee and its Members for focusing attention on the problem of immediate disaster relief. And, I especially applaud the Subcommittee's Chairperson, Senator Mikulski, for her long-standing leadership on this issue.

The question is not whether another natural disaster like Hurricane Andrew will strike the United States, but when. It is inevitable. Improvements in our nation's emergency response capabilities could one day prove to be the difference between life and death. For this reason, I am pleased to participate in this review of our nation's disaster preparedness and response program.

BACKGROUND

As you may know, I have an intense personal and professional interest in fire and emergency service issues. Following in the footsteps of my father and six brothers, I joined the Viscose Fire Company in Marcus Hook, Pennsylvania at the age of 18. Over the course of many years as a volunteer with the fire company, I worked my way up through the ranks to become President and Chief.

As a member of a volunteer fire company, I obtained an appreciation of the importance of adequate firefighter education and training. Consequently, I decided to attend Delaware County Community College at night, and in 1972, I received an A.A.S. Degree in Fire Protection. In addition to this graduate degree in fire science, I earned certification as a State Fire Instructor from the Pennsylvania State Fire School and became the first Administrator of the Delaware County Fire Academy. In this position, I managed training programs for 77 fire companies and directed approximately 200 separate training courses.

Like many volunteer firefighters, I have had to respond to major disasters. For example, in 1975, I served as Assistant Chief following the collision of an American chemical cargo ship, the *Edgar M. Queeny*, and the *Corinthos*, a Liberian tanker, at the Delaware River docks. The impact triggered a violent explosion and fire that killed 29 people. In the aftermath of the accident, I wrote a technical assessment of the incident, entitled, "The Corinthos Disaster." This assessment report also focused on marine and refinery fire safety issues.

In January of 1977, I combined careers and interests and joined INA Corporation, now Cigna, as director of training and manpower development. As director, I was responsible for the development of programs and activities in the area of risk management, which included fire protection, arson, hazardous and toxic waste handling, industrial hygiene, and environmental liability.

Ironically, I was asked to testify before several Committees in the Congress prior to my own election in 1986. In addition to appearing before various legislative bodies, I participated in numerous training seminars and spoke before many State and National Fire Conventions.

Although I decided to run for a seat in Congress for other important policy reasons, I quickly became alarmed by the lack of attention to fire service issues. To this end, I joined with several of my colleagues in both the House and Senate to establish the Congressional Fire Services Caucus (CFSC). The CFSC, which is the largest such organization on Capitol Hill, heightens awareness about the fire service and advocates on its behalf.

FEDERAL DISASTER RESPONSE

As the brief description above of my background illustrates, a major portion of my life has been devoted to fire protection and emergency response. Therefore, I believe that I am qualified to address the subject matter of this hearing from the dual perspective of first responder as well as policy-maker.

For too many years, the views of firefighters, ambulance drivers, disaster medics, and other responders have been ignored or shoved to the side by civil defense experts and/or military personnel. In order to have a meaningful discussion about the

fate of FEMA and the federal disaster response plan, it is imperative to take the time to evaluate carefully the views of my peers in the American Fire Service.

Following Hurricane Andrew, many in Congress began to call for the abolition of FEMA and a complete overhaul of the federal disaster response plan. Prior to taking any drastic action or hasty steps, we must review FEMA in the full context of its history. It is easy to criticize FEMA, and in my opinion, much of it is very well deserved. I have been outspoken on many occasions, but I also realize that our nation's shortcomings in immediate disaster response are not all FEMA's fault. It is a complex problem that has many causes.

In the past, FEMA has been a political dumping ground for retired generals and civil defense bureaucrats who had little practical understanding of or interest in emergency issues. The agency focused on fall-out shelters and civil defense, not on emergency response. It should come as no surprise, therefore, that FEMA has had difficulty responding to natural disasters.

Aside from the problems with FEMA's policy orientation, the agency has only attempted in recent years to solicit the participation of emergency responders. Many policy-makers have advocated transferring responsibility for immediate disaster response to the Department of Defense (DOD). While this proposal would presumably supply the military with a new role in a post Cold War world, it has many serious policy implications and fails to solve the issue of involving local authorities and responders.

When I was Chairman of the CFSC, I had the opportunity to observe first-hand the federal response to a number of natural and man-made disasters including: Hurricane Andrew, the San Francisco Earthquake, the Yellowstone Wildfire, and the Valdez Oil Spill. In these situations, the failure to adequately plan and prepare at the local level caused significant problems. Metro Dade's difficulties with the enforcement of building codes, for example, can not justifiably be blamed on FEMA.

There is also the problem of oversight. Twenty Subcommittees in both chambers have jurisdiction over some part of FEMA. Obviously, this overlapping Committee structure makes it difficult to review comprehensively FEMA's operations and has caused great confusion in regard to defining its mission and mandate.

In order to resolve the problem of oversight, Congressman Rob Andrews and I introduced a resolution to establish a Select Committee on Disaster Preparedness and Response. A Select Committee could provide the Congress with the broad perspective necessary to make a more informed decision about FEMA's future. Additionally, a Select Committee could examine the roles of the local, state, and federal governments and issue recommendations to coordinate their efforts.

Although I know that Congressional leaders are attempting to streamline the Committee structure and reduce legislative branch spending, I believe that the issue of disaster response is of national importance. Perhaps, the Clinton Administration might be willing to establish a Presidential Task-Force to examine this topic. Every American would welcome the Clinton Administration's leadership.

As a former firefighter, I would like to express my appreciation for the opportunity to appear before this Subcommittee to address emergency response issues. It is important that responders have input in this review process, and I look forward to continuing this dialogue.

Senator MIKULSKI. I have no questions of this panel. I think they were self-explanatory. I don't know if any of my colleagues want to ask questions.

Senator MACK. Madam Chair?

Senator MIKULSKI. Senator Mack, I was going to turn to you to see if you wanted to have your own comments along with your colleagues.

STATEMENT OF HON. CONNIE MACK, U.S. SENATOR FROM FLORIDA

Senator MACK. Madam Chair, I thank you for that. As I said a moment ago, I do have a prepared statement which I will put in the record.

There are several things that come to mind as I listened to the statements that have been made.

The first thing I think I would want to do is to express in this forum to the people of the country who responded to the people of Florida with such incredible graciousness and outpouring of re-

sources. There virtually was not a part of the country that did not respond.

Curt, you mentioned taking, what, 500 tons of supplies. That was done over and over and over again.

I was in York, PA, where a local television station had run a fund-raising effort, and the local community raised \$250,000 in York, PA, to send down to the victims of Hurricane Andrew.

So, my first comments are really to say thanks to the people of the country for their response to the needs of the people of south Florida.

Second, I would like to say we need to, at least from the perspective of Hurricane Andrew, understand the size and the scope of this in the sense of I don't know whether it was really possible to plan for this thing. I have lived through hurricanes before. As a matter of fact, my wife and I got married the day after Hurricane Donna went through our hometown with 120-mile-an-hour winds with gusts of 160. We thought we knew what hurricanes were all about, but when I arrived in Miami, I had never seen anything like this—never had seen anything.

So, I think that any criticisms that are expressed today with respect to what FEMA did in Florida, I think people need to put it in the context of the impact that that storm had on south Florida, which leads me to my next point.

There is an assumption that all relief is kind of built on the foundations of the local community, that there will be in place a whole group of people whose efforts will be to aid in relief.

Now, again, think about what happened in south Florida. The only way that I can express this is those of you—and we have all gone through this—who have lost a loved one, someone close to you who has died, if you can think about the emotional experience that you went through. One of the first things that happens to you is denial. I would suggest that the people in south Florida in trying to cope with this disaster were, in fact, dealing with those same emotions that you go through when you lose a loved one.

So, all I am trying to say here is there has to be some understanding of the significant impact on the local community as a result of the disaster itself.

Bob, you and I talked with highway patrolmen who hadn't seen their families for days who were trying to carry out their responsibility. This was happening all over the community.

The bottom line point is that I think we need to understand that with a disaster the scope of this one, that whatever foundation we had planned to have in place was significantly affected by the storm itself, and that impact slowed down the decisionmaking process. That is the human perspective. That is not even talking about the barriers that were created by the storm itself, the destruction that became barriers.

So, again, I share, Bob, many of the comments that you made with respect to the use of the military. In looking at what we went through, I don't know that there was any way other than the use of the military to bring the kind of relief that was necessary for the people of south Florida.

So, I hope we will be able to develop a process so that we can say that there are certain circumstances when the President will

be able to make the decision to send the military in. Whether you say any class 5 storm—I don't know whether you can just say that, but there ought to be a series of circumstances which we could identify that would say if these are taking place, the President has the right to make the move as rapidly as he believes is necessary.

I say this again. I know that there are going to be lots of criticism and there certainly is room for that. But when I see the people who went to work in south Florida, whether they were with FEMA, whether they were with the local community, they were all doing the best they could under the circumstances that were there. I want all of you to understand the severity of those circumstances.

Thank you, Madam Chairman.

[The statement follows:]

STATEMENT OF SENATOR MACK

Madam Chair, I appreciate your kind invitation to take part in this important hearing this morning. I look forward to working with you in the future on addressing the need to reform the Federal response to disasters.

During today's hearing, we will closely examine the Federal government's policy for responding immediately to a disaster. Specifically, we will review the performance of the Federal Emergency Management Agency (FEMA), and the role of the 26 Federal departments and agencies involved in emergency assistance. I believe our goal today should not be to simply criticize the Federal response to Hurricane Andrew, Typhoon Omar, and Hurricane Iniki. Rather, I would hope we could use the experiences we encountered during the first few days following these disasters to improve the Federal government's response plan. There is also a delicate balance between state authority and that of the Federal government, as outlined in the Stafford Disaster Relief Act. I hope this hearing will provide us with concrete recommendations on how to more clearly define these roles.

For the purpose of today's hearing, I will confine my opening remarks to the events surrounding the Federal response to hurricane Andrew. By all accounts, hurricane Andrew was the most devastating, most expensive disaster in America's history. The lessons we learned following this disaster will serve us well as we work to revise how the Federal government responds to such disasters. My personal experiences in the wake of hurricane Andrew lead me to the initial conclusion that the process by which the Federal government responds to natural disasters must be better planned, better coordinated in the first hours following the disaster, and it must be streamlined. In the immediate days following Andrew, more bureaucracy, more paperwork, more regulation, and more agencies involved in the emergency response phase would have only served to worsen an already unacceptable situation.

When hurricane Andrew slammed into south Florida in the early morning hours of August 24, 1992 not only were buildings leveled, homes destroyed, and trees uprooted. The entire fabric of Dade County, Florida was changed forever. Most people only saw the destruction of concrete and mortar, which was devastating beyond one's wildest imagination. However, what few people outside of the disaster scene saw were the blank, dazed expressions on the citizens as they sifted through rubble trying to come to the harsh realization that everything they owned was gone. I can think of few instances where I saw such pain. The physical destruction of Dade County was not unlike that of a war zone. Entire neighborhoods were leveled. There was not a single green leaf left on any of the few trees which withstood the 175 mile per hour winds. Simply put, the human and physical devastation was surreal.

When I arrived the day Andrew hit, there was a great deal of confusion as to how to meet the immediate needs of the citizens, specifically food, water, ice, and temporary housing. The distinction between the duties of Federal and State governments was unclear to relief officials. It took entirely too much time to coordinate with state officials and mobilize the Federal resources necessary to meet the immediate needs of those who were hardest hit by the hurricane. DOD, VA, SBA and a few other Federal departments and agencies were pro-active, while others took a reactive posture.

Homeowners simply did not know where to go for help or how they could get there. While we were fortunate to have dedicated staff to assist homeowners, the process led to layer upon layer of bureaucracy, multiple and duplicative paperwork, and not enough on-site supervisors with decision-making authority. Once they had

made their initial application for assistance, disaster victims were then subjected to multiple inspections and were rarely told the same thing twice by Federal inspectors. Some simply gave up. Others re-applied for assistance in hopes of expediting the process, leading to more confusion. We were fortunate in that loss of life was relatively low when compared to other disasters. However, the immediate health care needs of injured victims were neither quickly nor efficiently met. Much of the care given was provided by hundreds of medical volunteers who worked long hours in the worst of conditions. South Florida will be eternally grateful to those who gave of their time and talents to help their neighbors. Also, I would like to express my sincere gratitude to the pharmaceutical industry as a whole. Millions of dollars worth of prescription and over-the-counter drugs were donated to the cause. My office received telephone calls from many companies asking what more they could donate. While I wholeheartedly commend the volunteer relief effort, reforms must be made to the response by the Public Health Service.

Another area I hope to explore at today's hearing is the role of the Department of Defense. Some argue that duties such as providing food, potable water, ice, emergency housing, debris removal, distribution of generators, and other essential needs should be met solely by the military. Others believe the current process of having local jurisdictions request assistance through designated state agencies should be maintained. We must also examine the most effective role for the National Guard and the American Red Cross. I look forward to hearing the opinions of our witnesses on the role the Department of Defense should take.

Under the Stafford Act, FEMA is charged with the responsibility of coordinating all Federal disaster relief efforts. This agency has come under much criticism for its organizational structure. Some have characterized it as a "dumping ground" for non-career appointees. Some have even suggested that the Federal government do away with FEMA altogether. With 50 percent of its staff dedicated to defense-related activities, it raises a question as to what FEMA's mission really is. It is my hope that the panel from GAO and NAPA will be able to shed some light on this area.

These are but a few of the areas I hope to explore with our witnesses. While today's hearing will focus upon the Federal government's immediate response phase to disaster assistance, I also want to briefly touch on the recovery phase. Perhaps the Chair would consider a future hearing on this issue. It's been five months since hurricane Andrew hit, and there are still millions of dollars which Congress has appropriated which have not been released. I must also comment on the plight of millions of homeowners who are unable to rebuild due to Federal flood insurance laws. They were "grandfathered in" when the regulations were promulgated and now face the expensive and timely burden of meeting flood plain elevation requirements. It is estimated that this will cost between \$25,000 and \$50,000, practically none of which is covered by homeowners' insurance policies. Small business owners have complained that, once they have been approved for disaster assistance loans, it took entirely too long for the checks to arrive. I would welcome the opportunity to discuss these and other recovery-related issues at a future hearing. I look forward to hearing a broad range of views on the changes needed at FEMA and other Federal departments and agencies in hopes that no community ever has to go through what Dade County has been through since last August.

It is said that when a community experiences disaster, such as that which south Florida experienced when hurricane Andrew hit, it can actually pull the community closer together. If there is a universal theme which surrounds south Florida it is this: we will survive, we will endure, we will rebuild, and we will be stronger than ever before.

Senator MIKULSKI. Well, Senator Mack, thank you very much for your comments. Just so the Senators organize their thinking, in addition to the elected officials who testified today, they have also had incredible hands-on experience. We are going to have two additional panels now, one of those people who actually was out organizing the response, and then the third panel is of those who have a series of really concrete recommendations, one of which will be on the use of the military, because in this country we have this incredible dual-use ability, whether it is in the Army Corps of Engineers that has responded, the way the Guard and the military was called up, already an ecodisaster, the way the Coast Guard works. In the event of war, you sign an executive order and the Coast Guard comes under the Navy. Maybe there has to be a reverse

Coast Guard model. So, we are going to be gathering those models, and we will go on from there.

Senator FEINSTEIN?

Senator FEINSTEIN. Madam Chairman, if I might. I have given a lot of thought to this, and I'm convinced that both the Senator and the Congressman are correct.

One is I think that a part of defense conversion can be very useful if we look at creating a kind of emergency disaster strike effort.

Take the collapse of the freeway, Representative, that you mentioned. I mean, there was so much for the local police to do, that people were just going to respond. Cars were literally crushed a foot high by that falling concrete and people in between. One person's legs were sawed off to get them out of there.

If there were a standing military emergency strike force, whether it is under the Army Corps of Engineers, that had the equipment, that was mobile, that could be sent into an area and then trigger other things. I wouldn't even wait for the President. I think this thing has to move so fast.

I think the idea also of a Presidential task force on emergency preparedness is a good idea as well.

So, I think we have had two excellent suggestions already on that point.

Mr. WELDON. Will the gentlewoman yield on that point?

Senator FEINSTEIN. I would.

Mr. WELDON. The only other additional comment I would make—and I agree with you totally—is that in looking to plan for severity, if you consider the Loma Prieta earthquake, about the same on the Richter scale as the Armenian earthquake, 25,000 people were killed in the Armenian earthquake. How many were killed in San Francisco? Less than 100?

Senator FEINSTEIN. Yes.

Mr. WELDON. That is in the most heavily populated area of the western part of America because they knew how to preplan. Their building codes, their emergency response. That is what we can do in this country, and that is a prime example of how we can preplan for the worst.

Senator MIKULSKI. Thank you very much, Congressman Weldon.

Senator BURNS. I have a question for Congressman Weldon.

If there are 20 committees that deal with FEMA, I would suggest you go hot-footing over to this new task force to reform Congress and make some suggestions along those lines.

Mr. WELDON. I already have. Steny Hoyer now is chairing the caucus. I have stepped back for a year and it has been a topic that he and I have discussed. We can't just blame FEMA unless we understand the environment FEMA operates in, and we are part of the problem.

Thank you.

Senator MIKULSKI. Thank you very much.

We are now going to turn to our second panel of witnesses, those who have actually had hands-on experience. We are going to turn to Ms. Linda Loomis-Shelley, the secretary of community affairs in the State of Florida; Mr. Alex Muxo, the city manager of Homestead, FL; as well as Mr. Joe Myers, who headed the North Carolina Emergency Management Agency on behalf of their experience

not only in North Carolina, but the National Emergency Management Association; and Mr. William Reno, the senior vice president for national operations for Red Cross to get the private sector in that.

This Senate subcommittee is eager to engage in questions, answers, and real conversation with you. First of all, we thank each and every one of you for your participation, and we ask that you to confine your testimony to 5 minutes so that the real testimony is in the questions and answers. As you can see, this is a very well-experienced panel so we can get right to the heart of things.

Ms. Shelley, why don't you kick it off from Florida? We will probably link the two Florida folks together and then hear Mr. William Reno from the Red Cross on its private sector experience, then you, Mr. Myers, of North Carolina, representing emergency management.

STATEMENT OF LINDA LOOMIS-SHELLEY, SECRETARY OF COMMUNITY AFFAIRS, FLORIDA

Ms. LOOMIS-SHELLEY. Thank you, Madam Chairman and Senators.

On behalf of the citizens of the State of Florida, Gov. Lawton Chiles has asked me to discuss with you today a few issues which we believe are of critical importance as you examine the appropriate measures necessary to improve our Nation's ability to prepare for and respond to disasters. In a State such as Florida, future disasters are a certainty, not a remote probability, and we take very seriously our own need to improve emergency management at the State, Federal, and local levels.

In order to ensure that Florida takes advantage of the lessons learned as a result of Hurricane Andrew to improve emergency preparedness programs, Governor Chiles created the Disaster Planning and Response Review Committee. That committee has now submitted its recommendations to the Governor and to the legislature and we will be providing the completed report to your committee, which we ask would be included in the record of your deliberations. That is available to you today, and we will supplement other copies as you wish.

FLORIDA RECOMMENDATIONS

The extent of the hurricane's devastation in Florida is described in the Governor's commission report and I will not go over it again, as you are all personally aware of the extent of the tragedy that we encountered.

Prior to discussing our recommendations, I would like to pass along to you the Governor's and all our citizens' appreciation for the efforts of this committee to improve emergency management capabilities at the Federal level. We would also like to echo Senator Mack's gratitude to the people of America for the outpouring of assistance to the citizens of Florida in their time of need.

What we have learned as the experimental platform for emergency management improvements is that at all levels—Federal, State, and local—one of the most critical aspects of emergency management is what happens after a storm or other catastrophic event has occurred. We have found that, regardless of which level

in the area of postdisaster response and recovery, three key points must be kept in mind.

The first, the chain of command must be clear and understood. The disarray in the Federal Agency response, which ultimately led to the appointment of the Secretary of Transportation as the overall coordinator for Federal response, dramatically underscores the need to work these issues out in advance; in other words, to have a clear plan in place that works so that ad hoc management structures are not necessary and are not created in the heat of the moment.

Two, that the roles and responsibilities of individuals and organizations must be clearly delineated in the public and the private sector. Florida has entered into a new dialog with FEMA and we will make sure that not only FEMA, but the State level and our local governments understand and have clarified their respective roles.

Third, that the individuals and organizations expected to perform roles and fulfill responsibilities in response and recovery receive training to carry them out, and we again expect to work closely with FEMA in this regard.

While the State of Florida has been moving very aggressively to improve our own emergency response capabilities, we believe that legislative and administrative changes in the structure and function of FEMA are warranted. These include, first, the Stafford Act should be amended to require FEMA to serve more proactively following disasters as advisers to State and local emergency responders and to simplify the processes for requesting Federal assistance. We agree with the FEMA inspector general's recommendations on these issues. We found it to be right on point in many regards. It struck very true with us on these issues.

What we are specifically relating to in this regard is the repositioning of Federal resources so that there is not a delay in response.

Further, as pointed out, sometimes it is the very area affected that is least able to give you an accurate and rapid damage assessment. This should be a Federal response requirement working in advance with the State so that the victims are not the people that you are having to rely on immediately for the scope of the necessary response.

AMENDING THE STAFFORD ACT

Second, the Stafford Act should be amended to provide for the predeployment or immediate activation of the military in response to a catastrophic disaster. The intent of this recommendation is that the military should establish a fully equipped and trained national disaster relief strike force that immediately responds to catastrophic disasters if ordered to by the President upon the request of the Governor.

We believe this could happen as follows. The Department of Defense should predesignate and train appropriate elements of the Armed Forces to provide administrative, logistical, and humanitarian support for the devastated population.

In the area of hurricanes, I would say that we are lucky that we have an advance warning opportunity which many areas of our

country do not have. For example, with earthquakes there would be less opportunity to prepare. But for hurricanes, it is the posting of a hurricane watch which we believe should automatically trigger the alert of military forces, and the posting of a hurricane warning should result in establishment of a direct liaison with the Governor in the affected State.

When a catastrophic impact is predicted by the National Hurricane Center, Federal Armed Forces should begin immediate deployment to destinations assigned by the State. Military commanders should receive and execute missions assigned by authorized civil authorities in a manner consistent with the Department of Defense policies and regulations.

Finally, to bring home the reality of this on a personal level to the citizens affected, we recommend that Congress should direct FEMA and other Federal agencies that are involved in response and recovery efforts to revise their procedures related to providing financial and material assistance to disaster victims to ensure fairness and equity in the application and aid distribution process, and that contracting for needed materials and services ensures that minority contractors receive a proportionate share of the contracts and to ensure that local and in-State firms are given first consideration for contracts.

These last recommendations are based on our experience with an alienated, frustrated, and downright angry population which had just experienced our Nation's most extensive natural disaster. Their homes and their jobs were blown away. Imagine their reaction to the news that out-of-State firms landed the majority of the initial contracts. We understand that a certain amount of expertise must be deployed immediately from faraway places in order that the response is not delayed. However, every effort should be made to ensure that local people are hired. By doing so, these needed dollars are infused into the local economy and temporary housing shortages, which are exacerbated by the influx of out-of-towners, are not made even worse.

We thank you very much for the opportunity to address these few issues, and we look forward to receiving your questions.

[The statement follows:]

GOVERNOR'S DISASTER PLANNING AND RESPONSE
REVIEW COMMITTEE

FINAL REPORT--JANUARY 15, 1993

Philip D. Lewis, Chairman

January 11, 1993

The Honorable Lawton Chiles
Governor of Florida
The Capitol
Tallahassee, Florida 32399-0001

Dear Governor Chiles:

As charged in Executive Order 92-291, the Governor's Disaster Planning and Response Review Committee submits herewith its recommendations for improving Florida's readiness for future disasters.

Much of the response to Hurricane Andrew deserves tremendous praise. Countless individuals and organizations from both within and outside of Florida went beyond the call of duty to assist the victims of Hurricane Andrew and restore essential services. During our work we identified many actions, however, that should be taken to improve emergency preparedness and recovery plans and programs before the next disaster occurs. Current predictions that Florida is at risk to be hit by more frequent and stronger hurricanes in coming years adds urgency to the need to act quickly.

This report recommends numerous steps to be taken at all levels of government and by volunteer organizations. We used the unfortunate experience of Hurricane Andrew to identify weaknesses in preparedness and recovery efforts, but offer our recommendations from a statewide perspective. These recommendations are based upon what we saw during our intensive three-month effort. Please do not interpret these recommendations to be carved in stone but refine them as necessary during their implementation to accomplish their intent.

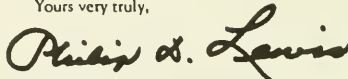
Moreover, the Committee obviously could not assess every issue in the short time available to it. We strongly encourage all appropriate agencies, governments, and organizations to independently evaluate and improve their readiness for future disasters, regardless of whether the specific actions that they need to take are contained in this report.

Early reactions to drafts of the Committee's final report have focused on the costs associated with our recommendations. I want to emphasize that the extraordinary majority of our recommendations can be implemented within existing resources or with relatively modest investments of funds and personnel. We have recommended the creation of a trust fund that can cover most of these costs. Only a few recommendations, primarily those focusing on physical improvements to buildings to increase the supply of safe shelter space, will require substantial investments.

Finally, I would like to commend the members of the Committee for their hard work. Many Committee members suffered damage to their own homes or otherwise had their lives disrupted but they still took a tremendous amount of time out of their schedules to meet and review materials over the past three months. I have rarely worked with a finer group of people. The efforts of staff, which allowed us to cover an enormous amount of ground during a very short time, are also greatly appreciated.

On behalf of the Committee, thank you for the opportunity to serve the citizens of Florida. If we can assist further, please do not hesitate to call on us.

Yours very truly,



Philip D. Lewis
Chairman

TECHNICAL ADVISORY COMMITTEE MEMBERS AND STAFF

Kate Hale, Co-Chair
Director, Metro-Dade County
Office of Emergency
Management
Miami

Bob Nave, Co-Chair
Director, Division of Emergency
Management, Department of
Community Affairs
Tallahassee

James R. Ackley
Palm Beach County Chapter,
American Red Cross
N. Palm Beach

Arthur M. St. Amand
Director, Emergency
Preparedness Division, Broward
County
Ft. Lauderdale

Thomas M. Beard
Chairman, Public Service
Commission
Tallahassee

James Broadhead
CEO, Florida Power and Light
Juno Beach
(Bill Hamilton, Alternate)

Carol Browner
Secretary of Environmental
Regulation
Tallahassee

Stan Cann
District Secretary,
Florida Department of
Transportation, District 6
Miami

Josefina Carbonell
President, Little Havana
Activity & Nutrition Center
Miami

Til Creel
Executive Director,
South Florida Water
Management District
West Palm Beach

Carolyn Dekle
Executive Director, South Florida
Regional Planning Council
Hollywood

Shirley Gooding
Secretary of Labor and
Employment Security
Tallahassee

General Ron Harrison
Adjutant General,
Florida National Guard
St. Augustine

Sam Ingram
Director of Safety and
Environmental Management,
Dade County Public Schools
Miami

Donald Jones
General Manager, Red Cross
Disaster Services
Washington, D.C.

B.T. Kennedy
Disaster Manager,
Palm Beach County Division of
Emergency Management
West Palm Beach

Joe Lacher
President
Southern Bell Florida
Miami

Bentley Lipscomb
Secretary of Elder Affairs
Tallahassee

Mike Long
Chief, Bureau of Fire Control,
Department of Agriculture and
Consumer Affairs
Tallahassee

Phil May
Regional Director,
Federal Emergency
Management Agency
Miami

James T. Moore
Commissioner, Florida
Department of Law Enforcement
Tallahassee
(Jack Fenwick, Alternate)

Fred J. Murphy
President, Florida Emergency
Preparedness Association
New Port Richey

R. C. Paulson
Chief,
Metro-Dade County
Fire Department
Miami

Fred Taylor
Director, Metro-Dade County
Police Department
Miami

Bob Williams
Secretary of Health and
Rehabilitative Services
Tallahassee
(Rex Uberman, Alternate)

COMMITTEE STAFF:

L. Benjamin Starrett
Staff Director
Department of Community
Affairs
Tallahassee

Tracy Suber
Catherine Deithorn
Debbie Skelton
Dawn McMillan
Pam Kugler
Department of Community
Affairs
Tallahassee

Ping Chang
Lorri Hall
Ildi Combrinck-Graham
Sangeetha Gall
South Florida Regional
Planning Council
Hollywood

EXECUTIVE SUMMARY

This report contains the recommendations of the Governor's Disaster Planning and Response Review Committee for improving Florida's preparedness for and capability to recover from future disasters. The Committee examined preparedness before Hurricane Andrew and response and recovery efforts during the first two weeks after landfall. The 94 recommendations identify actions that should be taken by all levels of government, volunteer organizations, the media and selected professional organizations. Each recommendation is supported by comments and fiscal notes.

The Committee's report is organized into three chapters. These address pre-disaster issues, post-disaster issues, and the need for additional funding for emergency preparedness programs. It also contains an introduction and four appendixes.

The overall result of full implementation of the Committee's recommendations will be to give Florida one of the best emergency management systems in the United States. The implementation of our recommendations will reinforce local governments' capabilities to prepare for and respond to emergencies; ensure that the state has adequate plans, equipment, training, and personnel to respond quickly and effectively to disasters that exceed local resources; and provide for a clear chain of command and effective coordination among federal, state, and local governments and volunteer organizations.

Particularly critical to the accomplishment of the Committee's recommendations is the strengthening and expansion of disaster preparedness and recovery planning. This can be accomplished with existing resources or minimal additional investment. At the state level, the Department of Community Affairs should be the catalyst for and administrator of an effective state comprehensive emergency management plan. This plan should be created in coordination with all possible agencies, organizations, and associations because many other entities besides the Department of Community Affairs have vital roles and responsibilities under Florida's emergency preparedness and recovery plans and programs.

Recommendations in the first two chapters of this report enumerate specific criteria for operations-oriented elements addressing evacuation, shelter, and post-disaster response and recovery that should be included in the comprehensive state emergency management plan. Similar planning efforts should also be undertaken by all counties and by those municipalities that choose to establish emergency management agencies.

In implementing the Committee's recommendations pertaining to planning, at least five objectives should be met. First, plans should provide for a clear chain of command. Second, they should clearly delineate the roles and responsibilities of individuals and organizations. Third, they should ensure that the designated individuals and organizations are trained to carry out their roles and responsibilities. Fourth, the organization of

federal, state, and local post-disaster and recovery teams should be generally aligned and parallel. Finally, the plans should prepare for disasters of different magnitude to ensure that response actions taken are appropriate given the magnitude of the disaster.

In addition, improving all aspects of communication at and among all levels of government and with the public and the media must be made a priority. Special attention must also be given to intergovernmental coordination, training, and funding. Numerous recommendations in this report speak to these issues.

The issue of funding is addressed in detail in this report. Readers will see that most of the Committee's recommendations can be implemented within existing resources or with modest additional investment in our emergency management system. Some recommendations will require substantial investment to carry out, but the cost of implementing these recommendations that are critical to saving lives and property is much lower than the cost of not acting.

The remainder of this executive summary describes the organization and contents of this report.

The Introduction provides some background on the Committee and presents some statistics on the impact of Hurricane Andrew. It also discusses some key conclusions of the Committee, such as the need to improve readiness for future disasters and the need to implement key solutions in the areas of communications, planning, intergovernmental coordination, training, and funding. The introduction concludes by discussing the importance of clearly understanding relationships among federal, state, county and municipal governments, outlining a general principle for planning efforts, and providing definitions of key terms used in the report.

Chapter One: Before the Storm contains three major sections: *communications, evacuation, and shelter*. Under *communications*, the Committee recommends actions for improving public education, pre-disaster communication with the public, and communications among emergency response agencies.

Under *evacuation*, the Committee recommends actions for improving evacuation planning, creating "refuges of last resort" programs, improving the ability of the transportation system to handle mass evacuations, and ensuring that policies for marinas and bridges put protecting life over property.

Under *shelter*, the Committee recommends actions for improving shelter planning and operations, increasing the ability to use public schools and other public buildings as shelters, reducing shelter demand, improving registration of shelter occupants, and improving procedures for sheltering people with special needs.

Chapter Two: After the Storm contains five major sections: *post-disaster communications and public information, post-disaster response and recovery operations, availability of damage assessment data, medical care and relief, and coordination of volunteers, donations and supplies*.

Under *post-disaster communications and public information*, the Committee recommends actions for improving coordination of emergency communications, coordination of post-disaster emergency communications, and coordinating the release of information and instructions to the public.

Under *post-disaster response and recovery operations*, the Committee recommends actions for improving planning for post-disaster response and recovery, enhancing post-disaster intergovernmental coordination, improving security, expanding civil liability protections, and improving federal programs.

Under *availability of damage assessment data*, the Committee recommends actions for improving aerial and ground damage assessments, and increasing the use of computerized information systems.

Under *medical care and relief*, the Committee recommends actions for improving coordination of medical services, creating a statewide medical plan, enhancing coordination of health care volunteers, and providing for emergency pharmacies.

Under *coordination of volunteers, donations and supplies*, the Committee recommends actions for improving effective receipt and distribution of donations and coordination of volunteers.

Chapter Three: Funding contains the Committee's observations that Florida devotes insufficient resources to emergency management programs. The Committee recommends that the Legislature create an emergency management preparedness and disaster assistance trust fund.

Appendix A: Fiscal Notes contains fiscal notes for each of the Committee's 94 recommendations.

Appendix B: Responsible Agencies identifies the agencies, organizations, associations, or entities identified in each recommendation or its associated comments as having a role or responsibilities in implementing the recommendation.

Appendix C: Summary of Meetings briefly describes the Committee's eight days of meetings.

Appendix D: Acknowledgements thanks certain individuals for their assistance to the Committee.

INTRODUCTION

BACKGROUND

Hurricane Andrew dealt South Florida a devastating blow on August 24, 1992. The storm was the third most powerful to hit the United States in its recorded history, exceeded only by Camille in 1969 and the Labor Day Storm that struck the Florida Keys in 1935. It was also the costliest natural disaster ever in America, with estimates of damage exceeding \$20 billion. Hurricane Andrew triggered an unprecedented response by federal, state and local governments and volunteer organizations.

To ensure Florida takes advantage of the lessons that can be learned from Hurricane Andrew to improve emergency preparedness and recovery programs, Governor Chiles issued Executive Order 92-291 to create the Disaster Planning and Response Review Committee on September 11, 1992. The Committee was assisted by a 25-member technical advisory committee of experts who were involved in the response to Hurricane Andrew.

The Committee met for eight days between October 1992 and January 1993 to evaluate the response to Hurricane Andrew and develop recommendations for improving Florida's emergency preparedness and recovery programs. All meetings were held in Dade County, Florida. The Committee received oral testimony from over 45 individuals who participated in the response to Hurricane Andrew. In addition, over 100 people, agencies, and organizations impacted by Andrew or active in response or recovery efforts submitted written recommendations for the Committee's consideration or provided comments on draft materials to assist the Committee.

THE IMPACT OF HURRICANE ANDREW

Hurricane Andrew slammed into South Florida at 5:05 a.m., August 24, 1992, damaging 1,100 square miles as it traveled across the peninsula and into the Gulf of Mexico. Classified as a category four storm, with sustained winds of 145 miles per hour and gusts of up to 175 miles per hour, Andrew battered the coast yet caused its most severe damage inland. The eye of Hurricane Andrew made landfall near the City of Homestead, the area hardest hit by the storm. Andrew's storm surge set a record high for Florida — 16.9 feet in Biscayne Bay at S.W. 160th Street. The following facts highlight some of the impact of Hurricane Andrew:

Impact of Hurricane Andrew in Florida

28,066	Homes destroyed
107,380	Homes damaged
180,000	Persons left homeless
82,000	Businesses destroyed or damaged
32,900	Acres of farmland damaged
31	Public schools destroyed or damaged
59	Health facilities and hospitals damaged
9,500	Traffic signs and signals damaged
3,300	Miles of powerlines destroyed
3,000	Watermains damaged
1.4 mil	Residents lost electricity
150,000	Residents lost telephone service

Further, virtually all economic activity in the devastated south Dade area ceased following the storm. The heaviest damage was inflicted on the south Dade area, home to 8,000 of the nearly 60,000 businesses in Dade County and 120,000 jobs. As of September 24, 1992, an estimated 86,000 people were out of work and 7,800 businesses were closed, at least temporarily. Tourism — a \$500 million per year industry — will likely be severely impacted in the coming years because of damage to hotels, restaurants, and parks and travel industry perceptions. There is uncertainty about the reopening of Homestead Air Force Base, which was severely damaged by the storm. The base accounted for 14,000 military and civilian jobs and annually contributed more than \$400 million to the local economy. Approximately 80,000 military retirees shopped at the base. Damage to agriculture is estimated at \$1 billion, with a permanent income loss of \$250 million and \$580 million in damage to structures.

READINESS FOR FUTURE DISASTERS MUST BE IMPROVED

It would be erroneous and dangerous to assume that another storm the size of Andrew may not hit Florida again in the near future. Even though it has been 32 years since Florida has experienced a category four storm (Donna hit the Keys in 1960), the 1940s saw nine hurricanes with sustained winds of 110 mph or greater make landfall in Florida. The possibility of hurricane landfalls is a seasonal fact of life for all Floridians. In fact, hurricane researchers predict that Florida is at risk to be hit by more frequent and stronger storms in coming years as compared to the past two decades. An important motivation for correcting deficiencies discovered in the response and recovery to Hurricane Andrew should be the realistic expectation that another hurricane will visit Florida soon.

The power of Hurricane Andrew and the extent of the disaster brings home the reality of the state's role in preparing for and responding to disasters. Damage to homes and the disruption of peoples' lives is a significant legacy of Andrew. Therefore, it is imperative that Florida acknowledge the urgency of the need to prepare for the inevitable next

storm. This report of the Governor's Disaster Planning and Response Review Committee offers recommendations for improving preparedness and recovery activities based on an examination of preparedness just before the storm and recovery actions in the first two weeks after the storm.

FOUR KEY SOLUTIONS SHOULD BE IMPLEMENTED

Foremost, the Committee commends all participants in the response to Hurricane Andrew. Given the magnitude of the devastation, the effectiveness of the effort to respond to and recover from Hurricane Andrew represents a triumph of the human spirit over significant adversity.

Before another disaster hits Florida, however, many steps should be taken to improve preparedness and recovery programs. During the Committee's work, four key solutions to the problems uncovered were repeatedly identified. These solutions are:

- Improve communications at, and among, all levels of government;
- Strengthen plans for evacuation, shelter, and post-disaster response and recovery;
- Enhance intergovernmental coordination; and
- Improve training.

In addition to these four solutions, making sufficient funding available for emergency management plans and activities is a critical need. Many improvements can be made to existing programs using existing resources. Increasing the funding available for emergency preparedness and recovery programs is essential, however, for implementing some key solutions recommended by the Committee and for bringing existing programs up to satisfactory performance levels. Chapter Three discusses the issue of funding in more detail. Appendix A contains fiscal notes to assist readers in estimating the fiscal impact of each of the Committee's recommendations.

RELATIONSHIPS AMONG FEDERAL, STATE, COUNTY AND MUNICIPAL GOVERNMENTS NEED TO BE CLEARLY UNDERSTOOD

The Committee spent a considerable amount of time grappling with the difficult issue of chain of command. The roles and responsibilities of federal and state agencies seem reasonably well understood and defined. These governments provide assistance to local governments and the public when local resources are inadequate to meet demands upon them. The Committee has offered many recommendations that will, if implemented, improve performance at the state and federal level in responding to future disasters.

On the other hand, the relationships among, and roles and responsibilities of, county and municipal governments do not seem to be similarly well understood and defined. Counties are charged in the Florida Statutes with being responsible for maintaining emergency preparedness programs for the entire county. Municipalities have the option under Chapter 252, F.S., to establish emergency management agencies and programs, but are not required to do so. For this reason, it cannot be presumed that all cities will assume similar roles and responsibilities prior to, during, or after disasters.

The Committee has, therefore, directed its recommendations primarily to county governments, which are ultimately accountable for meeting the needs of all impacted

residents with the county. If a municipality has an emergency management agency and program, the Committee believes that it should meet standards similar to those outlined for counties in this report. In addition, the Committee recommends that the emergency preparedness plans of municipalities should be consistent with and subject to the applicable county plans to ensure that close cooperation and coordination will exist in each county during disaster situations.

A GENERAL PRINCIPLE FOR PLANNING

The Committee recommends that a general principle guide emergency preparedness and recovery planning: Florida should plan differently for disasters of different magnitude. Specifically, the Committee recommends that Florida and its counties adopt plans tailored to minor, major, and catastrophic disasters.

The needs of citizens and communities following emergencies vary given the intensity and scale of disaster incidents. Therefore, planning for response and recovery should vary similarly. State, regional and local preparedness and recovery plans should contain guidelines for action for each category of disaster. The need to plan differently for disasters of different magnitude is a recurring theme in this report. It is recommended that the state and local governments use the following categories in planning efforts.¹

- **Minor disasters** means disasters that are likely to be within the response capabilities of local government and to result in only a minimal need for state and federal assistance, such as a tropical storm or limited flooding.
- **Major disasters** means disasters that will likely exceed local capabilities and require a broad range of state and federal assistance, such as a category one to three hurricane.
- **Catastrophic disasters** means disasters that will require massive state and federal assistance, including immediate military involvement, such as a category four or five hurricane that hits a densely populated area.

DEFINITIONS

The terms used in this report mean the following to the Committee:

Disaster means any natural, technological, or civil emergency that results in a declaration of a state of emergency by a county, by the Governor, or by the President.

Evacuation means activities whereby residents and visitors are moved from dangerous areas to safer areas.

Local government means county and city governments, unless the context clearly indicates that school boards and special districts are included.

Preparedness means the readiness of emergency management agencies and other emergency responders to handle evacuation, shelter, response, and recovery operations.

¹ Indications are that the federal government is considering using three classes of magnitude (Classes A, B, and C) in its emergency preparedness and response planning. In the event this is implemented, Florida should conform, to the extent appropriate for the State of Florida, its definitions of disaster categories to those used by the federal government.

Recovery means activities designed to mitigate physical damage caused by disasters and restore essential facilities and services to pre-disaster conditions. The recovery phase overlaps the response period, but typically begins about three days after a disaster incident, and can last for an indefinite period.

Response means activities taken immediately before, during, and immediately after a disaster to assure personal survival, alleviate human suffering, and ensure public safety.

Shelter means the process of moving residents and visitors into safe structures for temporary periods and meeting the needs of individuals while they are in the shelters.

Should means shall or must, depending on the context. The Committee recognizes that it is an advisory body that has no authority to compel action. It has, therefore, used the term "should" in this report to describe actions that it believes must be taken.

CONCLUSION

The recommendations of the Committee will, if implemented, improve preparedness for and response to all types of future disasters. Because the disaster that led to the creation of the Committee was a catastrophic hurricane, implementation of these recommendations will especially improve Florida's hurricane preparedness and recovery programs. Readers should keep in mind that Hurricane Andrew was a relatively dry hurricane, bringing with it an average of three to six inches of rainfall. Therefore, the potential impact of serious flooding was not discussed in detail during the series of meetings conducted by the Committee. The potential implications of flooding must also be considered in future planning efforts.

This report is organized as follows: Chapter One addresses pre-disaster activities, including evacuation and shelter issues. Chapter Two addresses post-disaster issues. Chapter Three addresses funding.

CHAPTER ONE:

BEFORE THE STORM

The Committee focused on three key issues in its examination of activities before Hurricane Andrew: communications, evacuation, and shelter. Our recommendations for improvements in these issue areas follow below.

I. COMMUNICATIONS

Issue A: Public Education

Hurricane Andrew has taught Florida's state and county emergency management agencies and other responders a tremendous amount about how to be prepared for, respond to and recover from disasters. Most of these agencies will be implementing significant improvements in plans and programs, some of which are recommended in this report, to put into practice the lessons they have learned before the next hurricane season.

In addition, Hurricane Andrew brought home to Floridians the destructive power of a hurricane. Unfortunately, Andrew's severity and extensive wind damage outside of surge zones may cause a much larger segment of the population to evacuate before the next hurricane than predicted by behavioral studies conducted prior to Andrew. This implies a strong need for public education efforts to focus on helping people to understand how to retrofit and secure their homes and property so that they will be safe at home and, possibly, be willing to remain there. Florida must now be concerned with encouraging people not in evacuation zones to not evacuate unless directed so we can avoid large numbers of people being caught on evacuation routes when hurricanes hit.

Recommendation # 1:

The Department of Community Affairs should work with Florida's counties, cities, the media and interested associations and organizations to develop and implement a comprehensive, multimedia, and multilingual public information campaign on emergency preparedness issues.

Comments:

- a. The campaign should help people to understand risks associated with different disasters, emphasize techniques for preparing homes for hurricanes, and encourage people to stay home or to head to local shelters unless specifically advised to take other actions by the Governor or county emergency management personnel. Infor-

mation should also be provided on supplies and equipment that should be brought to shelters and guidance for actions to be taken during and after disasters. In addition, the campaign should educate people about how to prearrange shelter for their pets in the event they are given an order to evacuate.

- b. The campaign should be designed to reach sight- and hearing-impaired individuals.
- c. The campaign should also be designed to provide a consistent level of information throughout the year, with information efforts intensifying just prior to and during hurricane season.
- d. The Department of Community Affairs and counties should enter into a dialogue with the Florida Association of Broadcasters and the Florida Radio-Television News Directors Association to determine how to produce informational announcements and stories that can run on a continuing basis.
- e. In addition to traditional media tools, this campaign should result in providing essential information in utility or tax bills, on grocery bags, tray liners, milk cartons, and through other nonconventional methods.
- f. Efforts should also be made to coordinate with public schools to include emergency preparedness issues on school curricula.

Issue B: Pre-Disaster Communication with the Public

The Committee found that the early warning and public notification process before the storm worked well. The following recommendations are intended to supplement an effective system.

Recommendation # 2:

The Department of Community Affairs, county emergency operations agencies, voluntary organizations and the local mass media should cooperatively develop procedures to use the Weather Channel, CNN, and the mass media to broadcast emergency information to the public. These procedures should provide for coordinated points of release of information to the media, perhaps from the state emergency operations center and largest at-risk county emergency operations center.

Comments:

- a. Efforts to provide emergency information to the public can be enhanced by facilitating media access to information. The procedures should establish a standardized format for the release of information, which would be transmitted to all activated emergency operations centers within a media market (region). This would allow large and small media outlets alike to access the most current, accurate information for release. The procedures should also provide for ensuring a continuous flow of information through coordinated release points as efforts shift to post-storm activities. (Post-storm communications procedures are addressed in Chapter 2, recommendation # 47.)
- b. The local mass media and government access channels should be used to relay emergency warning information to people within at-risk areas. The Weather Channel, CNN and other national news media should be used to provide general updates and information to people outside of at-risk areas.

-
- c. The Weather Channel requires information to be submitted to it by a state emergency management agency. The Department of Community Affairs should rapidly review information being submitted to avoid major errors without slowing the distribution of important information. Information should be prescribed whenever possible.

Recommendation # 3:

Counties should work with telephone companies to have emergency information and instructions that are not subject to change published in telephone directories.

Comments:

- a. Local telephone directories have historically been used as a source of information and instructions for the public. It is important, however, to only publish information that is not likely to change because of the long lead times needed to print directories and because of the staggered times for updating directories among the different counties. The following types of information should be considered for inclusion in telephone books:
- (1) important emergency telephone numbers;
 - (2) maps of evacuation areas and flood-prone areas;
 - (3) locations of predesignated information centers and other critical disaster response sites;
 - (4) key definitions and terminology, e.g., hurricane warning, hurricane watch;
 - (5) instructions and precautions for preparing homes for disasters, especially hurricanes, and for guiding actions during and after disasters;
 - (6) local radio and television stations for emergency information;
 - (7) hurricane evacuation routes;
 - (8) guidelines for determining when it is safe to stay at home instead of evacuating;
 - (9) guidelines for donating goods in response to disasters; and
 - (10) a description of the nonelectronic communications system that will be used if electronic communications are not possible (see recommendation # 50).
- b. Emergency management officials and voluntary organizations should work to stabilize shelter locations to the point that shelter locations eventually can be safely included in telephone books.

Recommendation # 4:

The Department of Community Affairs should conduct an assessment of the Florida Emergency Broadcast System.

Comments:

- a. The Florida Emergency Broadcast System (EBS) consists of a small number of radio stations that volunteer to participate as an EBS station.
- b. Before any additional funding is made available for improvements to this system, an assessment should be conducted to determine if it is effective, identify ways to increase the coverage of the system and its use by state and local emergency management officials, and evaluate methods to improve the rapid dissemination of emergency warnings and notification to the widest audience, including automatic "all channel" (including cable) broadcast overrides.

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- c. The Department of Community Affairs should work with county emergency management agencies, the media and other interested parties during this effort, including the State Emergency Communications Committee, which drafted the original Florida Emergency Broadcast System plan.

Issue C: Communications Among Emergency Response Agencies

Recommendation # 5:

The 1993 Legislature should provide funding to ensure that each county emergency management agency in Florida is linked to the National Warning System.

Comments:

- a. Presently, 49 of Florida's 67 counties have the National Warning System, which is a landline-based telephone system. Those counties without the National Warning System are predominantly the smaller, less populated, rural counties (Gadsden, Jefferson, Liberty, Washington, Wakulla, Baker, Clay, Flagler, Gilchrist, Hamilton, Madison, Suwannee, Union, Taylor, Hardee, Sumter, Osceola, and Glades) that cannot afford the recurring monthly line charge of \$500 or more.
- b. Fortunately, the Federal Emergency Management Agency is making system upgrades that could lower costs.
- c. The Legislature should only provide this funding if it is willing to commit to funding the recurring costs associated with keeping the system operating or if arrangements can be made with the applicable counties or the federal government to cover all or part of the recurring costs.

Recommendation # 6:

The National Warning System should remain the primary means of communication among federal, state, and county emergency management officials and the National Hurricane Center.

Comments:

- a. Because of its "conference call" capability, the National Warning System represents the most effective means of communicating information on weather conditions and coordinating emergency operations in response to that information. The National Warning System conference calls were used effectively by state and county emergency management officials during Hurricane Andrew to keep track of the storm and to coordinate protective actions.

Recommendation # 7:

The 1993 Legislature should appropriate sufficient funds to provide high frequency radios within each county's designated 24-hour warning point to serve as a back-up to the National Warning System.

Comments:

- a. Because the National Warning System is landline-based, there needs to be reliable and effective back-up systems in place that are not landline-based. High frequency radios will allow for direct radio communications among the state emergency operations center and each county when landline-based communications systems fail.
- b. Provision must be made for emergency power sources in the event of power outages.
- c. Provision must be made for training operators.

Recommendation # 8:

The 1993 Legislature should appropriate sufficient funds to install local government radios (LGRs) with remote capability within each county's designated 24-hour warning point to serve as a back-up to their high frequency radios.

Comments:

- a. The LGR system is a short range (approximate radius of 25 miles) that links county emergency management agencies into a statewide network. Many of the existing LGRs used by counties are extremely old and unreliable. Most of the antennas are located on buildings too low to allow good communications. The purchase of LGRs with remote capabilities would allow the antenna to be appropriately placed away from the transceiver and connected by a telephone line, which should improve its effectiveness.
- b. The Legislature should only provide this funding if it is willing to commit to funding the recurring costs associated with keeping the system operating or if arrangements can be made with the applicable counties or the federal government to cover all or part of the recurring costs.

II. EVACUATION

Hurricane Andrew necessitated the evacuation of nearly 750,000 persons from Monroe, Dade, Broward, and Palm Beach counties. Many people in the flood-prone areas of Lee and Collier counties also voluntarily evacuated. The evacuation contributed to the minimal loss of life experienced given the strength of the storm. The evacuation system was not put to the ultimate test, however, as a relatively small populated area was subjected to life-threatening flooding.

Issue A: Improve Evacuation Planning

Recommendation # 9:

The Department of Community Affairs should adopt a revised evacuation element, which includes specific regional and interregional planning provisions, as part of the state comprehensive emergency management plan by March 1, 1994.

Comments:

- a. The revised state evacuation element should be operations oriented and be based on the regional hurricane evacuation studies and county evacuation plans.
- b. The state element should provide policy guidance on lifting tolls on state highways, handling evacuees crossing county lines, sheltering people caught on evacuation routes, and ensuring sufficient, reasonably priced, fueling locations along evacuation routes.

Recommendation # 10:

The Department of Community Affairs should amend Chapter 9G-7, Florida Administrative Code, to ensure that county evacuation plans are coordinated with the revised state comprehensive emergency management plan.

Comments:

- a. In addition to their current components, county evacuation plans should address coordination among adjacent counties in handling evacuees, contingency plans for sheltering people caught on evacuation routes, and provision of adequate fueling locations along evacuation routes.
- b. These plans should contain plans to cut off access to transportation corridors to ensure that cars are not allowed to enter roadways that they cannot clear safely.
- c. The plans should identify roads on which tolls should be lifted in the event an evacuation is ordered.

Recommendation # 11:

The 1993 Legislature should require hospitals, nursing homes, adult congregate living facilities, group homes, and other health or residential care facilities that house people with special needs, to maintain evacuation plans as a condition of their licenses.

Comments:

- a. Institutions cannot take their residents to public shelters. Public shelters are not equipped to handle them.
- b. The Legislature should require that the applicable county emergency management agency approve facilities' plans annually as a condition of licensing or certification by the Agency for Health Care Administration. These plans should, at a minimum, ensure that patients' needs are adequately addressed, identify prearranged locations where residents will be taken, and provide for patient transportation.
- c. Based on the crowding that occurred prior to Hurricane Andrew, institutions should have multiple options for evacuating patients (at least two potential host facilities).
- d. First priority should be given to retrofitting and equipping institutional buildings outside of the category three surge zone and low-lying areas so that they do not have to evacuate. At a minimum, facilities in at-risk areas should be required to elevate essential equipment above anticipated surge levels.
- e. The Committee recognizes that facilities that have taken steps to reduce the need for hurricane evacuation would have a lesser need for hurricane evacuation plans. These facilities should still maintain evacuation plans for other types of disasters, e.g., radiological, hazardous materials spill.
- f. Institutional staff training to handle evacuations should be an integral part of hurricane preparedness plans.
- g. The legislation should provide that when facilities listed above and other facilities statutorily charged with responsibility for managing medicines for residents are required to evacuate residents to hospitals or other special care facilities or shelters, each resident must be accompanied by medical records, specifically including physician medical and pharmacy orders, and by the physician-approved medicines for that resident.

Recommendation # 12:

The Agency for Health Care Administration should enforce severe penalties, at a minimum to include loss of license, fines, or probationary measures, for residential care facilities that house people with special needs that fail to follow their approved evacuation plans.

Comments:

- a. The Committee received testimony that one or more nursing homes "dumped" patients at public shelters. Such unconscionable acts should be dealt with promptly and severely.
- b. The Committee recognizes that facilities that have taken steps to reduce the need for hurricane evacuation would have a lesser need for hurricane evacuation plans. These facilities should still maintain evacuation plans for other types of disasters, e.g., radiological, hazardous materials spill.

Issue B: Refuges of Last Resort**Recommendation # 13:**

The 1993 Legislature should amend Chapter 252, Florida Statutes, to direct the Department of Community Affairs to establish a statewide refuge of last resort strategy.

Comments:

- a. Coastal counties should be required to establish refuge of last resort programs for their coastal high hazard areas.
- b. Refuge of last resort strategies should include surveying private and public buildings that could serve as refuges, retrofitting potential refuges that are located outside of surge zones, and incorporating refuge of last resort standards in local building codes for new structures.
- c. The Legislature should amend appropriate provisions of the Florida Statutes to limit the liability of owners of qualified structures that allow their structures to be used as refuges of last resort.
- d. The Committee expressly recognizes that refuges of last resort are not shelters.
- e. This recommendation was not supported by the county emergency management officials who served on the Technical Advisory Committee.

Issue C: Transportation Improvements

Even during the relatively smooth evacuation prior to Hurricane Andrew, substantial traffic problems occurred. Some of these problems can be avoided through inexpensive actions that are described below.

In addition, the Committee reemphasizes the need for an aggressive program of public education to ameliorate the expected over-reaction (and over-evacuation) prior to the next hurricane. But even with this public educational effort, testimony provided to the Committee indicates that many people will evacuate next time. Florida must be ready to do all it can to avoid loss of life due to individuals trapped on transportation facilities.

Recommendation # 14:

The Florida Department of Transportation should implement a rule by June 1, 1993, for the automatic lifting of tolls on state toll facilities when an evacuation order is issued by county or state officials.

Comments:

- a. Prior to Hurricane Andrew, the Florida Department of Transportation obtained authorization to lift tolls on Florida's Turnpike after an order to evacuate was issued by local officials. Authorization to lift tolls on other toll facilities was granted later in the evacuation. The delay in lifting tolls resulted in long lines at toll plazas. If automatic authorization to lift tolls was linked to an evacuation order, no separate authorization would be necessary. This would effectuate a more efficient evacuation.
- b. The Florida Department of Transportation should use the county and regional evacuation studies to identify the toll roads that will be utilized for evacuation purposes and, therefore, on which tolls should be discontinued. For ease of implementation and simplicity to the public, all tolls throughout the length of the identified roadways should be lifted at the same time.
- c. The Florida Department of Transportation should also examine the feasibility of using retractable toll booths, at least on the far right hand side, to facilitate mass evacuations through toll facilities and submit a report on the feasibility study to the Department of Community Affairs.

Recommendation # 15:

When circumstances warrant, the Florida Highway Patrol should have the authority to request the Florida Department of Transportation to lift tolls at specific locations prior to the automatic plan being implemented if a severe traffic problem develops.

Comments:

- a. This understanding between the Florida Highway Patrol and the Florida Department of Transportation currently exists, but should be included in the FDOT's rule to confirm that the option exists when the need arises.

Recommendation # 16:

The Florida Department of Transportation should determine the technical feasibility of implementing a reversible lane system on Florida's limited access highways during an evacuation. This study should be completed by May 1, 1993, to allow for implementation, if appropriate, by June 1, 1993.

Comments:

- a. The Florida Department of Transportation has initiated efforts to look at the feasibility of such a plan on Florida's Turnpike. Since a significant effort is required to determine its feasibility, including but not limited to, analyses of physical constraints, availability of manpower for traffic control, and other factors, the Committee recommends that the Florida Department of Transportation be given sufficient time to complete its study. In addition to the technical feasibility of this issue, the Florida Department of Transportation should evaluate the policy implications of having a reverse-laning system. A report on the feasibility study should be submitted to the Department of Community Affairs.
- b. If determined to be appropriate on the Turnpike, the Florida Department of Transportation should subsequently consider other limited access facilities, such as I-95, I-75, I-4 and I-10.

Recommendation # 17:

The Florida Department of Transportation should expedite its construction plans to widen U.S. 1 between Key Largo and Florida City and to reconstruct a new high level bridge on U.S. 1 over Jewfish Creek.

Comments:

- a. Currently U.S. 1 has four lanes through Key Largo and north of Florida City. The 20-mile section between Key Largo and Florida City only has two lanes, which creates a severe constraint to evacuation traffic flows. The existing roadway elevation is low and subject to flooding.
- b. The Florida Department of Transportation has progressed in developing a project for four-laning this section. An Environmental Impact Statement has been approved and final design has commenced. It is recommended that the Florida Department of Transportation vigorously pursue completion of design and approval of required environmental permits in order to expedite the construction of this vital evacuation route.

Recommendation # 18:

The Florida Department of Transportation should perform an analysis of the State Highway System to determine which highways would cause a constraint to a regional evacuation effort. The FDOT should consider actions to reduce the effect of identified constraints.

Comments:

- a. A cursory review of the highway system in Southeast Florida performed by the engineering consulting firm of Keith and Schnars, Inc., indicated that if a full northbound evacuation were to take place, the flow of traffic would deteriorate within Palm Beach County due to lower capacity beyond the urbanized areas. The Florida Department of Transportation should review this study and perform a more thorough analysis statewide to determine where highway bottlenecks occur. This information should be used in county, regional, and state evacuation plans and studies.
- b. Following the analysis, the Florida Department of Transportation should identify strategies, including new construction, reconstruction, transportation system management, and transportation demand management, for reducing the constraining effects of the bottlenecks.
- c. Minor improvements to highways, such as widening shoulders, should also be considered to facilitate evacuations.

Recommendation # 19:

The Florida Department of Transportation should increase its supply of portable, programmable signs that can be used during mass evacuations and following disasters.

Comments:

- a. A mass evacuation places significant stress on transportation networks. Programmable signs can be used to direct traffic to the least congested routes.
- b. A major or catastrophic storm can destroy most signs and many landmarks. Re-entry into disaster areas can be improved through the use of programmable signs.
- c. The programmable signs should have multilingual capability.

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- d. In addition, the Florida Department of Transportation and counties should consider initiating a program to stencil street names on curbs at major intersections.

Issue D: Marinas and Bridges

Marty marinas in Florida have rules that require boat owners to remove their vessels when threatened by hurricanes. Boat owners that do not comply can lose their slips, which can be a significant penalty in some areas. The result of this policy, however, is that boat owners (especially out-of-town owners) are motivated to travel into areas being evacuated in order to move their boats, putting their lives at risk.

Prior to the landfall of Hurricane Andrew, the Florida Department of Transportation coordinated with the Dade County Emergency Operations Center and began locking down bridges and securing gates in the early evening before the storm. This coordinated effort worked well. The plan previously in place calls for lock down to occur when sustained winds reached 39 mph. However, the speed that Andrew was traveling would have allowed only a few hours for lock down to occur had the previous plan been followed.

Recommendation # 20:

The 1993 Legislature should establish a statewide "life over property" policy for marina evacuations.

Comments:

- a. This statute should prohibit marinas from having rules that require boats to be evacuated from marinas once a hurricane warning is in place. Special insurance programs and immunity provisions should be created to mitigate the effect of this prohibition on marina owners.
- b. Marinas should have the authority to dictate the kind of cleats, ropes, fenders and other measures that must be used on boats in their marinas to minimize damage.

Recommendation # 21:

The Florida Department of Transportation should adopt a rule establishing procedures for determining when drawbridges should be locked down. The rule should be promulgated in coordination with state and county emergency management agencies and the U.S. Coast Guard. The rule should be in place and advertised to boat owners by June 1, 1993.

Comments:

- a. Since the U.S. Coast Guard has jurisdiction over the operation of drawbridges and there is currently federal law dealing with this issue, it should be included in a coordinated effort to develop a statewide plan that has enough flexibility to consider the speed of an approaching storm and other appropriate factors.
- b. Educational efforts directed at boat owners should be increased prior to the hurricane season to clearly communicate to boat owners when bridges will be locked down during an evacuation. This could consist of a pamphlet distributed with boat licenses.
- c. When a hurricane is imminent, the Weather Channel, CNN, and the mass media should be used to convey information to boat owners concerning the status of bridges.

III. SHELTER

Florida has an inadequate supply of public shelter spaces. Before Hurricane Andrew, regional shelter studies determined that Florida had a statewide deficit of 118,000 shelter spaces.² The actual shelter deficit may now be considerably higher because it is anticipated that more people than previously predicted will evacuate before the next hurricane because of increased public sensitivity to the danger posed by hurricanes generated by the severity of Hurricane Andrew. While Florida's public shelter deficit cannot be immediately alleviated, an aggressive, multifaceted program should be begun to increase public shelter capacity in Florida. Such a program should be designed to eliminate Florida's public shelter deficit within five years.

Issue A: Improve Shelter Planning and Operations

Recommendation # 22:

The Department of Community Affairs should adopt a shelter element, which includes specific regional and interregional planning provisions, as part of the state comprehensive emergency management plan by March 1, 1994, and should amend Chapter 9G-7, Florida Administrative Code, to ensure that county shelter plans are coordinated with the revised state comprehensive emergency management plan.

Comments:

- a. This element should be developed in consultation with county emergency management offices and the American Red Cross. The process should provide opportunities for full participation by the owners of shelter facilities.
- b. The shelter element should be operations oriented. Many aspects of the shelter element should be automated and maintained on computer at the county and state level for use during emergency situations.
- c. At a minimum, the shelter element of the statewide plan should:
 - (1) contain or set forth strategies to obtain: (a) an inventory of all available shelter spaces, (b) an inventory of the supplies present at each shelter, especially emergency power generating equipment, and (c) an estimate of shelter demand in each county in response to minor, major, and catastrophic disasters;
 - (2) set forth strategies for alleviating shelter space deficits and shortfalls in shelter inventories;
 - (3) set forth policy guidance for local refuges of last resort programs;
 - (4) set forth a program for evaluating the structural soundness of additional nonschool public shelters;
 - (5) provide for coordination with the American Red Cross, county sheriff and city police departments, Florida National Guard, Department of Health and Rehabilitative Services, Florida Department of Law Enforcement, Department of Elder Affairs, the Agency for Health Care Administration, and county

² This figure is arrived at by combining the deficit of 359,000 shelter spaces in five regions (Southwest Florida, South Florida, Tampa Bay, Northeast Florida, and Treasure Coast) with the 241,000 excess shelter spaces in six regions (Withlacoochee, North Central, Apalachee, East Central, Central Florida, and West Florida). [Source: *Regional Hurricane Evacuation Studies*. Department of Community Affairs. June 1992.]

- school districts to ensure that adequate staffing plans exist for all shelters, including medical and security personnel³;
- (6) be coordinated with regional and county shelter plans and studies;
 - (7) provide strategies to create: (a) a network of shelters paralleling the main highway evacuation routes, e.g., I-95, the Florida Turnpike, and (b) a system for moving evacuees off these routes into shelters when the storm approaches;
 - (8) provide for a post-disaster communications system for public shelters;
 - (9) establish model shelter guidelines for operations, registration, inventory, power generation capability, information management, and staffing; and
 - (10) set forth policy guidance for sheltering people with special needs. These policies should be developed in consultation with a task force that includes representatives of special needs populations and special needs service providers.
- d. To assist counties and facilities with planning for sheltering persons with special needs, the Department of Health and Rehabilitative Services, the Department of Elder Affairs, the Department of Labor and Employment Security, and the Agency for Health Care Administration should establish full-time special needs disaster assistance coordinators responsible for ensuring the needs of their special needs populations are addressed prior to, during, and after disasters. These positions should also coordinate the state agency review of facilities' evacuation and shelter plans.
 - e. The American Red Cross should work with the Department of Community Affairs and county emergency management agencies to systematically inventory the equipment and supplies available at each shelter location.
 - f. If necessary, the Legislature should establish a funding program administered by the Department of Community Affairs to properly equip shelters.

Issue B: Increase Use of Public Buildings

Recommendation # 23:

The 1993 Legislature should amend appropriate sections of the Florida Statutes related to the construction of public schools, community colleges and universities, to require the State Board of Education and the Board of Regents to incorporate public shelter design criteria into the appropriate building codes by November 1, 1993.

Comments:

- a. Public schools serve as a principle source of public shelters in Florida and more should be available for this purpose. Building codes for public schools, community colleges and universities do not include specific criteria to enhance their use as shelters.
- b. Once added to the applicable building codes, the shelter design criteria should be part of the state's minimum criteria for school facilities. Only buildings specifically determined to not be necessary as a shelter location by the applicable county emergency management office and the Department of Community Affairs should be able to be built without meeting shelter standards.

³ These plans should provide specifically for predeployment of government personnel to shelters when a catastrophic disaster is imminent to supplement volunteer forces, especially to meet security and medical needs.

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- c. Public schools, community colleges and universities should be statutorily required to make facilities available as shelters. The new public shelter design criteria should be included in all new facilities that will serve as shelters that begin construction after January 1, 1995.
 - d. The public shelter design criteria should be developed by the Florida Department of Education and Board of Regents in conjunction with county school boards, county and state emergency management offices, and the American Red Cross.

Recommendation # 24:

The 1993 Legislature should create a program to:

- a) Survey existing schools, universities, community colleges, and other state, municipal and county owned public buildings to identify those that are appropriately designed and located to serve as shelters. The owners of the facilities should participate in the surveys.
- b) Retrofit as necessary the selected facilities with hurricane shutters and other improvements, such as emergency power generation equipment, adequate to fulfill the needs of the shelter. Funding for this program should be provided by the Florida Legislature as it will benefit citizens statewide.

Comments:

- a. The surveying program of schools, universities and community colleges should be undertaken by the Florida Department of Education and Board of Regents in conjunction with applicable entities, such as local school boards, community college boards, and the American Red Cross, and be completed within two years after the design criteria are established.
- b. The survey of other public facilities should be coordinated by the Department of Community Affairs in conjunction with appropriate state agencies, the Florida League of Cities, and the Florida Association of Counties.
- c. Retrofitting programs should be modeled on the Americans with Disabilities Act, which would give facilities specific time frames by which they would have to comply with retrofitting requirements.
- d. All agencies should assess their buildings and complete any simple, inexpensive retrofits that it can accomplish before June 1, 1993.
- e. Retrofitting facilities in regions with public shelter deficits should be given first priority and be completed within five years.
- f. All appropriate facilities should be retrofitted within ten years.
- g. State funds should be targeted to counties with shelter deficits.

Recommendation # 25:

The Department of Management Services should evaluate the feasibility and fiscal implications of constructing new state buildings to meet public shelter standards and report its findings to the Governor by November 1, 1993. The report should also address the fiscal implications of retrofitting existing state buildings to provide shelter capacity in counties with shelter deficits.

Comments:

- a. The Department of Management Services should coordinate with state and county emergency management agencies and the American Red Cross during this study.

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- b. The study should be limited to existing and future buildings that would have potential to serve as shelters, such as those containing food preparation facilities. There are currently 45 large state office buildings that could meet these criteria.
 - c. The Department of Management Services estimates that it could meet this reporting date if adequate funding for the study is appropriated by the 1993 Legislature.

Issue C: Reduce Shelter Demand

Recommendation # 26:

The Department of Community Affairs should examine the appropriateness of amending Chapter 723, Florida Statutes, to require mobile home parks that are over a certain size and located outside of category 3 storm surge zones to incorporate on-site shelters built to shelter standards.

Comments:

- a. Hurricane Andrew and other recent disasters in Pinellas County and the Southeastern United States have proven the vulnerability of mobile homes to very strong winds. The Committee supports improved structural standards for mobile homes but believes the desire for stronger structural requirements for mobile homes should be balanced against the need to preserve the availability of housing affordable to lower income households.
- b. An acceptable alternative strategy could be to require mobile home parks to be built with adequate shelter space.
- c. Before any recommendations pertaining to mobile homes are implemented, research should be undertaken to identify and minimize their fiscal impact on housing affordability.
- d. The Department of Community Affairs should examine the fiscal impact of (1) requiring only new or expanding mobile home parks to include adequate shelter space and (2) also requiring existing parks to retrofit their clubhouses or other facilities to provide in-park shelter space.
- e. The Department of Community Affairs, in conjunction with the Department of Business Regulation, should investigate the issue of whether the costs of provided shelters can be passed-through to lot owners.

Recommendation # 27:

The Department of Community Affairs should advocate the development and adoption of model building code requirements and incentives for new residential structures, both single-family and multistory, to address the issues of roof, weather envelope, and window and door failures, by the Florida Legislature or the respective model code organizations. The Department of Community Affairs should specifically address requirements and incentives for shutters, improved roof connections, and creation of a safe shelter space within the living area available to each household.

Comments:

- a. Florida should strongly promote in-place sheltering to avoid tragic loss of life from a hurricane catching motorists on highways while trying to evacuate unnecessarily. Building codes should be revised to increase the number of existing buildings in which individuals can safely remain during major and catastrophic hurricanes. In-

place sheltering programs would have to be complemented by close-proximity shelter facilities.

- b. One of the most difficult issues which must be dealt with is the need for requirements to limit window and door blow outs/ins and the need for requirements to assure the safety of occupants if windows and doors do blow out or in. A proper evaluation of these issues is needed to develop technically adequate and cost-sensitive recommendations.
- c. If new residential structures were built with a "safe room," for example, a center bathroom or large closet, residents may more likely be able to safely stay home during hurricanes, as long as they do not live in the storm surge zone, low-lying area, or a mobile home.
- d. Inclusion of shutters and stronger roof connections would have reduced the damage to many of the homes damaged by Andrew.
- e. If new building code requirements are established, mechanisms for recognizing substantial equivalency should be put in place.
- f. Code revisions should be coordinated with existing codes designed to meet other safety concerns.

Recommendation # 28:

The Agency for Health Care Administration should establish standards for facilities and equipment to ensure all residential care facilities are structurally capable of serving as shelters and equipped to be self-contained during disasters. The 1993 Legislature should ensure that the Agency for Health Care Administration has adequate authority to require that new health or residential care facilities (hospitals, nursing homes, adult congregate living facilities and group homes) meet standards that will minimize the need for evacuations. Existing facilities should be retrofitted to meet the new standards.

Comments:

- a. Standards for hospitals, nursing homes, adult congregate living facilities and group homes should be upgraded to reduce the need for evacuations. At a minimum, facilities in surge zones should be required to elevate essential equipment above anticipated surge levels.
- b. These standards should include, but not be limited to window protection, window air conditioner straps, and internal stairways. The facility should have a plan for medical staffing, a communication system, and a 72-hour supply of emergency equipment, medical supplies, food and water to ensure the facility is self-contained during and after a disaster.
- c. It is important to emphasize that this recommendation does not preclude residential care facilities from having to evacuate when ordered. The purpose of this recommendation is to provide additional protection to residential care facilities not required to evacuate, and to increase the probability that evacuated facilities would be available for re-occupancy after the disaster. The licensing of facilities could be the trigger to ensure buildings are structurally sound.
- d. Funding for retrofitting of existing special needs facilities or constructing new facilities to meet this newly proposed standard could be provided through programs such as capital development loans, low-interest rate mortgages, U.S. Department of Housing and Urban Development funds, or Capital Expenditures Needs Certificates.

Issue D: Improve Registration of Shelter Occupants

Following major or catastrophic disasters, the Department of Community Affairs, local governments, and the American Red Cross are deluged with calls from people concerned about family members. The American Red Cross processed 9023 disaster welfare inquiries following Hurricane Andrew.

Recommendation # 29:

The American Red Cross should develop a computerized network system for registering shelter occupants that can be accessed by out-of-town residents inquiring about relatives.

Comments:

- a. The American Red Cross is currently developing a computerized tracking system for its shelters.
- b. Because of the need to focus on sheltering and feeding, the American Red Cross currently does not process "disaster welfare inquiries" during the first 48 hours post-disaster.
- c. To minimize disruption of American Red Cross Chapters that are responding to a disaster, inquiries by out-of-town residents are answered by their local American Red Cross Chapter.

Issue E: Improve Sheltering of People with Special Needs

The health, safety and welfare of people with special needs must be ensured in a disaster. The testimony received by the Committee called for actions to ensure that disaster plans that address these populations are in place. These plans should consider individuals who reside in residential care facilities and individuals who live independently in the community. Counties should ensure the coordination of disaster plans for people with special needs at the community and regional levels.

Recommendation # 30:

The Florida Legislature should amend Chapter 252, Florida Statutes, to better define "people with special needs."

Comments:

- a. The term "people with special needs" has traditionally referred to people who need assistance to evacuate and includes the elderly, frail, disabled, homebound, and otherwise functionally limited population. A task force consisting of appropriate special needs agencies should be created to develop this definition.
- b. Functional limitations in the activities of daily living should be the basis to define people with special needs. Special needs population should not be defined in terms of disability; the term "disability" can lend itself to some subjective interpretations. It is the general perception that individuals living in residential care facilities are to some extent defined by the type of facility they are in and the type of care they receive.
- c. It is important to differentiate between people with special needs who live independently in the community and people who live in a residential care facility (such as a nursing home, adult congregate living facility or group home). In addition, this

definition should consider the different levels of functional limitations and address the fact that additional individuals will develop special needs as a result of a disaster.

- d. Other related terms which need to be agreed upon and defined include: service provider (referring to any agency that has contact with the subject population), special needs unit or special care unit (shelter for people with special needs), and host facility (shelter for resident care facilities that are evacuated).

Recommendation # 31:

The 1993 Legislature should amend appropriate statutes to define "residential care facilities" that should be responsible for maintaining evacuation and shelter plans.

Comments:

- a. This definition should include any congregate living environment which houses five or more nonrelated people with special needs living together under the supervision of someone paid for their care. At a minimum, this definition should include hospitals, nursing homes, adult congregate living facilities, and group homes.
- b. Residential care facilities provide care for their clients on a full-time basis. Therefore, these facilities should also be responsible for providing care in a disaster, including, at a minimum, adequate food and water, medical supplies, emergency power, and staffing. During an evacuation the facilities should have all essentials available to care for the residents. Adequate strengthening of the facilities can allow the facility to resume functioning more quickly after evacuation orders are lifted.
- c. There are many different types of residential care facilities. The licensing requirements of each type vary under Florida Statutes. This results in a lack of comprehensive disaster planning for these facilities. For instance, nursing homes, hospitals and adult congregate living facilities are required to have a disaster plan, whereas group homes are not. By defining residential care facilities as recommended, disaster planning requirements would be uniformly applicable to facilities that provide care to people with special needs.

Recommendation # 32:

The 1993 Legislature should amend appropriate statutes and the Agency for Health Care Administration should amend Rule 59A-4, Florida Administrative Code, to include minimum criteria for the development and maintenance of disaster plans by hospitals, nursing homes, adult congregate living facilities, and group homes and for joint state-county review and approval of the plans.

Comments:

- a. Hospitals, nursing homes, adult congregate living facilities, and group homes must prepare and maintain disaster plans as a condition of their licenses and these plans are reviewed annually by the Agency for Health Care Administration. Although these activities are required by statute and rule, the regulations are silent on minimum criteria for the preparation and review of the plans. This has resulted in a lack of consistent quality in the plans and lack of a coordinated review of the plans. Minimum criteria and joint state-county oversight are needed to ensure that the cumulative effects of the disaster plans are being evaluated.
- b. At a minimum, these plans should address: evacuation transportation, post-disaster transportation, medical supplies, medical staffing, emergency equipment, emergency power, food and water, individual identification of patients, responding to family inquiries, transfer of medical records and mutual aid agreements with host facilities. County emergency management agencies, the Department of Elder Affairs, the

Department of Health and Rehabilitative Services, and the Agency for Health Care Administration should provide technical assistance in the development of disaster plans. The absence of an adequate plan or the failure to carry out the plan in a disaster should result in the imposition of penalties, up to and including loss of license.

- c. A joint state-county review and approval process for evaluating disaster plans prepared by such should be established. This process should incorporate a coordinated review by county emergency management agencies, the Department of Elder Affairs, the Department of Health and Rehabilitative Services, the Agency for Health Care Administration, the American Red Cross and other appropriate agencies. Appropriate funding should be provided to these agencies to carry out these duties.

Recommendation # 33:

The Agency for Health Care Administration should amend Rule 59A-4.126(2)(g), Florida Administrative Code, to clarify that nursing homes may not use public shelters as alternative host facilities.

Comments:

- a. Rule 59A-4.126(2), Florida Administrative Code, requires nursing homes to maintain written agreements with alternative host facilities. It also requires procedures for necessary personnel to accompany residents to auxiliary facilities — such as schools, American Red Cross centers or other evacuation centers — thus providing a loophole for nursing homes to evacuate their residents to public shelters.

Recommendation # 34:

Coordinate and strengthen the registration of people with special needs by requiring appropriate agencies and community-based service providers, including home health care providers, to collect registration information for people with special needs as part of program intake processes, establish programs to increase the awareness of the registration process, and educate clients about the implications of their functional limitations in disasters.

Comments:

- a. Chapter 252, Florida Statutes, requires county emergency management agencies to provide for the voluntary registration of residents within their jurisdiction who would need assistance in order to evacuate. Because registration is voluntary and not widely publicized, registration is lower than the anticipated number of people in the population who would need special assistance. Individuals with special needs living in the community need to be specifically targeted for special outreach and educational efforts so they will voluntarily register. The expansion of the registration and management of the people with special needs program should be an ongoing, long-term process. The confidential nature of the special needs registry should be emphasized.
- b. The county emergency management agency, along with the Department of Health and Rehabilitative Services, the Department of Elder Affairs, and the American Red Cross, and other Voluntary Organizations Active in Disasters agencies, should coordinate public awareness and education efforts at a countywide level and provide support to the community-based service providers. The service providers should periodically report to the county emergency management agency and other appropriate agencies about their registration efforts. The registration data should be assembled into a countywide database coded geographically and providing health

classification information. To facilitate the coordination of the registration process, a standard registration form should be developed for use statewide.

- c. There is a need for greater public knowledge of the registration process to ensure the inclusion of all special needs individuals who live in the community. Community-based service providers have direct contact with special needs individuals living in the community and have earned the trust of these individuals. Therefore, service providers are in a better position to inform and educate special needs individuals. The Departments of Community Affairs, Elder Affairs, and Health and Rehabilitative Services are best equipped to provide overall coordination and support.

Recommendation # 35:

The 1993 Legislature should amend Section 252.355, Florida Statutes, to require clients of state or federally funded service programs to register as people with special needs.

Comments:

- a. Currently, there is a lack of participation with voluntary registration. Many special needs individuals who require assistance during evacuation are not being adequately identified and served. State and federally funded service providers should initiate mandatory registration as part of the intake process to assistance programs.
- b. Registration information should be gathered by service agency personnel and fed into county and state registries. In the event a county registry is not operable due to a disaster, the state registry would be the backup. State funds should be appropriated for this effort.
- c. By use of the phrase "clients of state or federally funded service programs" the Committee only means to include people with physical or mental handicaps that require them to need assistance in evacuating or when in shelters. This Committee is not referring to persons receiving economic assistance such as welfare or food stamp recipients.

Recommendation # 36:

The 1993 Legislature should amend appropriate sections of the Florida Statutes to authorize the Medicaid Program to reimburse hospitals for skilled nursing beds being used for other than acute care because of reasons pertaining to a Disaster Declaration issued by the Governor or the President.

Comments:

- a. Prior to Hurricane Andrew's landfall in south Florida, many nursing homes evacuated to area hospitals. Currently, there are limited provisions for hospitals to be paid by the Medicaid Program for beds being used for other than acute care. By granting the use of "swing beds" during a declared state of emergency or disaster, hospitals can be reimbursed for both acute care and nursing care, which would assist hospitals in their care for other types of patients.
- b. The Florida Hospital Association reported that the Agency for Health Care Administration established similar provisions by emergency rule.

CHAPTER TWO:
AFTER THE STORM

The Committee found that post-disaster response and recovery efforts following Hurricane Andrew were (and are) laudable, especially given the magnitude of the storm. Nevertheless, this experience revealed that the State of Florida, its local governments, major volunteer organizations, and the government of the United States are not fully prepared to respond to catastrophic disasters.

The Committee examined many facets of the response and recovery effort following Hurricane Andrew's landfall. The Committee focused on the post-disaster response and recovery effort during the first two weeks after Andrew's landfall. The following issues were investigated by the Committee:

- post-disaster communications and public information;
- post-disaster response and recovery operations, including intergovernmental coordination, chain of command, and security;
- availability of damage assessment data;
- environmental clean-up and debris removal;
- provision of medical care and relief;
- provision of temporary housing;
- coordination of supplies, volunteers and donations; and
- restoration of electrical power and telephone service.

The recommendations of the Committee follow below. They address post-disaster communications and public information; post-disaster response and recovery operations; availability of damage assessment data; medical care and relief; and coordination of volunteers, donations and supplies.

One issue must be emphasized. Although the following recommendations will improve post-disaster response and recovery efforts following future disasters, the recommended actions must be implemented *before* the next disaster to have any effect.

I. POST-DISASTER COMMUNICATIONS AND PUBLIC INFORMATION

After a catastrophic disaster like Hurricane Andrew, normal means of communications in the affected areas will be either demolished or largely incapacitated. The ability of emergency management forces to effectively coordinate hurricane post-disaster response and recovery activities depends upon their ability to communicate. This requires a network of reliable and redundant communications systems and a capability to rapidly establish temporary communications immediately after the storm.

In addition to effective communications among governmental and non-governmental emergency personnel, state and local officials must have in place effective means for communicating information and instructions to the public. State and local officials rely on written media releases and periodic media briefings to pass information to the public.

Hurricane Andrew demonstrated the need to re-evaluate the equipment and systems used to communicate during disasters and to improve procedures for acquisition and deployment of additional communications equipment, establishment of temporary communications, and means for communicating information and instructions to the public.

Issue A: Coordination of Emergency Communications

Recommendation # 37:

An Emergency Support Function (ESF) for Communications should be established at the state emergency operations center to implement the post-disaster communications plan and assure the provision of adequate telecommunications support to emergency post-disaster response and recovery efforts.

Comments:

- a. The establishment of a Communications ESF will assure better coordination of actions by state and federal agencies to provide telecommunications support during a hurricane. The Department of Management Services' Division of Communications should serve as the primary agency, with other state agencies with significant communications capabilities and resources serving as support agencies, e.g., the Division of Forestry, Florida National Guard.
- b. The Communications ESF should be responsible for:
 - (1) identifying operational communications facilities within the affected area(s) that are available for use;
 - (2) identifying those communications facilities outside the affected area(s) that can be made available for use in the affected area(s);
 - (3) identifying actions by commercial telecommunications companies to recover and restore their facilities; and
 - (4) coordinating the deployment and use of telecommunications equipment and resources to support post-disaster response and recovery efforts.
- c. Those agencies represented on the Communications ESF should inventory all available telecommunications resources for use during a hurricane.
- d. For the Communications ESF to be effective, there must be an inventory of all existing government-furnished communications, commercially leased communica-

tions, and telecommunications services available under the provisions of the national security and emergency preparedness telecommunications service priority system procedures for expediting service requirements. This inventory should include, but not be limited to:

- (1) mobile or transportable telecommunications equipment;
 - (2) multichannel radio systems;
 - (3) base stations and hand-held portable radios;
 - (4) mobile or transportable microwave systems;
 - (5) mobile satellite systems;
 - (6) mobile or transportable switchboards and station equipment;
 - (7) aircraft/watercraft suitable as platforms for radio repeaters; and
 - (8) trained installation and operations personnel available for deployment into affected area(s).
- e. Once this inventory has been completed, the Division of Communications should determine the extent to which existing telecommunications equipment and resources are compatible with each other.
- f. During Hurricane Andrew, a variety of communications resources were made available in the disaster area from federal, state, local and private entities. Problems resulted from the lack of common channels and frequencies. Every effort should be made to ensure that additional communications equipment deployed within the affected area(s) is compatible with other equipment.

Recommendation # 38:

The Department of Management Services should coordinate the preparation of an emergency communications coordination plan as a part of the statewide communications plan to guide the use of telecommunications equipment by emergency personnel.

Comments:

- a. The Emergency Communications Coordination Plan should be prepared in conjunction with the Department of Community Affairs and agencies that will have responsibility under ESF # 2 (Communications).
- b. The Emergency Communications Coordination Plan should address the use of standardized equipment and common frequencies; the hardening of existing and new facilities to mitigate future damage from storms; the use of broadcast media transmissions capabilities as a backup for communicating with response agencies; and requirements for periodic exercises to test the plan; and should consider the use of new technologies, e.g., low earth orbit satellite systems, personal communications services.
- c. The plan should be developed to be compatible with any pertinent federal communications plan.

Issue B: Coordination of Post-Disaster Emergency Communications

Recommendation # 39:

The Department of Management Services should revise state emergency plans and implementing procedures to provide for the predeployment and staging of equipment, personnel and resources necessary to establish temporary telecommunications capabilities.

Comments:

- a. Prior to the landfall of Hurricane Andrew, the Department of Community Affairs predeployed its two mobile communications vans in the Orlando area. This was outside the radius of tropical storm strength winds but close enough to allow rapid deployment into the affected area. Within a few hours after landfall, the vans were located and operational at the Metro-Dade emergency operations center and at the Homestead City Hall. Metro-Dade County and Homestead provided antennae, phone lines, and electricity. All emergency operation centers should have external outlets to support such vehicles.
- b. There are other resources that, although not predeployed during Hurricane Andrew, could be predeployed as a matter of procedure. This includes communications assets from the Florida National Guard that have the capability for rapid deployment and field installation of land-mobile, two-way radio, point-to-point radio (high frequency through microwave), and wireline systems to satisfy a wide range of communications needs. The Florida Wing of the Civil Air Patrol has more than 500 very high frequency (VHF) mobile radios. More than half of these have a range of 10 to 15 miles, and can be used during a hurricane.

Recommendation # 40:

The National Warning System should be used as the primary means for communicating with county emergency management agencies outside of the affected area(s).

Comments:

- a. After landfall it is important to maintain communications with local emergency management agencies outside of the disaster area(s). Because of its "conference call" capability, the National Warning System should be used as the primary means to coordinate the exchange of information with counties located outside of the disaster area(s).

Recommendation # 41:

The Department of Management Services, in conjunction with the Department of Community Affairs, should establish open purchase orders and memoranda of understanding with commercial telecommunications companies to provide temporary communications equipment within the disaster area(s).

Comments:

- a. In order to meet the immediate demand for equipment necessary to establish temporary communications within the disaster area(s), two options appear feasible. The first option is to purchase and store large numbers of hand-held radios and cellular phones that could then quickly be deployed to emergency personnel. This option is not recommended. The second and preferred option is to establish open purchase orders and memoranda of agreement with commercial telecommunications companies to lease the necessary equipment and services.

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- b. Several factors must be considered relative to the first option — large-scale purchase and storage of communications equipment by the state. First, it is doubtful that sufficient state funding could be secured to purchase the requisite number of hand-held radios and other necessary equipment. Second, sufficient storage space must be located. Third, the equipment must be periodically inspected, tested and repaired to ensure its operability when needed. Finally, the "state of the art" improves so quickly that equipment purchased by the state will soon become obsolete.
 - c. The preferred option is to establish open purchase orders and memoranda of agreement with commercial telecommunications companies to lease the necessary equipment and services. The memoranda of agreement should identify the number and types of equipment to be provided, time frames for providing the equipment, contact persons, and programming requirements. Equipment to be provided under these memoranda of agreement should include, at a minimum, preprogrammed hand-held portable radios, cellular phones, and switches. Services, such as the provision of satellite uplink and downlink time, should also be included.

Recommendation # 42:

The Department of Community Affairs should make necessary arrangements with counties and cities that have mobile emergency communications vans to use the vans and trained operators in an emergency if they are not supporting local operations.

Comments:

- a. It was apparent during Hurricane Andrew that the two emergency communications vans owned by the Division of Emergency Management cannot provide sufficient coverage of a large disaster area. Many county emergency management agencies have communications vans similar to those owned by the Division of Emergency Management. These vans can be predeployed near the disaster area(s), assigned common radio frequencies to assure compatibility with other post-disaster response efforts, and strategically located throughout the disaster area(s) to serve as radio relays for emergency personnel. As communications are restored, the vans could be reassigned to support emergency operations elsewhere or released.

Recommendation # 43:

The Departments of Management Services and Community Affairs should coordinate to have the 800 Megahertz (MHz) radio communications system expanded to include channels for emergency management. The two emergency communications vans owned by the Department of Community Affairs should be upgraded with the installation of 800 MHz transceivers, extendable towers and antennas, and additional hand-held portable 800 MHz radios.

Comments:

- a. The 800 MHz radio band contains a number of unused channels that could be made available for use for emergency management purposes. The establishment of an 800 MHz system for emergency management includes both long-term and short-term strategies.
- b. In the short term, six mutual aid channels presently exist within the 800 MHz band. Five of these channels are set aside nationwide for use by state and local public safety and emergency management agencies. The sixth channel is similar in function but is available for use only in Florida under licenses held by the Division of Communications. Because these channels are shared, their effective use during an emergency may require cooperative agreements with other state and local agencies that use them.

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- c. In the long term, the state should apply to the Florida Region Committee (which is made up of state and local public safety officials) during the 1993 filing window for four conventional channels for emergency management purposes. Depending on their availability, these channels could then be allotted on a statewide basis or in groups on a regional basis. These channels should be dedicated to emergency management communications for use in establishing networks linking post-disaster response and recovery sites and facilities.
 - d. Since these channels will be a primary means of interagency communications in areas where 800 MHz is in use, the capability to establish temporary repeater sites for all channels must exist. 800 MHz base stations with repeaters programmed to the mutual aid channels (and eventually to the dedicated emergency management channels) and a 100-foot extendable tower should be purchased and installed in each of the two emergency communications vans owned by the Department of Community Affairs' Division of Emergency Management. This will allow the vans to function as temporary repeater sites until permanent communications have been restored. A small number of hand-held 800 MHz radios (100-200) programmed to the mutual aid channels (and eventually to the dedicated emergency management channels) should be purchased and placed in the vans for use in the field. These radios should be supported by additional radios made available through open purchase orders and memoranda of agreement.

Recommendation # 44:

The cellular telephone industry is urged to work to accelerate technological improvements so that priorities can be established for the use of cellular telephones during early post-disaster periods.

Comments:

- a. The use of cellular telephones created a number of problems after Hurricane Andrew. Many of the cell sites were damaged or destroyed. Many of those remaining failed from the lack of commercial power to the cell site batteries immediately following landfall.
- b. Although Cellular One and BellSouth Mobility both restored their pre-existing service capacity in the impacted area within four days, the channels became so jammed with calls that the system could not be used as anticipated. This problem could be addressed by establishing priorities for use of cellular phones, restricting their use to emergency traffic until regular systems are restored.
- c. The Committee received testimony from BellSouth Mobility and Cellular One that indicated current technology will not allow for prioritization of individual phones, although certain channels could be reserved. As the cellular industry moves to digital technology over the next three years, the ability to prioritize individual phones or groups of phones should become available.
- d. When technically possible, priority should be given to cellular phone users as follows:
 - (1) state and local public safety units, e.g., emergency management, fire, emergency medical services; state, local and federal law enforcement personnel; Florida National Guard and federal military personnel; state, local and federal human services units, e.g., American Red Cross, public health units, and other medical personnel; and public utilities designated to restore service or take corrective actions;

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- (2) the media and selected fiscal and economic interests, e.g., banks, investment firms; and
 - (3) the general public.

Recommendation # 45:

The 1993 Legislature should appropriate funds to the Florida Department of Law Enforcement for the purchase of two additional vehicles: a Florida security control center vehicle, and an emergency communications and command center vehicle. Existence of these vehicles would greatly improve the state's capability to coordinate post-disaster response and recovery activities and emergency communications within the disaster area.

Comments:

- a. These technologically advanced vehicles should be utilized throughout the state for deployment and rapid response to any man-made or natural disaster. These vehicles would provide the necessary capability to rapidly employ critical emergency communications within the disaster area.
- b. The Florida Security Control Center Vehicle should serve as the primary field communications and coordination center for state and local law enforcement agencies. The vehicle should be designed on a hydraulic expandable trailer and include a double expandable conference room, generators, and necessary communications equipment.
- c. The Florida Emergency Communications and Command Center Vehicle would provide for self-contained, compatible communications among local, state and federal agencies. The vehicle should include a totally integrated communications network, a double expandable conference room, and generators to operate in the field.
- d. Procedures for use of these vehicles should specify how emergency power will be supplied and how emergency fueling will be handled.

Recommendation # 46:

County emergency management plans and procedures should be revised as necessary to identify an amateur radio coordinator and to encourage the use of amateur radio operators at shelters and post-disaster response sites and facilities.

Comments:

- a. The contributions of volunteer amateur radio operators during Hurricane Andrew should not be overlooked. These volunteer operators have their own equipment and are available to quickly establish communications at public shelters, distribution sites, and reception and staging areas. Effective use of amateur radio operators can help relieve the burden on governmental agencies to establish temporary emergency communications. The American Red Cross and ham radio operator groups have agreements regarding shelter communications.
- b. Plans should be made to develop, support, and recognize the contributions of amateur radio operators to encourage more recruits to counteract the significant decline in the number of young people getting involved in amateur radio activities.

Issue C: Coordinating the Release of Information and Instructions to the Public

Recommendation # 47:

The Department of Community Affairs should work with the Federal Emergency Management Agency, counties, voluntary organizations and the media to develop procedures that will ensure consistent and coordinated release of post-disaster information to the media and public.

Comments:

- a. Standardized formats and procedures should be used for releasing information to the public and media. For example, an "Immediate Broadcast Emergency Bulletin" could be issued in those instances where immediate action is necessary to save lives or safeguard the public. An "Emergency Information Update" could be released according to an established schedule, e.g., every two hours.
- b. The formats for state and local bulletins should be identical and should include a complete overview of necessary emergency information, i.e., evacuation status, and road and school closings. County releases should be shared with the state and vice-versa.
- c. Following major or catastrophic disasters, a single point or a small number of points of release should be established for coordinating the release of information to the media in order to avoid release of duplicating or conflicting information. This can be most easily accomplished through co-location of public information officers in the joint information center that the Federal Emergency Management Agency will establish in or near the disaster field office. The joint information center should serve as the physical location where federal, state and county public information officers come together to ensure coordination of information released to the media and public. The purpose of the joint information center is to serve as the central point for media access to the latest developments and emergency information. Potential joint information center sites should be identified in advance in county and state post-disaster response and recovery plans.
- d. At somewhat greater cost, facilities to be used as joint information centers could be pre-designated, hardened and wired in each of the 10 regional media markets.⁴ In media regions with more than one large county, more than one facility should be prepared.⁵ These buildings should be large enough to accommodate the media and local, state and federal information personnel after the storm. Multiple paths for data and information transfer that are hardened so that they will survive the storm, i.e., buried underground, should be established between these buildings and the emergency operations centers in the media market. In the case of more than one facility, hardened communication paths should also be established between them. In addition, local media should be encouraged to install hardened paths (primary and back-up) for video and data capabilities.
- e. The state's emergency communications coordination plan should contain procedures for coordinating releases of information to the media and the public during the time from the impact of the disaster until the joint information center is fully operational.

⁴ According to the Florida Association of Broadcasters, Florida is made up of the following 10 media markets: Pensacola, Panama City, Tallahassee, Jacksonville, Tampa Bay, Gainesville/Ocala, Orlando, West Palm Beach, Miami/Ft. Lauderdale, and Ft. Myers/Naples.

⁵ Perhaps 14 facilities would be needed: one per media market plus one additional facility in each of four media markets: Miami/Ft. Lauderdale, Tampa Bay, Gainesville/Ocala, and Ft. Myers/Naples.

Recommendation # 48:

Counties should identify facilities or areas where emergency supplies and information would be first available after major and catastrophic disasters in their post-disaster response and recovery plans.

Comments:

- a. Certain facilities should be designated as post-disaster information centers so people would automatically know where to go to get help and information, i.e., schools, shopping centers. The location of these facilities should be listed and identified on a map in the telephone directory. Permanent signs should be placed at these facilities to indicate their purpose. County plans should call for county emergency personnel to go to these locations at the first opportunity after the storm.

Recommendation # 49:

Local media should provide their technical and programming plans for the release of emergency information to the public to applicable county emergency management agencies to help emergency management personnel to be familiar with media procedures.

Comments:

- a. If they are more familiar with media plans for the release of emergency information to the public, local emergency management directors can better integrate their emergency plans with those of the local media.

Recommendation # 50:

The Department of Community Affairs should coordinate the development of a system for disseminating post-disaster information and instructions to the public using nonelectronic media and methods.

Comments:

- a. Because of the likely disruption to electrical power and telecommunications systems, state and local emergency management officials should agree upon non-electronic methods for disseminating information and instructions to the public. This system should be adopted for statewide use, e.g., a red helium balloon should mean the same thing in all counties. Communication media to be considered should include, but not be limited to:
 - (1) Helium-filled balloons to mark areas where services and information are available;
 - (2) Distribution of multilingual newsletters advising the public of the availability of services;
 - (3) Multilingual broadcast vehicles with loud speakers; and
 - (4) Airships or blimps with electronic billboard capabilities.

II. POST-DISASTER RESPONSE AND RECOVERY OPERATIONS

The following section addresses one of the most controversial and critical aspects of emergency preparedness: post-disaster response and recovery operations. The Committee benefitted from a voluminous quantity of oral and written testimony on this issue. Much of this testimony emphasized three key points:

- (1) the chain of command must be clear and understood, especially within and among federal and state agencies, water management districts, counties, cities, and volunteer organizations;
- (2) the roles and responsibilities of individuals and organizations must be clearly delineated; and
- (3) individuals and organizations expected to perform roles and fulfill responsibilities in post-disaster response and recovery efforts must be trained to carry them out.

The following sections contain many recommendations to enhance post-disaster response and recovery operations. The Committee recognizes that transforming these recommendations into meaningful plans and programs will not be easy but challenges all applicable agencies to make the necessary effort to be ready for the next hurricane season. The implementation effort should give special attention to the three points noted above.

Issue A: Improve Planning for Post-Disaster Response and Recovery

Recommendation # 51:

The State of Florida and counties should use three categories of disasters — minor, major, and catastrophic — in emergency preparedness and recovery planning.

Comments:

- a. This issue is discussed in the introduction to this report.
- b. County emergency management agencies should declare when a minor disaster has occurred. The Governor should make the determination when a disaster is major or catastrophic.

Recommendation # 52:

The Department of Community Affairs should adopt a post-disaster response and recovery element, which includes specific regional and interregional planning provisions, as part of the state comprehensive emergency management plan by June 1, 1993. This element should provide for a state post-disaster response and recovery strategy generally aligned with the strategy used by the federal government. Each Florida state agency assigned lead responsibility for an emergency support function by the state comprehensive emergency management plan should prepare a detailed operational plan needed to implement the ESF assigned by June 1, 1993. The 1993 Legislature should amend Chapter 252, Florida Statutes, to add these requirements.

Comments:

- a. Florida's state policy for responding to disasters should be to support local efforts. In the case of major or catastrophic disasters, however, the needs of citizens and communities will likely be greater than local resources. In these situations, the state

must be capable of providing effective, coordinated, and timely support to communities and the public. A key to creating this state capability is the creation of a post-disaster response and recovery element in the state comprehensive emergency management plan.

- b. The Department of Community Affairs and the Florida Emergency Preparedness Association are both in the process of preparing state recovery plans. These draft documents should be evaluated for use in preparing this post-disaster response and recovery element.
- c. To improve coordination between the state and federal governments during the post-disaster response and recovery period, Florida's post-disaster response and recovery team should be based on a command and control structure that generally parallels the organization set forth in the *Federal Response Plan*.
- d. The post-disaster response and recovery element should predesignate specific entities that would assume control of 12 separate emergency support functions (ESFs). These ESFs should address the following areas:
 - (#1) transportation;
 - (#2) communications;
 - (#3) public works and engineering;
 - (#4) fire and rescue⁶;
 - (#5) information and planning;
 - (#6) mass care;
 - (#7) administrative support;
 - (#8) health and medical;
 - (#9) hazardous materials;
 - (#10) food;
 - (#11) energy; and
 - (#12) security⁷.
- e. In major or catastrophic disasters, the Governor should designate a key representative to assume the role of State Coordinating Officer. This individual must have command and control authority over all state resources (the Chief of Staff served in this role during Hurricane Andrew). If not selected to be the State Coordinating Officer, the Director of the Department of Community Affairs' Division of Emergency Management should assume the role of Deputy State Coordinating Officer. Advance training should be given to the individual that the Governor selects to serve as State Coordinating Officer.
- f. In minor disasters, the Director of the Department of Community Affairs' Division of Emergency Management should be designated by the Governor as the State Coordinating Officer.

⁶ The *Federal Response Plan* does not combine these functions but instead calls for two separate ESFs, #4 firefighting and #9 urban search and rescue. It is recommended that Florida combine these functions into one ESF because it will better correspond to the organization most counties will use to carry out these activities.

⁷ In the *Federal Response Plan*, security is not designated as an ESF. In their case, a Defense Coordinating Officer who reports directly to the Federal Coordinating Officer coordinates activities of the Department of Defense. No individual is assigned responsibility to coordinate all federal law enforcement operations (see also recommendation # 81).

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- g. In addition to the 12 ESFs, six support officers who report to the State Coordinating Officer should be pre-designated to handle public information, legislative liaison, community liaison, coordination of donations, coordination of volunteers, and victim assistance.
 - h. The ESFs and six support officers should automatically activate if a major or catastrophic disaster is imminent or if one has occurred without warning; they should only activate in response to a minor disaster if directed to do so by the State Coordinating Officer.
 - i. The Department of Community Affairs should work closely with Florida's local governments and those agencies with post-disaster response and recovery responsibilities in creating the element. It should provide for different post-disaster response and recovery scenarios depending on whether the disaster is minor, major, or catastrophic.
 - j. The element should be updated annually, although many of its provisions, especially resource inventories, should be kept on computer and updated continuously.
 - k. In addition to establishing the organizational structure of Florida's post-disaster response and recovery team as described above, the element should provide for:
 - (1) a description of Florida's post-disaster response and recovery strategy, including the organization of the post-disaster response and recovery team, procedures for activating the state's plan, policies used to guide post-disaster response and recovery activities, delineation of the chain of command, description of initial and continuous post-disaster response and recovery actions, and establishment of agency responsibilities;
 - (2) a continuous training program for the individuals (and their alternates) who will be called on to perform key roles in state and local post-disaster response and recovery efforts;
 - (3) detailed training manuals and operational guidelines for each position in Florida's post-disaster response and recovery team;
 - (4) periodic, e.g., annual, exercises for responding to minor, major, and catastrophic disasters;
 - (5) current inventories of equipment and supplies available under pre-established memoranda of agreement;
 - (6) identification of potential disaster field office sites statewide;
 - (7) a pre-established statewide staging area network, perhaps using existing fairgrounds, and identification of the agencies designated to use the staging areas;
 - (8) procedures and measures for logistical and finance/administrative support;
 - (9) a comprehensive communications plan;
 - (10) an inventory of active mutual aid agreements, strategies for liaison with the associations that administer the agreements, and procedures for monitoring aid provided to jurisdictions under the agreements;
 - (11) a comprehensive statewide medical care and relief plan coordinated with the Florida Department of Health and Rehabilitative Services, the Agency for Health Care Administration, the Department of Labor and Employment Security, the Department of Elder Affairs, and the U.S. Public Health Service;
 - (12) systems for coordinating volunteers and accepting and distributing donated funds and goods, including access to a pre-designated large-scale toll free phone bank;
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- (13) current and detailed instructions for dealing with the federal government, including protocol for requests for equipment, supplies, and nonmilitary and military assistance, and guidelines for maintaining financial records to obtain prompt assistance and reimbursements; and
 - (14) in the case of an imminent major disaster, procedures for predeployment of the Florida National Guard, and, in the case of an imminent catastrophic disaster, procedures for predeployment of the Florida National Guard and the U.S. Armed Forces.
- l. If Florida enters into an interstate compact, the post-disaster response and recovery plan should be amended to include procedures for responding to disasters in other states.
 - m. The effectiveness of state and federal officials trying to assist local governments following a major or catastrophic disaster would be enhanced by an understanding of the political situation in each county. To assist individuals to acquire this information, the Department of Community Affairs should maintain a current snapshot of the political situation in each county, including county-city relationships, e.g. charter or noncharter county, and a directory of key elected and administrative officials.

Recommendation # 53:

The 1993 Legislature should amend Chapter 252, Florida Statutes, and other statutes as necessary, to provide each state agency with lead responsibility for an emergency support function with authority to promulgate rules necessary to carry out its responsibilities under the ESF.

Comments:

- a. For example, the Department of Health and Rehabilitative Services has said it needs authority to promulgate rules to establish state management support units and state management support regions to support the overall coordination of emergency medical facilities to a declared state disaster.

Recommendation # 54:

The 1993 Legislature should amend Chapter 252, Florida Statutes, to require all counties to adopt post-disaster response and recovery elements. Chapter 252, Florida Statutes, should clearly require cities' emergency planning efforts to be consistent with and subject to the applicable county plans. The Department of Community Affairs should amend Rule 9G-7, Florida Administrative Code, to establish the minimum criteria for county post-disaster response and recovery elements.

Comments:

- a. Every county in Florida should have a post-disaster response and recovery element as part of its peacetime emergency plan. The post-disaster response and recovery element should be created in coordination with the cities in the county and in coordination with adjacent counties, regional and state post-disaster response and recovery agencies, and associations administering mutual aid agreements to which the county or its cities are a party.
- b. Cities have the option of conducting their own emergency preparedness planning pursuant to Chapter 252, Florida Statutes. Cities' plans should be consistent with and subject to the applicable county plan. If cities elect not to prepare their own emergency management plans, counties should retain responsibility for planning for these cities, as they now are under Chapter 252, Florida Statutes. Counties should

- periodically review municipal plans to ensure their consistency with the county plan.
- c. The Department of Community Affairs should adopt criteria by rule to require that these elements, at a minimum, provide for:
- (1) a post-disaster response and recovery command and control system that reflects the state's approach or is based on related Incident Command System principles⁸;
 - (2) a description of the county's post-disaster response and recovery strategy, including the organization of the post-disaster response and recovery team, procedures for activating the county's plan, policies used to guide post-disaster response and recovery activities, delineation of the chain of command, description of initial and continuous post-disaster response and recovery actions, and establishment of agency responsibilities;
 - (3) a recurring training program for the individuals (and their alternates) who will be called on to perform key roles in local post-disaster response and recovery efforts;
 - (4) detailed training manuals and operational guidelines for each position in the county's post-disaster response and recovery team;
 - (5) an inventory of potential preselected sites for co-locating food and water distribution centers, temporary medical care facilities, public information centers, public assistance centers, and other key post-disaster response and recovery facilities;
 - (6) an inventory of potential disaster field office facilities, regional supply operation staging areas, and military staging areas;
 - (7) provisions for both meeting the needs of families of post-disaster response and recovery personnel and for ensuring that stress, fatigue, and family concerns among personnel do not hinder post-disaster response and recovery operations;
 - (8) a current inventory of equipment and supplies, e.g., back hoes, portable toilets, and related maintenance agreements available under pre-established memoranda of agreement;
 - (9) a current inventory of assistance available through mutual aid agreements and a method for advising state emergency management personnel or mutual aid agreement administrators of assistance received thereunder;
 - (10) coordination among the cities in the county and the county during the post-disaster response and recovery period;
 - (11) periodic, e.g., annual, exercises for responding to minor, major, and catastrophic disasters;
 - (12) procedures and measures for logistical and finance and administrative support;
 - (13) a comprehensive communications plan;

⁸ The Incident Command System concept is a management structure used to coordinate responses to disasters. The organizational structure used in Incident Command Systems has five major functions: command, planning, operations, logistics, and finance. The number of personnel involved in each of these functions expands or contracts based on the type and magnitude of disaster. A designated Incident Commander has overall responsibility for the disaster and authority over all five functions. The Incident Command System concept has been used most frequently in efforts to fight large fires but there is growing recognition of its potential for managing responses to other major disasters, especially at the local jurisdiction and subjurisdiction level.

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- (14) a plan for debris removal, including provisions to chip and mulch vegetative debris instead of burning, and quick, sanitary handling of deceased animals;
 - (15) procedures for coordinating volunteers and accepting and distributing donated funds and goods; and
 - (16) procedures for predicting in advance needs for food, water, and other supplies by zone in impacted areas.

Recommendation # 55:

Florida's counties should serve as liaison for and coordinator of cities' requests for state and federal assistance during post-disaster emergency operations. Chapter 252, Florida Statutes, should require cities to coordinate requests for state or federal emergency response assistance with their county. This does not apply to requests for reimbursement under federal public disaster assistance programs.

Comments:

- a. Effective post-disaster response and recovery operations require a clear chain of command and commitment to working together within an agreed upon system. The proper allocation of state and federal resources in a county also depends on knowing the big picture concerning needs throughout a county and cities within the county. This information can only be generated if cities within a county and the county are working together in a partnership in the post-disaster response and recovery phase.
- b. Assistance provided to cities through mutual aid agreements would not need to be coordinated through county emergency operations centers but cities should advise county decision makers concerning the assistance that they are receiving.
- c. When the impacted area is a considerable distance from the county emergency operations center, the county should consider sending a representative to any active municipal or sub-county emergency operations centers to assist and gather information for use by the county at the county emergency operations center.

Recommendation # 56:

The 1993 Legislature should appropriate funds to the Department of Community Affairs to accelerate the updating of the regional hurricane evacuation studies, regional inland shelter studies, storm surge atlases, and regional hurricane loss and contingency planning studies.

Comments:

- a. Effective planning and post-disaster response and recovery operations requires accurate information. The majority of Florida's regional hurricane evacuation studies, regional inland shelter studies, storm surge atlases, and regional hurricane loss and contingency planning studies are over five years old. No regional inland shelter study or regional hurricane loss and contingency planning study has been updated in the past five years.
- b. If funds are limited, priority should be given to updating the behavioral study components of the regional hurricane evacuation studies and regional inland shelter studies. If the behavioral studies show significant changes, then funding priority should be given to updating transportation analyses to assess evacuation times and shelter space requirements.

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- c. Among the regions, priority for updates should be as follows:
 - (1) regions that have suffered major or catastrophic disasters since the last update; and
 - (2) other regions, starting with the oldest plans first.
 - d. After the behavioral study components, priority should be given to updating the storm surge atlases. These predict the extent to which storm surge waters will extend inland as a result of storms of different strengths. These atlases are based on computer models known as SLOSH (Sea, Lake, and Overland Surges from Hurricanes) models.
 - e. The Department of Community Affairs has been appropriated \$186,000 to update these studies and atlases in past years. The same level of funding has been requested for fiscal year 1993-94. This funding is sufficient to update annually two or three studies or atlases. This level of funding is insufficient for the Department of Community Affairs to maintain a cycle of updating each of these documents even once every five years.

Recommendation # 57:

Every state and regional agency should have a designated emergency coordination officer and an alternate.

Comments:

- a. This position should be responsible for coordinating the development and maintenance of agency emergency preparedness and post-disaster response and recovery plans, maintaining rosters of personnel that will be involved in disaster operations, and training such agency personnel to perform the functions they will be called upon to handle.
- b. In addition, these individuals should be responsible for ensuring that every state facility, e.g., prisons, office buildings, universities, has a disaster preparedness plan that is approved by the local emergency management agency.

Recommendation # 58:

The Florida Legislature should provide funding to every county sufficient to ensure every county has a dedicated emergency preparedness officer.

Comments:

- a. This position should be responsible for coordinating the development and maintenance of county evacuation, shelter, and post-disaster response and recovery plans and programs, conducting necessary training, and coordinating with the state and other emergency response agencies.
- b. As of October 1991, the latest data available, 34 counties had a full-time emergency management director and the other 33 counties had a part-time director. The Department of Community Affairs should work with the Florida Association of Counties and appropriate legislative committee staff to update these figures as soon as possible.
- c. The intent of the Committee is that every county should have available a full-time director. Many counties are already receiving funds passed through the state sufficient to have a full-time position. The Legislature should focus on ensuring that the poorer counties can afford this resource. Measures that should be considered include appropriating sufficient funding through a new trust fund, establishing matching grant programs, providing incentives to counties to use the multicounty pooling

provisions contained in Chapter 252, Florida Statutes, and other means for accomplishing the intent of this recommendation in a cost-feasible manner.

Recommendation # 59:

The Florida Department of Community Affairs should immediately develop and implement two concurrent training programs. These programs should train (1) the individuals that will comprise Florida's post-disaster response and recovery team and (2) local government personnel on federal and state post-disaster response and recovery strategies and procedures.

Comments:

- a. While specific disasters cannot be predicted, general performance in responding to any disaster can be improved by prior training.
- b. To complement its training course for state personnel that will play a role in the state emergency post-disaster response and recovery team, the Department of Community Affairs should prepare a written handbook for each position that clearly spells out the position's duties, responsibilities and authority and provides guidelines for performing the function. The participation of the specific individuals that will be involved in the post-disaster response and recovery in the training programs should be mandatory.
- c. In addition, the Department should immediately develop and implement a training program for local government personnel to help them to understand both how the federal and state governments will respond to disasters and how they can provide the information that federal and state agencies need to assist local governments effectively.

Recommendation # 60:

The Department of Community Affairs should establish a team that is not involved in evacuation operations to be responsible for preplanning and implementing post-disaster response and recovery operations prior to a disaster's impact.

Comments:

- a. During a mass evacuation prior to a hurricane's impact, the Department of Community Affairs uses its personnel to assist with ensuring the evacuation is successfully executed.
- b. A small action team charged with post-disaster response and recovery planning before the disaster occurs could, while phone lines are still operational, begin prepositioning personnel and supplies and implementing other actions that will speed post-disaster response and recovery.

Recommendation # 61:

The Department of Community Affairs, in conjunction with appropriate state and federal agencies, should assist local jurisdictions in the development of urban search and rescue teams and create a statewide urban search and rescue program.

Comments:

- a. It has been demonstrated that local jurisdictions are quickly overwhelmed with the problems associated with disasters. Budgetary cutbacks and manpower reductions are common problems that plague most municipal and county organizations. Because of this, essential services, such as emergency medical services, police and firefighting, are generally stretched to their limits by common daily emergencies. When faced

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- with a major or catastrophic disaster, handling the crisis is generally beyond local organizations' capabilities.
- b. Many local government personnel resources are not trained in large-scale urban search and rescue operations. In addition, local jurisdictions face problems staffing emergency medical and firefighting positions when they are directly affected by a disaster, i.e., loss of homes, concern for family members.
 - c. The state should review local and state assets to identify the resources available for a statewide urban search and rescue program. Teams could be established to increase local preparedness and provide assets that can be used for local, regional, state and national responses. Teams would serve as a resource to provide fresh, trained personnel to a disaster. The specialized team members would bring search, extrication, medical and other essential skills that otherwise might not be available to the community.
 - d. The Federal Emergency Management Agency has developed 25 such teams across the country.⁹ It is also now developing a program called PUSH to create the capability to send large, multifaceted strike teams into impacted areas immediately.
 - e. Florida should consider the establishment of three teams to comprise its program: one in North Florida and two in South Florida (one of which would be Metro-Dade's team). Two teams should be established in South Florida for the following reasons:
 - (1) the largest population concentration resides along the coast of South Florida;
 - (2) there is a large pool of emergency responders that have extensive experience in hurricane disaster response that are willing to participate in the program;
 - (3) the two teams would be able to train and interact with each other, resulting in reduced training costs;
 - (4) the Metro-Dade Task Force is under contract to the U.S. State Department to provide international training for disaster preparedness and to respond to disasters outside the United States. This commitment could pose a serious problem if key members of their team are training or otherwise unavailable; and
 - (5) the national program lacks the available resources in the eastern United States to cover U.S. possessions in the Caribbean and the Southeastern U.S.
 - f. This effort should be coordinated by the entity responsible for ESF # 4, fire and rescue, under the state post-disaster response and recovery element.
 - g. Urban search and rescue functions performed under ESF # 4 will not replace the functions currently performed by the Florida Department of Law Enforcement, Coast Guard, Civil Air Patrol and other agencies with regular search missions.

⁹Metro-Dade County maintains one of the 25 teams.

Issue B: Improve Post-Disaster Intergovernmental Coordination

Recommendation # 62:

In major or catastrophic disasters, a disaster field office (DFO) should be established as soon as possible after the disaster incident. Federal, state, and local coordination should occur through co-location of key decision makers and public information officers at the disaster field office.

Comments:

- a. Following a major or catastrophic disaster, it is important to bring key federal and state decision makers to the impacted counties as soon as possible. However, county emergency operations centers (EOCs) are not big enough to handle the federal, state and local government personnel that are involved in a post-disaster response and recovery to a major or catastrophic disaster.
- b. Therefore, county emergency operations centers should be used to coordinate and implement post-disaster response and recovery operations by the county and cities within the county. The disaster field office should be used to coordinate federal and state post-disaster response and recovery operations with all impacted local governments. The top local government decision makers should either operate out of the disaster field office or send a high level representative to the disaster field office. A disaster field office liaison should also be placed at the emergency operations center of impacted counties and at sub-county emergency operations centers if they are created.
- c. The location of the joint information center near or in the disaster field office has been discussed in an earlier recommendation.
- d. The above statements apply to major or catastrophic disasters. In the case of a minor disaster, the post-disaster response and recovery and public information effort should be coordinated out of the state and county emergency operations center(s).

Recommendation # 63:

In major or catastrophic disasters, a post-disaster response and recovery coordination task force should be established and be co-located at the disaster field office as soon as possible.

Comments:

- a. The Committee heard substantial testimony that the post-disaster response and recovery to Hurricane Andrew suffered from several problems, including:
 - inadequate communication between levels of government concerning specific needs;
 - lack of full awareness of supply inventories and agency capabilities;
 - failure to have a single person in charge with a clear chain of command; and
 - inability to cut through bureaucratic red tape.
- b. Use of a coordination task force that would cluster key decision makers together and meet at least daily in the disaster field office should help address the first two of these problems. If the chair of the coordination task force is given temporary authority to cut through red tape, commit resources and compel action, this would help address the last two of these problems.

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- c. The Presidential Task Force established by President Bush at the start of the second week after Andrew's landfall demonstrated the potential effectiveness of the task force approach. This task force was chaired by U.S. Department of Transportation Secretary Andrew Card at the direction of President Bush.
 - d. The chair of the coordination task force should be the State Coordinating Officer in the event the impacted site is limited to one state and the disaster is classified as major. If the impacted area is multistate or the disaster is classified as catastrophic, the Federal Coordinating Officer should chair the coordination task force because of the significant role the federal military will play.
 - e. In either case, the chair of the coordination task force should be given the authority to commit resources and compel action on all levels through an appropriate order from the Governor or the President.

Recommendation # 64:

The Department of Community Affairs should examine options for entering Florida into an Interstate Compact to share resources and coordinate responses to major and catastrophic disasters with other states.

Comments:

- a. The Committee supports the concept of Florida entering into an interstate compact but believes additional research is needed before it recommends enactment of specific legislation. The Department of Community Affairs should identify the number of states that have adopted the legislation necessary to enter the compact, cost reimbursement procedures established in the compact, and how the compact could be administered.
- b. The Department of Community Affairs should complete its examination in time for action by the 1993 Legislature.
- c. Section 590.31, Florida Statutes, authorizes the Governor to enter into a compact for forest fire protection. This compact could be used as a model for an interstate compact for responding to major and catastrophic disasters.

Recommendation # 65:

The Department of Community Affairs should evaluate the executive orders issued by the Governor after Hurricane Andrew and prepare draft executive orders by May 1, 1993, to be used when declaring a state of emergency in response to major and catastrophic disasters.

Comments:

- a. After Hurricane Andrew, the Governor issued over two dozen executive orders to expedite the post-disaster response and recovery. For example, orders were issued to suspend certain requirements of Chapter 120, Florida Statutes, lift highway tolls, and allow for temporary licensure of medical professionals from other states.
- b. To speed up post-disaster response and recovery efforts, the Department of Community Affairs should prepare executive orders containing provisions to accomplish actions that can be predicted to be needed given major or catastrophic disasters so that they occur when the Governor declares a state of emergency.
- c. In preparing the draft executive order pursuant to this recommendation, the Department of Community Affairs should, in consultation with other appropriate agencies, assess whether the Legislature needs to grant additional emergency authority to state or regional agencies. For example, the Committee received testimony that the

executive directors of water management districts should be granted emergency authority to undertake specified actions without first receiving approval from the governing board.

Recommendation # 66:

The Department of Management Services should obtain special procurement provisions for state agencies during the post-disaster response and recovery phase when negotiating state contracts for lodging, rental cars, and air travel. In addition, reimbursement provisions in Chapter 112, Florida Statutes, should be revised to reflect the different conditions that exist during an emergency response.

Comments:

- a. Because it hit South Florida, Hurricane Andrew required tremendous travel between Tallahassee and the impacted area. State agencies reported tremendous difficulties in finding lodging, renting cars, and high costs for air travel.

Recommendation # 67:

The 1993 Legislature should amend Chapter 252, Florida Statutes, to allow counties to extend declarations of emergency declared locally for up to seven days.

Comments:

- a. Counties currently have to renew declarations of emergency declared locally every 72 hours following the initial period of seven days. The Committee received testimony from several county emergency preparedness officials that the shortness of this period of time detracts from their ability to focus on responding to the emergency.

Recommendation # 68:

The 1993 Legislature should amend Chapter 252, Florida Statutes, to provide incentives to local governments that enter into statewide mutual aid agreements.

Comments:

- a. Mutual aid agreements can stretch resources and improve post-disaster response and recovery efforts.
- b. Local governments participating in mutual aid agreements should be given additional preference when distributing state funds for emergency preparedness activities.
- c. The Department of Community Affairs, regional entities, the Florida League of Cities, the Florida Association of Counties, the Florida Emergency Preparedness Association and other interested professional associations should work together to draft statewide agreements and to share responsibility in administering agreements.
- d. Establishment of mutual aid agreements among members of various associations should also be encouraged. Progress is occurring in these areas. For example, Florida's sheriff departments have entered into a statewide mutual aid agreement administered by the Florida Department of Law Enforcement. In addition, the Florida Fire Chiefs Association is actively pursuing a statewide mutual aid plan.
- e. Systems should be put in place to advise decision makers allocating resources of the resources provided under mutual aid agreements so that they can ensure that other resources are being distributed according to need. This could involve establishing a telephone line in the state and applicable county emergency operations centers for use only by associations administering mutual aid agreements so that they can report assignments of resources and receive advice on where resources are needed.

Issue C: Security**Recommendation # 69:**

To increase the effectiveness of security activities following a disaster, the 1993 Legislature should amend Chapter 23, Part I, Florida Statutes, to:

- (a) give the Director of the Florida Mutual Aid Plan authority to command all state law enforcement personnel in times of disaster;
- (b) allow the requirement that requested operational assistance agreements be in writing be waived for up to 90 days following the declaration of a disaster; and
- (c) provide that the Director of the Florida Mutual Aid Plan shall serve as liaison and guide the flow of requests from local law enforcement for law enforcement services from the Florida National Guard.

Comments:

- a. Chapter 23, Florida Statutes, currently provides that the Director of the Florida Mutual Aid Plan (the Executive Director of the Florida Department of Law Enforcement) is authorized to "coordinate, integrate, and implement law enforcement planning activities...." The suggested statutory revisions would enhance law enforcement operations and coordination during times of disaster.

Recommendation # 70:

The Florida Department of Law Enforcement and the Florida National Guard should work with affected local law enforcement personnel to evaluate the need for stricter limits on access to heavily impacted disaster areas to facilitate post-disaster response and recovery operations.

Comments:

- a. Testimony received from organizations responsible for restoring electrical power and telephone service indicated that their restoration work crews were noticeably hampered by the large number of sightseers allowed in impacted areas.
- b. An identification system should be established to ensure personnel working to restore essential services, e.g., cellular phones, land-line telephones, and utilities, can move through security checkpoints with minimal delay.
- c. Access controls need to be strict enough to maintain public safety, protect property, and give enough room to work crews so that they can maneuver their equipment, but not so strict as to unnecessarily exacerbate traffic problems or work against the welfare of impacted residents.

Recommendation # 71:

The Florida Department of Transportation should coordinate the reservation of one traffic lane on limited access highways for use by emergency responders during the early post-disaster response and recovery phase.

Comments:

- a. Testimony received from organizations responsible for restoring electrical power and telephone service indicated that restoration work crews were noticeably hampered by poor transportation access to impacted areas because of heavy traffic.

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- b. Deployment of the Florida National Guard and other personnel movements to the disaster area were also severely slowed by the tremendous amount of traffic on major roadways.

Recommendation # 72:

The 1993 Legislature should authorize security and emergency response personnel to enter homes of special needs individuals who are on the special needs registry that are located in a declared disaster area. To preserve privacy rights, however, special needs individuals that would like for security and emergency response personnel to be able to enter their homes should authorize this action by registering in advance.

Comments:

- a. After a disaster, many special needs individuals may be too frail or suffering from injuries to be able to answer their doors during security and search and rescue sweeps of the area. Authorizing security and emergency management personnel to enter homes would provide a last resort mechanism to help those individuals who need assistance but are unable to ask for it.

Recommendation # 73:

The 1993 Legislature should provide funding to the Florida National Guard for planning, training, participating in exercises, predeploying prior to issuance of an executive order, and responding immediately to emergencies.

Comments:

- a. The Florida National Guard does not receive funding from the state for planning, training, participating in exercises, or predeploying before or responding immediately to emergencies.
- b. The federal government does not provide funds for state programs and exercises involving the Florida National Guard.
- c. It is important that local National Guard commanders, planners, and logisticians be actively involved at the local level in preparing for and participating in development of emergency plans and exercises that will upgrade the response to future emergencies.

Issue D: Expand Civil Liability Protections

Recommendation # 74:

The 1993 Legislature should amend Section 252.51, Florida Statutes, to broaden the civil liability protections already in the law to include protection for private or public persons who volunteer goods, services, materials, equipment, facilities or personnel.

Comments:

- a. To paraphrase, Section 252.51, Florida Statutes, currently provides that, with certain exceptions, a person or organization that voluntarily and without compensation offers premises to be used as a shelter during an actual or practice emergency shall not be liable for accidents or injuries that happen while the shelter is being used.
- b. To promote more active involvement from the private sector in post-disaster response and recovery activities, the Legislature should expand this liability protection to cover private or public persons who volunteer goods, services, materials, equipment, or personnel. Liability protection should not apply, however, when a person

or organization acts with malicious intent or with willful disregard of human life, safety or property.

Issue E: Improve Federal Programs

Recommendation # 75:

The Governor and the Florida Legislature should request that Congress direct the Federal Emergency Management Agency and other federal agencies that are involved in response and recovery efforts to revise their procedures related to:

- (a) providing financial and material assistance to disaster victims to ensure fairness and equity in the application and aid distribution process; and
- (b) contracting for needed materials and services to ensure that minority contractors receive a proportionate share of the contracts and to ensure that local and in-state firms are given first consideration for contracts.

Comments:

- a. During its meetings, the Committee received testimony about inequities in federal assistance programs. Both the working poor and working people experienced tremendous difficulty accessing help because of their income levels or inability to leave their work sites. And applicants with similar circumstances did not receive equal assistance.
- b. Middle-income persons also reported that despite their ability to pay, they did not receive material assistance, e.g., housing, food and water. The lesson is that in a disaster the magnitude of Hurricane Andrew, access to money did not increase the odds of securing housing or supplies.
- c. The news media widely reported instances of federal contracts for debris removal and other recovery activities that were awarded to out-of-state contractors when qualified local or in-state and minority contractors were available.
- d. State and local officials involved in recovery efforts testified that despite requests to have local needs included in federal contracts or to piggy-back contracts to maximize cost savings, they were excluded from federal contracting processes.

Recommendation # 76:

The Governor and the Florida Legislature should request that Congress amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to require the Federal Emergency Management Agency's representatives to serve more proactively following disasters as advisors to state and local emergency responders and to simplify processes for requesting federal assistance.

Comments:

- a. Federal representatives from the Federal Emergency Management Agency currently play the limited role of responding to state requests for assistance from the federal government. Because of the intensive experience of some of their personnel in responding to a wide range of disaster incidents, Federal Emergency Management Agency representatives should be empowered to act as advisors and consultants to state and county post-disaster response and recovery personnel during times of crisis.

Recommendation # 77:

The Governor and the Florida Legislature should request that Congress amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to provide for the predeployment or immediate activation of the military in response to a catastrophic disaster.

Comments:

- a. The Stafford Act should be amended to provide that:
 - (1) the United States Department of Defense tailor and predesignate, in consultation with the Federal Emergency Management Agency, appropriate elements of the United States Armed Forces into task forces capable of providing administrative, logistical, and humanitarian support to a devastated population in the aftermath of natural disaster. Use of federal military resources in civil emergencies should be planned for in such a manner that does not prohibit execution of the primary national defense military mission;
 - (2) the posting of a hurricane watch by the National Hurricane Center for any coastal area of the United States serve as a triggering mechanism to alert military task forces assigned federal emergency assistance responsibilities;
 - (3) upon the posting of a hurricane warning by the National Hurricane Center for any coastal area of the United States, military liaison be immediately established with the Office of the Governor of the state or states affected by the warning;
 - (4) when the National Hurricane Center forecasts the impact of a catastrophic disaster predesignated units of the federal armed forces begin immediate deployment to destinations assigned by the Office of the Governor of the affected state or states; and
 - (5) military task force commanders receive and execute missions assigned by authorized civil authorities in a manner consistent with Department of Defense policies and regulations.
- b. The damage and suffering caused by catastrophic disasters will exceed the post-disaster response and recovery capabilities of local and state governments and volunteer organizations.
- c. The intent of this recommendation is that the military should establish a fully equipped and trained national disaster relief strike force that immediately responds to catastrophic disasters if ordered by the President pursuant to a request from the applicable governor.

Recommendation # 78:

The Federal Emergency Management Agency should amend the *Federal Response Plan* to establish a security ESF.

Comments:

- a. The *Federal Response Plan* does not have an ESF for security. A Defense Coordinating Officer position is established to coordinate the military's involvement but no position exists to coordinate federal law enforcement efforts, such as those of the Federal Bureau of Investigation and the U.S. Marshall Service, with state and local law enforcement efforts.

Recommendation # 79:

The Governor should request that U.S. Department of Housing and Urban Development officials be on site immediately following a disaster and remain on a permanent basis until the relocation of all eligible persons has been accomplished.

Comments:

- a. After Hurricane Andrew destroyed or rendered uninhabitable housing complexes administered by the U.S. Department of Housing and Urban Development, elderly and disabled residents were entitled to receive vouchers enabling them to move immediately into other available housing or hotels. Aging network service providers assisted residents who were unable to move back to destroyed housing that were unable to secure the necessary vouchers. To preclude this from happening again, there needs to be an established understanding of the responsibilities of the U.S. Department of Housing and Urban Development during and after a disaster.
- b. The Department of Community Affairs and the U.S. Department of Housing and Urban Development should establish a performance agreement on these issues in advance of the 1993 hurricane season.
- c. All local housing authorities should develop contingency plans for emergency housing assistance for tenants, if any, following disasters.

III. AVAILABILITY OF DAMAGE ASSESSMENT DATA

The ability to promptly assess damage following a disaster is a key facet of an effective post-disaster response and recovery effort. Damage assessments are needed for informed resource allocation decisions and requests for assistance and to guide activities of recovery personnel. In addition to the essential process of sending assessment teams physically into impacted areas, quick information can be obtained through aerial photography and computer information systems.

Issue A: Aerial and Ground Damage Assessments

Rapid aerial assessment, supplemented by ground reconnaissance teams, is necessary to identify damage to critical facilities and to identify immediate unmet emergency needs of disaster victims.

Recommendation # 80:

The State of Florida should enter into a memorandum of understanding with the U.S. Air Force or other providers to obtain immediate aerial video and still photography of areas impacted by major or catastrophic disasters.

Comments:

- a. The Department of Community Affairs and the Florida National Guard should coordinate to implement this recommendation.
- b. These photographs should be available at the state and applicable county emergency operations center in a timely manner.
- c. The use of aerial photographs should be supplemented with ground reconnaissance to assure accurate information is compiled.

Recommendation # 81:

The Department of Community Affairs should ensure that the post-disaster response and recovery element of the state comprehensive emergency management plan provides for rapid assessment teams, comprised of governmental and nongovernmental officials, to be immediately assembled, equipped, trained, and deployed into affected areas to assess the impacts of disasters on victims and critical facilities and services and report their findings to state and local emergency operations centers in a timely manner.

Comments:

- a. Immediate and accurate damage assessments are essential for ensuring that proper actions are taken by decision makers in the post-disaster environment.

Issue B: Increase Use of Computerized Information Systems

Computerized information systems can provide quick information to decision makers during the post-disaster response and recovery phase. Known also as geographic information systems and emergency management information systems, the use of computerized information systems is becoming increasingly common and practical. Many local governments and regional and state agencies have active computerized information systems. Coordination between these agencies and governments should be an important objective.

Recommendation # 82:

County emergency management agencies, with support from the Department of Community Affairs, are encouraged to have certain computerized data sets available in advance of a disaster.

Comments:

- a. Based on the effort to respond to Hurricane Andrew, having certain computerized information data sets available will be especially valuable in making decisions in the post-disaster environment. A current version of these data should be prepared two months prior to the beginning of the hurricane season. The following computerized data sets would be most useful:
 - (1) Locations of available shelters with database tables containing information about capacities, facilities, hardening preparations, emergency power and communications capabilities, contact persons and agencies.
 - (2) Locations of fire stations, police stations, hospitals, and emergency medical stations with attributes about capacities, capabilities, hardening preparations, emergency power communications capabilities, and phone numbers.
 - (3) Locations of potential staging areas and temporary housing locations.
 - (4) Street centerlines with attributes for street names and address ranges. This coverage was invaluable in Dade County for producing base maps for use in the field immediately after the event.

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- (5) Demographic data. These data were invaluable for identifying areas of special need such as migrant camps or nursing homes. This coverage was also used to track the potential spread of disease. This information is available as a commercial product compatible with most systems.
 - (6) Locations of hazardous materials with information about special handling requirements and hazards. This would be useful for identifying areas of potential hazard or contamination.
 - (7) Locations of major food stores. These are potential sources of emergency food and water supplies.
 - (8) Utility networks such as power distribution and other utilities. Power networks should be available from electric utility companies. Other utilities such as water and sewer may not be available for all counties.
 - (9) Transportation bottlenecks identified on transportation network with recommended alternate routings. These problem areas should be available from the Florida Department of Transportation and should be incorporated into a pre-existing computerized coverage.
- b. Counties should work with their applicable water management district(s), regional planning council, adjacent counties and cities, the Florida Department of Transportation and the Florida Growth Management Data Network Coordinating Council in implementing this recommendation.
 - c. The Department of Community Affairs should provide support to the counties in developing a standardized data set structure and in accessing pre-existing data sets from other agencies.
 - d. The work done by Florida City and Monroe County personnel after Hurricane Andrew to develop a complete integrated emergency management information system for South Dade County should be closely reviewed for use in implementing this recommendation.

Recommendation # 83:

Counties should enter into agreements and contracts for operation of computerized data base systems prior to a storm event to expedite the recovery effort and take advantage of existing resources.

Comments:

- a. Agreements should be in place with other agencies to provide technical personnel to assist in staffing the base station of the computerized system after the storm. Dade County's experience showed that even with a computerized system in place those directly impacted by the storm could not be expected to carry the full workload. Each agency with the appropriate resources can contribute to the recovery.
- b. The state should maintain an inventory of those personnel with the appropriate skills and each state agency's computerized information system resources. This roster should be updated annually two months prior to hurricane season.

Recommendation # 84:

The Department of Community Affairs and counties should ensure that use of computerized information systems is made a part of annual hurricane preparedness and recovery exercises to verify that data and resources are in a state of readiness.

Comments:

- a. Hypothetical "strike" areas should be designated. Systems near the strike area should be designated as recovery systems. Their resources should be reviewed and the appropriate agreements should be in place to insure that their response will be appropriate.
- b. Available computerized data should be reviewed and updated as needed.

Recommendation # 85:

The Department of Community Affairs should prepare a handbook on model post-disaster computerized information system procedures.

Comments:

- a. The most important product to be produced first from the computerized information system is a series of base maps. These should show detailed streets and roads, should be a uniform scale, and should be produced in large quantities immediately after a disaster. These are invaluable for orientation, planning, and status maps. They are also useful for collecting data in the field for input into the computerized information system.
- b. Supplemental maps should be produced as needed for specialized applications such as locations of kitchens, curfew areas, senior homes, damage assessment, and burn sites.
- c. The handbook should specify procedures for assuring the fastest, most efficient entry of incoming data.

IV. MEDICAL CARE AND RELIEF

Following the catastrophic landfall of Hurricane Andrew, public health and medical response teams worked together through a single joint medical task force with representation from participating organizations and agencies. The Governor's Office and the Agency for Health Care Administration appointed the South Florida Hospital Association as the central command center for hurricane relief efforts for hospitals in south Florida. The command center, established at St. Mary's Hospital in Palm Beach County, served as the central point for hospital and health care relief efforts for the American Hospital Association and hospital and physician volunteer initiatives.

Issue A: Coordination of Medical Services

During the early response to Hurricane Andrew, it was apparent that no single entity was in control of the medical service response. The Committee's recommendation to include a health and medical emergency support function should remedy this problem. The health and medical ESF should be directed by the State Health Officer.

Recommendation # 86:

The 1993 Legislature should amend Chapter 252, Florida Statutes, to direct the State Health Officer to coordinate the immediate medical response to a declared state of emergency and empower him or her to issue and enforce public health advisories related to the emergency response.

Comments:

- a. The State Health Officer could informally function in this capacity given current statutory authority to promote, protect and improve public health and authority to issue public health advisories pursuant to section 20.19, Florida Statutes. Amending Chapter 252, Florida Statutes, to formally designate the State Health Officer's role, however, helps to clarify the unique needs of emergency medical and public health response in responding to emergencies.

Issue B: Statewide Medical Plan**Recommendation # 87:**

The evacuation, shelter and post-disaster response and recovery elements of the state comprehensive emergency management plan should contain components that detail emergency medical evacuation, availability of health care professionals in shelters, and emergency medical response for minor, major and catastrophic disasters.

Comments:

- a. The plan for medical response should be modeled on the *Federal Response Plan*, and include similar support categories.
- b. Joint planning responsibility for all health and medical related response agencies (governmental and private) should be delegated to the Department of Health and Rehabilitative Service (the State Health Officer).
- c. The plan should provide for:
 - (1) prestaging supplies known to be needed in mass quantities, especially medical oxygen, chronic disease medication, and supplies needed to establish temporary pharmacies;
 - (2) recruiting and deploying volunteer health care professionals, including provisions for assuring their adequate presence in shelters, waiving personnel licensing requirements for out-of-state health care professionals participating in disaster relief, and supplying volunteers with food, water, transportation and lodging;
 - (3) measures to ensure adequate communications with emergency operations centers, disaster medical assistance teams, shelters, mobile medical units, hospitals and other established care centers, and the disaster field office;
 - (4) procedures for disseminating public health information;
 - (5) the maintenance of disaster preparedness and response plans by hospitals and other health care facilities, including staffing plans and plans for dealing with lack of water and electrical power, and evacuation plans, including agreements with necessary transportation providers and alternative facilities, and that these plans are reviewed and strengthened where necessary;

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- (6) the roles and goals of providers, government, voluntary relief organizations, the National Disaster Medical System, and others involved in emergency medical response to disasters, and identify gaps in coverage;
 - (7) security measures to prevent loss of medical supplies from looting, and to ensure the safety of those volunteers providing care and delivering the supplies; and
 - (8) procedures to ensure the proper disposal of medical waste.

Issue C: Emergency Pharmacies

One concern cited by health care professionals and members of the general public was the difficulty in obtaining prescription drugs during the response to Hurricane Andrew. While Governor Chiles did issue an executive order to allow emergency refill of prescriptions, the Committee recommends that Florida Statutes be amended to codify such emergency provisions.

Recommendation # 88:

The 1993 Legislature should amend Section 465.0275, Florida Statutes, to permit pharmacists to dispense a one-time, emergency refill of up to a 30-day supply of a prescribed medication and Section 465.019, Florida Statutes, to allow hospital institutional pharmacies to dispense prescribed medications to the general public in counties included in an emergency or disaster declaration order.

Comments:

- a. Statutory authority for these issues will permit immediate assistance to the community.

V. COORDINATION OF VOLUNTEERS, DONATIONS AND SUPPLIES

Issue A: Effective Receipt and Distribution of Donations

The Florida Relief Center was established in partnership with voluntary organizations and associations, including the Florida Emergency Preparedness Association, American Red Cross, and United Way, and Governor Chiles directed essential resources to expand and sustain the operation. The use of a single receiving point for donated goods in the relief effort for Hurricane Andrew proved tremendously successful.

The Florida Relief Center, established at the South Florida Fairgrounds, coordinated the receipt and distribution of donated supplies and goods. Governor Lawton Chiles designated the center as the single receiving point for all donations. More than 20,000 volunteers donated hours of service at the center; between 80 and 120 trucks per day ferried donated supplies to subdistribution points in the disaster area. Based on this success, the Committee recommends that future disaster response plans include a similar operation and encourage all relief agencies to work through this single operation.

Recommendation # 89:

The post-disaster response and recovery element of the state comprehensive emergency management plan should establish a uniform, single-point-of-receipt system for receiving and distributing supplies.

Comments:

- a. At a minimum, this system should include:
 - (1) designation of potential sites in every county and in each region that are pre-approved for use by the property owner¹⁰;
 - (2) lists of needed equipment and potential suppliers;
 - (3) memoranda of understanding for acquiring key packing and moving equipment, e.g., conveyor belts, pallets, forklifts, back support belts, boxes, shrink wrap, and trucks;
 - (4) memoranda of understanding with shipping or distribution companies for personnel and computer software to run facilities;
 - (5) methods for getting goods to individuals who are frail, elderly, disabled or homebound, e.g., roving distribution centers, meals-on-wheels drivers, senior centers or temporary public transit systems;
 - (6) arrangements for food, water, lodging, and medical needs for volunteers working at the staging and distribution areas;
 - (7) standard operating procedures for regional and county staging and distribution facilities; and
 - (8) a communications system to link staging areas, distribution centers, the disaster field office, the state emergency operations center and the county emergency operations center.
- b. The Department of Community Affairs should coordinate the development of this plan with appropriate volunteer organizations. Voluntary organizations that have established roles in the disaster response and have predesignated distribution systems should continue their use of these systems and coordinate with the staging area.
- c. The Department of Community Affairs should develop this system in conjunction with county emergency management officials and conduct training as needed to assure county officials are thoroughly informed about its intended operation.

Recommendation # 90:

The Department of Community Affairs should coordinate the execution of memoranda of understanding with suppliers of potable water to assure adequate supplies in the event of a disaster.

Comments:

- a. The Department of Community Affairs, in conjunction with the state agency with lead responsibility for the public works and engineering emergency support function (ESF # 3) of the state comprehensive emergency management plan should enter into memoranda of understanding to provide for water in case of major and catastrophic disasters. County memoranda of understanding should address water needs for minor

¹⁰ Florida's existing network of fairgrounds should be considered for this purpose.

disasters. Care should be taken to ensure that suppliers do not over commit resources. Memoranda of understanding should require water bottles to be dated to assure use prior to expiration of shelf life.

Recommendation # 91:

The 1993 Legislature should amend appropriate chapters of the Florida Statutes related to the tax code, to authorize:

- (a) the Governor and Cabinet to waive excise taxes on fuels donated for emergency use within 96 hours of a disaster declaration when solicited by the state; and
- (b) the Executive Director of the Department of Revenue to extend due dates of tax returns and waive interest on taxes due during the time of a declared state of disaster.

Comments:

- a. The Governor and Cabinet and the Executive Director of the Department of Revenue have limited authority to waive taxes due. This includes no authority to relieve a taxpayer of taxes due even if the state solicited a donation for emergency use to protect life and property during an emergency as the result of a disaster.
- b. Petroleum suppliers are reluctant to create a tax liability for their businesses by donating fuel inventories.
- c. To facilitate relief efforts in time of a disaster, the Legislature should give the Governor and Cabinet or the Executive Director of the Department of Revenue the authority to waive taxes on fuels donated for emergency use. This would be limited to utilities and fuels necessary for emergency equipment, law enforcement, and other equipment and supplies needed to protect life or property.
- d. Sales and use taxes are already avoidable on items other than fuel if items are purchased by a tax exempt entity or if funds are donated to an exempt entity to purchase needed items.
- e. The Department of Revenue currently has no authority to grant extensions of due dates regardless of circumstances. Late filing of tax returns as a result of the effects of a disaster is a valid basis for compromise or waiver of the penalty under Chapter 213, Florida Statutes. Giving the Department of Revenue authority to extend due dates would simplify the current steps necessary to deal equitably with taxpayers.
- f. The Department of Revenue has limited authority to waive interest charges, even in cases where the state delayed notifying a taxpayer of liability as the result of a natural disaster. During the time of a natural disaster, it can be difficult — if not impossible — to contact taxpayers regarding errors in their return filing. Suspension of collection efforts can subject taxpayers to additional interest charges that might otherwise have been avoided. While in most cases this interest is due, from an equity standpoint there may be circumstances of reasonable cause that would indicate a compromise or waiver of interest is appropriate.
- g. The Department of Revenue should be tasked with preparing this legislative proposal.

Recommendation # 92:

A public education program should be created to educate people on what should and should not be donated.

Comments:

- a. The American public responded to the devastation of Hurricane Andrew with a flood of donations. As goods were received at the Florida Relief Center, they were unloaded, sorted, labeled and stored. One of the most difficult issues faced by those managing the center was the constantly growing pile of clothing and other items that were unusable due to their storage containers (glass or rusty) or were not needed (clothing, odd food items and furnishings). Handling donated items not in great need delayed distribution of much needed items. Although the center attempted to control the flow of donated goods through releasing statements detailing what items were needed and what items were not, many unneeded items poured in.
- b. This could involve public service announcements, information in local telephone books, mailings before hurricane season, media releases, pamphlets made up before hurricane season, and prerecorded messages that would play on the telephone hot-line for donations and volunteers.

Issue B: Coordination of Volunteers**Recommendation # 93:**

The post-disaster response and recovery elements of the state and county plans recommended earlier in this chapter should include provisions for volunteer coordination.

Comments:

- a. The plan should establish procedures for a volunteer clearinghouse for health care professionals. Numerous volunteers responded to the needs of south Florida following Hurricane Andrew. Because no coordinated plan for using volunteer health care professionals existed, many volunteers experienced frustration and were under used. The lack of a process to waive licensure requirements, yet verify an individual's credentials to render health care services, was also problematic.
 - (1) This should be included as a component of the health and medical ESF.
 - (2) The clearinghouse should be maintained on a year-round basis but be designed with a mechanism that allows it to be augmented for minor, major and catastrophic disasters.
 - (3) A toll-free bank of telephone lines should be pre-established for use following a disaster. Perhaps this could be dovetailed into the hot-line used for other volunteers and donations.
- b. The plan should establish a procedure to establish single points of contact for volunteer information.
 - (1) The task of coordinating volunteers who wished to assist in relief efforts was managed by both the Governor's Office and the Dade County Manager's Office at the disaster field office. Recognizing the enormity of the task, the Governor's Office reached an agreement with the United Way of Dade County to coordinate volunteer efforts. The Governor's Office referred volunteers to the United Way's already established Volunteer Center, which

matched volunteers with the needs of communities. In return, when the Governor's Office was made aware of situations which demanded immediate volunteer assistance, the United Way placed volunteers to meet the need. Because this reciprocal agreement worked well, the Committee recommends similar relationships be formalized prior to the 1993 hurricane season.

- (2) One approach would be for the Department of Community Affairs, on behalf of the state, and counties to enter into memoranda of understanding with Voluntary Organizations Active in Disasters and other key volunteer organizations.
 - (3) Provisions for these memoranda of understanding should be included in county and state post-disaster plans. The memoranda of understanding should vary based on the magnitude of the disaster. Memoranda of understanding should be entered into with Voluntary Organizations Active in Disasters and other key volunteer organizations, e.g., the American Red Cross, the United Way, and the Salvation Army. The memoranda of understanding should, at a minimum:
 - (a) address volunteer training (at least for volunteers that will be called upon to act as managers) for each responsibility accepted by the volunteer organization;
 - (b) designate single points of contact for volunteer coordination at the state and county levels;
 - (c) provide for "lead volunteer organization" assignments and means for coordinating with other organizations;
 - (d) ensure multilingual volunteers; and
 - (e) provide for teams from outside areas that can move quickly into impacted areas in the case of major or catastrophic disasters.
 - (4) The Department of Community Affairs should provide a model memorandum of understanding to assist counties in formulating their agreements.
- c. The plan should outline a mechanism to establish a large capacity volunteer and donation telephone hot-line to receive offers for assistance, to provide directions to people that wish to give money or goods, and to quickly provide the names of potential volunteers to the volunteer coordinators.
- (1) At the Governor's request, 200 telephone lines were installed at the Florida Relief Center under the number "1-800-FL HELP 1." The lines were installed by Southern Bell and the equipment was donated by Northern Telecom to make the system operational within a 24-hour period. This line raised more than \$3 million for the victims of Hurricane Andrew. More than 66,000 calls were answered in a three-week period and more than 25,000 volunteer hours were given to the telephone operation. Given the success of this operation, the Committee recommends that arrangements be made each year prior to hurricane season to be able to quickly establish a toll-free phone bank.
 - (2) This could involve pre-establishing a system with one or more different companies, e.g., the Home Shopping Network, AT&T. The Federal Emergency Management Agency could be asked to set this up for national access following major or catastrophic disasters.

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- (3) An automated answering system could be used to answer and direct incoming calls to telephone volunteers who can provide the latest information about making donations or volunteering.
 - (4) While callers are on hold a prerecorded message could explain the types of donations that are not needed.

CHAPTER THREE: FUNDING

I. FLORIDA DEVOTES INSUFFICIENT RESOURCES TO EMERGENCY MANAGEMENT PROGRAMS

In fiscal year 1992-93, Florida is spending about 68 cents per person for emergency preparedness and recovery programs. The Department of Community Affairs' budget for emergency management is just over \$8.8 million¹¹. This is comprised of \$1.4 million in state general revenue, \$1.7 million from the state hazardous materials trust fund, \$3.6 million from the federal government, and \$2.1 million from power companies that operate nuclear power plants. Over two-thirds of the federal funding is distributed to counties for local emergency management preparedness and recovery activities. Of the funding being passed through to counties in fiscal year 1992-93, Metro-Dade County is receiving the most (\$121,932) and Union County the least (\$4,521).

In fiscal year 1993-94, the Department of Community Affairs has requested \$14.3 million for emergency management programs, \$3.6 million of which would come from state general revenue, \$1.9 million from the state hazardous materials trust fund, \$3.6 million from the federal government, and \$2.2 million from nuclear power plants¹². If this amount were fully appropriated, state funding for emergency management would rise to 87 cents per person. This would contrast with the steady decline in the level of spending per capita on emergency management programs seen in recent years.

Unfortunately, neither current nor requested levels of state funding are sufficient to bring Florida and its political subdivisions to the state of readiness necessary to handle future major and catastrophic disasters. The Governor and the Legislature must remedy this crucial shortcoming if Florida is to implement necessary improvements in its emergency preparedness and recovery programs and facilities.

¹¹ In addition, the DCA receives an annual appropriation of \$3 million in spending authority, not actual funds, to be used to respond to disasters. When this spending authority is used, the source of the funds usually is split 75 percent federal and 25 percent state.

¹² The DCA is again requesting an additional \$3 million in spending authority, not actual funds, in the event of actual disasters.

Issue A: Create an Emergency Management Preparedness and Disaster Assistance Trust Fund

Recommendation # 94:

The 1993 Legislature should establish an Emergency Management Preparedness and Assistance Trust Fund to be administered by the Department of Community Affairs.

Comments:

- a. As of fiscal year 1991-92, state general revenue funding to support emergency management had decreased 31 percent over the past three fiscal years.
 - b. Because of reductions in revenue, the Department of Community Affairs had, as of February 1992:
 - (1) eliminated its positions responsible for surveying buildings outside of surge zones for potential use as shelters;
 - (2) conducted no updates of hurricane inland shelter studies or hurricane loss and contingency planning studies for the past four years;
 - (3) held only two statewide hurricane preparedness exercises since 1985; and
 - (4) reduced funding to train shelter managers by 77 percent (to \$13,800) and reduced funding to support the Florida Wing of the Civil Air Patrol by 55 percent (to \$25,000).
 - c. The Speaker's Task Force on Emergency Preparedness in 1990 recommended the creation of a Disaster Preparedness Trust Fund. This proposal has been considered by subsequent legislatures but has not yet been implemented.
 - d. The revenue source for the trust fund should be determined by the Legislature. The Committee strongly recommends, however, that the funding source selected have a logical relationship to the purpose of the trust fund.
 - e. Options that should be considered to capitalize the trust fund include: a percentage surcharge on premiums paid for property and casualty insurance policies, a surcharge on marina docking fees or other boat fees, a surcharge on building permits, or fees on transactions or specified activities in high-risk areas. If some form of a surcharge is used, a percentage of the funds collected should be retained by the collecting entity to cover administrative costs in accordance with established procedures.
 - f. The funding source contained in HB 3669 (1990), which was drafted to implement the recommendations of the Speaker's Task Force, was a \$2 surcharge on homeowners' property insurance policies and a \$4 surcharge on business or commercial property insurance policies. The funding source contained in HB 3669 (1990) would have raised about \$13.6 million annually according to a legislative staff analysis.
 - g. The revenues placed into the trust fund should be sufficient to effectively implement current programs and the recommendations of the Committee implemented by the Legislature, executive agencies, or local governments.
 - h. Monies from the trust fund should be used to improve state and county emergency preparedness and recovery programs and facilities. They should supplement, not replace, existing federal, state and local funds used for emergency management. In addition, the Department of Community Affairs should be given the authority to leverage the funds when possible and appropriate, for example, by requiring local match.
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APPENDIX A:
FISCAL NOTES

CHAPTER ONE: BEFORE THE STORM

I. COMMUNICATIONS

Issue A: Public Education

Recommendation # 1:

- a. The Department of Community Affairs estimates that it would need a new public information specialist position to carry out this recommendation. The recurring cost of this position would be \$45,572 (salaries, benefits, operating capital outlay, and expenses). In addition, the Department of Community Affairs should be given \$50,000 in recurring OPS funds to implement projects in support of this campaign.
- b. This position should be empowered to arrange private sponsorship of public education pieces and supplies, e.g. arrangements with grocery stores to put hurricane preparedness information on milk cartons.
- c. Establishment of this position is essential to the accomplishment of many of the recommendations in this report for improving communications with the public.
- d. The Department of Community Affairs should aggressively pursue donations of equipment, materials, personnel, and air time to support this public information campaign.

Issue B: Pre-Disaster Communication with the Public

Recommendation # 2:

- a. The Department of Community Affairs estimates that it can implement this recommendation if it receives the public information specialist position discussed in recommendation # 1.

Recommendation # 3:

- a. Most telephone companies will publish this information without charge as a public service to the community.
- b. The Department of Community Affairs can assist counties in the implementation of this recommendation if it receives the public information specialist position discussed in recommendation # 1.

Recommendation # 4:

- a. The Department of Community Affairs estimates that it can accomplish this assessment if it receives the public information specialist position discussed in recommendation # 1.

Issue C: Communications Among Emergency Response Agencies**Recommendation # 5:**

- a. With an installation charge of approximately \$600 per National Warning System drop and a recurring monthly charge of approximately \$500, the first-year cost of installing the National Warning System in the 18 counties presently without it would be approximately \$19,800. Annual recurring charges thereafter would be approximately \$108,000.

Recommendation # 6:

- a. Recommendation # 5 discusses the fiscal implications of ensuring that all counties are linked into the National Warning System.

Recommendation # 7:

- a. At a unit cost of approximately \$4,000, the cost of purchasing a 100-watt high-frequency base transceiver, tuner and antenna for those 50 counties without high-frequency radios would be approximately \$200,000.
- b. The Department of Community Affairs estimates that the training activities discussed under this recommendation can be implemented by the Department of Management Services using the two positions discussed in recommendation # 37.

Recommendation # 8:

- a. At a unit cost of approximately \$4,500 for the base station and antenna, and a monthly line charge of approximately \$150, the first year cost of purchasing and operating these LGRs in all counties would be approximately \$422,100. The annual recurring line charges thereafter would be approximately \$120,600.

II. EVACUATION**Issue A: Improve Evacuation Planning****Recommendation # 9:**

- a. The Department of Community Affairs has four regional coordinator positions on staff. If the Department of Community Affairs were to place one position in each major media market to promote regional planning and coordination, it would need an additional six positions to accomplish the regional component of this recommendation. The Department estimates the costs for these positions at \$295,734 (salaries, benefits, operating capital outlay, and expenses). In the event that the Department receives matching funds from the federal government for these positions, this amount would be reduced.
- b. The Department of Community Affairs estimates that the remainder of this recommendation can be implemented within existing resources.

Recommendation # 10:

- a. The Department of Community Affairs estimates that the implementation of this recommendation would be enhanced by updates to the 10 regional evacuation studies and 11 regional inland shelter studies. See recommendation # 56 for an estimate of the cost to prepare these updates.

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- b. The state-funded, dedicated county emergency management official recommended in recommendation # 58 would be responsible for preparing and maintaining the county evacuation plan. Additional costs for preparing the element would need to be determined on a project-specific basis.

Recommendation # 11:

- a. The costs incurred by the applicable emergency management agency in reviewing an evacuation plan should be funded by a review fee paid by the institution.
- b. The cost to the institutions to prepare these plans has not been determined but should not be significant as these facilities should have already considered these issues.

Recommendation # 12:

- a. None.

Issue B: Refuges of Last Resort

Recommendation # 13:

- a. Not determined.

Issue C: Transportation Improvements

Recommendation # 14:

- a. The Florida Department of Transportation estimates that the rule can be adopted using existing resources.
- b. The amount of lost toll revenues would depend on the facilities impacted and the duration of evacuation and recovery.

Recommendation # 15:

- a. The Florida Department of Transportation estimates that the overall impact would be minor. The amount of lost toll revenues would depend on the facilities impacted and the time required to alleviate the traffic problem.

Recommendation # 16:

- a. The Florida Department of Transportation estimates that the initial study would cost \$50,000 and advises that the cost could be absorbed in its existing budget. The cost to actually reverse one or more lanes would be determined in the study.

Recommendation # 17:

- a. Project costs for these improvements are already included in the Florida Department of Transportation's five-year work program.

Recommendation # 18:

- a. The Florida Department of Transportation estimates that the study would cost \$150,000 and advises that the cost could be absorbed in its existing budget.

Recommendation # 19:

- a. The Florida Department of Transportation estimates that \$500,000 would be needed to purchase an adequate supply of programmable signs. This amount would provide for the acquisition of ten signs (at a cost of \$50,000 per sign).

Issue D: Marinas and Bridges**Recommendation # 20:**

- a. The City of Miami has estimated that boats left in the Dinner Key Marina caused roughly two-thirds of the \$2.5 million in damage experienced by the marina. Based on this figure, the cost of implementing this recommendation could be substantial.
- b. Persons docking vessels at marinas could be assessed an annual fee to capitalize a special insurance fund for this purpose.

Recommendation # 21:

- a. This rule can be promulgated by the Florida Department of Transportation using existing resources.
- b. The cost of the educational program should be limited but the exact cost cannot be determined until the program is established.

III. SHELTER**Issue A: Improve Shelter Planning and Operations****Recommendation # 22:**

- a. The Department of Community Affairs estimates that OPS funds of \$250,000 annually would be needed to collect and maintain the shelter inventory and data base, evaluate the structural soundness of additional shelters, and establish model shelter guidelines.
- b. Information on shelter demand would be provided through the updated regional evacuation and inland shelter studies (see the fiscal note for recommendation # 56).
- c. Establishing a full-time special needs disaster assistance coordinator at each of the Department of Health and Rehabilitative Services, the Department of Elder Affairs, the Department of Labor and Employment Security, and the Agency for Health Care Administration would cost approximately \$205,050 per year for salaries, benefits, and standard expense and operating capital outlay packages (four positions).
- d. The state-funded, dedicated county emergency management official recommended in recommendation # 58 would be responsible for updating and maintaining the county shelter plan. Additional costs for preparing the element would need to be determined on a project-specific basis.
- e. The Department of Community Affairs estimates that remaining tasks can be accomplished within existing resources and those identified as needed to implement recommendation # 9.

Issue B: Increase Use of Public Buildings**Recommendation # 23:**

- a. The Department of Education estimates that it would cost between \$100,000 and \$150,000 to develop the design criteria. The Committee expects that the actual changes needed to the building code will be modest, and, therefore, that the cost of implementing this recommendation will be modest when applied to new buildings before design work begins on them.

Recommendation # 24:

- a. The Department of Education estimates that the survey program will cost at least \$1 million. This is based on a minimum cost of \$4,000 to survey buildings at each of the roughly 2,500 schools. This figure should be assumed to be a low estimate. The cost of surveying community college and university buildings should be comparable per building.
- b. Costs for the retrofitting program cannot be determined until the number of facilities and the type of retrofitting needed is identified. Costs in the hundreds of millions of dollars are anticipated. For example, the Department of Education has estimated that the addition of hurricane shutters can cost as much as \$400 per window.

Recommendation # 25:

- a. The Department of Management Services estimates that it would cost approximately \$45,000 to establish shelter criteria to be used in the design of state buildings.
- b. The cost of retrofitting existing state-owned buildings would have to be determined by a survey of existing facilities. The Department of Management Services estimates that about \$15,000 per building should be budgeted for a retrofit study, for a budget of \$675,000.
- c. The cost of implementing shelter design criteria cannot be determined precisely but can be estimated. The Department of Management Services recently built a facility for Monroe County that was hardened because it contains a county emergency operations center. The Department of Management Services estimates that including the additional features to harden the structure added about 7.5 percent to the cost of the building.

Issue C: Reduce Shelter Demand**Recommendation # 26:**

- a. The Department of Community Affairs can evaluate the fiscal impact and feasibility of this recommendation using existing resources.
- b. While the potential impact on mobile home affordability cannot be precisely determined, the Florida Manufactured Housing Association estimates that the total cost of providing hurricane shelters in all parks of over 100 lots would be \$420.1 million. This calculation assumes 98 percent of parks containing at least 100 lots are located outside of the category three surge zone; each home is occupied by an average of two people; 20 square feet per person shelter space is needed; 50 percent of homes would be occupied during hurricane season; shelter features include storm shutters, electric generators, and potable water storage capability; and shelter construction costs of \$80 per square foot.
- c. There are 262,542 lots in mobile home parks containing at least 100 lots that are located outside of the category three surge zone. If the total cost of providing shelter is divided by this number of lots, each lot owner's share would equal \$1,600 (\$240.1 million divided by 262,542). If this amount were paid off over the term of a 15-year mortgage, the monthly payment required by each lot would be very modest.
- d. In addition, in parks where inadequate space exists for a shelter, acquiring a shelter site would displace at least four homes per park at an average cost of \$140,000 per park.

Recommendation # 27:

- a. The Department of Community Affairs estimates that it can promote the development and adoption of model code requirements and incentives using existing resources.
- b. The costs of new building standards could be substantial depending on the options and approaches selected. The lowest cost approaches which are consistent with technically sound judgment should be evaluated. Options such as requiring shutters or laminated glass could add thousands of dollars to housing costs. Sheltered spaces or strengthened structure requirements may have lower cost impacts.

Recommendation # 28:

- a. Until the new standards are established and existing structures are surveyed, the fiscal impact of this recommendation cannot be determined.

Issue D: Improve Registration of Shelter Occupants**Recommendation # 29:**

- a. The American Red Cross estimates a fiscal impact of \$50,000 to \$75,000 for every 30 shelters.

Issue E: Improve Sheltering of People with Special Needs**Recommendation # 30:**

- a. The Department of Community Affairs estimates that this recommendation can be implemented within existing resources.

Recommendation # 31:

- a. The Agency for Health Care Administration estimates that this recommendation will have fiscal impacts on the state and facilities that fall under the new definition. Costs to the state will include developing and adopting minimum criteria for the preparation of disaster plans and educating staff. Costs to facilities will include the cost of preparing or updating disaster plans. Precise cost estimates could not be determined.

Recommendation # 32:

- a. The costs incurred by agencies in reviewing disaster plans should be funded by review fees paid by submitting institutions.
- b. The cost to the institutions to prepare these plans has not been determined but should not be significant as these facilities have already been required to consider these issues.

Recommendation # 33:

- a. The Department of Community Affairs projects that this recommendation can be implemented by the state with available resources. Nursing homes subject to the rule will be impacted to the extent that they must revise disaster plans to respond to the requirements of the revised rule and to the extent that alternative host facilities require payment for providing shelter services during a disaster.

Recommendation # 34:

- a. The Department of Community Affairs cannot determine the fiscal impacts of implementing this recommendation at this time; however, collecting registration information at intake points should keep costs down.

Recommendation # 35:

- a. The fiscal impact of this recommendation cannot be determined at this time; however, collecting registration information at intake points should keep costs down.

Recommendation # 36:

- a. The Department of Community Affairs projects that the costs of implementing this recommendation will be limited to the costs associated with rule making and can be implemented within existing resources. The Department cannot determine costs to the Medicaid Program, as these would vary from disaster to disaster.

CHAPTER TWO: AFTER THE STORM**I. POST-DISASTER COMMUNICATIONS AND PUBLIC INFORMATION****Issue A: Coordination of Emergency Communications****Recommendation # 37:**

- a. The Department of Community Affairs estimates that two new positions in the Division of Communications of the Department of Management Services would be necessary to implement this recommendation at a cost of \$102,500 (salaries, benefits, operating capital outlay, and expenses). These positions would also provide specialized support to the Communications ESF before, during, and after disasters.
- b. Establishing the Communications ESF is part of a larger recommendation addressing Florida's entire post-disaster response and recovery strategy. The state's emergency operations center will have to be reconfigured to accommodate the suggested new organizational structure. See recommendation # 52 for an estimate of the cost of this reconfiguration.

Recommendation # 38:

- a. The Department of Community Affairs estimates that this recommendation can be implemented by the Department of Management Services using the two additional positions discussed in recommendation # 37.

Issue B: Coordination of Post-Disaster Emergency Communications**Recommendation # 39:**

- a. The Department of Community Affairs estimates that this recommendation can be implemented within existing resources.

Recommendation # 40:

- a. Recommendation # 5 discusses the fiscal implications of ensuring that all counties in Florida are linked into the National Warning System.

Recommendation # 41:

- a. The Department of Community Affairs estimates that the open purchase orders and memoranda of understanding can be negotiated by the two additional positions discussed in recommendation # 37.
- b. The costs of using the open purchase orders and memoranda of understanding cannot be determined. If a Presidential Disaster Declaration is issued, the federal government will pay 75 percent, and in some extreme cases more, of these costs. Without a Presidential Disaster Declaration, the state will bear 100 percent of the costs.

Recommendation # 42:

- a. The Department of Community Affairs estimates that this recommendation can be implemented within existing resources.

Recommendation # 43:

- a. At a unit cost of approximately \$3,000 per base station, \$17,000 per extendable antenna, and \$1,000 per hand-held radio, the cost of establishing an 800 MHz radio network for emergency workers would be approximately \$140,000 to \$240,000 depending on the number of hand-held radios purchased.

Recommendation # 44:

- a. As the cellular industry is already working to move to digital technology and to create the capability to prioritize phones, no additional costs would be placed on the industry by this recommendation.

Recommendation # 45:

- a. The Florida Department of Law Enforcement has estimated the cost of the Emergency Communications and Command Center Vehicle to be \$1,260,500 and the cost of the Security Control Center Vehicle to be \$520,500. This includes two special agent positions to maintain and staff the vehicles in addition to equipment costs.

Recommendation # 46:

- a. The Department of Community Affairs estimates that this recommendation can be implemented within existing resources.

Issue C: Coordinating the Release of Information and Instructions to the Public**Recommendation # 47:**

- a. Creation and use of standardized formats and procedures for release of information can be accomplished using existing resources. In addition, pursuant to the *Federal Response Plan*, the Federal Emergency Management Agency will be establishing a joint information center in the event of a major or catastrophic disaster so use of the joint information center as a single point of release will have no appropriations consequences.
- b. The cost to pre-select, harden, and wire up to 14 facilities cannot be precisely determined. Costs would vary depending on the physical improvements needed and the distance of the buildings from the different emergency operations centers.

Recommendation # 48:

- a. The cost to implement this recommendation should be limited to the cost of the signs denoting the facilities.

Recommendation # 49:

- a. None.

Recommendation # 50:

- a. The Department of Community Affairs can implement this recommendation using existing resources.

II. POST-DISASTER RESPONSE AND RECOVERY OPERATIONS**Issue A: Improve Planning for Post-Disaster Response and Recovery****Recommendation # 51:**

- a. None.

Recommendation # 52:

- a. This recommendation will require actions by numerous agencies. Many of the actions are similar to functions currently performed and should not require additional appropriations. The Department of Community Affairs estimates that existing personnel and the resources identified as needed in recommendations # 9 and # 22 should be sufficient to implement this recommendation.
- b. The Department of Community Affairs advises that the state emergency operations center would need to be reconfigured to serve the new ESF-based organizational structure. The cost of reconfiguring the emergency operations center and installing emergency telephone and electrical systems necessary to support this concept is estimated to be \$150,000 to \$200,000.
- c. The Department of Community Affairs estimates the cost of an annual hurricane preparedness exercise sufficient to test state and county emergency management plans and programs could be as low as \$50,000.

Recommendation # 53:

- a. The Department of Community Affairs estimates that implementing this recommendation will require actions on the part of many agencies; however, it projects that rulemaking activities should not require substantial expenditure of additional resources.

Recommendation # 54:

- a. The state-funded, dedicated county emergency management official recommended in recommendation # 58 would be responsible for updating and maintaining the county shelter plan. Additional costs for preparing the element would need to be determined on a project-specific basis.

Recommendation # 55:

- a. Implementation of this recommendation should not require resources in addition to those that would have to be expended in responding to a disaster in any event.

Recommendation # 56:

- a. The Department of Community Affairs estimates that updating the 10 regional evacuation studies and 11 regional inland shelter studies will cost about \$50,000 to \$65,000 per update, for a total cost of approximately \$1,050,000 to \$1,365,000.
- b. The Department of Community Affairs estimates that updating the 10 storm surge atlases and 11 hurricane loss and contingency planning studies will be approximately \$50,000 to \$65,000 per update for a total cost of \$1,050,000 to \$1,365,000.

Recommendation # 57:

- a. Every state and regional agency with any role in Florida's emergency management system should designate a person and an alternate from existing resources.
- b. The state comprehensive emergency management plan discussed in recommendation # 52 calls for creation of 12 Emergency Support Functions (ESFs). Because of the intensive responsibilities associated with being the lead agency responsible for an ESF, these agencies should be given an additional position to handle these roles. As the ESFs have not been assigned, up to 12 agencies could need an additional position to handle their ESF responsibilities. In addition, because of their responsibilities in many of the ESFs, the Florida National Guard should receive a position.
- c. If a cost of \$50,000 per position per year were assumed, including salaries, benefits, expenses, operating capital outlay, and modest program costs, establishment of dedicated emergency management coordinators at up to 13 agencies would generate a recurring cost of \$650,000. If this cost were matched by federal funds, this cost could be halved.
- d. The designation of alternates should not have a fiscal impact as these individuals should come from existing personnel.

Recommendation # 58:

- a. Many counties are currently receiving federal funds passed through the state that are sufficient to fund a full-time position. The Legislature should focus on ensuring that the poorer counties can afford this resource. Measures that should be considered include appropriating sufficient funding through a new trust fund, establishing matching grant programs, providing incentives to counties to use the multicounty pooling provisions contained in Chapter 252, Florida Statutes, and other means for accomplishing the intent of this recommendation in a cost-feasible manner.
- b. If the Legislature chooses to make this investment only in those counties without full-time directors, the recurring cost would be \$825,000 (assuming a cost of \$50,000 per position per year, including salaries, benefits, expenses, operating capital outlay, and modest program costs) with the cost being matched by Federal Emergency Management Assistance funds on a 50:50 matching basis.

Recommendation # 59:

- a. The Department of Community Affairs estimates that implementation of this recommendation will require \$100,000 in OPS funds.

Recommendation # 60:

- a. The Department of Community Affairs estimates that four additional planner positions will be needed to implement this recommendation at an estimated annual cost of \$211,204 (salaries, benefits, operating capital outlay, and expenses).

Recommendation # 61:

- a. The three teams would be comprised of existing county and city personnel. Modest costs should be anticipated for program administration and team training. Costs for activation of the teams would be borne by the federal or state government or benefitting communities, depending on the scope of the disaster, and the source of the activation request.
- b. Costs to the state for this program should be limited if adequate support can be obtained from the Federal Emergency Management Agency.

Issue B: Improve Post-Disaster Intergovernmental Coordination**Recommendation # 62:**

- a. Implementation of this recommendation will not require expenditures in excess of what would be required under current response procedures.

Recommendation # 63:

- a. Implementation of this recommendation should not require expenditures in excess of what would be required under current response procedures. The commitment of the Federal Emergency Management Agency to use these procedures would be necessary.

Recommendation # 64:

- a. The Department of Community Affairs estimates that it can examine potential benefits and liabilities pertaining to an interstate compact with existing resources. The resources that would be needed to respond to a disaster in another state or to reimburse costs incurred by another state assisting Florida cannot be determined.

Recommendation # 65:

- a. This recommendation can be implemented by the Department of Community Affairs within existing resources.

Recommendation # 66:

- a. If special contract provisions can be obtained, it is possible that this recommendation could lead to cost savings.

Recommendation # 67:

- a. This recommendation could have very modest cost saving implications when locally declared states of emergency extend beyond ten days.

Recommendation # 68:

- a. None. Any incentives provided should be implemented through revisions to distribution formulas as opposed to requiring funds beyond those recommended elsewhere in this report.

Issue C: Security**Recommendation # 69:**

- a. None.

Recommendation # 70:

- a. The Florida Department of Law Enforcement and the Florida National Guard estimate that this recommendation can be implemented within existing resources.

Recommendation # 71:

- a. The Florida Department of Transportation estimates that this recommendation can be implemented within existing resources.

Recommendation # 72:

- a. The Department of Community Affairs, after consultation with the Florida Department of Law Enforcement and the Florida National Guard, estimates that the fiscal impacts of implementing this recommendation would be relatively minor and could be handled within existing resources.

Recommendation # 73:

- a. The Florida National Guard estimates a need for funding of \$300,000 annually to implement this recommendation.

Issue D: Expand Civil Liability Protections**Recommendation # 74:**

- a. None.

Issue E: Improve Federal Programs**Recommendations # 75:**

- a. None.

Recommendation # 76:

- a. None.

Recommendation # 77:

- a. None.

Recommendation # 78:

- a. None.

Recommendation # 79:

- a. The Department of Community Affairs estimates that it can implement its responsibilities under this recommendation with existing staff.
- b. The cost to local housing authority and the U.S. Department of Housing and Urban Development should be low as they should have already been considering these issues.

III. AVAILABILITY OF DAMAGE ASSESSMENT DATA

Issue A: Aerial and Ground Damage Assessments

Recommendation # 80:

- a. The Department of Community Affairs cannot determine the fiscal impacts of this recommendation at this time. This service may be available through the implementation of the *Federal Response Plan* at no cost to the state.

Recommendation # 81:

- a. Implementation of this recommendation will not involve costs in addition to those currently expended after a major or catastrophic disaster.

Issue B: Increase Use of Computerized Information Systems

Recommendation # 82:

- a. The Department of Community Affairs estimates that it can provide support to counties in implementing this recommendation (as defined in paragraph c. of the comments) for a cost of \$3.6 million. This includes one systems programmer position, consultant services, and computer hardware and software. These costs are approximate and represent costs above existing and requested resources that can be used to support implementation of this recommendation.
- b. Once the data sets are established, users of the information, primarily existing planner positions, would be involved in the maintenance of the data.
- c. Costs to others cannot be predicted, but should be reduced from what would be needed if starting from scratch because many counties' property appraisers and other county offices maintain similar data sets for their use. These systems should be designed to be useful for daily activities, not just for emergency purposes.

Recommendation # 83:

- a. The Department of Community Affairs estimates that implementation of this recommendation can be accomplished with existing state and local resources.

Recommendation # 84:

- a. Implementation of this recommendation will not add additional costs to those already associated with conducting an annual hurricane preparedness and recovery exercise.

Recommendation # 85:

- a. The Department of Community Affairs estimates the cost of implementing this recommendation at \$50,000 to \$75,000. This would include consultant services needed to prepare the handbook and printing and distribution costs.

IV. MEDICAL CARE AND RELIEF

Issue A: Coordination of Medical Services

Recommendation # 86:

- a. The Department of Community Affairs estimates that implementing this recommendation will have minimal fiscal impacts as the position of State Health Officer currently exists and the position's authority to issue public health advisories exists in Section 20.19, Florida Statutes.
- b. Costs would be limited to those associated with performance of the duties during a declared emergency and costs associated with any rule making necessary to implement this provision.

Issue B: Statewide Medical Plan

Recommendation # 87:

- a. The Department of Community Affairs included the costs of implementing this recommendation in the fiscal impact for recommendation # 52.

Issue C: Emergency Pharmacies

Recommendation #88:

- a. The Department of Community Affairs determined that the cost of implementing this recommendation should be minimal and within existing resources. Costs to the state would include those related to rule making by appropriate implementing agencies.

V. COORDINATION OF VOLUNTEERS, DONATIONS AND SUPPLIES

Issue A: Effective Receipt and Distribution of Donations

Recommendation # 89:

- a. The Department of Community Affairs estimates that implementation of this recommendation should have only minimal fiscal impacts, because the necessary planning and coordination can be performed by existing staff and volunteers.

Recommendation # 90:

- a. The Department of Community Affairs has determined that implementation of this recommendation should have only minimal fiscal impacts, because negotiations and planning can be performed by existing staff.
- b. In negotiating memoranda of understanding, efforts should be made to have water donated. In any case, fiscal impacts will be limited to the cost of the water supplied, if any, in response to a disaster.

Recommendation # 91:

- a. The fiscal impacts of implementing part (a) of this recommendation would vary based on the amount of donations made in response to a given disaster. The Department of Revenue estimates that following a disaster the magnitude of Hurricane Andrew, the potential loss in fuel taxes would be \$15,000 in state taxes and \$15,000 in local option taxes.
- b. The Department of Revenue determined that fiscal impacts of implementing part (a) of this recommendation would be offset to the degree that the state would expend money for fuels in lieu of donations than it would waive in tax payments.
- c. The Department of Revenue estimates that the fiscal impacts of implementing part (b) of this recommendation would be minimal because all taxes would remain due.

Recommendation # 92:

- a. The Department of Community Affairs has included the cost of implementing this recommendation in the fiscal impact of recommendation # 1.

Issue B: Coordination of Volunteers**Recommendation # 93:**

- a. Based on information provided to the Department of Community Affairs, it estimates that establishing a volunteer clearinghouse for health care professionals would require two full-time positions with salaries and benefits of \$58,630 and an expense budget of \$55,857.
- b. In order to establish single points of contact for volunteer information, the Department of Community Affairs has determined that implementation of this recommendation should have only minimal fiscal impacts, because negotiations and planning can be performed by existing staff.
- c. The Department of Community Affairs determined that the cost of establishing a toll-free telephone bank similar to the one used at the Florida Relief Center would cost approximately \$100,000.
- d. Other costs associated with the recommendation can be implemented using existing resources and additional resources discussed under numerous previous recommendations.

CHAPTER THREE: FUNDING**I. FLORIDA DEVOTES INSUFFICIENT RESOURCES TO EMERGENCY MANAGEMENT PROGRAMS****Issue A: Create an Emergency Management Preparedness and Disaster Assistance Trust Fund****Recommendation # 94:**

- a. Not applicable.

APPENDIX B:
RESPONSIBLE AGENCIES

Affected Agencies & Groups	Committee Recommendations																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Federal Government						*		*	*											
Governor																				
Legislature					*		*	*			*		*							
Agency for Health Care Administration											*	*								
Department of Community Affairs	*	*	*	*	*	*	*	*	*	*			*				*		*	
Department of Education	*					*														
Department of Elder Affairs						*					*									
Department of Environmental Regulation						*														
Department of Health and Rehabilitative Services						*					*	*								
Florida Department of Law Enforcement						*														
Department of Management Services					*	*	*	*												
Florida Department of Transportation						*								*	*	*	*	*	*	*
Florida National Guard																				
Other State Agencies				*		*										*				
Regional Agencies										*	*								*	
Local Government	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Care Facilities											*	*								
Media	*	*		*																
Professional Associations																				
Telecommunications Industry			*				*	*												
Volunteer Organizations																				

Affected Agencies & Groups	Committee Recommendations																		
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Federal Government		*							*									*	*
Governor						*													
Legislature	*			*	*	*		*	*		*	*	*			*	*		
Agency for Health Care Administration			*						*		*	*	*	*	*	*	*		
Department of Community Affairs		*	*	*	*	*	*	*		*	*			*	*	*	*	*	*
Department of Education				*	*														
Department of Elder Affairs			*						*		*	*	*	*	*	*	*		
Department of Environmental Regulation						*													
Department of Health and Rehabilitative Services			*			*			*		*	*	*	*	*	*	*		
Florida Department of Law Enforcement			*			*												*	*
Department of Management Services						*												*	*
Florida Department of Transportation		*				*													
Florida National Guard			*			*												*	*
Other State Agencies	*	*				*		*										*	*
Regional Agencies			*																
Local Government	*	*	*	*	*	*	*			*		*	*	*	*	*	*	*	*
Care Facilities			*						*		*	*	*	*	*	*	*		
Media																			
Professional Associations								*	*		*	*						*	*
Telecommunications Industry																		*	*
Volunteer Organizations			*	*	*	*				*		*		*					

Affected Agencies & Groups	Committee Recommendations																		
	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
Federal Government	*					*		*						*			*		
Governor														*					
Legislature							*							*	*	*		*	
Agency for Health Care Administration													*	*	*	*			*
Department of Community Affairs	*	*	*	*	*		*	*	*			*	*	*	*	*	*	*	
Department of Education													*	*		*			*
Department of Elder Affairs													*	*		*			*
Department of Environmental Regulation													*	*	*	*			*
Department of Health and Rehabilitative Services						*							*	*	*	*			*
Florida Department of Law Enforcement	*						*						*	*	*	*			*
Department of Management Services	*	*	*		*								*	*	*	*			*
Florida Department of Transportation													*	*	*	*			*
Florida National Guard	*												*	*		*			*
Other State Agencies	*												*	*	*	*			*
Regional Agencies													*	*		*		*	*
Local Government	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Care Facilities													*						
Media						*			*		*		*						
Professional Associations								*					*	*					
Telecommunications Industry	*		*	*	*	*							*	*					
Volunteer Organizations						*		*	*				*	*	*				

Affected Agencies & Groups	Committee Recommendations																			
	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	
Federal Government				*	*	*													*	*
Governor									*										*	*
Legislature	*							*		*	*	*			*	*	*	*	*	*
Agency for Health Care Administration	*	*			*				*						*					*
Department of Community Affairs	*	*	*	*	*	*	*	*	*	*	*			*						*
Department of Education	*	*			*				*											*
Department of Elder Affairs	*	*			*				*						*					*
Department of Environmental Regulation	*	*			*				*					*						*
Department of Health and Rehabilitative Services	*	*			*				*					*	*					*
Florida Department of Law Enforcement	*	*		*	*				*			*	*	*	*					*
Department of Management Services	*	*		*	*	*			*					*						*
Florida Department of Transportation	*	*		*	*				*					*						*
Florida National Guard	*	*		*	*				*			*	*	*	*	*				**
Other State Agencies	*	*		*	*				*					*						*
Regional Agencies	*										*									*
Local Government	*	*	*	*	*	*				*	*	*	*	*	*	*			*	*
Care Facilities																				
Media																				
Professional Associations				*							*									
Telecommunications Industry														*						
Volunteer Organizations				*	*	*														

Affected Agencies & Groups	Committee Recommendations																	
	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
Federal Government
Governor			
Legislature
Agency for Health Care Administration						
Department of Community Affairs		
Department of Education							.											.
Department of Elder Affairs						
Department of Environmental Regulation										
Department of Health and Rehabilitative Services					
Florida Department of Law Enforcement							.			.								.
Department of Management Services							.						.					.
Florida Department of Transportation					
Florida National Guard			
Other State Agencies			
Regional Agencies																		.
Local Government			
Care Facilities		
Media																.		.
Professional Associations						.												.
Telecommunications Industry																		.
Volunteer Organizations				

APPENDIX C:
SUMMARY OF MEETINGS

October 12, 1992

The Committee convened for the first time at the Dade County Youth Fair Grounds in Miami, Florida. Opening remarks were provided by Chairman Philip D. Lewis and Lieutenant Governor Buddy MacKay. After introductions, the Committee discussed its workplan for the coming three months and prior legislative actions on emergency management issues.

The Committee spent the remainder of the day examining issues prior to the landfall of Hurricane Andrew, especially the issues of public notification, evacuation and shelter. Presentations were received from: Bob Sheets, Director of the National Hurricane Center; Kate Hale, Director of the Office of Emergency Management, Metro-Dade County; Billy Wagner, Director of the Office of Emergency Management, Monroe County; Bob Nave, Director of the Division of Emergency Management, Florida Department of Community Affairs; Tom Arnold, Deputy Director, Metro-Dade Police Department; Jim Towey, District XI Administrator, and Charles Mahan, Deputy Secretary for Health, Florida Department of Health and Rehabilitative Services; Ron Jones, Assistant Secretary for Operations, Florida Department of Corrections; Donna Girodo, Director of Emergency Services, American Red Cross, Dade County Chapter; and Sam Ingram, Director of Safety and Environmental Management, and Mark Zaher, Liaison for Emergency Operations, Dade County School Board.

November 2-3, 1992

The Committee convened for its second and third days of meetings at the South Dade Government Center, Dade County, Florida. The Committee began by receiving and discussing reports from three workgroups established at the prior meeting. The workgroup report on hurricane shutters and public schools was presented by Suzanne Marshall, Bureau Chief, Office of Educational Facilities, Florida Department of Education. The workgroup report on interim evacuation traffic plans was presented by Stan Cann, District 6 Secretary, Florida Department of Transportation. The workgroup report on sheltering people with special needs was presented by Kate Hale, Director, Office of Emergency Management, Metro-Dade County, and Linda Quick, Executive Director, South Florida Health Planning Council. The Committee then discussed additional preliminary recommendations concerning notification, evacuation and shelter.

The Committee then began its examination of post-disaster issues. Communications issues were examined first, particularly the issues of communicating information to the media and the public, improving Florida's Emergency Broadcast System, and improving communications between emergency response agencies. Testimony was received from Toni Riordan, Director of Communications, Florida Department of Community Affairs; Paula Musto, Director of Communications, Metro-Dade County; Frank Koutnik, Chief,

Bureau of Operations, Florida Department of Community Affairs; and Bob Nave, Director, Division of Emergency Management, Florida Department of Community Affairs.

On the morning of November 3, 1992, the Committee examined issues pertaining to intergovernmental coordination and chain of command during the first two weeks. Testimony was received from Bob Nave, Director, Division of Emergency Management, Florida Department of Community Affairs; Joaquin Avino, County Manager, Metro-Dade County; Tom Herndon, Chief of Staff, Office of the Governor of Florida; and Howard Chapman, Emergency Management Coordinator, Charleston, South Carolina.

November 23-24, 1992

The Committee convened for its fourth and fifth days of meetings at the Metro-Dade Center for the Fine Arts, Miami, Florida. The Committee began by receiving and discussing reports from workgroups established at the prior meeting. The workgroup report on communications was presented by Bob Nave, Director, Division of Emergency Management, Florida Department of Community Affairs. The workgroup report on damage assessment information was presented by Til Creel, Executive Director, South Florida Water Management District. The workgroup report on chain of command and intergovernmental coordination was presented by Ben Starrett, Director of Strategic Planning and Policy Coordination, Florida Department of Community Affairs. The Committee then discussed additional preliminary recommendations from the previous meeting.

The Committee then moved to an examination of matters pertaining to debris removal and burning and other environmental issues. Presentations were received from: John Ruddell, Director, Division of Waste Management, Florida Department of Environmental Regulation; Tony Clemente, Assistant County Manager, Metro-Dade County; and Major Donald Henninger, Project Manager, Debris Removal, U.S. Army Corps of Engineers.

The Committee next discussed issues pertaining to medical care and relief. Presentations were received from: Captain Ellery Gray, Senior Emergency Coordinator, U.S. Public Health Service; Mike Williams, Chief of Emergency Medical Services, Department of Health and Rehabilitative Services, State of Florida; Bob Millar, Manager for Special Projects, St. Mary's Hospital, West Palm Beach; Sarah Grim, Executive Director, South Florida Hospital Association; and Marta Prado, Vice President, EMSA Limited Partnership.

After reconvening on November 24, 1992, the Committee received a presentation by Alex Muxo, the City Manager of Homestead, concerning the perspective of an impacted community on the Committee's charge.

The Committee moved to an examination of issues pertaining to security. Presentations were received from: Commissioner Tim Moore, Florida Department of Law Enforcement; Major General Ron Harrison, Adjutant General, Florida National Guard; Fred Taylor, Director, Metro-Dade Police Department; and Curt Ivy, Chief of Police, City of Homestead.

The Committee next discussed issues pertaining to temporary housing. Presentations were received from: Michael Polny, Federal Emergency Management Agency; Chris Bezruki, Assistant City Manager/Human Resource Management, City of Homestead; and Lee Rawlingson, Metro-Dade County.

The Committee concluded the meeting with an examination of issues pertaining to distribution of food, water, and other supplies and coordination of volunteers and donations. Presentations were received from: Jon Moyle, Director of Legislative Affairs, Office of the Governor of Florida; Chuck Wolfe, Director, Florida Relief Center; Donald Jones, General Manager, Disaster Services, American Red Cross, National Office; Major Ted Arrowood, Salvation Army; and Tammy Klingler, Senior Vice President for Public Relations, United Way of Dade County.

December 9, 1992

The Committee convened for its sixth day at the Metro-Dade Center for the Fine Arts, Miami, Florida. The Committee began by examining issues pertaining to restoration of electrical power and telephone service. Presentations were received from: Bill Hamilton, Vice President, Customer Service, Residential and General Business, Florida Power and Light; Linda Isenhour, General Manager Southern Network, Southern Bell Florida; Don Riedel, Network Manager, Bell South Mobility; and Fred Mercado, Cellular One. These presentations concluded the testimony gathering phase for the Committee.

The Committee received a presentation on the potential of geographic information systems to improve emergency management planning and damage assessments from staff of the South Florida Water Management District.

During its afternoon session, the Committee reviewed and discussed numerous work-group reports and recommendations. These reports addressed: communications; intelligence/damage assessment information; improving response to disasters; transportation-related hurricane planning; improving public shelter planning and availability; sheltering people with special needs; medical care and relief; and volunteers and donations.

December 21, 1992

The Committee convened for a public workshop at 7:00 p.m. at the South Dade Government Center, Dade County, Florida. Approximately 30 citizens attended. Testimony was received from: Robert Collins; Lt. Peter E. Smalley, City of Miami Fire Rescue; Ed Hanna, West Perrine/Richmond Heights Community Center; Jonathan Reidy, Alliance for Aging; Honorable John Cosgrove, State Representative, District 119; Patricia M. Stang, Chairman, South Dade Community Council; and Fernando Mendez.

January 6, 1993

The Committee convened for its final meeting at the Metro-Dade Center for the Fine Arts, Miami, Florida. The Committee reviewed, debated, amended and adopted its final report.

APPENDIX D:

ACKNOWLEDGEMENTS

A special thanks to Jorge Lopez and Lily Abello, of the Metro-Dade County Manager's Office, for all of their help. The Committee could not have met its charge without their tremendous contribution.

The Committee extends its appreciation to the many individuals who submitted written comments to assist the Committee's deliberations and who participated in the December public workshop.

Finally, the Committee thanks the following speakers, in addition to those persons on the Technical Advisory Committee, who responded to the Committee's requests for testimony:

Tom Arnold
Deputy Director
Metro-Dade Police Department
Miami

Major Ted Arrowood
Salvation Army
Miami

Chris Bezruki
Assistant City Manager
Human Resource Management
City of Homestead
Homestead

Howard Chapman
Emergency Management
Coordinator
Department of Traffic and
Transportation
Charleston, SC

Tony Clemente
Assistant County Manager
Metro-Dade County
Miami

Donna Girodo
Director of Emergency Services
Dade County Chapter
American Red Cross
Miami

Captain Ellery Gray
Senior Emergency Coordinator
U.S. Public Health Service
Quincy

Sarah Grim
Executive Director
South Florida Hospital
Association
Hialeah

Major Donald Henninger
Project Manager, Debris Removal
U.S. Army Corp of Engineers
Miami

Tom Herndon
Chief of Staff
Office of the Governor
Tallahassee

Linda Isenhour
General Manager, Southern
Network
Southern Bell Florida
Miami

Curt Ivy
Chief of Police
City of Homestead
Homestead

Ron Jones
Assistant Secretary for Operations
Department of Corrections
Tallahassee

Tammy Klingler
Senior Vice President
for Public Relations
United Way of Dade County
Miami

Frank Koutnik
Chief, Bureau of Operations
Department of Community
Affairs
Tallahassee

Charles Mahan
Deputy Secretary for Health,
Department of Health and
Rehabilitative Services
Tallahassee

Suzanne Marshall
Bureau Chief, Office of
Educational Facilities
Technical Facilities of
Development and Management
Florida Department of Education
Tallahassee

Fred Mercado Cellular One <i>West Palm Beach</i>	Linda Quick Executive Director South Florida Health Planning Council Miami	Jim Towey District XI Administrator Department of Health and Rehabilitative Services Miami
Bob Millar Manager for Special Projects, St. Mary's Hospital <i>West Palm Beach</i>	Lee Rawlingson Metro-Dade County Miami	Billy Wagner Director Office of Emergency Management Monroe County <i>Marathon</i>
Jon Moyle Director of Legislative Affairs, Office of the Governor <i>Tallahassee</i>	Don Riedel Network Manager Bell South Mobility <i>Fort Lauderdale</i>	Mike Williams Chief of Emergency Medical Services Department of Health and Rehabilitative Services <i>Tallahassee</i>
Paula Musto Director of Communications Metro-Dade Communications Miami	Toni Riordan Director of Communications Department of Community Affairs <i>Tallahassee</i>	Chuck Wolfe Director Florida Relief Center Office of the Governor <i>Tallahassee</i>
Michael Polny Federal Emergency Management Agency Miami	John Ruddell Director Division of Waste Management Department of Environmental Regulation <i>Tallahassee</i>	Mark Zaher Liaison for Emergency Operations Dade County School Board Miami
Marta Prado Vice President EMSA Limited <i>Plantation</i>	Bob Sheets Director National Hurricane Center <i>Coral Gables</i>	

Senator MIKULSKI. Thank you very much, Ms. Shelley.

Mr. Muxo, do you want to tell us about Homestead? Just for everybody watching, the yellow light means your time is starting to run out and the red light means your time has expired.

STATEMENT OF ALEX MUXO, JR., CITY MANAGER, HOMESTEAD, FL

Mr. MUXO. Thank you. On behalf of the city of Homestead, I would like to thank you for the opportunity to address the disaster response policy of the Federal Emergency Management Agency.

The city of Homestead suffered the worst natural disaster in the history of the United States when Hurricane Andrew struck on August 24. In its wake, 90 percent of the residents of Homestead were left without adequate housing and in most cases, they also lost their businesses as well. The city of Homestead also experienced severe damage to its infrastructure, including the total loss of the municipal electrical distribution system.

If I can just take a minute to put it in perspective—and I know Senator Graham spoke earlier about the insurance claims—the latest estimate is \$16.5 billion in insurance claims that will be paid to the south Florida area. The best comparison I can give you is a 30-square-mile tornado with gusts of up to 221 miles an hour. That's what struck Homestead, Florida City, and southern Dade County.

Fortunately, our city has been able to move forward with its recovery process because of the tremendous outpouring of support. The military, neighboring municipalities, the State, and several social service organizations were able to provide life's most basic necessities—food, shelter, and a helping hand—in the early hours after Andrew. Without the help of these organizations, the wrath of Andrew would have been far worse for many more Homestead residents.

Unfortunately, I cannot be as complimentary of the relief assistance provided by FEMA. FEMA was very slow to respond. Its relief mission was confusing. There was no communication or little, if at all.

Hurricane Andrew's devastation presents an opportunity for the Homestead community for the 21st century. It also offers a unique opportunity for the Federal Government to reform the Federal Emergency Management Agency's disaster response policies which are ineffective and do not meet the needs of disaster victims.

I think that FEMA in other disasters may have responded well, but when you have one of this magnitude, it was just not adequate in the way they responded.

The Federal Government's immediate response to catastrophic disaster is vital to the recovery efforts of a community. Based on the city's experience these past 5 months, I can only conclude that the Federal disaster system is not equipped to handle a disaster of this magnitude. Therefore, the city presents the following recommendations in an attempt to assist Senator Mikulski's goal of creating a disaster relief policy that American people can depend on.

RECOMMENDATION FOR A DISASTER RELIEF POLICY

No. 1, the city of Homestead recommends that a Cabinet-level post be appointed in which the appointee has direct access to the President and authority to delegate disaster relief missions of FEMA. If the Federal Government is to take a larger role in responding to catastrophic disaster in our country, then Congress needs to reassess the original purpose of FEMA. An agency responsible for providing supplemental appropriations for disaster assistance must be able to demonstrate that its infrastructure is viable and can withstand the demands which it will be confronted with.

No. 2, the city of Homestead recommends that the military be required to respond within 24 hours after a major disaster to the impacted area and provide damage assessment reports to State, Federal, and local officials. The military has the infrastructure, training, and equipment to survey a disaster site, but more importantly has the capabilities to quickly determine the type of aid needed in an affected area.

FEMA's inability to conduct early damage assessments severely delayed the supply of food, water, and medical supplies to those areas hardest hit by Hurricane Andrew. Those hurricane victims were forced to wait in unsafe structures and torn-up neighborhoods for as long as 4 days before they saw any organized relief operations. It was not until the military arrived that the plight of our community receive the assistance it desperately needed.

No. 3, the city of Homestead requests that FEMA be required to develop a comprehensive emergency response plan that incorporates the resources of local governments and social service organizations. All municipalities are required to have an emergency preparedness plan. All social service agencies, such as the Red Cross, Salvation Army, and United Way, have designed emergency response plans. In a time when communication is essential, there were too many instances when efforts were being duplicated because of a lack of communication or misunderstanding of one's mission. It is evident that the Federal response plan, which allows FEMA to assist and aid 26 Federal agencies, was seriously impeded by poor planning and lack of organization.

No. 4, finally, the city of Homestead requests that FEMA be required to develop an adequate short- and long-term housing program to assist local municipalities and counties in housing redevelopments. The tent life support centers established by the military provided immediate housing for many of our citizens. However, it took FEMA 8 weeks to provide alternative housing before life support centers could be closed. Delays were attributed to FEMA's hiring of out-of-State and unlicensed contractors, many of which were unfamiliar with the coral rock of south Florida and inadequately tied down the mobile homes with sand anchors.

We commend this committee's visionary leadership in recognizing the importance of addressing the disaster response policies of FEMA. We hope the recommendations outlined today will be considered as well as incorporated in amending existing policies.

Thank you for the opportunity to present these comments.

[The statement follows:]

STATEMENT OF ALEX MUXO, JR.

On behalf of the City of Homestead, I would like to thank you for the opportunity to address the disaster response policy of the Federal Emergency Management Agency ("FEMA").

The City of Homestead suffered the worst natural disaster in the history of the United States when Hurricane Andrew struck on August 24. In its wake, 90% of the residents of Homestead were left without adequate housing and in most cases, experienced losses in their business as well. The City of Homestead also experienced severe damage to its infrastructure including total loss of its municipal electrical distribution system.

Fortunately, our city has been able to move forward with its recovery process because of the tremendous outpouring of support. The military, neighboring municipalities and several social service organizations were able to provide life's most basic necessities - food, shelter and a helping hand - in the early hours after Andrew. Without the help of these organizations, the wrath of Andrew would have been far worse for many more Homestead residents. Unfortunately, I cannot be as complimentary of the relief assistance provided by FEMA. FEMA was slow to respond. Its relief mission was confusing. There was no communication.

Hurricane Andrew's devastation presents an opportunity for Homestead to become a model community for the 21st century. It also offers the unique opportunity for the federal government to reform the Federal Emergency Management Agency's disaster response policies, which are ineffective and do not meet the needs of disaster victims.

The federal government's immediate response to catastrophic disaster is vital to the recovery efforts of a community. Based on the City's experience these past five months, I can only conclude that the federal disaster system is not equipped to handle a disaster of this magnitude. Therefore, the City presents the following recommendations in an attempt to assist Senator Mikulski's goal of creating a "disaster relief policy that the American people can depend on."

The City of Homestead requests that a Cabinet level post be created in which the appointee has direct access to the President and the authority to delegate disaster relief missions of FEMA. If the federal government is to take a larger role in responding to catastrophic disaster in our country, then Congress needs to reassess the original purpose of FEMA. An agency responsible for providing supplemental appropriations for disaster assistance must be able to demonstrate that its infrastructure is viable and can withstand the demands in which it will be confronted.

The City of Homestead requests that the military be required to respond within 24 hours after major disasters to the impacted area and provide damage assessment reports to State and Federal officials. The military has the infrastructure, training and equipment to survey a disaster site, but more importantly, has the capabilities to quickly determine the type of aid needed in the effected area. FEMA's inability to conduct early damage assessments severely delayed the supply of food, water and medical supplies to those areas hardest hit by Hurricane Andrew. Thousands of hurricane victims were forced to wait in unsafe structures and torn up neighborhoods for as long as four days before they saw any organized relief operations. It was not until the military arrived did the plight of our community receive the assistance that is desperately needed.

The City of Homestead requests that FEMA be required to develop a comprehensive emergency response plan that incorporates the resources of local governments and social service organizations. All municipalities are required to have an emergency preparedness plan. All social service agencies, such as the American Red Cross, Salvation Army and the United Way, have designed emergency response plans. In a time when communication is essential, there were too many instances when efforts were being duplicated because of a lack of communication or a misunderstanding of one's mission. It was evident that the Federal Response Plan, which allows FEMA to assist the aid of 26 federal agencies, was seriously impeded by poor planning and a lack of organization. Fortunately for Homestead, we were able to rely on mutual aid agreements between neighboring municipalities. These municipalities provided utility and public works crews who assisted our staff in restoring the City's electrical distribution system and the removal of storm debris. FEMA had no clear picture of what was happening in South Dade. The residents of Homestead could not afford to wait until FEMA fretted over who was responsible for what and who would pay for it all. Help was needed.

Finally, the City of Homestead requests that FEMA be required to develop an adequate short- and long-term housing program to assist local municipalities in housing redevelopment. The Tent Life Support Centers established by the military provided immediate housing for many of our citizens. However, it took FEMA eight weeks to provide alternative housing before the Life Support Centers could be closed. Delays were attributed to FEMA's hiring of out of state and unlicensed contractors, many of which were unfamiliar with the coral rock of South Florida, and inadequately tied down the mobile homes with sand anchors.

We commend this committee's visionary leadership in recognizing the importance of addressing the disaster response policies of the Federal Emergency Management Agency. We hope that the recommendations outlined today will be considered as well as incorporated in amending existing policies.

Thank you for the opportunity to present the concerns of the City of Homestead.

Senator MIKULSKI. Thank you, Mr. Muxo. I know you and Ms. Shelley and Governor Chiles and all the people of Florida have been through it and, from what I gather, are not through it yet. So, we will come back to you for questions.

Well, now, the world always turns to the Red Cross in times of disaster. Let's hear from the American Red Cross as to what their role has been and what they think their role should be in the future.

STATEMENT OF WILLIAM H. RENO, SENIOR VICE PRESIDENT, NATIONAL OPERATIONS, AMERICAN RED CROSS

Mr. RENO. Thank you, Madam Chair and members of the committee.

My name is William H. Reno. I am senior vice president for national operations for the American Red Cross. Mrs. Elizabeth Dole, the President of the Red Cross, asked me to express her appreciation to you, Senator Mikulski, for your outstanding leadership in calling attention to the needs of disaster victims and the role of the Federal Government in meeting those needs.

As my testimony will be brief, I would like to request that I be allowed to provide extended remarks for the subcommittee's record.

Senator MIKULSKI. Absolutely.

Mr. RENO. The American Red Cross is, as you know, the only nongovernmental disaster relief organization chartered by Congress to provide relief to victims of major disasters. It is also the only organization, public or private, that maintains a relief capability specifically for victims of disasters throughout the country 24 hours a day, 365 days a year.

The Red Cross shares the concerns of this subcommittee members that services needed by disaster victims be available and effectively delivered to alleviate their suffering. We believe the Federal Government has an important role in assisting State and local governments to prepare for and to respond to major disasters.

We also believe that in the case of catastrophic disasters the Federal Government must take the lead role in disaster relief.

Finally, we believe that the Federal response plan that was developed to provide a framework for action by many Federal agencies and the Red Cross is basically sound as a plan, but I will make recommendations about how to improve its implementation.

Before addressing these issues, however, I would like to provide some background on the American Red Cross role in disaster relief. For the 10-year period from 1983 to 1992, the Red Cross spent

nearly \$1.1 billion for disaster relief in the United States and its territories. In 1992, we spent over \$187 million responding to over 58,000 separate disasters.

While the large disasters make headlines, the vast majority of disaster incidents in this country are virtually invisible to most Americans. While the attention of the Nation was focused on relief efforts in southern Florida and Louisiana after Hurricane Andrew, the Red Cross was also responding to the needs of victims of Hurricane Iniki in Hawaii, Typhoons Omar and Brian in Guam, fires in Calaveras and Shasta Counties in California, flooding in Jacksonville, FL, tornadoes in Waushara County, WI, and Tampa, FL, and scores of unnamed local disasters.

Most disasters are relatively small, usually home fires. I realize that this hearing is focused on major disasters. However, the small, local disasters are an important part of this discussion for three reasons.

First, to the victims, they are major disasters.

Second, response to small disasters is the foundation for all disaster relief. It is the ongoing day-to-day response to disasters in communities across America that develops the human skills and organizational capacity needed when a major disaster occurs.

Third, in major disasters, the local community and its Red Cross chapter must be self-sufficient for some period of time before State and national resources become available. Responses to small, local disasters, although important in their own right, are essential training exercises for us to become self-sufficient and for the communities to do likewise, at least for a brief time, after a major disaster.

The Federal response plan was developed as a blueprint for Federal response to catastrophic disasters. The American Red Cross is the lead agency for the component of the plan known as emergency support function [ESF-6].

The basic components of mass care under ESF-6—sheltering, feeding, first aid, welfare inquiry, and distribution of bulk supplies—are areas of responsibility for which the Red Cross has great experience and expertise. When the Federal response plan is activated, a single Federal authority and a single line of authority is required. Under ESF-6, the Red Cross would exercise direct authority in coordinating Federal activities, as well as its more traditional role of coordinating other nonprofit organizations. We have memoranda of understanding with many nonprofits in order to assure that at the time of a disaster incident, everyone will understand their roles and responsibilities.

AMERICAN RED CROSS' RECOMMENDATIONS

The American Red Cross has three recommendations to make with regard to the Federal role in disaster relief. These are, first, establish a capacity requirement and responsibility to undertake rapid damage assessments for the purpose of advising whether to invoke a Presidential declaration of a major disaster and/or to activate the Federal response plan.

Second, determine and specify in detail the conditions for which the Federal response plan will be activated and the expectations of all participants.

Third, increase Federal resources for State and local disaster planning, preparedness, and coordination.

We believe, Madam Chair, that these three recommendations will improve the Federal response to major and catastrophic disasters. They will also make the Federal response plan a more effective tool for managing the response to the most serious disasters we have.

I would be very pleased to answer any of your questions.

Senator MIKULSKI. Thank you very much, Mr. Reno.

[The statement follows:]

STATEMENT OF WILLIAM H. RENO

Good morning Madam Chairwoman and members of the subcommittee. My name is William H. Reno. I am Senior Vice President for National Operations for the American Red Cross. Mrs. Elizabeth Dole, the President of the Red Cross, asked me to represent her and to thank you for convening this important hearing and including the Red Cross in it. She is especially appreciative, Senator Mikulski, of your outstanding leadership in calling attention to the needs of disaster victims and the role of the federal government in meeting those needs. Effective disaster response requires the coordinated efforts of individuals and families, private organizations, local and state governments, and the federal government. It requires coordinated planning, preparedness and capacity building long before the disaster incident. And it requires a mutual understanding by everyone involved of each other's roles and responsibilities.

As my testimony will be brief, I would like to request that I be allowed to provide extended remarks for the subcommittee's record.

BACKGROUND

The American Red Cross is, as you may know, a unique private, nonprofit organization with humanitarian mission to provide relief to victims of disasters and help people prevent, prepare for, and respond to emergencies. It is the only non-governmental disaster relief organization chartered by Congress to provide relief to victims of major disasters. It is also the only organization—public or private—that maintains a relief capacity specifically for victims of disaster, throughout the country, 24 hours a day, 365 days a year. This is a capacity that we exercise every day. When a major disaster strikes, the Red Cross can mobilize quickly large numbers of trained and experienced disaster relief workers.

The Red Cross shares the concerns of subcommittee members that services needed by disaster victims be available and effectively delivered to alleviate their suffering. We believe the federal government has an important role in assisting state and local governments to prepare for and respond to major disasters. We also believe that, in the case of catastrophic disasters and in other unique situations, the federal government must take the lead role in disaster relief. Finally, we believe the Federal Response Plan that was developed to provide a framework for action by many federal agencies and the Red Cross is basically sound. However, in its current form, the Federal Response Plan is not perfect. With some changes in how it is implemented, that I will discuss in detail, we feel the Federal Response Plan will be a more useful tool for meeting the relief needs of victims of major and catastrophic disasters.

Before addressing these issues, however, I would like to provide some background on the American Red Cross and our role in disaster relief. The American Red Cross is a human service organization that provides a variety of biomedical, instructional and social services, most of which are related to disasters and other emergencies. The Red Cross is governed by an all-volunteer Board of Governors presided over by the Chairman of the American Red Cross. The Chairman is appointed by the President of the United States, as are seven other members of the Board.

Most of the services delivered by the Red Cross are delivered locally by the approximately 1500 active Red Cross chapters such as the Bi-State Chapter in St. Louis, Missouri; the 48 blood service regions such as the Greater Chesapeake and Potomac Region in Baltimore, Maryland, and the 294 stations on military installations worldwide, including Fort Dix, New Jersey, Fort Sill, Oklahoma, and Fort Hood, Texas. Red Cross chapters were recently organized on a statewide basis under the leadership of a state council that is responsible for assuring a high level of disaster relief capacity throughout the state and for managing disaster relief oper-

ations in the state that are beyond the capacity of the local chapter. The national headquarters of the Red Cross, located in Washington, DC, is responsible for maintaining national disaster response performance standards, for managing a national system for assuring that human and material resources are available wherever a disaster occurs, and for directing disaster relief operations that are beyond the capacity of Red Cross chapters or state councils. This combination of local, state and national capacity enables the Red Cross to respond quickly and effectively wherever it is needed.

The American Red Cross was founded in 1881. It was chartered by the United States Congress in 1900 and rechartered in 1905. The 1905 charter from Congress requires the Red Cross: To continue and carry on a system of national and international relief in time of peace and apply the same in mitigating the sufferings caused by pestilence, famine, fire, floods, and other great national calamities, and to devise and carry on measures for preventing the same.

For the ten year period from 1983 to 1992, the Red Cross spent nearly \$1.1 billion for disaster relief in the United States and its territories. In 1992, the Red Cross spent over \$187 million responding to—and helping victims recover from—over 58,000 separate disasters. While the large disasters make headlines, the vast majority of the disaster incidents in this country are virtually invisible to most Americans. Our experience last August illustrates this point very clearly. While the attention of the nation was focused on the relief efforts in southern Florida and Louisiana after Hurricane Andrew, the Red Cross was also responding to the needs of victims of Hurricane Iniki in Hawaii; Typhoons Omar and Brian in Guam; fires in Calaveras and Shasta Counties, California; flooding in Jacksonville, Florida; tornadoes in Waushara County, Wisconsin and Tampa, Florida; and scores of unnamed local disasters.

It is significant that, in 1992, only 23 Red Cross disaster operations—of the 58,000 total—required more than \$250,000 in relief expenditures. The remainder were relatively small, local disasters, most of them—over 55,000—were home fires. I realize that this hearing is focused on major disasters and the ability of the federal government to respond to them. However, the smaller, local disasters are an important part of this discussion for three reasons. First, the victims of a single-family home or apartment fire, or a power outage emergency, or a neighborhood evacuation caused by a hazardous material spill suffer no less because they are not part of a large group of victims. Their lives are disrupted, often shattered, just as are the lives of the many victims of a devastating hurricane.

Second, the Red Cross response to small local disasters is the foundation for its entire disaster relief program. It is the ongoing, day-to-day response to disasters in communities across America that develops the human skills and organizational capacity needed when a major disaster occurs. It is the planning, preparedness, and stockpiling of supplies for disasters of all sizes that assures that the Red Cross will be ready for a major disaster.

Third, in any major disaster, the local community and its Red Cross chapter must be self-sufficient for some period of time before state and national resources become available. At the extreme end of the spectrum, we tell our chapters in Samoa, Guam and other remote islands of the Pacific—that they must be self-sufficient for 72 hours after a major storm. The state emergency management authorities in California expect local communities and local Red Cross chapters to be self-sufficient for 72 hours after a catastrophic earthquake. For most disasters, the time period for local self-sufficiency will be much less—but it cannot be eliminated. Again, responses to small local disasters, although important in their own right, are essential training exercises for citizens, Red Cross chapters, other private organizations, and local governments to become self-sufficient, at least for a brief time, after a major disaster.

The Red Cross disaster relief system is built on the principle and the local organization of neighbors helping neighbors. Over 1500 local Red Cross chapters provide the base for a nationwide disaster planning and response capacity. When a major disaster strikes a community, the Red Cross will respond, first with the resources of the local or another nearby chapter and then, with additional resources from across the nation.

DISASTER SERVICES REVITALIZATION

In 1990, after a thorough evaluation of our response to Hurricane Hugo and the Loma Prieta Earthquake, the Red Cross began a comprehensive program to improve the quality of our service delivery and to increase our response capacity. These changes—known as Disaster Services Revitalization—were begun in 1991 and already have resulted in:

- A national Disaster Operations Center staffed around the clock, gathering information from disasters nationwide and directing coordinated responses from Red Cross units in affected areas;
 - Tripling the number of trained paid and volunteer staff available for disaster assignment nationwide from 3,200 in 1989 to 9,000 in December 1992;
 - Doubling the number of national disaster specialists assigned to high hazard locations in the United States from 10 to 21.
 - 12 new disaster planning staff to improve our planning and preparedness capacity in high hazard locations in the United States and its territories;
 - An increase in the number of Emergency Response Vehicles and improved placement throughout the country;
 - A streamlined casework procedure to increase the speed with which victims can receive Red Cross disaster assistance; and
 - A recruiting effort to increase the number of people from diverse racial and ethnic backgrounds in Red Cross disaster relief work.
- Other changes that are scheduled:
- A disaster training college with an intensive curriculum for training paid and volunteer disaster staff from throughout the country;
 - Statewide response plans to assure that the Red Cross is able to respond within two hours of notification of a disaster;
 - Strengthened relationships with other voluntary organizations and governmental agencies active in disaster relief;
 - Annual nationwide readiness exercises to test Red Cross systems and plans for major and catastrophic disasters; and
 - More emergency response vehicles, improved communications systems to include satellite communications, prepositioning of material, and improvements in automation.

FEDERAL RESPONSE PLAN

A major or catastrophic disaster that overwhelms the capacity of the state and local governments to respond requires a coordinated effort of local, state and federal governments and voluntary organizations to provide the necessary assistance. We see leadership for this coordinated response as a federal government responsibility. The specific details of the federal responsibility will vary, based on the scope of the disaster and the availability of local and state resources.

The Federal Response Plan was developed as a blueprint for federal response to catastrophic disasters. A catastrophic disaster—to distinguish it from other major disasters—is one in which the physical and/or social infrastructure of a community is so extensively damaged over a wide area so that it cannot be effectively used to sustain response activities for recovery. For example, Hurricane Andrew destroyed so much housing over such a large area that the usual response—short-term shelter, replacement bedding and appliances, clean up kits, and minor repairs—were not enough to assure recovery.

The Federal Response Plan provides, when it is activated, a single authority for disaster response and a framework for the coordinated efforts of many federal agencies and the American Red Cross. The Plan has never been fully tested because it has not yet been fully activated. However, sections of the Plan have been activated selectively for several disasters, including Hurricane Andrew.

The American Red Cross is the lead agency for the component of the Plan known as Emergency Support Function or ESF 6. ESF 6 deals with Mass Care and its focus is: . . . to coordinate efforts to provide sheltering, feeding and emergency first aid following a catastrophic earthquake, significant natural disaster, or other event requiring Federal response assistance; to operate a disaster welfare information system to collect and receive and report information about the status of victims and assist with family reunification within the disaster area; and to coordinate bulk distribution of emergency relief supplies to disaster victims following a disaster.

The basic components of Mass Care under ESF 6—sheltering, feeding, first aid, welfare inquiry, and distribution of bulk supplies—are areas of responsibility for which the Red Cross has great experience and expertise. When the Federal Response Plan is activated, a single federal authority and a single line of authority for each of the Emergency Support Functions, including ESF 6, is required. Under ESF 6, the Red Cross would exercise some direct authority in coordinating federal agencies as well as its more traditional role of coordinating other nonprofit relief organizations. In practice, our role under ESF 6 would not be much different from our role in any major disaster. The Red Cross has signed Memoranda of Understanding with many other non-profit organizations in order to assure that, at the time of a disaster incident, everyone will understand their roles and responsibilities.

The needs of victims of a major disaster are so great that every organization with something to contribute is needed. In providing relief to the victims of Hurricane Andrew, the Red Cross worked in close coordination and shared its resources with many non-profit organizations. The important point is that the Red Cross depends on other non-profit organizations during a disaster operation and provides the coordination necessary to assure that victims are well-served.

RECOMMENDATIONS

The American Red Cross has several recommendations to make with regard to the federal role in disaster relief. We believe the Federal Response Plan is fundamentally sound and the Red Cross has no significant criticism of it—as a plan. Our concerns are with its implementation. We recommend improvements in the area of: damage assessment, activation of the Federal Response Plan, and local and State planning.

Our specific recommendations are:

—Establish a capacity, requirement and responsibility to undertake rapid damage assessment for the purpose of advising whether to invoke a Presidential declaration of a major disaster and/or activate the Federal Response Plan.

Many of the problems associated with Hurricane Andrew resulted from the, for a time, unrealized scale of the disaster. This was a problem of the scope, accuracy and timeliness of damage assessment.

Many organizations conduct damage assessments at various points in their disaster response. For example, the American Red Cross routinely conducts damage assessments for major disasters in order to properly staff its relief operation and to estimate disaster relief costs. Our principal concern is with damage to housing and utilities in order to determine the number of people in need of shelter and food. Federal, state, and local governments have different damage assessment needs, which include information about damage to roads, businesses, and government property. Even with the mutual sharing of information by several organizations, multiple assessments conducted at different times for a variety of purposes do not result in a timely and accurate assessment on which the federal government can base decisions about a Presidential declaration or activation of the Federal Response Plan.

Damage assessment is a part of the Federal Response Plan. In addition, the federal government should develop the capacity to assess (and in some cases, to project) damage for all major disasters and to provide information to the public, to federal, state and local officials, and to the Red Cross. Accurate, timely information about the scope (or the projected scope) of a disaster will allow all involved to meet their responsibilities more effectively. The federal damage assessment capacity should include all available information and data collection technology related to population, weather projections, and hazard analysis. Enhanced damage assessment capacity will have the secondary benefit of improving disaster planning, preparedness and prepositioning of relief supplies.

—Determine and specify in detail the conditions for which the Federal Response Plan will be activated and the expectations of all Plan participants.

For many major disasters, lead responsibility can be handled by state emergency management authorities. A Presidential disaster declaration does not, by itself, mean that federal leadership is required for every aspect of a relief operation. However, when a decision is made that federal leadership of the disaster response is required, the Federal Response Plan should be activated. Unfortunately, the experience of the Red Cross has been that there are not well-defined and widely understood criteria for determining when the Federal Response Plan should be invoked. It is possible, under current procedures, to activate some of the Emergency Service Functions in the Plan without activating the entire plan. This further confuses the meaning of the Plan and the expectations of its participants.

It is also not clear how financial responsibility for disaster relief may change when the Plan is activated. As the only nongovernmental participant in the Federal Response Plan, the issue of reimbursement has a unique importance to the Red Cross. The Plan clearly includes reimbursement for all participating agencies, including the Red Cross. However, this may not apply to partial activation of the Plan. The type and quality of service that we provide to disaster victims will not vary, whether or not federal reimbursement is available. We are committed to doing our job and will do it. However, it is important for us to know what financial resources are available. The Red Cross depends on contributions from citizens and corporations for support of its disaster operations. We must provide detailed information about our real financial needs if we are

to expect the continued support of the public. Confusion about the meaning of the Federal Response Plan in this regard interferes with our ability to present our case for financial support completely and accurately to the public.

—Increase federal resources for state and local disaster planning, preparedness and ordination.

Disaster planning and preparedness are essential at all levels of government. Effective planning for major and catastrophic disasters should build on the planning for small local disasters. Such planning is a responsibility of local and state governments that vary greatly in their resources and commitment to disaster preparedness.

The public expectations for disaster response are increasing. The Red Cross is working diligently to keep up with rising expectations by improving our state planning efforts, filling gaps in our response network, and reducing response time for disasters of all sizes and types. We are also paying more attention to community education so that citizens will be more self-sufficient and more helpful to their neighbors at the time of a major or catastrophic disaster.

There is an important leadership role for the public sector that should be filled by the federal government. Local and state emergency management organizations will benefit from consistent training, rigorous performance standards, and increased resources for an effective nationwide disaster response system.

We believe that these three recommendations will improve the federal response to major and catastrophic disasters. They will also make the Federal Response Plan a more effective tool for managing the response to the most serious disasters. I hope we will have an opportunity to work with you on the important task you have undertaken.

Thank you for inviting the American Red Cross to participate in this hearing. As I end my remarks, let me take this opportunity to publicly praise the thousands of volunteers who tirelessly provide relief to disaster victims in Florida, Louisiana, Hawaii, and Guam. Let me also thank the American people and business corporations for their financial and in-kind contributions to the Red Cross.

Thank you Madam Chairwoman. I will be pleased to answer any questions you or other members of the subcommittee may have.

STATEMENT OF JOSEPH F. MYERS, DIRECTOR OF EMERGENCY MANAGEMENT, NORTH CAROLINA, REPRESENTING THE NATIONAL EMERGENCY MANAGEMENT ASSOCIATION

Senator MIKULSKI. Mr. Myers, we welcome you. We know that you, too, have had firsthand experience in North Carolina, which is hurricane vulnerable, and at the same time, you are also representing the Emergency Management Association. I know you will elaborate on that. Please proceed.

Mr. MYERS. Madam Chair and members of the committee, thank you for the opportunity to appear before you today. I have a written statement that I would like to submit for the record and I will summarize my remarks for you.

I am here as a representative of the National Emergency Management Association, which I will refer to as NEMA. NEMA is an association comprised of directors of State emergency management agencies that are responsible to, and work for, our Nation's Governors in managing their respective disaster programs.

NEMA believes that the climate is right for change and we want to be part of that effort. We believe that we have the opportunities to learn from the failures and successes of the recent catastrophic disasters to revitalize FEMA and improve our State emergency management programs because these catastrophic disasters have provided emergency managers at all levels of government with a wealth of new information.

RECOMMENDATIONS

We have several recommendations; I would like to go over a few of those today.

First of all, we believe that the new FEMA management must provide strong professional leadership. A more effective partnership must be built in the future between the White House, the Congress, FEMA, and all the other organizations that would be involved in a national emergency management program. This is no job for the uninformed. This job will require a professional because we in the emergency management area cannot afford a learning curve.

No. 2, we believe that we should just go ahead and stop the debate over civil defense versus all hazards and now announce to all the States and local governments that the future policy and direction of FEMA will be that of an all-hazards program with major emphasis and focus on mitigation and response to catastrophic disasters.

It doesn't take a rocket scientist to tour the disaster areas of Andrew, Hugo, Iniki, Loma Prieta to recognize that they are seeing the variations of the same consequences and that is the displacement and isolation of people, the destruction and damage to the infrastructure, and long-term recovery and reconstruction efforts.

No. 3, we believe that the Director of FEMA should work directly with the White House through the Vice President who we think should serve as the disaster coordinator on response and recovery decisions.

Four, FEMA should be given the resources to develop right here in Washington, DC, a 24-hour communications center that would monitor all situations and receive resource requests from the States and State Governors when we have emergency situations.

IMPROVED COMMUNICATIONS

Now, we also acknowledge that all States have weaknesses, and we think the following action would greatly improve the situation. We need to establish direct dialog between FEMA and each State to identify each State's risks and weaknesses.

We need to improve the relationship between Governors and their State directors by establishing an emergency management structure accountable to the Governor in those States where this does not exist. This is so often the linchpin that fails.

We also need to establish a viable professional emergency management capability in each county of each State because that is where the action is.

In the future, we cannot afford 24 hours to pass following a catastrophic event when we just don't know what is going on. We recommend that FEMA organize and develop with the States self-contained, quick impact assessment teams to determine the magnitude of the damage and needs of the people and the destruction to the infrastructure.

We also believe that FEMA should seek new legislation that would empower FEMA to utilize all Federal resources to fulfill the State's requests and also waive the 25 percent on Stafford during response so there will never be any case where a State hesitated to call on that.

We think that we should be given the resources needed to build a strong State emergency program, a program with solid response plans and a strong hazard mitigation program.

Let me say that States are not sitting on their hands. NEMA directors are aggressively seeking to support each other through a system of mutual aid. Two of our most recent efforts are the Southern Governors Association and the Southwest Caucus where we will be pledging to support each other.

In closing, Madam Chair, given the predictions of the weather for the future and for the next decade, emergency management must become a priority business of government.

I appreciate the interest of the committee and look forward to working with you in helping meet these new changes that are needed. We will be glad to answer any questions you have.

[The statement follows:]

STATEMENT OF JOSEPH F. MYERS

It is obvious the Federal Emergency Management Agency (FEMA) today faces an emergency . . . a crisis of its own. The problems are well-known, having been discussed extensively by the public and the news media, and addressed by a number of investigative studies. What are the causes, implications and solutions to this crisis?

The Chinese language does not have an equivalent to the English word "crisis." Instead, they use a term which means danger coupled with opportunity. I believe this Chinese term for crisis is directly applicable to the circumstances currently surrounding FEMA. The situation does involve danger . . . danger that FEMA may be disabled in the process of trying to fix problems within the agency . . . and danger that FEMA may even be dismantled, thus leaving the nation without a focal point for the management of large-scale disasters. On the other hand, the membership of the National Emergency Management Association is excited that we have before us great opportunities . . . opportunities to use past failures and successes to revamp FEMA and the entire emergency management organization . . . and an opportunity to establish a cost-effective, comprehensive emergency management program that will meet the needs of our citizens and earn their confidence and that of the Congress and the Administration. Although it may be determined that some FEMA activities would be most appropriately conducted by other agencies, our nation would be best served by using these opportunities to pragmatically assess the needs of our nation's communities, examine the agency's ability to fulfill these needs, and, in that light, initiate positive improvements. These opportunities are the subject of my testimony today, for I sincerely believe that we can achieve a national emergency management system which will serve our nation . . . our communities . . . our families . . . and the future victims of disasters . . . a system which will bring pride to us all.

Recently, there has been much discussion concerning whether FEMA's program should retain its civil defense focus, or redirect to a true multi-hazard emergency management program designed and organized to deal with the consequences of disaster regardless of cause. There are those who say that a program which prepares the nation for foreign attack must be separate from one which prepares the nation for natural and technological hazards. Because the same responders and emergency management infrastructure will be utilized regardless of the hazard, NEMA believes we must focus on the consequences of disaster and implementation of a realistic horizontal and vertical functional planning process to ensure the full resources of the federal, state and local governments and the private disaster relief agencies of this country are utilized to meet future challenges.

We have an opportunity to establish an effective all-hazards emergency management system and organization to prepare for natural and technological hazards as well as national security threats. The "lessons learned" from recent major disasters have provided emergency managers at all levels of government with a wealth of information not previously comprehended. Incorporation of the predictable consequence information into our planning activities, including infrastructure destruction (transportation, energy distribution, communications systems and other vital services facilities), loss of housing, and cultural differences within our society (language barriers, ethnic food requirements, and awareness of cultural ways and traditions) will allow emergency planners to anticipate resource requirements and establish contingencies to meet the demands during the planning phase, rather than in the throes of the actual response.

Action: The Federal Emergency Management Agency should:

- Formally adopt, sanction, and encourage implementation of an integrated, comprehensive, all-hazards and consequence management policy;
- Announce this policy to all federal, state and local disaster agencies, and to the public;
- Organize and operate the agency in accordance with this concept, including the assignment of skilled FEMA personnel, as warranted, to each of the states and territories to: (a) support the interpretation and implementation of this policy; (b) provide federal coordination at the onset of disasters; (c) provide insight and guidance in the enhancement of the state emergency management program; and, (d) assist in the development of minimum functional response capabilities.
- Provide for the unique cultural differences of communities by: (a) securing sufficient FEMA disaster personnel trained in foreign languages and/or dialects; (b) translating all instructional materials into these languages; and, (c) ensure that response and recovery plans are sensitive to cultural differences.
- Request the revision of enabling legislation to support optimum implementation of this philosophy.

We have an opportunity to establish an emergency management program, based upon the foundation of mitigation, whose primary mission is to do everything reasonably possible to eliminate or reduce the impact of hazards on communities. By establishing a coalition among the levels of government and the private sector, and by actively focusing on mitigation now, through structural and non-structural methods, we can: save lives; protect property; significantly reduce resource demands and disaster recovery costs in future disasters; and, contribute to the economic well-being of our nation.

Action: FEMA must formally establish and announce to the emergency management community and to the public that mitigation is the foundation of the nation's emergency management program, and FEMA must ensure that mitigation is fundamental in all of the agency's programs, procedures, and activities. State and local governments should be strongly encouraged to adopt this philosophy as well.

We have an opportunity to develop a new partnership in providing emergency management services. The White House, Congress, FEMA, state and local emergency management agencies, and private organizations, must establish a program wherein we are "partners" in planning and executing the nation's emergency management program. By incorporating the views of all parties, response and recovery activities can be coordinated through planning and exercises, thus building cooperative relationships.

Action: The new FEMA management must recognize the need for innovative national leadership, and develop and implement its programs, policies, and procedures in cooperation with all involved parties, including federal agencies, state and local emergency management agencies, and private organizations involved in disaster mitigation, preparedness, response, and recovery.

Out of this partnership, we have an opportunity to provide a strong, immediate, and unified response to future catastrophic disasters. If properly organized, there exists among these entities the knowledge, manpower, equipment, materials, and commitment to effectively respond to the demands of future catastrophic disasters anywhere in the country.

Action: FEMA, in conjunction with the entire emergency management community and the private sector, should develop a network and system to identify, inventory, organize, and utilize the specialized resources across the nation which are required to meet the demands of future catastrophic disasters.

We have an opportunity to clarify the roles and responsibilities of the Federal Emergency Management Agency which have been repeated topics of controversy. This confusion and debate over FEMA's role in disaster response, which has historically been the financial administration of disaster assistance programs, has led to the virtual destruction of morale within the agency. FEMA is not adequately staffed, organized, trained, or equipped to provide effective, timely, and adequate support during the response phase. While the agency has served as the focal point in the development of the Federal Response Plan, and provided training and support for various initial response activities, FEMA does not have a formal, legally-mandated role in disaster response.

Action: Because there is the need for a central emergency coordinating agency within the federal government, duly-empowered to utilize the resources of the federal government to meet the needs of disaster victims, the new FEMA management should:

- Focus on the issue of federal response to a disaster, in conjunction with state emergency management directors;

- Develop a 24-hour communications center located in Washington, DC. This central center should be capable of monitoring emergency situations and receiving requests for assistance from the states;
- Develop a self-contained capability within FEMA to respond rapidly to disasters to assist state and local governments in assessing the impact of the disaster and anticipating resource requirements; and,
- Seek legislation empowering FEMA to utilize federal resources to fulfill these requirements and to meet the public's expectations.

We have an opportunity to correct a problem which now inhibits state and local governments from requesting federal assistance during the response phase. The Stafford Act authorizes FEMA to pay 75 percent of the costs of specified response and recovery services provided by the federal government after a Presidential declaration of a "Major Disaster". The Act also permits the President to waive the remaining 25 percent state and local contribution associated with the Public Assistance Program. Because we are initially expected to pay this portion, which may be significant depending on the magnitude and location of the resources requested, there is generally a hesitation to use these services prior to conducting budget analyses. Because finances should not delay actions to protect lives and property during the initial throes of a disaster, a method must be found to alleviate this problem.

Action: The Stafford Act should be revised to eliminate the requirement for a 25 percent state and local contribution during the response phase. In the interim, we recommend the President establish a policy that, until the Stafford Act is revised, this 25 percent contribution will be waived for a minimum of the first 72 hours after a disaster with provisions for extending this period in catastrophic or unusual circumstances.

We have an opportunity to demonstrate that FEMA deserves strong support, cooperation, and coordination from the White House and the Congress during a disaster situation. Recently, FEMA's authority was superseded in several situations by other federal agencies that lacked its experience in crisis management. These actions indicate the lack of confidence held by the White House and other parties in the efficacy of FEMA.

Action: A strong, cooperative relationship should be established between FEMA management and the White House. Specifically, we recommend the Vice President of the United States be assigned as White House Coordinator who will work with the Director of FEMA in making decisions necessary for responding to and recovering from catastrophic events.

These are just a few of the opportunities we have in considering the future of the Federal Emergency Management Agency. The members of the National Emergency Management Association strongly believe our citizens cannot afford the risks associated with dismantling FEMA. We should, however, use these and other opportunities to establish an integrated, comprehensive, all-hazards, emergency management program which will ultimately minimize deaths, injuries, human suffering, property damage, and economic losses from all disasters.

Thank you. I will be happy to address any questions you may have.

Senator MIKULSKI. I would like to thank each and every member of this panel for their excellent testimony and your specific recommendations.

I know that each one of my colleagues will have a series of questions. I will impose upon myself the same time limits as upon others.

Joe, I am really going to focus on you and, if I have time, ask questions of Mr. Muxo of Florida, and then Mr. Reno of the American Red Cross.

REGIONAL RISK-BASED STRATEGY

First, you heard my comments that I believe in a regional-based strategy and the doctrine of flexible response. Having said that, I am going to ask you questions about risk-based strategies on a regional basis and what you think about this. We all know we need to do better planning, better identification, and a risk assessment. Instead of national approaches, we want to look at regional areas.

Here is my question. Tell me what you think of the idea of regional approaches in which you could have an identification of what risks are most likely to affect that region.

For example, Maryland would be most hurricane vulnerable, nuclear powerplants, accidents and spills on the Chesapeake Bay, oil-spills in the transportation of hazardous waste in urban areas. So, we know what we are up against. We are not going to have the kind of forest fires they might have in Montana, and we are not earthquake prone. In other areas, it would be earthquakes. In other areas, it is a hurricane or whatever is the combination.

But my question is, What do you think of developing regional strategies in which States could do multiple cooperation, the prepositioning not only of material, but an inventory of where the materials might be in other States and not only things like generators, but also people. So, when Louisiana was coping with what it had to do, there was a Governor in Arkansas, who now is President, who was all set to send in his Guard in a brotherly way and as a fellow Governor, but couldn't. But yet a regional approach and regional training so that if we have a problem at Three Mile Island, we need Pennsylvania and Delaware in this so we all would be in this together.

What do you think about, one, regional approaches based on risk; No. 2, the prepositioning not only of material, but an inventory of people who speak Spanish, the language needs of the given area, the cultural sensitivity that you talked about because not every area is going to have it? But we could have an inventory of military personnel and physicians who spoke the primary language of the most highly risk based area. What are your comments on that?

Mr. MYERS. I agree totally with you, Senator. We have the same risk in North Carolina that you outlined for Maryland, and that is true up and down the east coast.

First of all, working together on these risks, is something that we are working on now. I know in our State, we are developing a concept paper that I would be glad to provide when completed. We believe that States should help States through manpower to help form some of these quick impact teams because our risks are going to be the same to a degree.

Senator MIKULSKI. They could also do drills together.

Mr. MYERS. Exactly.

Senator MIKULSKI. While we would also have a certain national response like sending in the Marines or the Army, but still the National Guard, the firefighters that Congressman Weldon was so well-versed in—don't we need a lot more drills as well as plans? We put so much in the planning process. Then the plans don't have any real world practicality because they have never been done with drills.

I wanted to do one for an evacuation plan at Aberdeen Proving Grounds and I still have yet to be invited to an event. All they want to do is desk top. Well, what the hell. Disasters are not desk top.

Mr. MYERS. I totally agree. You play like you practice.

We had the opportunity during the Andrew situation where States helped States. We sent over 230 people from North Carolina forming one self-contained team made up of local government offi-

cials, made up of workers, people to remove debris, supported by our own National Guard and other type specialists to go in there to help out.

This could be organized to where States would help each other. They could take on specific roles of debris removal versus mass care and working with the cultural sensitivities. I believe we ought to be working on this and inventory these resources because the resources, in my opinion, are there.

Senator MIKULSKI. Let me ask one question of Florida, Ms. Loomis-Shelley. One of the things about hurricanes is science really is well-advanced, unlike earthquakes and some of the others. So, we have a pretty good idea of when a hurricane is going to hit.

EARLY DEPLOYMENT

We are talking about early deployment. Now everything is post facto. You have to wait till you are hit, wait till you are devastated, wait till a Governor says we are on our hands and knees and we are desperate, send in the military, rather than this early warning assessment, evacuation, and so on.

What went on in Florida? Could you make use of this information or what recommendations would you have, particularly in hurricane-prone areas, that would maximize our resources in order to minimize loss? Prevention.

Ms. LOOMIS-SHELLEY. Yes, ma'am; Governor Chiles did predeploy the Florida National Guard. He repositioned them prior to landfall, in fact, at least 24 hours before landfall. They were sent to Orlando. If I may, I am sure you are aware that hurricanes can change course. It was not until later on after—

Senator MIKULSKI. Hurricanes are like politics. They are very windy, high velocity. [Laughter.]

Ms. LOOMIS-SHELLEY. I would point out to you one aspect of this is that the State has to be ready to be lucky, and by that I mean if a hurricane then turns and goes back out to sea, we are very grateful that that occurred, but we have incurred significant expense in repositioning and in predeployment. We have to have the financial resources to absorb that readiness. We are undertaking changes to our own emergency management laws at this time so that readiness will be available at the State level.

Senator MIKULSKI. I am going to turn to my colleagues. Senator Mack, and then we will go to Senator Feinstein, and then to Senator Burns.

Senator MACK. Thank you, Madam Chair.

PREPLANNING NEEDS ASSESSED

If I could, I would like to start with Alex Muxo.

Alex, why don't we just engage in a dialog to try to identify in retrospect, going through those first couple of days, what were the things you needed? What didn't get to you? How does that relate to what FEMA should have been doing? What did you anticipate that you were going to get that you didn't? Let's just start with a general dialog and see.

Mr. MUXO. I think the comment was made by Senator Graham or the other Senator regarding the preplanning stages. I think that

the county and the cities and the State had an excellent preplan in effect for the disaster. However, nobody planned for a disaster of this magnitude because it had never happened before. That is evident by the fact that there were only 29 lives lost because of the hurricane. Our evacuation process worked. We had over 1,600 families in trailers in our community. We lost one person from those 1,600 trailers. So, I think that the preplanning stage worked.

The real challenge came in that we had a community that became worse than a third world country overnight. We lost all communications. We had one phone working in the city of Homestead. So, we lost all communication with the outside world. We couldn't get emergency vehicle response teams or equipment to the area because there was no way to get there.

It wasn't until the next day that people even realized that the news media covered Homestead and the devastation that had occurred.

Senator MACK. Let me stop you there for a second. That is an excellent point because I arrived on the scene probably 8 hours after the storm. We started to make our way south from Miami International Airport. If you landed in Miami coming from the north, you looked out and you saw virtually no damage. Until you started to make your way south, the damage got worse and worse and worse. Eventually we just couldn't go any further.

So, the discussion here has raised this thing about who is responsible to identify really the level of destruction. I believe, Ms. Shelley, you suggested that it not be the victims.

Ms. LOOMIS-SHELLEY. That's correct. I believe that in this situation, what we needed most critically was information not only about the extent of the damage, but how to translate that into how many and what kind of resources needed to go where. We struggled with that mightily for the first few days. When the resources got in the pipeline, that eased up considerably, but it was based on the idea that you couldn't do too much and so do everything that you could.

In retrospect, I noticed in the inspector general's report, that there is considerable duplication of resource allocation, confusion, and that causes unnecessary expense to be undertaken at a time when government cannot afford to do that.

Senator MACK. Let me hone in on this thing about the identification of the seriousness of the problem. Mr. Myers, do you have any suggestion about how that can be done differently, or are we focusing on something that is not all that significant?

Mr. MYERS. On the initial problems, what I would recommend is we need to send in a team of experts immediately right after the wind quits blowing.

Senator MACK. We in this case would be?

Mr. MYERS. We would be a team made up of Federal, State, and locals. As the Senator from Maryland mentioned, we should be trained together ahead of time and know who these people are. We should go in there and immediately look at what the people need and what has happened to the infrastructure because that so often affects the people. Then get that information out quickly and bring in those response items that are needed to feed the people and get

things going. Then we come in with a detailed damage assessment program to get into the long-term recovery.

Senator MACK. How long do you think something like that takes?

Mr. MYERS. I would think within the first 2 days to go in and get what has happened.

Senator MACK. Now, let me again hop in here. I got down to Homestead I think the second day.

I think that, Alex, you would probably react and say that is too long, but I would like to get your reaction to it.

Mr. MUXO. By the second day, we had complete chaos because by then the looting started. Our local police couldn't deal with the problem. Part of the situation was that, again, the news didn't get to the outside world of how bad it was.

I will tell you that there is cooperation between States and local governments. The city of Charleston, SC, had a 21-man unit within 18 hours, a self-contained police unit, at our doorstep ready to assist, and they stayed with us for 4 weeks. That was a godsend. If it wasn't for that, the chaos would have even been greater.

MILITARY DEPLOYMENT TO DISASTER SITE

That is where I think the military can come in. They have the manpower to deploy, whether it is landing at Homestead Air Force Base, which they couldn't have done, but they would have a way to get on site by helicopters. Somehow the assessment needs to be made within the first 24 hours or by then you have lost control.

Senator MACK. OK. Let Mr. Myers get back in here.

Mr. MYERS. What I was saying was they needed to be there immediately, right when it happened, and what I was saying is they should stay at least about 2 days to tell me what has happened. Then they are bringing in these resources.

Senator MACK. Let me follow that up a little bit more too.

Mr. MYERS. It's a wave.

Senator MACK. Those of us from Florida who have gone through this seem to respond by saying that the President ought to, in essence, be given the authority to act and go ahead and send in the necessary forces to solve the problem. Do you have any suggestions about how one triggers that? Do you wait for the 2-day assessment to take place? Because I think it was probably the third or fourth day when the military was activated. How do you go about this process of saying let's go beyond the State to put in the national resources?

Mr. MYERS. I would have it prepositioned because I don't think there is any one particular resource that can meet all the needs. We are going to have to have some military resources prepositioned. We are going to have to have our neighboring States, electrical equipment, and things that could help rebuild the infrastructure prepositioned. This storm hit on Monday.

Senator MIKULSKI. Or an inventory of where it would be. If you are prepositioned, you could lose your material unless you have an inventory that is 100 miles away that could be brought in. That is why the inventory of materials in a radius would be crucial.

Mr. MYERS. Within a total regional network.

The storm was over on Monday I believe. It had passed through Homestead. That is when the people needed to be on the ground

saying, "This is the resources we need to be moving in now." That assessment team could probably then move on out as these resources came in.

Senator MACK. This is my last question.

Mr. MYERS. Because they should be going on into Louisiana.

Senator MACK. Do you believe that a highly qualified assessment team could have gone, let's say, into south Dade on that first day and by the end of the day have a pretty good idea about whether we needed to bring in resources that we had never brought in before?

Mr. MYERS. I truly believe that, because I had a person there who called me. We had been working on this situation.

The main thing we have to look at is the electrical system and the transportation. It is obvious when you have 100,000 people homeless what the needs are going to be.

Senator MIKULSKI. Senator, you are going to hear in the next panel ideas exactly on that in terms of the assessment. One issue is that an assessment is beyond the capability of a Governor at that moment because everything has been devastated. You don't get in your car and do a windshield tour.

But we have within the reach of the U.S. Government, one, the civilian means for a NASA flyover that by satellite can give us the read on the nuclear problem I might be talking about, the issues that a Governor would face of a catastrophic situation in California. So, one would be the use of those mechanisms that we would have.

The other thing that you will hear is that within the civil defense aspects of the agency, they had an assessment of the Florida situation—but the civilian side didn't want to listen—down to how many meals they would have needed. We have the civilian defense. We have the technology and so on. So then President Bush could be on the phone with Lawton Chiles or President Clinton could be on the phone with Governor Pete Wilson saying, "Pete, we know what you have here. Let us tell you what you have and we're ready to roll" because that Governor might not know because all of his or her means have been wiped out.

You will be hearing that, and that would be a good time to really go into those questions. The appropriate trigger, not to violate federalism, and so on.

ASSESSING CIVIL DISORDERS

Senator Feinstein.

Senator FEINSTEIN. Yes; I want to complicate this discussion a little bit because we talked essentially about natural disasters, and I think you also have to take major civil disorders into consideration along the lines of the Los Angeles, south central, civil disorder, which in many respects was as serious as a megadisaster in terms of what happened.

I would like to ask quickly each of the panelists to answer this question based on now a dual scenario of initial assessment. Who does that initial assessment, and how is it done for either a major civil disorder or a natural disaster and within what period of time? Should it be FEMA? Should it be the Army? Should it be the State? Could we just go right down the panel?

Mr. RENO. Senator, you need to understand that each agency has a different assessment need. I do not, in the Red Cross, need to know about power lines, but I need to know the extent of human suffering, the amount of homeless, the number of people we know we are going to have to serve. We need to know that immediately so that we can ensure that the proper size force is put on the ground to deal with it. This is why we need to get an assessment 1 to 2 hours after the storm.

Senator FEINSTEIN. So, who would you recommend do that assessment?

Mr. RENO. I think it should be the State agency.

Senator FEINSTEIN. The emergency preparedness office.

Mr. RENO. We need to be a part of that.

I agree with Joe that there should be experts in the air very quickly, perhaps by helicopter, to include representatives of the local Red Cross so that each of us gets the initial and immediate damage assessment we need.

Senator FEINSTEIN. Thank you. Could we just go right down the panel?

Ms. LOOMIS-SHELLEY. Certainly. In the case of a major civil disorder, we believe that it is the State that should do the assessment. It is a security function. In our State the Florida Department of Law Enforcement is the oversight agency that works with local law enforcement, and that is their call as to the extent of the resources needed.

In a natural disaster, we believe that it is the team approach of the Federal Government with its available resources and the State government as well working with a local contact to make the damage assessment.

Senator FEINSTEIN. Thank you very much.

Next?

Mr. MYERS. I think that the team should be made up of the same people that would handle any emergency because the consequences are the same, the same network within the region which would be made up of Federal, State, specialists within that region. It should be done immediately, but it needs to be triggered out of this emergency communications center that is monitoring this right here in the Nation's Capital. You have to have one central coordinating agency to manage all of the different groups. It won't be just one particular agency, but you need one coordinating agency like FEMA.

Senator FEINSTEIN. Next?

Mr. MUXO. In the case of the L.A. riots, I would say that it would have to be the State in coordination with the local agency. Sometimes I think the local agencies don't want to admit defeat, and it may get to the point where it gets out of hand. But I think you need the local input, but the State at that point, when it is of that magnitude, needs to take over.

STATES' RESPONSE TO CIVIL DISORDERS

Senator FEINSTEIN. Now, the second problem is let's say you do the initial assessment. There is an institution of mutual aid where the mayor or the chief law enforcement officer can call in surrounding counties. I listened to the Chair—and I think it is an excellent

idea. There should be a mutual aid pact extended to the States, just as you have it locally, so that the mutual aid could be implemented by the States and brought in.

If I go the next step and you take the Los Angeles situation where the Governor then made a decision to call in the National Guard. The National Guard went in and didn't have ammunition. So, they had to sit and wait during what was a critical period of time.

It brings up the point again—I go back to being prepared, being skilled, having a force that is multidimensional that you can send in because over that initial period, a lot of damage was done because there wasn't an adequate response to the initial civil disorder.

So, it seems to me that if we are going to have a National Guard, the National Guard has to really be trained, be armed, be trained in civil disorder, and have a predefined role that they play when they are brought in.

On another question—well, we covered the mutual aid pact. Would you all agree that there should be not only a local mutual aid pact, but perhaps a regional State government mutual aid pact? Is there any dissent among you in that area?

Ms. LOOMIS-SHELLEY. No.

Mr. MYERS. No.

Senator FEINSTEIN. That takes care of my questions of this panel. Thank you.

Senator MIKULSKI. Senator Feinstein, I thought that was an excellent line of questioning.

Senator BURNS.

Senator BURNS. Thank you, Madam Chair.

I have sat here and listened to this whole scenario. I guess when we started to modernize ours in Yellowstone County with computers and everything else, developing the software response, trying to inventory where our vulnerabilities were, and how we would respond to them.

COST OF WAIVER TO FEDERAL GOVERNMENT

I want to ask Mr. Myers. I read your statement and your recommendations there in improving the emergency disaster response, both the Federal and the local level. I wonder, however, about the cost to the Federal Treasury whenever we start talking about waiving the 25-percent State and local contribution under the Stafford Act. Sometimes we have a hard time dealing with that whenever State and local taxing authorities do not maintain their budgets as they should and set aside a certain amount of money to deal with emergencies, and then they ask for the 25-percent waiver. I don't know how that plays in when we start making our decisions.

Mr. MYERS. In my testimony, the area I was referring to is during the response phase of Stafford, that first 72 hours or a little bit longer, when you call in resources from the Federal Government to eliminate that 25-percent factor. I was not recommending to change the entire Stafford process, waiving the entire 25 once you got into the recovery program, just that initial response phase, sir.

Senator BURNS. OK; that clears that up.

I have no other questions other than the fact that it has been suggested in the case of a catastrophic disaster such as Andrew and the ability of the Red Cross to lead mass care is quickly overwhelmed by the magnitude of the needs as the inspector general made in its report.

Mr. Reno, does the American Red Cross share that assessment that was made in his report?

Mr. RENO. No, sir; I don't think we do. The night of the disaster landfall in Florida, we had over 1,500 people on duty, 229 shelters open, 84,000 people in those shelters. The reason I commented to the Senator on the need for that very rapid initial assessment is our need in all agencies to get a handle on the extent of the problem so we can flow the right size of force in. Within 2 days, we had 2,500 people on site and 2 days later, 3,500 because we flowed the capability without having a full damage assessment, knowing only that the damage was tremendous.

Immediately after landfall, our number of shelters was reduced from 229 to 61. We had 48 shelters open in Dade County, for example, that first night. But that reduction in mass care the second day was because of the people voluntarily returning to their homes. The capability was there and we had additional mass care capability available had we needed it.

We began immediately to flow in increased capability to feed. We had, for example, at landfall augmentations not only on the east coast of Florida, but on the west coast with the expectation of damage on exit of the hurricane. We had staging areas in Orlando, Atlanta, Jackson, MS, for landfall in Louisiana.

We began flowing the first day additional emergency response vehicles and feeding capability into the Miami area. We were hampered in part from some of the problems that my colleagues at the table cited of security, access to get the feeding kitchens out to where the need was the early few days of the disaster. The feeding function of mass care was augmented importantly by other non-profit organizations such as the Salvation Army, such as the Brotherhood of the Baptist Convention, and other church groups that, in coordination with American Red Cross, established feeding capability throughout the area.

We have the capability, Senator, through this network to mass and expand the capability as we understand the requirement to be, and that is why the initial damage assessment is so critical.

Senator BURNS. I don't want to interrupt you here, but I have some more questions I would like to ask.

For the sake of time, Madam Chairman, I'm going to write you all some questions because it sounds like that whenever we come in with a voluntary unit out here, then we have a structured State unit, we have a structured county unit, and then we have Federal structures that start to run into one another, and we all couldn't get through the same intersection. We all had good intentions, but we were dying while we were trying to get through the intersection. We had no traffic cops, so to speak.

So, I just have a couple of questions along those lines in the structure of this, because I think it is very important whenever we react and lines of communications that I will be sending you just for your response.

I thank the Chairman.

Senator MIKULSKI. Senator, when you send those questions, we would like to see them because we think we could gain from your insight.

Senator BURNS. Yes.

Senator MIKULSKI. The other is also in your questions was the fact that we each represent certain highly vulnerable coastal areas and so on. The State that you represent has its own set of problems, and also the very rural, the very mountainous areas would again have their own areas. So, we would benefit from that very keenly.

I am going to exercise the prerogative of the Chair and ask a generic question that I think my colleagues would be interested in and go down the panel. This goes to the delivery of both public health services and medical services. I have not heard, in all of the testimony, this raised as an issue. This would go to both a ecodisaster like a hurricane, as well as a civil disturbance.

PUBLIC HEALTH CONCERNS

Looking at Hurricane Andrew, you had old people who were bewildered and walking around. Some had Alzheimer's. You didn't know if they were diabetic. You didn't know if they needed nitroglycerine. You had all of these problems and all of that chaos. At the same time, when all the buildings collapsed and the mobile homes were in just utter destruction, you didn't know who was there to give the tetanus shots, who was there to make sure the children had their immunization, what we would call the public health response, as well as the organization. If somebody were injured and you knew their ribs were cracked or their leg was being amputated, bang, into the hospital. But you essentially had a war-like situation in which there are the questions of how the injured's needs were being met.

I wondered, one, is there a framework for that? No. 2, is this an area that is overlooked? We find that it would be true for the eco as well as the civilian disaster.

Former Mayor Feinstein talked about her situation. During the Baltimore riots of the 1960's, I coordinated the delivery of social services in an area working under the National Guard. We were all in the same room, the private volunteer agencies, us, and then what was the beginning of an emergency medical response.

How about if we start with you, Alex, and then just go down? Is this a real issue? Is it an overlooked issue? Or is it all part of what you are saying anyway?

Senator MACK. Madam Chair, if I could just add an additional comment.

Senator MIKULSKI. Sure; I thought this might be of keen interest to you.

Senator MACK. It is an excellent point.

One of the things that we heard, as we went from shelter to shelter, was that there was dumping of patients out of nursing homes. Now, there are all kinds of reasons why that may have taken place, but the reality was that we had a huge number of elderly, very frail elderly that found themselves in the shelters without any abil-

ity to provide them the service that they needed. So, you have touched on something I think is very, very important.

Senator MIKULSKI. Alex.

Mr. MUXO. Madam Chair, I think that is a very good point. One reason why I think you haven't heard so much discussion, at least after the storm hit, in terms of the medical delivery was because that part of it did work. Within 2 to 3 days, medevac units were set up, MASH units were set up in our community in coordination with the local hospital and the doctors.

We had to evacuate the hospital after the storm. It had no power in it. It received severe damage. So, in that case, we were faced with a community that had a 150-bed hospital in the community that wasn't there.

The fire department did an excellent job. Fire rescue, along with the medevac units addressed that problem. So, I think that that part of it did seem to work.

In terms of what Senator Mack said, we did have a problem. Our police department until 1 o'clock that night was evacuating a nursing home that had been left without evacuation. The way we did it was by putting these people in buses. I can tell you it was probably one of the worst memories I have seeing our police officers carry people that didn't know where they were. There was poor planning in terms of they didn't have identification. Two weeks later, they found a patient in the middle of the State that, through the system, had moved up from one shelter to another or they had moved them and she didn't know who she was. Thanks to the efforts of the police department, they were able to identify. So, that is a very important point that needs to be addressed in terms of nursing homes.

Senator MIKULSKI. Joe.

Mr. MYERS. This problem exists whether it's an Andrew or a small situation for most States. We have a problem dealing with the special needs, and it is an area that needs to be addressed. There is a lack of resource, and I think some direction on who's in charge of taking care of these type victims. It's, again, whether it is just a small group, one nursing home from a small, little tornado or something that has happened in the State all the way to a Homestead situation.

Senator MIKULSKI. So, this is an overlooked area unless you have an emergency medical system.

Linda.

Ms. LOOMIS-SHELLEY. The Governor's commission heard extensive testimony regarding the special-needs population and the critical aspects of evacuation and shelter, the special evacuation needs and the special shelter needs. Particularly in an area of south Florida where we have extensive populations of frail elderly, we need to develop at the State level a cross-referencing, a registration process so that when we interact with these populations in other ways of helping them, that we also are aware of their needs at the time that the disaster strikes.

I would ask that the committee pay attention to the recommendations that we are making to ourselves in Florida to improve that situation.

The other issue that has not been mentioned here today, but which must be addressed is the coordination of volunteers, particularly in the area of the healing professions where a natural impulse is to go there and help anyway you can. We were very unprepared for the outpouring of assistance that we got from the medical and healing professions. They were literally setting up street-side opportunities to serve. Although we did have a formal process of the DMAT's and through the public health service, there was an informal mechanism that was working, and it was very frustrating, both to the people who were trying to help and the people who needed help. So, we need work on that.

Mr. RENO. I would agree with my colleagues, and I would particularly like to congratulate Linda and her staff and the Governor's task force in their recommendation because, Senator Mack, you're correct. We did receive people from these facilities, and they were a problem. Obviously, we didn't turn them away the first night, but we moved them as quickly as we could into adequate facilities.

I do not think, Madam Chair, that the medical function is overlooked. Like so much of the planning, it is very critical it be improved and practiced. Plans have little value unless they are tightened up and practiced.

Very interestingly, within the disaster function, getting back to the Federal response plan, we as a government and as volunteer agencies have a great opportunity each time there is a disaster to practice and improve our plans. I think that is central at the Federal, State, and local levels, the medical only being a part of that.

Senator MIKULSKI. Thank you very much, Mr. Reno. I want to, on behalf of the Senate, thank you for your testimony. We look forward to an ongoing conversation with you.

In a few weeks I will be in Florida. The National Association of Emergency Physicians is holding a conference on lessons learned from Andrew and has asked me to come down, and I hope to be able to visit with you to have an even more in-depth knowledge of it.

We thank you for this very thoughtful and very practical testimony.

This panel is now excused and we will go to our final panel representing those who we have been charged with taking a look at the response from an administrative point of view and their recommendations.

Our final panel will include: Mr. Scott Fosler, the president of the National Academy of Public Administration, who we asked to look at the FEMA administrative structure and their recommendations; Mr. Dexter Peach, the Assistant Comptroller of GAO, who we also asked to make an assessment. We welcome Ms. Deborah Hart, the Assistant Inspector General for Inspections at FEMA, who undertook, as part of her responsibility, an assessment of the FEMA response to Andrew as well. We look forward to hearing your findings and recommendations.

We would like to start first with Mr. Fosler representing those professionals who figure out what is the best way to administer public programs and welcome their independent assessment, step-

ping outside, bringing the best knowledge of a nonprofit organization and yet the hands-on experience of public administrators.

So, Mr. Fosler, we look forward to your testimony telling us what happened, lessons learned, and what you think FEMA ought to be as we get ourselves ready now for a 21st century FEMA.

PANEL NO. 2

STATEMENT OF R. SCOTT FOSLER, PRESIDENT, NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

ACCOMPANIED BY GARY WAMSLEY, PROJECT DIRECTOR

Mr. FOSLER. Thank you very much, Madam Chair. My name is Scott Fosler. I am president of the National Academy of Public Administration. I am pleased to respond to your invitation to appear at this hearing on the Federal Emergency Management Agency and Federal disaster response policy.

I respectfully request that my full prepared statement be inserted in the hearing record, and I will summarize my comments.

Senator MIKULSKI. Without objection.

Mr. FOSLER. As you know, the academy, pursuant to a congressional mandate, is conducting a comprehensive and objective study of the Federal, State, and local governments' capacities to respond promptly and effectively to major natural disasters occurring in the United States. Congress ordered the study in light of widespread criticism of how FEMA in particular and the Federal Government in general responded to Hurricane Andrew last year.

Today I am presenting our preliminary conclusions and recommendations. We will provide our report to FEMA and to your committee at the end of February.

As it now stands, FEMA is like a patient in triage. The President and Congress must decide whether to treat it or let it die. The present time and circumstances provide a unique opportunity for change. We believe that a small, independent agency could coordinate the Federal response to major natural disasters, but only under certain conditions. Absent these conditions, the President and Congress should consider dismantling FEMA and assigning its various functions either separately to other agencies or all together to one Cabinet department or major agency. Otherwise, America's frustration with the timeliness and quality of the Federal response to major natural disasters very likely will continue.

The 1978 reorganization plan that created FEMA was adopted with several goals in mind, but to date each goal has been only partially met, if at all. In essence, the institution envisioned by the 1978 plan has not yet been built.

Concerns about FEMA's record have prompted numerous calls to let the military do it or to place FEMA in the Department of Defense, and such calls are certainly understandable in light of the military's laudable performance after Andrew, but close examination reveals that we should be very cautious about such an approach. In the first place, emergency management disaster response must necessarily remain a secondary mission for the military whose primary commitment must be a warfighting capability. Second, there are very real problems stemming from the posse com-

itatus law in using the Armed Forces to maintain law and order except in the case of insurrection.

Unless the Nation is to abandon more than 2 centuries of federalism, it cannot make the Federal Government the 911 first responder. Our constitutional structure is fundamentally bottom heavy. Most emergencies and even most incidents we call disasters are met by private, voluntary groups and by local and State government. Even in catastrophic situations, there are ways to improve the Federal disaster response without altering the tradition of federalism.

The Federal response plan, if appropriately modified and tied to State and local response plans, can provide a sound basis for the initial Federal response. As it now stands, however, the plan is more of an outline than an operational plan. It needs modifications. Lessons learned from experience in previous natural disasters should be incorporated into it.

Federal/State/local relations are complex and often highly conflicted regarding emergency preparedness, response, and recovery. We believe that emergency management needs a new Federal charter, building on the Robert T. Stafford Disaster Relief and Emergency Assistance Act, to clarify State and local responsibilities and shifting the emphasis from nuclear attack preparedness to domestic emergencies and natural disasters.

RECOMMENDATIONS FOR FEMA

As for the Federal emergency management function, we make several recommendations to create a high-performance, high-reliability agency, and they boil down to several conditions that must be met. The reduction or elimination of political appointees and development of a competent, professional career staff, No. 1.

Second, access to and support of the White House when needed by means of a domestic crisis monitoring unit.

Third, development of trained joint assessment teams for making early recommendations on levels of gradated response.

Fourth, a new statutory charter centered on integrated mitigation, preparation, response, and recovery from domestic emergencies, and disasters of all types.

Fifth, enhancement of the technical competence of staff in specialized subjects who must interface with other agencies and institutions.

Sixth, subunit or stove pipe integration through a common mission, vision, and values, and rotations and common executive and employee training.

Seventh, development of functional headquarters type relationships.

Eighth, development of structure, strategy, and management systems to give agency leadership the means of directing the agency.

If after these conditions have been attempted to be made and have not, then and only then we would recommend one of two other very drastic options which would include, first, abolishing FEMA and returning its component parts to their agencies of origin or placing them elsewhere or, second, to transfer most FEMA functions intact to an existing department or agency.

Let me also note that we are examining the role that Congress plays in developing emergency management policy and Federal response to natural disasters and believe that there are significant changes that should be made in the role of Congress.

Madam Chair, this concludes my prepared statement and I would, of course, be pleased to respond to any questions.

Senator MIKULSKI. Thank you very much.

[The statement follows:]

STATEMENT OF R. SCOTT FOSLER

Madam Chair and members of the subcommittee, we are pleased to respond to your invitation to appear at this hearing on the Federal Emergency Management Agency (FEMA) and federal disaster response policy. As you know, the National Academy of Public Administration has been engaged by FEMA, pursuant to a congressional mandate, to conduct a "comprehensive and objective study of federal, state, and local governments' capacities to respond promptly and effectively to major natural disasters occurring in the United States."

The National Academy convened a project panel of nine emergency management, national defense, government organization and operations, and political affairs experts under the leadership of Philip Odeen, President and CEO of BDM International, Inc., and a former senior official in the Department of Defense familiar with national security and emergency management issues. This panel was supported by a senior project staff with backgrounds relevant to the study charter.

Given the several efforts to examine the government's performance in recent major natural disasters, the Academy concluded it could best make a unique contribution by reviewing and analyzing the entire system of governmental organizations, private and non-profit organizations, and individuals involved in responding to major disasters. Moreover, it concluded that response to natural disasters could not be examined in isolation from other emergency management functions: mitigation, preparedness, response, and recovery. In addition, the Academy felt that analysis of FEMA's roles and mission required an understanding of all the major functions performed by the agency. Comprehensive analysis also required an understanding of how FEMA's major functions related to the programs and functions of other related government agencies.

I want to emphasize that our work is not yet complete. The views I am presenting today represent the panel's preliminary conclusions and recommendations. Our final report will be provided to FEMA and to your committee at the end of February.

In your invitation letter, you asked us to address several issues on governmental responses to catastrophic disasters. I will discuss each of these issues briefly, and then offer concluding remarks on our panel's work.

IMMEDIATE FEDERAL RESPONSE TO CATASTROPHIC DISASTERS

On August 24, 1992, Hurricane Andrew made landfall in South Dade County, Florida. Initial reaction was a sense of relief—Greater Miami's most populated areas had been spared the full brunt of the storm. However, it quickly became evident that an area encompassing about 250,000 people had suffered a major disaster.

After crossing South Florida, the by-then less severe Hurricane Andrew made landfall once again, wreaking additional havoc, this time in southwestern Louisiana. Even before the storm subsided, it was clear that Andrew was the most costly natural disaster in United State's history. It also became increasingly evident that the governmental response to the disaster, particularly in South Florida, fell short. The immediate needs of the disaster victims, as well as the needs of the general public for a competent presence in the midst of such destruction were, to a large degree, unmet.

As a result of successful evacuation efforts and the compactness of the storm, the loss of life had been relatively low, but the distress and dislocation of those in the storm's path was great. Property damage alone reached record estimates of more than \$20 billion.

The response to Hurricane Andrew by federal agencies was initially uneven. However, as the full extent of Andrew's devastation became clear to state and local officials and as political and public pressure mounted, the federal government, following a request from the governor of Florida, began a massive effort to aid disaster victims. This response became fully operational five days after Andrew made landfall. Federal troops arrived, providing shelter and food and general assistance.

Our research and interviews in Florida and elsewhere indicated that most people were satisfied with the federal response—once it arrived. However, lack of information on the extent of the damage and lack of appreciation of victims' actual needs coupled with inability to communicate among levels of government and uncertainty about who would pay the costs of relief, led to unfortunate and avoidable delays in making this response.

The concern for a more timely response by the government has led to numerous calls to "let the military do it" or to place FEMA in the Department of Defense. This is certainly understandable in light of the military's laudable performance. But close examination reveals that such an approach is too simplistic. First, emergency management/disaster response must necessarily remain a secondary mission for the military. The military's primary role is to fight and prepare to fight. The Armed Forces' primary commitment therefore must be to its war-fighting capability. There is concern in the military establishment that increasing the involvement of the Armed Forces in civil matters (such as emergency management or drug interdiction) would necessarily mean increasing their involvement in politics and detracting them from their war-fighting capabilities. Second, there are very real problems, stemming from the posse comitatus law, in using the Armed Forces for purposes of maintaining law and order except in case of an insurrection. The role of the police officer and that of the soldier are so different as to be almost mutually exclusive.

Moreover, unless the nation is to abandon more than two hundred years of federalism, it cannot make the federal government the "911" first responder. Our constitutional structure assigns most direct aspects of governing to state and local government under their broad police powers. Most of what we call disasters are met by private, voluntary groups and by local and state government. However, our panel believes that there are ways in which the federal disaster response can be improved without altering the traditions of federalism.

COORDINATION OF RESPONSE

Our panel has concluded that the Federal Response Plan (FRP), if appropriately modified and tied to state and local response plans, can provide a sound basis for the initial federal response. The plan as it now stands, however, is more of an outline than an operational plan. It needs modification and incorporation of lessons learned to become an operational plan.

What would make it an operational plan? First, there should be trained joint assessment teams. These teams would go immediately to a disaster site and make quick reconnaissance and assessment of victims' needs. This reconnaissance would necessarily be supplemented by overhead photo reconnaissance provided by the National Aeronautics and Space Administration.

FEMA has developed a plan for "quick strike teams," but the plans at present involve only federal officials. Federal, state and local officials, as well as relevant military and civilian agencies need to be included in these assessment teams. These teams would train together. They would also have the capability to operate in the field under adverse conditions. They would be supported by assets enabling them to communicate with all levels of government and with the phone system.

These teams would make their recommendations to the governors and local officials and decisions regarding response would be made promptly. Only if a local or state government were incapacitated should the federal government intervene unilaterally to protect the well-being of citizens.

Second, the FRP should continue as the basis for the federal response, but it should be updated to adjust for lessons learned from the 1992 disasters. Our panel also has concluded that the FRP should become the President's response plan. This would give it added prominence among the 27 federal agencies involved.

Third, there should be a graded scale of responses depending on the severity of the disaster, including a category for catastrophes. Part of the joint assessment team's recommendations would be to determine the level of the disaster. In catastrophes, the Defense Department might well assume responsibility for mass care and feeding which is now coordinated by the American Red Cross.

MORE EFFECTIVE STATE EMERGENCY RESPONSE PLANS

For the great majority of emergencies and disasters, local government responds through a police department, fire department or ambulance service. In a country as large as the United States, it is not surprising that this capacity for emergency management has been uneven and sometimes inadequate. The same must be said for the states. The federal government has applied resources to support and strengthen local resources through the civil defense program, Fire Academy training, and flood insurance program, and the like. However, this support, coupled with

local and state financing, has not been sufficient to assure the desired capacity and consistency across the thousands of local and state jurisdictions.

Federal/state/local relations are complex and often highly conflicted regarding emergency mitigation, preparedness, response and recovery. Our panel believes a new federal charter for emergency management, building on the Stafford Act, is needed to clarify federal, state and local responsibilities and shift the emphasis from civil defense to domestic emergencies and natural disasters.

Events of the magnitude or visibility of Hurricanes Andrew and Iniki, bring emergency management problems into the national spotlight, albeit briefly. Governments are reluctant to invest resources in preparing for high-cost but low probability events, and some localities are more inclined to do so than others.

Several factors now contribute to unevenness and variable capacities at state and local levels. They include:

- Lack of clear and measurable objectives; and adequate resources, public concern and support, and official commitments;
- Local sensitivity surrounding building code enforcement and land-use planning—both essential in planning and implementing mitigation measures, and prominent in response and recovery efforts;
- Fragmented decision-making and strained intergovernmental relations;
- Concerns about inconsistency of federal support and involvement (e.g., for civil defense, natural disasters, seismic safety, wetlands management, etc.); and
- Lack of knowledge and competence in emergency management.

Even if the federal response role in catastrophic disasters is strengthened, the need for increasing state and local capacity remains. The main thrust of that effort, however, should be to build capacity and consistency, not increase controls. Means of doing this include:

- Setting clear goals and objectives.
- Setting performance standards.
- Monitoring state emergency management plans.
- Evaluating state plans and efforts to help local governments create compatible plans and capabilities.
- Making grants conditional on effective state performance.

To assure that state plans will be compatible with the FRP in both their design and implementation, the federal government needs to improve training and education at its Emergency Management Institute. FEMA should explore contracting with colleges and universities to offer training at all levels.

FEMA also needs to work with the relevant associations and public interest groups, such as the National Governors' Association and the National Emergency Management Association, to encourage states to work out agreements of mutual cooperation and to build needed emergency management capacities.

FEMA'S MISSION AND ORGANIZATION

The 1978 reorganization plan creating FEMA was designed to make a single agency and a single official accountable for all federal emergency preparedness, mitigation, and response and recovery activities, and to create a single point of contact for state and local governments. There has been some progress in this direction, particularly with the development and implementation of the FRP. There are still numerous federal agencies involved in responding to disasters, not all of whom can be coordinated by FEMA as presently constituted. In the early stages of the response to Andrew, the White House sent in federal troops and designated as disaster czar Secretary Card, who wielded more clout than FEMA typically can. These actions were needed under the circumstances, but meant that FEMA took a back seat instead of being the lead federal agency to which state and local officials could turn.

Another goal of the reorganization plan was to enhance the dual use of emergency preparedness and response resources at all levels of government. The panel believes progress has been made on this front, but a changing world has made reliance on a national defense underpinning for federal support of, and funding allocations to, state and local emergency management increasingly doubtful. Still, the Federal Emergency Management Agency management justifiably clings to this underpinning because of concern about program vulnerability in the domestic arena in both the White House and in Congress.

A third goal was to bring about the integration of the functions of emergency management—mitigation, preparation, response, and recovery. As one official involved in the reorganization explains, the original vision of FEMA pictured agencies such as the Fire Administration and National Preparedness relating at the margins

to achieve a synergistic effect in pursuit of a comprehensive approach to emergency management.

Such integration would improve the cost effectiveness of spending for hazard mitigation, preparedness planning, relief operations and recovery assistance. Related to this was another goal: providing greater visibility and coherence for preparedness functions. Progress has been made since FEMA was established, particularly in the flood and fire mitigation arenas, since FEMA was established. However, the lion's share of political and administrative attention and the large-scale funding has gone to either a build-up of civil defense and continuity of government functions in the 1980's or paying for catastrophic disasters in the 1990's.

FEMA has not had the stable, effective leadership or political clout to bring about the hoped for integration of functions and enhancement of mitigation and preparedness, especially for natural disasters. Now FEMA finds itself in uncharted waters as agency officials cope with the complexities of responding to the aftermath of a major civil disturbance in Los Angeles and flooding caused by a tunnel collapse under the streets of Chicago.

A fourth goal was to achieve significant economies through combining duplicate regional structures and redundant management systems. Again, there appears to have been little progress in melding together program elements from the agencies brought together to make up FEMA. Moreover, several other departments and agencies continue to operate their own programs for disaster response and recovery. These include the Small Business Administration, the Corps of Engineers, the Army, and the Farmers Home Administration. In addition, other departments and agencies continue to have their own emergency authorities, including the Corps of Engineers, Department of Justice, and the EPA.

To sum up, few of the goals envisioned by the 1978 reorganization plan have become reality. FEMA as an institution has not yet been built.

The panel strongly believes that FEMA or any successor should be built into a professional, depoliticized organization capable of coordinating federal, state, and local responses to disasters and meeting the needs of disaster victims. There is no Republican or Democratic way to perform emergency management.

Our panel will be making several recommendations designed to create a high-performance, high-reliability agency and otherwise strengthen the federal emergency management function. They boil down to several essential conditions to reach the goal. They are:

- Reduction or elimination of political appointees and development of a competent, professional career staff headed by a career executive director.
- Access to and support of the President when needed through the creation of a Domestic Crisis Monitoring Unit in the White House.
- A new statutory charter centered on integrated mitigation, preparation, response, and recovery from emergencies and disasters of all types.
- Integration of FEMA's subunits into a cohesive institution through the development of a common mission, vision and values, and rotations and development of career executives, and the development of effective management systems.
- Development of functional headquarters-field relationships.
- Development of structure, strategy and management systems to give agency leadership the means of directing the agency.

Additional funding in the near term may be required to meet these conditions, but our panel believes that the result will be improved efficiency and program effectiveness that, in the long run, would reduce costs.

If after a reasonable period, significant progress towards the above essential conditions has not been made, the President should consider and take action on two more drastic options. Because changes in law would be required (absent enactment of new reorganization authority for the President), Congress also would have to act.

Option one: Break up FEMA

FEMA could be abolished and its component parts returned to their agencies of origin or placed elsewhere. For example, disaster assistance could be returned to HUD, and civil defense planning to DOD. A small office in the Executive Office of the President would be needed to perform the coordination function under the FRP. This, however, was the situation that led to the creation of FEMA in the first place. The panel sees this as a useful option only if no other is available, as it would simply substitute one set of problems for another.

Option two: Transfer most functions intact to an existing department

The second, preferred option if FEMA can not be made viable as an agency would be to transfer most FEMA functions intact to an existing department or agency, such as Commerce, HUD or EPA. No other department or agency provides an ideal

home for the emergency management function and all have other priorities and problems. The panel reiterates that this solution, while better than the breakup of FEMA, would substitute one set of problems for another.

The panel does not recommend that this function be transferred to DOD. In fact, many of FEMA's problems with disaster response can be traced to a preoccupation with national security emergency preparedness. The panel believes the time has come to shift the emphasis from national security emergency to domestic civil emergency management. In addition, making this function a routine part of the defense mission may further complicate larger issues of the Armed Forces' peacetime roles.

CONGRESSIONAL ROLE

Congress plays a leading role in developing policies for emergency management and the federal response to natural disasters. Jurisdiction over these functions and FEMA is so splintered, however, that no single authorizing committee has the ability or interest in examining either one in their totality. This splintered jurisdiction also reinforces fragmentation within the agency, as well as programmatic authorizations tied to specific kinds of disasters, such as earthquakes or radiological hazards. In addition, FEMA's relations with Congress are needlessly time-consuming, complex and contentious.

One side effect of this splintered jurisdiction has been a reluctance by FEMA to propose a restructuring of its authorizing statutes. Several laws apply to emergency management programs. The two most prominent are the Robert T. Stafford Disaster Relief and Emergency Assistance Act and the Federal Civil Defense Act of 1950, as amended. However, certain emergency management functions are also governed by the National Security Act of 1947 and the Defense Production Act of 1950. Agriculture and small business loan programs are authorized by their own laws under the jurisdiction of committees with little or no interest in mainline emergency management programs. The result is a hodge-podge of statutory authorizations providing sometimes conflicting and outdated guidance which, in the panel's judgment, slows and materially complicates the federal response to natural disasters.

Congress should enact a comprehensive emergency management charter by revising the Stafford Act to encompass emergencies and disasters of all types other than those administered outside the current body of laws applying to FEMA.

Congress also should designate a single committee in each House of Congress with jurisdiction over "emergency management" and the laws applying to FEMA. The Joint Committee on the Organization of Congress should give this matter priority attention.

There also is a need to shift from a preoccupation with shortcomings in the federal response, needed as that is, to support for improved management of FEMA and emergency management programs. FEMA or a successor agency needs greater funding flexibility and sustained support for an improved institutional infrastructure.

SUMMING UP

The concept behind the creation of FEMA and the federal performance in responding to catastrophic disasters has not lived up to expectations. The responsibility for that lies with both the presidency and Congress, and with both the public and its leaders.

FEMA as it now stands, is a patient in triage. Congress and the President must determine if it is to be treated or it is so ill it must be allowed to die. The panel believes it is possible for a small independent agency to coordinate the federal response to major natural disasters, but certain essential conditions must be met. If these conditions are not met, then the President and Congress should consider dismantling FEMA and assigning its functions to other agencies or transferring these functions to a Cabinet department or major independent agency, such as EPA. Without such action, America's frustration with the timeliness and quality of the federal response very likely will continue.

Changes of the magnitude needed to ensure effective responses to catastrophic natural disasters and other domestic emergencies will require strong and sustained White House and congressional leadership attention and support. Given the nation's economic and social problems and the foreign policy challenges likely to occupy the political leadership, the panel believes a galvanizing event, such as a White House or governor's conference on emergency management, a summit meeting between the President and the governors, or a national commission chartered by Congress or appointed by the President, may be needed to reach a new compact between the states and the federal government on how the nation will prepare for and respond of emergencies and who will pay for it.

Madam Chair, this concludes my prepared statement. We would be pleased to respond to any questions.

STATEMENT OF HON. J. DEXTER PEACH, ASSISTANT COMPTROLLER GENERAL, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE
ACCOMPANIED BY JUDY ENGLAND-JOSEPH, DIRECTOR, HOUSING AND COMMUNITY DEVELOPMENT ISSUES

Senator MIKULSKI. We will now turn to Mr. Dexter Peach from the Government Accounting Office.

Mr. Fosler, do you want to introduce the gentleman with you?

Mr. FOSLER. Yes; let me introduce Mr. Gary Wamsley who is the Project Director of the academy project.

Senator MIKULSKI. Thank you.

Mr. Peach?

Mr. PEACH. This is Ms. Judy England-Joseph. She is Director of Housing and Community Development Issues, and it is under her jurisdiction that our work for you was carried out in this area, Madam Chair.

Senator MIKULSKI. Well, thank you very much.

Mr. Peach, why don't you go ahead and tell us what GAO thinks?

Mr. PEACH. Madam Chair, we have a complete statement we would like to ask you to enter into the record, and I would like to proceed with a summary of that statement.

We are pleased to be here to discuss our work on how the Nation responds to disasters.

Hurricane Andrew and the experience there has led to what has been a growing dissatisfaction with the Nation's system for responding to large disasters. You and a number of other congressional leaders asked us to examine the adequacy of the Federal strategy for responding to disasters and develop solutions for improving it.

The title on my testimony today, "Recent Disasters Demonstrate the Need to Improve the Nation's Response Strategy," summarizes our testimony in one respect. There is a need for change. We have seen this need somewhat evident before in some of our earlier experiences, but it is now at this time that we need to get on with making that change and making it effective.

We found that the Federal Government's strategy for comprehensively and effectively dealing with catastrophic disasters is deficient. The strategy lacks provisions for the Federal Government to comprehensively assess damage and the corresponding needs of disaster victims and to provide them with quick, responsive assistance.

The Federal Government also does not have explicit authority to adequately prepare for a disaster when there is a warning.

Finally, State and local governments, for the most part, do not have adequate training and funding to enable them to respond to catastrophic disasters on their own.

In the case of Hurricane Andrew, the combination of these factors resulted in such shortcomings as inadequate damage assessments, inaccurate estimates of needed services, and miscommunication and confusion at all levels of government, all of which slowed the delivery of services vital to disaster victims. Hurricane Andrew also demonstrated that for large, catastrophic disas-

ters, the military has the capability to respond to the immediate needs of disaster victims in a highly effective manner.

Improving the Nation's disaster response capabilities is essential because we could well face disasters or emergencies that could affect even more people than Hurricane Andrew. We could experience stronger hurricanes—Hurricane Andrew was only a category 4. There could still be a category 5—and earthquakes, radiological or hazardous materials releases, or civil disturbances, such as the 1992 Los Angeles riots.

We make a number of recommendations that can improve the way FEMA decides whether State and local governments need help, use existing authority to provide that help, and enhance State and local preparedness, minimizing the amount of Federal assistance needed.

Madam Chair, I might say I have had the opportunity to listen to the variety of witnesses that you have had before you, and what I am impressed by so far is the consistency of some of the recommendations that are being made to you. I think you will find, as I talk about the areas we see that need improvement, that same consistency is beginning to emerge. It certainly gives you a good menu to begin to work with.

We also in our testimony discuss options for reforming the Federal organizational structure to ensure Presidential leadership when catastrophes overwhelm State and local responders. Let me briefly walk you through our major findings.

FEDERAL DISASTER RESPONSE PLANNING

Hurricane Andrew in south Florida showed that FEMA's response strategy, implemented through the Federal response plan, is inadequate for dealing with catastrophic disasters. The plan assumes that an increasing number of 12 response operations, such as food, health and medical services, transportation and communications, will be activated depending on the gravity of the disaster. Although all of the plan's 12 operations were activated for Hurricane Andrew, the response was neither immediate nor adequate. The key reasons for the plan's failures include the absence of provisions for rapid damage assessment and the lack of a provision to escalate the Federal response to the extraordinary requirements of a catastrophic disaster.

After Hurricane Andrew hit south Florida, leaving about 250,000 people homeless, State, local, and volunteer agencies fell far short of providing the required amount of lifesaving services. For example, during the first 3 days after the storm, State, local, and volunteer agencies could only provide enough daily meals to feed about 30,000 disaster victims. As a result—and as we talked to some of the victims and held focus groups there—some told us they survived by resorting to looting grocery stores, drinking potentially contaminated water, and living in makeshift dwellings to defend the remnants of their property from looters.

The lack of both a comprehensive damage assessment and the ability to translate that assessment into an overall estimate of the services needed was one of the most glaring deficiencies in response to Hurricane Andrew. Although the Federal response plan assumes that State and local governments will already have con-

ducted such assessments, there is no contingency in the event State and local government do an inadequate job, as occurred in south Florida. We believe the Federal Government already has broader authority than it is currently using to conduct its own assessments after a disaster is declared.

The absence of comprehensive damage assessments delayed needed assistance and could have been avoided if the Federal Government had an information gathering unit to guide the Federal response. Specifically, this unit could predict the impact of a disaster, assess its damage, evaluate State and local preparedness, estimate the response needs, and possibly coordinate response activities. The unit would have disaster management experts that State and local officials may not have.

In addition, Federal agencies need to mobilize resources and deploy personnel in anticipation of a catastrophe. Currently Federal agencies may fail to prepare before a disaster because of uncertainty about being reimbursed. We believe Congress should provide them with explicit legal authority to do so. I might say such authority would also be important when you talk about having a disaster response unit, such as I have discussed, in terms of allowing them to undertake activity when they can foresee a likely disaster occurring.

Finally, the Federal strategy ought to explicitly recognize that only the U.S. military has the capability to quickly provide, transport, and distribute sufficient relief to catastrophic disaster victims. FEMA currently relies on the American Red Cross to meet mass care needs under its plan. In less severe disasters, such reliance on a relief agency with a large network of volunteers may be sufficient. In fact, it largely proved sufficient in Hurricane Hugo when that occurred in Charleston. But in the case of catastrophic disasters, the Federal Government should use its expertise to gauge the damage and needs and then be proactive in advising States when the military is needed.

FEMA can also make better use of the resources it currently has available to improve its own catastrophic response capability. Given changing world circumstances, the time is right to reassess the level of resources FEMA devotes to national security issues with an eye toward shifting some of these resources into natural disaster response. FEMA's National Preparedness Directorate, whose mission entails a rapid deployment capability, has numerous resources that could be used effectively for catastrophic disaster response.

As a matter of fact, Madam Chairman—and this also gets to an area in which you made an inquiry earlier, Senator Mack—they used a modeling capability they had, adjusted it to consider the circumstances with the wind velocities of Hurricane Andrew, and came within 10 percent of what you could be expecting in terms of the number of meals needed and homeless that you had in that area. But it was done in another section of FEMA and the information not readily used in terms of developing the response to this particular storm.

So, trying to deal with the question, there is capacity and capability there, and there is a need to relook at that Agency, its mission, and look at this concept of all hazards as opposed to trying

to place emphasis in one part of the area or just one type of hazard as opposed to other hazards.

STATE AND LOCAL DISASTER PREPAREDNESS

FEMA can also enhance State and local catastrophic disaster preparedness by continuing to give State and local governments latitude to use civil defense grants to meet local needs instead of just emphasizing a nuclear threat.

Again, apropos to some of the discussion you heard earlier, we went to six States, and one of the things we asked them to do was to fill out a questionnaire for us on what they see as the major hazards they may face. We found the nuclear attack hazard way down the list or even not evident. We found many other hazards, all of which you have mentioned as ones predominating in different areas, as being things that they felt there was a need to work on.

You need to upgrade the training and exercises for responding to catastrophic disasters. Certainly we found again, as we talked to the States, they often feel those are inadequate. They don't feel their training in preparedness is up to where it needs to be.

You need to assess each State's preparedness because you do have differing circumstances in the States. Some are more prepared than others. I would say California is an example at least that has done a lot of thinking about what will happen in the case of an earthquake and trying to be prepared for that, although there still may be help that is needed from the Federal Government in that area.

OPTIONS FOR REFORM.

In addition to the specific solutions, as I said, we looked at options for reforming and improving the Federal response, and in doing so, we focused our analysis on four options and believe the choice among them comes down to one critical dimension. What is the organization that would direct the Federal response to catastrophic disasters that could demonstrably carry the authority of Presidential attention to that disaster? The presence of Presidential leadership creates a powerful, meaningful perception that the Federal Government recognizes this event as catastrophic, is in control, and is going to use every means that it has at its disposal necessary to meet the immediate mass care needs of your disaster victims.

The four organizational options we analyzed include designating a person who could represent the President and ensure that resources are brought to bear, such as a key official in the Executive Office of the President, a Cabinet Secretary, such as the Secretary of Transportation who has been designated in previous disasters, a key Department of Defense official, such as the Secretary of the Army, or the head of FEMA.

In considering these options, it is important to understand that FEMA deals with many disasters that are not catastrophic and has important responsibilities not only for response, but for preparedness and recovery. In fact, you may have on the average, let's say, 35 to 40 disasters in a year, and the potential is perhaps 1 or 2 may fit a catastrophic mode, if that many, in a particular year.

Whatever organizational structure may come out for extraordinary circumstances or catastrophic disaster, these other responsibilities are going to have to go on somewhere, in FEMA, an enhanced FEMA, or some type of successor organization.

After looking at these options and talking with experts, we did convene an expert panel with people with a variety of expertise and background in these areas. We would see, in order or preference, either placing responsibility with a designated official in the Executive Office of the President or a designated Cabinet Secretary. While either could clearly be seen as the President's representative, there was much more support among the experts whom we consulted for designating an official in the Executive Office of the President.

Because of the military's unique capabilities for responding, the Secretary of the Army is also a viable option. However, as we talked with Defense officials, they clearly showed a willingness to accept and be tasked to train and be prepared for a mission to deal with catastrophic disasters, but they would rather see in civilian hands the responsibility for making the judgment and tasking them with that mission.

Last, I would say given FEMA's recent performance, given the criticism that it has endured, there is a need to rebuild the Agency, if it is going to be viable, but at this point it would make it difficult for the head of FEMA to have the credibility necessary in order to be seen as that Presidential representative and have that imprimatur.

Any of these options we think could be put in place quickly by executive order, and then over the long term, if you looked at making some revisions to the Stafford Act or other laws, you could consider how you wanted to deal with it at that point also.

Senator MIKULSKI. Well, thank you very much, Mr. Peach, and your team at GAO, for this very thorough and rigorous review.

[The statement follows:]

STATEMENT OF GENERAL ACCOUNTING OFFICE

Madam Chair and members of the subcommittee, we appreciate the opportunity to be here today to discuss our work on how the nation responds to disasters.

Several recent catastrophes—especially Hurricane Andrew in South Florida—have led to growing dissatisfaction with the nation's system for responding to large disasters. As a result, you and a number of other congressional leaders have asked us to examine the adequacy of the federal strategy for responding to disasters and to develop solutions for improving it. Our testimony today discusses the results of our work to date.

In summary, we found that the federal government's strategy for comprehensively and effectively dealing with catastrophic disasters is deficient. The strategy lacks provisions for the federal government to comprehensively assess damage and the corresponding needs of disaster victims and to provide them with quick, responsive assistance. The federal government also does not have explicit authority to adequately prepare for a disaster when there is warning. Finally, state and local governments, for the most part, do not have adequate training and funding to enable them to respond to catastrophic disasters on their own.

In the case of Hurricane Andrew, the combination of these factors resulted in such shortcomings as inadequate damage assessments, inaccurate estimates of needed services, and miscommunication and confusion at all levels of government—all of which slowed the delivery of services vital to disaster victims. Hurricane Andrew also demonstrated that for large, catastrophic disasters, the military has the capability to respond to the immediate needs of disaster victims in a highly effective manner.

The nation may well face disasters or emergencies that could affect even more people than Hurricane Andrew. We could experience stronger hurricanes and earthquakes, radiological or hazardous material releases, terrorist and nuclear attacks, or civil disturbances such as the 1992 Los Angeles riots. Accordingly, we are making a number of recommendations to the Federal Emergency Management Agency (FEMA) aimed at improving the way the federal government (1) decides whether state and local governments need assistance, (2) uses existing authority to effectively provide assistance, and (3) enhances state and local preparedness in order to minimize the amount of federal assistance needed. We also are suggesting matters the Congress needs to consider that would give federal agencies explicit authority to prepare for and respond to catastrophic disasters. Because leadership is so important to an effective response to a catastrophic disaster, we also discuss options for improving federal leadership.

BACKGROUND, SCOPE, AND METHODOLOGY

FEMA was established in 1979 during the Carter Administration to consolidate federal emergency preparedness, mitigation, and response activities. FEMA has a number of responsibilities, including the coordination of civil defense and civil emergency planning and the coordination of federal disaster relief. The disasters and emergencies to which FEMA may respond include floods, hurricanes, earthquakes, hazardous material accidents, nuclear accidents, and biological, chemical, and nuclear attacks.

The fundamental principles that guided FEMA's creation included implementing the disaster priorities of the President; drawing, to the extent possible, on the resources and missions of existing federal, state, and local agencies; and emphasizing hazard mitigation and state and local preparedness—thereby minimizing the need for federal intervention. Consequently, FEMA's primary strategy for coping with disasters has been to (1) enhance the capability of state and local governments to respond to disasters, (2) coordinate with 26 other federal agencies that provide resources to respond to disasters, (3) give federal assistance directly to citizens recovering from disasters, (4) grant financial assistance to state and local governments, and (5) provide leadership—through grants, flood plain management, and other activities—for hazard mitigation. FEMA conducts its disaster response and civil defense activities primarily under the authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act and the Federal Civil Defense Act of 1950, as amended.

The Federal Response Plan is FEMA's blueprint for responding to all disasters and emergencies. The Plan is a cooperative agreement signed by 26 federal agencies and the American Red Cross for providing services in the event that there is a need for federal response assistance following any type of disaster or emergency. The present version of the plan—developed following dissatisfaction with the response to Hurricane Hugo in 1989—was completed in April 1992. Hurricane Andrew was the first time the plan was fully used.

The Plan outlines a functional approach to federal response and groups the types of federal assistance that may be needed under 12 categories such as food, health and medical services, transportation, and communications. For each function, one agency is charged with being the primary provider of the service, with several other agencies responsible for supporting the primary agency. For the mass care functions (such as food and shelter), the primary agency is the American Red Cross.

In order for FEMA to activate the Federal Response Plan and for a state to receive life-sustaining and other services from the federal government, the governor must obtain a presidential declaration that a major disaster exists under the Stafford Act. The Governor's request must be based on a finding that the scope of the disaster is beyond the state's ability to respond. After the President declares a disaster, FEMA supplements the efforts and resources of state and local governments and voluntary relief agencies, which are expected to be the first responders when a disaster strikes. Over the past 10 years, presidents have declared an average of about 35 disasters annually. FEMA officials stated that catastrophic disasters requiring life-sustaining services from the federal government occur, at most, 1 to 2 times a year in the United States.

We reviewed the organizational structure and disaster response activities of FEMA. We also evaluated the federal, state, local, and volunteer response to recent catastrophic disasters, focusing on Hurricane Andrew in South Florida, and consulted with a panel of experts who represented a cross section of views on disaster response. These experts included a number of former federal agency heads and other high-level officials from the Department of Defense (DOD), FEMA, and FEMA's predecessor agencies; an emergency medical program director; state emer-

gency management directors; and members of academia specializing in intergovernmental relations during disaster response.

As you requested, we focused our review on the immediate response to catastrophic disasters. Therefore, we address neither long-term recovery activities for catastrophic disasters nor any aspect of the response to less severe disasters. We define catastrophic as any disaster that overwhelms the ability of state, local, and volunteer agencies to adequately provide victims with such life-sustaining mass care services as food, shelter, and medical assistance within the first 12 to 24 hours.

HURRICANE ANDREW REVEALS INADEQUACIES IN FEDERAL RESPONSE TO CATASTROPHIC DISASTERS

Hurricane Andrew in South Florida showed that FEMA's response strategy, implemented through the Federal Response Plan, is not adequate for dealing with catastrophic disasters. The Plan is based upon the premise that an increasing number of the 12 functional response areas will be activated, depending on the gravity of the disaster. Although all of the Plan's 12 functional areas were activated for Hurricane Andrew, the response was neither immediate or adequate. The key reasons for the Plan's failure include the absence of provisions for rapid assessment of the disaster's magnitude and the lack of a specific functional responsibility to respond to the extraordinary requirements of a catastrophic disaster.

The federal response to Hurricane Hugo in 1989 highlighted the fact that the federal government may be the only entity capable of quickly providing the large amounts of life-sustaining services needed immediately after a catastrophic disaster. For example, FEMA's own internal evaluation of the lessons learned from Hugo noted that "it is quite clear that in an extraordinary or catastrophic event that overwhelms the state, the federal government may be the principal responder."¹ In addition, the report recommended that a plan be developed to address the need for a federal response to significant natural disasters.

The Federal Response Plan developed by FEMA after Hugo, however, does not have a support function that addresses the performance of damage and needs assessments, even though the Plan itself recognizes that the magnitude of damage to structures and lifelines will rapidly overwhelm the capacity of state and local governments to assess the disaster and respond effectively to basic and emergency human needs. Instead, FEMA relies on state and local governments to identify services needed from the federal government once they have determined they cannot adequately meet their own needs. In practice, their request for federal assistance must specify the type, amount, and location of the needed services. State and local governments were unable to do this because of the overwhelming nature of Hurricane Andrew, causing delays in services.

RESPONSE TO HURRICANE ANDREW DID NOT MEET NEEDS

State, local, and volunteer agencies fell far short of providing the amount of life-sustaining services needed in the immediate aftermath of Hurricane Andrew. For example, during the first 3 days after Andrew, the combined efforts of state, local, and volunteer agencies provided enough meals to feed about 30,000 disaster victims a day, although Andrew left about 250,000 people homeless and potentially in need of mass care.²

A number of disaster victims told us that the relief effort was inadequate. They said that they survived by resorting to such actions as looting grocery stores to feed their families, drinking potentially contaminated water from leaking faucets, and staving off looters by living in makeshift dwellings set up in front of their homes.

In addition, local officials, who in many cases were victims of the storm, knew that they were unable to meet their citizens' needs for life-sustaining services. However, they were having trouble communicating with one another and with the state, and were unable to request specific assistance.

FEMA regional officials told us that they knew by the second day after the disaster that the American Red Cross was unable to fulfill its mass care response role. These officials then offered to provide the state with whatever assistance it requested. However, Florida did not immediately request significant amounts of additional mass care because it had the impression that the state/local/volunteer network was doing an adequate job. For example, the state official who managed Flor-

¹"Response to Hurricane Hugo and the Loma Prieta Earthquake: Evaluation and Lessons Learned," FEMA, May 1991. Unpublished.

²Accurate statistics do not exist on the exact number of people who stayed in the immediate disaster area. American Red Cross statistics show, however, that about 84,000 residents were temporarily sheltered in the disaster area in that organization's centers alone.

ida's emergency operating center told us that the American Red Cross officials informed him that it had established feeding centers in Homestead and Florida City. In fact, Homestead and Florida City—perhaps the two hardest hit areas—did not get such help until the military set up field kitchens there 4 to 5 days after the disaster.

The American Red Cross officials with whom we talked did not agree that they fell short of meeting disaster victims' needs. While they stated that the American Red Cross met its expectations, they also said that their projection of disaster victims needs may have been low because of a lack of good information on the extent of damage.

By the second day after the disaster, FEMA headquarters officials said that they had realized that a massive amount of relief would be needed from the federal government—and that Florida was not requesting it. Concurrent with the designation of the Secretary of Transportation to oversee relief operations, the President also directed increased federal assistance, particularly from the military, to South Florida. At that point, significant amounts of relief supplies began flowing into the region.

In the long term, the nation is likely to face far greater disasters than Hurricane Andrew. Terrorist and nuclear hazards, biological disasters, and large earthquakes—larger than we have seen in this century—are all threats that government officials must take seriously. Another earthquake near Memphis, similar to the ones that occurred in the winter of 1811-12, which exceeded 8 on the Richter scale, could kill thousands of people and disrupt 60 percent of the natural gas supply to the Northeast, causing major hardships and the closure of thousands of businesses. Therefore, the federal government needs to improve the national response system by (1) improving how the government decides its help is needed, (2) improving the federal response in providing mass care to catastrophic disaster victims and (3) making better use of the resources available for responding to disasters. I would now like to discuss each of these three areas.

Improving how the Federal Government decides its help is needed

Several actions would significantly improve the nation's ability to respond to catastrophic disasters. These actions—which would be especially useful when there is some advance warning—include:

- Improving FEMA's assessments of damage and response needs.
- Developing a disaster unit with the capability to predict the impact of a disaster, assess its damage, evaluate state and local preparedness, estimate the response needs, and, possibly, coordinate response activities.
- Enacting legislation that would facilitate preparatory actions that FEMA and other federal agencies could take in anticipation of a disaster.

Improving damage and needs assessments

Conducting damage and needs assessments as soon as a disaster occurs would enable local, state, and federal agencies to know what type and how much response is needed within 12 to 24 hours. The lack of both a comprehensive damage assessment and the ability to translate that assessment into an overall estimate of the services needed was one of the most glaring deficiencies in the response to Hurricane Andrew. The Federal Response Plan has no provision for FEMA to either oversee or conduct a comprehensive damage assessment that can be used to estimate the services needed by disaster victims. Instead, it assumes that state and local governments already have conducted such surveys and will then use that information to request specific federal assistance.³

Although FEMA headquarters officials realized that massive amounts of relief would be needed from the federal government—and that Florida was not asking for the aid it needed—FEMA's Director told us that FEMA is limited by the Stafford Act to responding only to state requests for assistance. Therefore, he said, FEMA could not help the state unless it asked for assistance and specified how much it needed.

We believe that FEMA is authorized to take much more aggressive action than it took in Hurricane Andrew. For example, once the President has declared a disaster, FEMA has ample authority to conduct its own damage and needs assessment and then recommend to the state specific amounts of assistance that should be requested.

³ Currently, FEMA and officials from affected states conduct a preliminary damage assessment before the state requests a presidential disaster declaration. The information collected is used by the state as a basis for the Governor's request and by FEMA for the purpose of determining whether it will recommend to the President that the request be granted.

Establishing a Federal disaster unit

Other shortcomings that we observed in the response to Hurricane Andrew could have been eliminated if the federal government had an information-gathering disaster unit to guide the federal, state, and local response.

When responding to disasters like Hurricane Andrew, an expert unit could provide federal, state, and local officials with information to help them decide whether (1) a disaster declaration should be requested and granted, (2) the state and local governments are responding to the disaster adequately, (3) assistance requested by states is adequate to respond to the disaster, and (4) help from federal agencies is necessary. While the unit's primary focus would be gathering information to help guide the response to a disaster, the unit could also be involved in coordinating response activities.

Federal experts could even conceivably provide governors with a menu of disaster response options, each with cost considerations analyzed, to help expedite the appropriate amount of federal assistance. Resolving cost-sharing issues can eliminate a potential bottleneck in the disaster assistance process.

Cost-sharing is designed to ensure that states pay a commensurate "fair share" of the disaster costs. After states meet a per capita damage threshold, they are normally required to pay 25 percent of the costs of immediate emergency protective measures provided by the federal government, though the President has authority to increase the federal share up to 100 percent. Cost-sharing can have the unintended consequence of making states reluctant to accept needed federal assistance because that assistance comes with an unspecified—and potentially large—price tag, although we found no evidence of reluctance on the part of the state of Florida. A federal disaster unit could help expedite the cost-sharing agreement between the state and the federal government by providing both the President and the governor with better information to make rapid decisions on the need for federal assistance and the potential cost for that help.

By constantly planning and organizing federal catastrophic disaster responses, a federal disaster unit would develop far better experience and expertise than would state and local officials who infrequently face catastrophic disasters. In fact, the skilled personnel, intelligence-gathering equipment—including sophisticated sensors—and other assets needed to build an expert disaster unit already exist in various agencies in the federal government. For example, FEMA already possesses the capability to model the impact and associated life-sustaining needs resulting from varying levels of disasters occurring in different locations. However, this capability was not used for Hurricane Andrew because FEMA's disaster response strategy calls for it to rely on state-identified needs rather than to develop this information itself.

Improving other agencies' preparation

To respond more quickly, federal agencies also need to mobilize resources and deploy personnel in anticipation of a catastrophe. Federal response time could be reduced by encouraging agencies to do as much advance preparation as possible prior to a disaster declaration—and even earlier for disasters, such as hurricanes, where some warning exists. However, current law does not explicitly authorize such activities. Therefore, federal agencies may fail to undertake advance preparations because of uncertainty over whether costs incurred before a disaster declaration will ultimately be reimbursed by FEMA. For example, DOD officials told us that they take some actions to prepare for a disaster when there is warning—such as identifying quantities, locations, and transportation requirements for mass care supplies—but they run the risk of having to pay for the expenses themselves if their assistance is not needed.

IMPROVING THE FEDERAL RESPONSE IN PROVIDING MASS CARE TO CATASTROPHIC DISASTER VICTIMS

The key to successfully responding to a catastrophic disaster is rendering sufficient life-sustaining assistance, such as food, water, shelter, and medical care, and dealing with mass psychological trauma within a short period of time. With the current disaster response system's reliance on state and locally identified needs, FEMA cannot ensure a timely or adequate response. Furthermore, FEMA lacks procedures that specifically guide how the federal government will offer mass care when state, local, and volunteer efforts fall short. Only DOD has the resources and transportation to provide mass care quickly and in sufficient quantities for catastrophic disasters.

Currently, the American Red Cross has responsibility for providing and coordinating mass care, with support from DOD, the U.S. Department of Agriculture, and other agencies. In less severe disasters, such a reliance on a relief agency with a

large network of volunteers maybe sufficient. However, the American Red Cross was quickly overwhelmed following Hurricane Andrew and was unable to fulfill all of its mass care responsibilities. Because of this, in the event of a catastrophic disaster, primary reliance on the American Red Cross may need to shift and be placed with a federal agency.

DOD is the only federal agency with the capability to provide, transport, and distribute sufficient quantities of the items that disaster victims immediately need. In fact, Hurricane Andrew demonstrated the effectiveness of the military in bringing to bear a variety of supplies and services and establishing the infrastructure necessary to restore order and meet immediate needs of victims. For example:

- DOD has trained medical and engineering personnel, mobile medical units, storehouses of food and temporary shelters, contingency planning skills, command capability, and other requirements for mass care, as well as the transportation to deploy them. Building up response capability in other organizations—such as FEMA—would be redundant.
- Catastrophic relief activities mirror some of DOD's wartime support missions. Soldiers are trained for similar missions and catastrophic disaster relief provides soldiers with additional training.
- Catastrophic disaster responses, such as for Hurricane Andrew, are smaller than many military operations and do not significantly affect DOD's military readiness in the short term.

The fact that DOD possesses the capability to respond to mass care needs does not mean that it should be given responsibility for planning, directing, or managing this response function. Military officials told us that DOD is willing to respond to whatever requests it receives from disaster relief authorities. The military officials further stated that the requests should always come from authorities outside DOD so that the public does not perceive that the military is trying to inject itself into domestic policy decisions.

The DOD officials also cautioned that, while responding to a catastrophic disaster will not adversely affect short-term military readiness, the extent to which DOD can respond will depend on other world events at the time of the disaster. For example, if Hurricane Andrew had occurred during Operation Desert Storm, DOD would not have been able to provide as much airlift to transport personnel, equipment, and relief supplies to the disaster area. It also is questionable whether it could have provided the same number of personnel to assist in disaster relief efforts.

Another factor that could affect DOD's response capability is that DOD's force structure is being reduced. To some extent, this limitation could be overcome through greater use of the Reserves, which possess many of the skills and services that are needed for effective disaster relief operations. Under current law, however, the Reserves may be called upon to perform disaster relief operations only in limited circumstances.

MAKING BETTER USE OF RESOURCES AVAILABLE TO RESPOND TO CATASTROPHIC DISASTERS

FEMA can make better use of the resources it currently has available to improve its own catastrophic response capability as well as that of state and local governments. Given changing world circumstances, the time is right to reassess the level of resources FEMA devotes to national security issues—with an eye toward shifting some of those resources into natural disaster response.

The primary mission of FEMA's National Preparedness Directorate entails a rapid deployment capability. As such, numerous National Preparedness resources could be, and to a limited extent have been, used for catastrophic disaster response. FEMA can also enhance state and local catastrophic disaster preparedness by making better use of the civil defense funds that it grants to states. Traditionally, such grants also have had a national security focus. In addition, FEMA needs to improve its training for and oversight of state and local disaster preparedness.

Increasing use of national preparedness resources

FEMA's National Preparedness Directorate is assigned the mission of "maintaining the federal government's capability to deliver effective emergency management during all phases of any national security emergency." The Directorate includes about 900 employees and has an annual appropriation of about \$100 million—significant assets that could be used more effectively to help guide the federal government's response to catastrophic natural disasters, especially in light of changing nature of national security emergencies. However, just as most of the National Preparedness Directorate's budget is submitted separately, we too will have to provide you with more complete information in an alternative forum.

In general, however, the Directorate has many of the people and resources that could help form the nucleus of the disaster unit I referred to earlier. Its current rapid response mission places a premium on people with such skills as strategic and tactical planning, logistics, command and control, and communications. Its resources include communications, transportation, life support, and sophisticated computer modeling equipment. Through constant planning and exercising, the Directorate maintains a high level of readiness and is, therefore, able to instantly deploy people and resources from a number of locations to anywhere in the United States.

Although the Directorate's assets could have been instrumental in such tasks as planning, assessing damage, and establishing communication links between local, state, and federal officials at the disaster site, they were not fully used to respond to Hurricane Andrew and other recent disasters. This occurred, in part, because the Federal Response Plan lacks procedures for using the Directorate's assets to respond to natural disasters.

Improving use of civil defense funds

Approximately another \$100 million is provided annually under civil defense authorities to develop state and local emergency response capabilities. Civil defense activities, which include the construction of emergency operating centers and training for key personnel, are carried out under the authority of the Civil Defense Act of 1950, as amended. Here, too, the time is right to reassess the continuing need for this activity at this funding level given changing world circumstances. The 1950 act originally had the purpose of developing a civil defense capability in the event of nuclear attack. However, a 1981 amendment to the act permits states to spend these funds according to an all-hazards approach. That is, states may use civil defense funds to prepare for natural disasters to the extent that such use is consistent with, contributes to, and does not detract from attack-related civil defense preparedness.

Many state and local officials have told us that FEMA very closely controls what types of activities qualify for civil defense funding. According to these officials, nuclear defense concerns still predominate. The state and local officials stated that civil defense funding did not correspond to their areas' disaster response priorities. These state and local officials said that they would like additional flexibility to use civil defense funds to meet their perceived priorities.

FEMA officials are aware of the benefits increased flexibility would provide state and local entities and are considering merging the various programs into broader categories to enable a more diversified use of the funds. Some civil defense programs have been suspended for the current year while awaiting the results of FEMA's study of civil defense requirements, which is nearing completion. This study is intended to identify needs at the state and local level and establish ideal funding levels for civil defense activities.

Better training for State and local governments

The amount of federal resources needed to respond to a catastrophic disaster are lessened if state and local government response capabilities are increased. We believe that FEMA could do more to ensure that state and local governments prepare for catastrophic disaster response. Our review uncovered shortcomings both in the way FEMA helps state and local governments train and conduct exercises in anticipation of catastrophic disasters and in the way it monitors state and local preparedness.

FEMA's own evaluation and our report on Hurricane Hugo recognized a number of training deficiencies.⁴ These included the need to provide state and local governments with training specifically geared towards developing such necessary catastrophic disaster response skills as assessing damage and estimating the amount of mass care needs. However, state and local officials have not received such training. For example, Dade County's Emergency Management Director told us that instead of training her in such skills as conducting damage and needs assessments, FEMA typically offered generic management training designed to enhance skills such as keeping program budgets. You will recall that one of the biggest problems with the response to Hurricane Andrew was the inability of state and local officials to determine how bad the disaster was and specify how much assistance was needed.

FEMA officials told us that its Emergency Management Institute (EMI) is in the process of developing courses to enhance state and local officials' ability to respond to catastrophic disasters. However, because such courses usually require about 2 years to develop, most were not available in time for Hurricane Andrew. Also, EMI

⁴ Disaster Assistance: Federal, State, and Local Responses to Natural Disasters Need Improvement (GAO/RCED-91-43 Mar. 6, 1991).

officials told us that they further delayed development of many disaster response courses until completion of the Federal Response Plan, which was not finished until April 1992.

Most state officials believe that their state disaster exercises do not adequately prepare them to respond to catastrophic disasters. These officials cite such problems as too few exercises, low federal participation, and failure to act on weaknesses identified. To illustrate, Dade County conducted only one hurricane preparedness exercise in each of the past 2 years. There were 144 participants for the 1991 exercise—and none were from the federal government. No participation records were kept for the 1992 exercise.

In 1991, FEMA staged two major earthquake exercises, involving one along the "New Madrid" fault (near Memphis, Tennessee) and one near Puget Sound, Washington, to test the draft Federal Response Plan. Those exercises identified problems such as (1) inadequate state requests for assistance, (2) hesitation by federal personnel that could have resulted in numerous delays in procuring essential supporting services, and (3) the American Red Cross's inability to meet the mass care needs of catastrophic disaster victims. Another FEMA-sponsored exercise for a catastrophic disaster generally pointed out similar response deficiencies, including problems with resources, communications, and training. However, as shown by the events of Hurricane Andrew, these shortcomings have not yet been corrected.

Improving oversight of State and local readiness

Greater preparedness and accountability for state and local governments is needed to ensure that they, as well as participating federal agencies, make maximum efforts to effectively respond to disasters. However, FEMA is neither organized for, nor carries out, the type of oversight needed to ensure that deficiencies are identified and corrected.

FEMA headquarters sets policies and establishes training programs but does not monitor state performance. Regional offices implement headquarters' initiatives and interact directly with the states. However, regional offices report directly to the FEMA Director, not to the policy-setting headquarters program offices. Headquarters officials told us that, as a result, they do not have comprehensive knowledge of state readiness.

Regional officials told us that headquarters has neither established performance standards nor developed a program for evaluating state and local preparedness for catastrophic disaster response. Therefore, the regions have no uniform national standards that can be used to judge state and local readiness. By creating performance standards and then evaluating how well state and local governments perform, FEMA can increase the accountability for all participating agencies.

CONCLUSIONS

The fundamental principles that guided the creation of FEMA—such as securing top-level commitment and ensuring the most efficient use of available resources—are sound and still provide the basis for an effective, rapid federal response to catastrophic disasters. However, because the implementation of these principles has left much to be desired, our nation is not prepared for catastrophic disasters and does not respond rapidly and effectively when such disasters occur.

In responding to disasters, state, local, and volunteer agencies should do as much as possible before turning to the federal government for help. However, it is essential to recognize that the magnitude of certain disasters, such as Hurricane Andrew, will quickly outstrip the capacity of all but the federal government to respond. For catastrophic disasters affecting large numbers of people, the military possesses a unique capacity to bring substantial resources and expertise to bear. And, we run the risk that if such help does not come quickly, lives may be lost.

FEMA currently lacks an effective strategy for rapid federal response. First, the federal strategy does not include provisions for such aggressive actions as independently assessing damage and estimating needs to help determine whether federal assistance is called for, and if so, how much. Second, FEMA has not developed operating procedures to specifically guide how the federal government will provide mass care and other relief services when the state, local, and volunteer effort falls short. Finally, the federal government needs to do more to ensure that state and local governments are better prepared for catastrophic disasters, thereby lowering the federal government's expenditures for assistance.

Hurricane Hugo in 1989 provided the nation with a warning, but adequate corrective actions were not taken. Hurricane Andrew offers us another warning that the nation needs to develop a strategy for rapidly responding to catastrophic disasters.

Fortunately, relatively few lives were lost in either Hugo or Andrew, but as we noted earlier, we could easily face much worse disasters.

RECOMMENDATIONS TO FEMA

The federal government needs to develop a catastrophic disaster response capability. We believe that the following recommendations represent important steps in providing such a capability. Accordingly, in the case of catastrophic disasters, FEMA should do the following:

- Conduct independent and comprehensive damage and needs assessments and compile the information so that it can be effectively translated into specific requests for federal assistance. In doing so, attention should be given to identifying and using the resources and expertise that currently exists in the National Preparedness Directorate.
- Use the authority that exists under the Stafford Act to aggressively respond to catastrophic disasters. This response should include actively advising state and local officials of identified needs and the federal resources available to address them.
- Recognize that, in the case of catastrophic disasters, only DOD has the resources and capability required to meet victims' mass care needs. In this regard, FEMA, rather than the American Red Cross, should determine what assistance is required from federal agencies—such as DOD—to provide mass care.
- Enhance state and local governments' capacity to respond to catastrophic disasters by taking the following actions: continue to give state and local governments increasing flexibility to match grant funding with their individual response needs; upgrade training and exercises specifically geared towards catastrophic disaster response; and assess each state's preparedness for catastrophic disaster response.

Matters for congressional consideration

We believe that the Congress should consider providing explicit legislative authority for FEMA and other federal agencies to take actions to prepare for catastrophic disasters when there is warning, and removing statutory restrictions on DOD's authority to activate reserve units for catastrophic relief.

Options for improving the Federal response

In addition to the specific solutions we recommend today, we have explored options for reforming and improving the federal response to catastrophic disasters. At your request, we expanded our work to include not just a review of specific activities in the response to Andrew but also a broader look at overall federal policy and organizational structure. In doing so, we have focused our analysis on four options and believe the choice among them comes down to one critical dimension: The person or organization directing the federal response to catastrophic disasters must explicitly and demonstrably carry the authority of presidential attention to the disaster. The presence of presidential leadership creates a powerful, meaningful perception that the federal government recognizes this event is catastrophic and that the federal government is in control and is going to use every means necessary to meet the immediate mass care needs of disaster victims.

The four organizational options we analyzed for placing responsibility for managing a catastrophic disaster involve designating a person who could represent the President and ensure that needed resources are brought to bear. These options include (1) a key official in the Executive Office of the President (EOP); (2) a cabinet secretary, such as the Secretary of Transportation; (3) a key DOD official, possibly the Secretary of the Army; and (4) the head of FEMA.

In considering these options, it is important to understand that FEMA deals with many disasters that are not catastrophic in nature and has important responsibilities not only for response but also for preparedness and recovery. Whatever organizational arrangements may be made for the extraordinary circumstances of a catastrophic disaster, these other FEMA responsibilities would have to be carried out by FEB or some successor organization.

Given this context, our analysis of the four options focuses on how each could be the focal point needed to marshal the resources of various federal agencies into an effective and rapid federal response to a catastrophic disaster. On the basis of our analysis and discussions with experts, we would favor, in order of preference, either placing responsibility with a designated official in the Executive Office of the President or a designated cabinet secretary. While either could be clearly seen as the President's representative, there was much more support among the experts that we consulted for designating an official in the Executive Office of the President. Because of the military's unique capabilities for responding to catastrophic disasters,

the Secretary of the Army is also a viable option. However, while Defense officials showed a willingness to take on a mission to respond as necessary to disasters in our discussions with them, they also showed reluctance to be placed in charge. Given FEMA's recent performance, the head of FEMA clearly would not have credibility at this juncture. Any of these options can be put in place quickly by executive order. However, for the long-term, legislative action may be preferable. Our analysis of the four options follows.

Making the EOP in charge of catastrophic disaster response

The primary advantage of placing catastrophic disaster response leadership and coordination in the EOP is the perception of presidential leadership. From our review of the federal response to Hurricane Andrew as well as our discussions with experts in this area, the perception of presidential control is absolutely critical to effectively managing the crucial first few days of a major disaster. Further, this option would institutionalize the direct presidential involvement that has happened on an ad hoc basis in two recent disasters. Creating a visible presidential presence mirrors the advice of the National Governors Association, which emphasizes that a governor should not just manage a disaster response from the state capital; he or she must be seen as actively in charge at the disaster site.

A variant on this option would be placing within the EOP, not only leadership for catastrophic disaster response, but for all disaster response activities with the supporting staff and resources to carry out those activities. However, this raises two concerns. State emergency management directors expressed concern about having an additional federal coordinating point with whom they would have to work in disaster response, particularly during the transition from initial response to recovery. Additionally, there were concerns expressed both in creating FEMA and in previous reorganizations of federal disaster roles that placing these responsibilities in the EOP would greatly increase its size.

Placing another department, such as Transportation, in charge of catastrophic disaster assistance

Arguments for this option center on institutionalizing the perception of presidential leadership in catastrophic disasters. In two recent catastrophic disasters—the Loma Prieta earthquake and Hurricane Andrew—the President designated the Secretary of Transportation to oversee the federal role. If this is a precedent that is likely to continue, then that role should be established in advance and made clear to the responsible Secretary well ahead of an actual disaster. If the goal is to enhance the perception of presidential leadership, then the EOP is a better choice than the head of an unrelated federal agency for whom disaster response would be an ancillary duty.

A variant on this option would entail assigning all of FEMA's functions, such as disaster preparedness, response, and recovery, to a cabinet agency such as Transportation. However, a 1978 Office of Management and Budget evaluation conducted before the creation of FEMA noted that assigning coordinating responsibilities to subdepartmental units had not worked for years. These units did not have the clout of an independent agency and had to compete in the budget process with the regular missions of their departments.

Placing the Secretary of the Army in charge of catastrophic disaster response

Placing the Secretary of the Army in charge of catastrophic disaster response would increase the appearance of presidential leadership. However, this option's chief value lies in giving responsibility to the official with direct control over significant resources essential to responding to such disasters.

Existing units that report directly to the Secretary of the Army clearly can be effective rapid responders capable of meeting the mass care needs that result from a catastrophic disaster. Not only does the Army have the trained staff, supplies, and other related assets in sufficient quantity, it has the transportation capabilities necessary to get those things to a disaster area within 12 to 24 hours.

However, this option raises the question of whether there is a need to retain control outside DOD over any domestic mission it undertakes. There was significant sentiment at FEMA's creation—sentiment that remains today—that assigning catastrophic disaster response to the Secretary of the Army would extend the—military influence too far into civilian matters. This concern was particularly acute within the Army itself. Nearly all its officials with whom we spoke expressed strong reservations about military personnel assuming any domestic duties in the absence of a predetermined mission from civilian authorities outside DOD.

Keeping FEMA in charge of catastrophic disaster assistance

FEMA's effectiveness in responding to past catastrophic disasters raises questions as to the agency's ability to adequately project the needed presidential leadership essential to managing such extraordinary disasters. Recent experience clearly indicates that leadership external to FEMA is necessary at least in the short run to ensure that the appropriate federal resources are brought to bear on the disaster. Sometime in the future, perhaps, FEMA can regain its credibility and take on greater leadership responsibilities. We believe the recommendations we make to FEMA in this testimony are necessary first steps and need to be acted upon to improve the federal response to disasters.

Madam Chair, this concludes my prepared statement. I would be pleased to respond to any questions that you or Members of the Subcommittee may have.

RESPONSE OF AMERICAN RED CROSS TO THE TESTIMONY OF THE U.S. GENERAL
ACCOUNTING OFFICE—FEBRUARY 25, 1993

On January 27, 1993, J. Dexter Peach, Assistant Comptroller General of the United States General Accounting Office, testified before the Senate VA-HUD Subcommittee on the subject of the federal government's response to Hurricane Andrew. The written version of his testimony included several references to the America Red Cross that were to some degree inaccurate or misleading. The purpose of this report is to provide additional information in order to clarify the public record and increase the value of future testimony or reports on this subject.

In its testimony, the GAO stated that the relief efforts provided by state, local, and volunteer agencies immediately after the hurricane were inadequate. Its statement that only 30,000 victims a day were fed in the immediate aftermath of Hurricane Andrew is not supported by Red Cross experience in Florida. As GAO, itself, noted in a footnote, the America Red Cross alone sheltered and fed 84,361 people in 229 shelters on the night of August 23-24. Our conservative estimate is that the Red Cross served 100,000 meals on the first day after landfall. The following table shows the sheltering and feeding activity of the American Red Cross in the immediate aftermath of Hurricane Andrew. The statistics on the number of shelters open and the number of people in shelters are reliable. We acknowledge that the statistics on the number of meals served did not become fully reliable until the third day.

AMERICAN RED CROSS—HURRICANE ANDREW DAILY RESPONSE

Date	Number of—		
	Shelters	Persons sheltered	Meals served
Aug. 23-24, 1992	229	84,361	126,000
Aug. 24-25, 1992	61	34,043	153,819
Aug. 25-26, 1992	51	39,050	235,407

¹ Based on incomplete reporting; 100,000 is a conservative estimate of meals served.

The Red Cross served a total of over 4.7 million meals by October 31. During this period, it served meals from 88 Emergency Response Vehicles and a varying number of fixed feeding sites including 13 kitchens operated by the Southern Baptist Convention in cooperation with the Red Cross.

The Red Cross operated shelters in southern Florida from August 23 until October 26, 1992. The first week of September, Red Cross shelters housed a average of 1,100 people a day. Throughout the rest of September, Red Cross shelters housed 300-400 people a day. The daily average dropped to 250 by October 1, and the last shelter was closed October 26.

In its testimony, the GAO reported that soon after Andrew struck, regional officials of FEMA believed that the Red Cross would be unable to carry out its mass care responsibilities. It is unlikely that such a statement would be made by anyone with knowledge and understanding of the Red Cross's mass care responsibilities. The Federal Response Plan is based on the assumption that no single agency or organization will be able to meet the needs of the victims of a catastrophic disaster by itself. With regard to mass care, the Plan assumes that Red Cross resources will be supplemented by other organizations, both private and public.

The statistics cited above make it clear that the Red Cross responded to the mass care needs of victims before and immediately after Hurricane Andrew's landfall on August 24, 1992. This response was a substantial one and there remained consider-

able capacity within the Red Cross to increase its response as necessary. Obviously service delivery by the Red Cross and all other responders was hindered by the level of destruction, blocked roads, lack of security and by incomplete damage assessment information. The damage assessment issue was addressed by several witnesses at the Senate Appropriations subcommittee hearing and there was consensus by all parties that improvements in this area would result in improved service delivery by all responders.

In its testimony, the GAO questioned whether the Red Cross established feeding centers in Homestead and Florida City. In fact, the Red Cross was operating a shelter in Homestead and distributing food and water from Emergency Response Vehicles (ERVs) in both Homestead and Florida City on August 24, 25, and 26. By August 26, the Red Cross had a food and water distribution site established at the Homestead Middle School and the City Hall in Florida City.

In addition, the Southern Baptist Convention, working under a cooperative agreement with the Red Cross, operated feeding sites in Homestead, Florida City, and nearby Cutler Ridge, beginning on August 25. Further, the American Evangelical Christian Church, also in cooperation with the Red Cross, established a kitchen and feeding site in Homestead by August 27. The Red Cross provided the food supplies for these kitchens.

It is possible that the GAO unintentionally erred on this point because it, or its sources of information, did not fully understand the Red Cross role under the Federal Response Plan. This role includes coordinating the mass care efforts of many private organizations and providing them with the food, water and other relief supplies they need to operate kitchens and feeding sites.

In its testimony, the GAO recommended shifting primary responsibility for mass care from the American Red Cross to a federal agency, most likely the Department of Defense, for catastrophic disasters. The information cited above makes it clear that the Red Cross, although challenged by Hurricane Andrew, effectively carried out its responsibility under the Federal Response Plan to lead and coordinate the response of many organizations in order to meet victims' needs.

The testimony suggests that when the scale of a disaster reaches the catastrophic level, the experience of the Red Cross in responding to other major disasters is not relevant. However, the capacity to respond to a catastrophic disaster is built on the experience of responding to disasters of all sizes and all kinds, most of which strike without warning. The American Red Cross does this every day. The military and other support agencies included in the Federal Response Plan are needed, during a catastrophic disaster, to augment Red Cross capacity.

Those who respond to disasters occasionally rather than daily, may not be aware of the amount of planning and preparation an effective disaster response requires. Even before an event is threatened or takes place, the Red Cross helps prepare communities to respond. For example, the Red Cross was in South Florida long before Hurricane Andrew:

- Developing a disaster response plan;
- Forming and training watch teams;
- Developing agreements with organizations for use of potential shelter facilities, feeding locations and bulk distribution sites;
- Developing agreements with merchants to supply food and other necessities at the time of disaster;
- Developing mutual aid agreements with other Red Cross chapters;
- Recruiting and training volunteers;
- Conducting community disaster education programs to enhance public awareness of potential hazards;
- Organizing regular meetings with state and local emergency management officials; and
- Participating in periodic preparedness exercises.

For most disasters which occur with no warning, it is the local Red Cross staff and volunteers who can respond immediately. Local Red Cross chapters are the backbone of disaster response. Chapters are required to prepare for the initial response, based on the types of disasters that are likely to strike their community. Chapter resources are supplemented by other chapters in their state and beyond and from national headquarters. When there is warning time, as in the case of Hurricane Andrew, additional personnel and equipment that is needed are deployed to areas near the expected disaster site.

The American Red Cross has standard procedures for preparing for and responding to disasters of all sizes. In areas subject to hurricanes, typhoons and similar storms, the Red Cross designates "Watch Areas." Each Watch Area has a pre-identified headquarters location and Watch Area Manager. The Red Cross also pre-identifies staging areas where people, vehicles, supplies and other resources from outside

the potential impact area will be sent. The selection of a staging site must balance the need for proximity to several potential landfall areas, external access through airports or other means, and security.

In pre-disaster planning, the local Red Cross chapter develops a hazard analysis of their jurisdiction and the capacity to execute all damage assessment responsibilities. When a major disaster occurs, the local chapter conducts a preliminary assessment of damage at the earliest time that is safe to do so. While the preliminary assessment is being done, planning for the detailed assessment is begun to provide specific damage information on all affected dwellings in the disaster area.

After Hurricane Andrew, Red Cross chapters completed a preliminary damage assessment on August 27, 1992 (3 days after the hurricane) in areas that were accessible. This preliminary data was released the following day. As soon as the preliminary assessment was complete, our personnel began a detailed assessment of homes affected by the hurricane—house by house, block by block. This detailed data was released to government agencies and other relief agencies on a daily basis. Between August 27 and September 13, Red Cross damage assessment workers surveyed 137,526 dwellings damaged or destroyed by the storm.

The following chronology demonstrates how Red Cross preparedness and response procedures were implemented before, during and after Hurricane Andrew struck south Florida.

August 19.—Five days before the hurricane struck, Florida Red Cross chapters began identifying shelter sites, alerting local school officials and others that their facilities might be needed.

August 21.—Red Cross Hurricane Watch Teams were alerted for Hurricane Andrew in Florida, Georgia, South Carolina and North Carolina. All local Florida Red Cross chapters also were put on alert.

August 22.—The Florida Hurricane Watch was activated. Red Cross personnel were assigned to all Florida Emergency Operations Headquarters. The Red Cross staging area was activated in Orlando. The Red Cross National Disaster Operations Center began moving trained disaster specialists from across the country into the staging area. Local shelter teams were alerted.

August 23.—The decision was made that Red Cross national headquarters would control the response operation. NHQ assigned 125 Red Cross paid and volunteer disaster specialists at the Orlando staging area to support the local chapters. Twenty-five Emergency Response Vehicles (for mobile feeding and supply transport) were on-site or enroute to the Florida staging area. The Red Cross job operations headquarters was established at the International Brotherhood of Electronics Workers union hall in Miami. 229 shelters were opened.

August 24.—229 Red Cross shelters were operating across Florida with 84,361 people. All Red Cross units nationwide were ordered to make additional disaster workers available for immediate assignment. A total of 40 Emergency Response Vehicles and additional supplies were enroute to Florida. Approximately 3,000 local Red Cross volunteers were working in Florida.

The Houston and Baton Rouge Hurricane Watch Areas remained open. An advance team of Red Cross disaster managers was sent to Jackson. Twenty-three Emergency Response Vehicles were enroute to Jackson. Two shelters were opened in Louisiana.

August 27.—Red Cross chapters completed preliminary damage assessment.

August 28.—452 national Red Cross personnel (paid and volunteer staff) were on the job, with over 3,000 volunteers from local chapters. One hundred and fifty national personnel were enroute.

August 30.—638 national Red Cross personnel were on the job in Florida. The number of local volunteers remained high but began a steady decline as volunteers returned to their own homes to meet their recovery needs.

September 4.—962 national Red Cross personnel were on the job.

September 13.—Red Cross chapters completed detailed damage assessment.

September 15.—The number of national Red Cross personnel peaked at 1,258.

The GAO claimed in its testimony that two 1991 exercises conducted by FEMA showed that the Red Cross was unable to fulfill its mass care role under the Federal Response Plan. We have reviewed the after-action reports for these two exercises and have been unable to identify any evidence to support GAO's assertion. The statements themselves misrepresent the role of the Red Cross in the Federal Response Plan. A catastrophic disaster, by its very nature, outstrips the ability of any single organization to meet mass care and other needs. The responsibility of the American Red Cross is to lead and coordinate the activities of other voluntary and government agencies indicated by ESF 6.

In its testimony the GAO recommended that FEMA assign mass care responsibility to the Department of Defense. The conclusion that only the military has the ca-

pability to respond to catastrophic disasters is not demonstrated by the evidence from Florida. Unlike the Red Cross, the military is not immediately available in the community when a disaster strikes. The military arrived in Florida four to five days after Hurricane Andrew's landfall. Therefore, it was not subjected to the problems faced by the Red Cross and others in the immediate aftermath of Hurricane Andrew. The report of the FEMA Inspector General (January 1993) noted that, after it arrived, the military served about 30,000 to 40,000 meals a day. The Red Cross served about 150,000 meals a day during this period.

More importantly, the recommendation is misleading about the present role of the military under the Federal Response Plan. The Department of Defense is included in the Plan as a support agency to the Red Cross under ESF 6. It is anticipated that when a catastrophic disaster occurs, or when ESF 6 is activated for other reasons, units of the armed services may be called upon to support the mass care function. The role of a lead agency under the response plan includes that of tasking support agencies. However, as pointed out in the report of the FEMA Inspector General (January 1993), the military did not view itself as subject to tasking except by the Federal Coordinating Officer. Obviously, there is still considerable lack of clarity about what is expected of the lead and the support agencies under the Federal Response Plan. Further clarifying the roles, responsibilities, expectations, and reporting requirements under the Plan is clearly the most appropriate recommendation that the Red Cross, the GAO and other interested parties can make at this time.

Providing immediate care and assistance to those in need following a catastrophic disaster must continue to be the top priority of the American Red Cross. The American people can trust that the Red Cross will be there for them in their time of need.

**STATEMENT OF DEBORAH A. HART, ASSISTANT INSPECTOR GENERAL
FOR INSPECTIONS, FEDERAL EMERGENCY MANAGEMENT AGENCY**

Senator MIKULSKI. Ms. Hart, now you are the assistant inspector general at FEMA.

Ms. HART. One of three, Madam Chairman.

Senator MIKULSKI. Then you stepped forward and did this assessment. Do you want to share with us what the inspector general says?

Ms. HART. Thank you, Madam Chairman, and members of the subcommittee.

I am pleased to be here today to discuss our audit of FEMA's disaster management program and its performance after Hurricane Andrew in Florida. We provided an overview of our audit report for inclusion in the record and I will just briefly summarize it here.

We concentrated on what actually happened in south Florida. Our criteria was mainly the needs of disaster victims. We noted things that worked well, but emphasized areas where improvement is needed.

The reaction of the public and Congress in the aftermath of Hurricane Andrew was loud and clear. Because of that reaction, we assumed that in the future a quicker response by Federal agencies will be authorized and expected. Based on that assumption, we developed 113 recommendations for FEMA to improve and expedite Federal action in future disasters. Most of those recommendations would apply even if changes were made in the responsibilities of Federal agencies.

As a result of lessons learned from Hurricane Hugo and the Loma Prieta earthquake, FEMA and other Federal agencies developed the Federal response plan. It is the framework for Federal response to Hurricane Andrew and other significant disasters, but it is clear that substantial work is needed to speed up and coordinate the Federal response.

A primary weakness is the belief of FEMA officials that they lack the authority to provide immediate response. They believe that even after the President has declared a major disaster, immediate response assistance cannot be provided without specific individual requests from the State. This question of authority would lead FEMA to approach the next disaster in the same way as Hurricane Andrew with consequent delays in meeting the victims' immediate needs.

The next hurricane season is now less than 6 months away, and other significant disasters could happen at any time. With this in mind, we are recommending that FEMA seek clarification of its authority and implement other needed actions as quickly as possible.

I would like to hit the highlights of our report in 10 points.

HIGHLIGHTS OF FEMA INSPECTOR GENERAL'S REPORT

One, even though there was a warning period of several days in advance of Hurricane Andrew, FEMA officials followed a wait-and-see practice. In other words, they waited until the disaster occurred to determine what Federal assistance was appropriate rather than prepositioning equipment and supplies or making arrangements with suppliers in advance based on predictions of estimated damage.

Two, after the disaster, a timely damage or needs assessment was not performed. This delayed the determination of response requirements and the placement of Federal resources.

Three, arrangements were not made in advance to clear roads quickly and get responders into the disaster area.

Four, FEMA directed other Federal agencies to wait for specific assignments from FEMA rather than act on standing missions defined in the Federal response plan.

Five, assignments for mass care were fragmented among many agencies and organizations. Lack of coordination among them caused confusion and duplication in getting food, shelter, water, and ice to disaster victims.

No. 6, disaster victims were cut off from their usual sources of information such as TV, radio, newspapers, telephones. Alternate methods were developed slowly and on an ad hoc basis.

No. 7, disaster victims were confused by the number and complexity of aid programs.

No. 8, FEMA's administrative support systems were inadequate, and the need to develop such systems after the disaster slowed the delivery of assistance.

No. 9, multiple lines of authority weakened command and control of Federal responders.

No. 10, FEMA management failed to issue the report it had done on lessons learned from Hurricane Hugo and Loma Prieta earthquake and did not systematically follow up on its own recommendations. Thus, some of the same problems identified in those disasters were repeated in response to Hurricane Andrew.

Some of our other findings and recommendations cover improvements needed to get quick medical, search and rescue, and law enforcement assistance to future disasters where those requirements may be even more pressing than they were in Florida. These im-

provements will be key to saving lives and reducing victims' stress in the next significant disaster.

Thank you for the opportunity to participate in the hearing. I would be happy to answer any questions as well.

[The statement follows:]

STATEMENT OF DEBORAH A. HART

At the request of the Congress, the General Accounting Office (GAO) and the National Academy of Public Administration (NAPA) are examining basic questions relating to disaster preparedness and management. These include the respective responsibilities of the Federal and State governments, the potential role of various Federal agencies, the organization of FEMA, and high level strategies for improvement. Our office also examined FEMA's disaster management program after Hurricane Andrew struck South Florida. In view of the GAO and NAPA projects, however, we took a more microscopic approach. We conducted a performance audit, which examined the existing disaster management program and its effectiveness.

The reaction of the public and the Congress to the Federal performance in Florida was loud and clear. Because of that reaction we assume that, in the future, a more timely response by Federal agencies to such a disaster will be authorized and expected. Based on that assumption, we developed 113 recommendations to improve and expedite an accelerated Federal role. Our measures of effectiveness stressed the needs of disaster victims. Hence, most of those recommendations would apply even if changes were made in the responsibilities of Federal agencies.

The following is an excerpt from our report, entitled "FEMA's Disaster Management Program: A Performance Audit After Hurricane Andrew," dated January 14, 1993. This overview of our findings and recommendations is organized as follows:

- Preparing for Imminent Disaster
- Delivering Immediate Response Services
- Providing Recovery Assistance to Victims
- Providing Recovery Assistance to Public Agencies
- Supporting Disaster Management Operation
- Supporting State and Deal Governments
- Using Results of After-Action Studies

PREPARING FOR IMMINENT DISASTER

Some progress has been made toward improving the capability of the Federal Government to prepare for and respond to extraordinary disasters since Hurricane Hugo occurred in 1989. However, much work remains to be done to meet the response requirements of a disaster like Hurricane Andrew. This is critical since the magnitude of Hurricane Andrew was far short of the worst disaster the United States can expect.

Detecting and scaling severity of imminent disaster.—FEMA's approach to Federal disaster response is based upon a "wait and see" philosophy. Even in disasters with advance warning and accurate forecasting of severe results, FEMA does not use systems to predict response requirements and begin Federal response activities. The Federal response is to wait until the disaster occurs, then decide what Federal action is appropriate.

We are recommending that FEMA expand upon its current capability to forecast the effects of disasters and scale immediate Federal response requirements accordingly.

Evacuating and sheltering the public.—Local officials were successful in getting information about the projected strength and path of Hurricane Andrew, issuing evacuation orders, and providing shelter to evacuated residents before the hurricane made landfall.

We are recommending that FEMA revise the scope of hurricane evacuation studies it funds to include more emphasis on the effects of wind.

Activating the Federal Response Plan.—The "Federal Response Plan" is a fundamentally sound framework for organizing Federal response. However, the planning needed to convert the functional groups of Federal agencies into a cohesive, working response team has not been done. In addition, delays were caused by FEMA officials' belief that they lack authority to mobilize resources and provide Federal assistance until specifically requested. The following issues need attention:

Mobilizing and prepositioning resources.—Although FEMA deployed some Federal personnel to the State Emergency Operations Center in Tallahassee, Florida, prior to Hurricane Andrew's landfall, little was done to mobilize equipment, supplies, or

specialized expertise for movement into the affected area quickly after the hurricane passed. The "Federal Response Plan" restricts Federal agency activities prior to a Presidential declaration of major disaster and warns that FEMA will not reimburse agencies for actions taken in advance. Some FEMA officials believe they lack legal authority to mobilize during the warning period.

We are recommending that FEMA seek clarification of the limits of its legal authority and propose new legislation if necessary to enable Federal responders to mobilize personnel and equipment prior to a disaster.

Establishing early presence at disaster site.—After Hurricane Andrew made landfall, FEMA and other Federal agencies emphasized locating and equipping the Disaster Field Office in Miami, Florida, but did not establish an early presence in the hard hit area of south Dade County. Without Federal representatives in the severely affected area, it was difficult to refine requirements and to coordinate with local officials.

We are recommending that FEMA immediately deploy staff to the most severely affected area in future disasters.

Using prearranged taskings.—Even though the "Federal Response Plan" assigns disaster response tasks to individual Federal agencies and departments, FEMA required agencies to wait for specific instructions from the FEMA Federal Coordinating Officer before commencing their activities. Inconsistencies in the Plan on this subject contributed to confusion and delay.

We are recommending that FEMA remove inconsistencies in the Plan and use the preassigned standing missions in future disasters.

Assessing damage.—After Hurricane Andrew, FEMA waited for local and State officials to assess damage and identify needs for Federal response assistance. As FEMA learned in 1989 after Hurricane Hugo, Federal efforts are necessary in extraordinary disasters to assist in the information gathering and needs assessment process.

We are recommending that FEMA work with other Federal agencies, such as the National Aeronautics and Space Administration, and develop the capability to perform rapid damage assessment in the immediate aftermath of the next large disaster.

Using FEMA mobile assets.—FEMA's use of its Mobile Air Transportable Telecommunications System and Mobile Emergency Response Support personnel and equipment in response to Hurricane Andrew was more extensive and effective than in Hurricane Hugo. However, these assets are not part of the "Federal Response Plan" and need to be more fully developed in regional response plans.

We are recommending that FEMA incorporate the use of these assets fully and consistently in the "Federal Response Plan," regional response plans and future training and exercises.

Providing communications support.—Plans used for Federal disaster response to Hurricane Andrew did not anticipate the level or type of communications support needed and did not efficiently use resources already available in FEMA and other Federal agencies.

We are recommending that FEMA evaluate plans being used to identify communications roles and tasking for immediate deployment to disaster areas.

Providing logistical support.—Operational plans for personnel, material, and supplies to support Federal response activities are needed. In the response to Hurricane Andrew, uncoordinated logistical support resulted in confusion, duplication, and waste.

We are recommending that FEMA develop detailed logistics plans for all aspects of Federal response.

Providing for chain of command.—The command and control structure outlined in the "Federal Response Plan" was perceived as inadequate and therefore not followed in Florida. The addition of a Presidential Task Force and a Department of Defense Joint Task Force to the FEMA Federal Coordinating Officer created three separate lines of authority, not contemplated in planning or exercises. The structure was weakened further by pulling the military support function out and centralizing it under the Department of Defense Joint Task Force.

We are recommending that FEMA strengthen the command and control structure in response to future disasters.

DELIVERING IMMEDIATE RESPONSE SERVICES

The difference between Hurricane Andrew and the dozens of other disasters that occur every year is the requirement for the Federal Government to assume an immediate response role. In most disasters, local and State government and voluntary organizations can manage search and rescue, emergency medical treatment, and ini-

tial mass care operations to feed and shelter those whose homes are destroyed. But in the rare disasters like Hurricane Andrew, the severity and magnitude of the damage require Federal assistance in response. In evaluating the response of FEMA and the other Federal agencies, it is important to note that most agencies have little experience or expertise in delivering immediate response services. These activities are not a natural extension of their normal work. Therefore, the best possible plans and frequent, realistic exercises are essential.

Gaining access to disaster site.—Relief personnel and supplies were delayed getting into the disaster area because of debris, inoperable traffic signals, and security concerns. Inadequate planning, coordination, and prioritization between responders and debris removal teams in the first days after the disaster delayed the delivery of essential services to some disaster victims.

We are recommending that FEMA seek legislative authority to initiate debris clearance activities earlier in future disasters and to ensure that responders are paired up with those arranging access, to coordinate priorities.

Coordinating transportation requirements.—Federal officials assigned to procure and manage vehicles for the response to Hurricane Andrew did not know how to determine the appropriate size or type of vehicles, or how to properly manage the fleet of equipment.

We are recommending that FEMA revise assignment of these responsibilities for future disasters.

Conducting search and rescue.—Due to inadequate damage information and poor communication among local, State, and FEMA officials, Federal search and rescue assistance was not provided in Florida.

We are recommending that FEMA increase understanding and coordination of the Federal search and rescue capability.

Providing medical services.—The Disaster Medical Assistance Teams rely on volunteer professionals from communities all across the country to supplement local resources for health and medical services in a disaster. Following Hurricane Andrew, the lack of standard capabilities and equipment reduced their effectiveness.

We are recommending that FEMA pursue alternative options for Federal health and medical response assistance until the capabilities of the Disaster Medical Assistance Teams are fully developed.

Providing mass care.—The immediate needs of disaster victims in south Florida for food, shelter, water, and other items were not met in a rapid and well coordinated way among agencies. When Federal resources did begin pouring into the area, there was considerable duplication and confusion.

We are recommending that FEMA mobilize mass care resources in advance, consolidate responsibilities, and reassess whether the American Red Cross is the appropriate organization to lead Federal mass care response.

Providing security and law enforcement.—Local and State law enforcement officials needed help in traffic control and ensuring the security of people and property in south Florida after Hurricane Andrew. Because the "Federal Response Plan" does not adequately address the coordination of Federal assistance for law enforcement, Federal assets were not mobilized and deployed in a timely and coordinated fashion.

We are recommending that FEMA incorporate security and law enforcement assistance by the Federal Government into Federal response planning, training, and exercise activities in preparation for future disasters.

PROVIDING RECOVERY ASSISTANCE TO VICTIMS

FEMA personnel have extensive experience in recovery assistance, in the dozens of Presidentially-declared disasters every year. Hurricane Andrew presented special problems, however, because of the magnitude of the destruction and the number of individual victims in the affected areas. Applications for assistance were taken for about 172,500 households.

Understanding assistance programs available.—Due to the myriad of Federal, State, and private organization assistance programs available to disaster victims, and the complicated delivery process, victims seeking help experience confusion and frustration.

We are recommending that FEMA seek changes to existing legislation, merge programs, improve informational handouts, and explore options for temporary housing.

Delivering needed assistance.—The confusion caused by the number of disaster victim assistance programs was compounded by the procedures victims had to follow. Victims had to complete multiple and sometime duplicate application forms, endure multiple damage inspections, and travel repeatedly back and forth between various application centers to satisfy everyone's eligibility requirements. FEMA's ad

hoc fast-track process put in place to alleviate some of these problems lacked the controls to ensure that only qualified applicants receive assistance.

We are recommending that FEMA change the application receipt, review, and approval process, and coordinate inspection requirements to reduce the need for multiple inspections.

PROVIDING RECOVERY ASSISTANCE TO PUBLIC AGENCIES

The process for providing public assistance appears to be working well in south Florida. Applications have been received from 38 State agencies, 59 local governments, 21 special districts, and 79 private nonprofit organizations. However, there are certain steps FEMA could take to facilitate assistance delivery: issue clearer guidance on what constitutes a "private nonprofit organization"; more clearly articulate the State's matching contribution requirements in the President's disaster declaration letter; and ensure that applicants do not qualify for insurance compensation.

We are recommending that FEMA provide clearer guidance to applicants for public assistance.

SUPPORTING DISASTER MANAGEMENT OPERATIONS

The effectiveness of direct disaster assistance is determined, in part, by timely, adequate support services. There are conflicting goals in the early days of a disaster. The main goal is to expedite tangible services (food, water, ice, and medical). Another is to reduce, or at least not add to, victims' stress. A final goal is to provide support services that accent the primacy of the other goals, while avoiding waste where possible. These services include such things as controlling funds and property, staffing operations, maximizing the use of available technology, providing logistical support to satellite operations, and communicating with the public. A critical evaluation of these support services in connection with Hurricane Andrew is not intended to unreasonably emphasize administrative matters; rather it is to identify opportunities to improve response and recovery operations and enhance certain support functions.

Managing disaster relief funds.—Available financial data was not adequately utilized by managers at the Disaster Field Office. Each program manager developed his or her own informal funds management system. As a result, procedures used in Hurricane Andrew did not provide adequate internal controls over funds that were obligated and expended for mission assignments, individual and public assistance grants, major procurements, and imprest fund operations.

We are recommending that FEMA develop the necessary training and related procedures to control disaster relief funds.

Purchasing and controlling property.—FEMA's property management procedures used at the disaster Field Office are highly vulnerable to fraud, waste, and abuse. The procedures cannot provide an accurate accounting of the property worth millions of dollars that was purchased to support disaster relief operations. Also, there are material weaknesses in the methods used to procure and dispose of the property. As a result, property is not being safeguarded against theft or unauthorized use.

We are recommending that FEMA develop procedures to control the purchase, use, and disposition of property purchased in support of disaster relief operations.

Providing automated support.—FEMA's automated support system for disaster management operations does not take advantage of modern technology. FEMA had to wait until after the disaster to establish its Information Management System operations at the Disaster Field Office. This was not only wasteful, but it delayed the delivery of emergency response and recovery services.

We are recommending that FEMA establish a permanent data processing facility to support all disaster relief operations instead of recreating this capability for each disaster, and integrate the check-writing and management information systems to expedite delivery of temporary housing checks to victims.

Supporting disaster application centers.—FEMA did not equip its Disaster Application Centers with the minimum equipment and supplies needed to accomplish their mission in an efficient and effective manner. For example, many Centers did not have signs, telecommunications capabilities, transportable facilities, application forms, and automated capabilities.

We are recommending that FEMA give greater attention to the equipment and supply needs of the Disaster Application Centers.

Staffing disaster relief efforts.—FEMA lacks a national data base of trained disaster relief personnel. This hindered its efforts to locate and deploy personnel to Florida efficiently and economically. Further, FEMA lacked an effective staff rotation

policy, causing undue stress on staff who were subjected to a relentless work schedule. Finally, FEMA's policy of hiring locals to support disaster relief operations is time consuming and administratively cumbersome.

We are recommending that FEMA develop a national roster of trained disaster relief staff, improve staff rotation practices, and explore contracting with local temporary agencies to the maximum extent possible to satisfy temporary staffing needs.

Communicating with the public and Congress.—Because all traditional methods of public communications—television, radio, newspaper, and telephone—were disrupted by Hurricane Andrew, FEMA could not disseminate critical information, such as how to obtain food, water, and shelter. Further, FEMA did not have enough well-trained personnel or automated equipment to perform the external affairs function effectively.

We are recommending that FEMA develop alternative methods of communicating with victims who are without electricity and telephones, and that greater attention be given to the equipment and staffing needs of the external affairs function during disaster relief operations.

Preparing reports for managers.—FEMA does not have a formal system for collecting data and producing meaningful management information reports on disaster relief operations. As a result, an inordinate amount of time was spent collecting and rearranging data, preparing and modifying reports, photocopying, and resolving reporting problems.

We are recommending that FEMA formalize its system for collecting data and producing meaningful management information reports concerning disaster relief operations.

SUPPORTING STATE AND LOCAL GOVERNMENTS

One of FEMA's prime objectives is to enhance State and local government emergency management capabilities. FEMA provides State and local governments with supplemental financial support, technical guidance, and training to foster integrated emergency management activities that can deal with the full spectrum of emergencies—natural, technological, and nuclear attack. This makes it possible for response and recovery activities in most emergency situations to be handled without Federal involvement.

Providing financial assistance.—The consensus of State and local emergency managers is that they need more flexibility in the use of funds awarded under FEMA's Comprehensive Cooperative Agreement program. The intent of this program is to encourage consolidation of resources, cross-training of personnel, and reprogramming of surplus funds. However, statutory restrictions on the reallocation of funds and FEMA restrictions limit or are perceived to limit State and local flexibility and their ability to develop an integrated emergency management system.

We are recommending that FEMA propose legislative and budgetary changes, and amend its own guidelines to give States flexibility to meet their emergency preparedness requirements, and to create more flexibility in allocating limited Federal funds.

Providing educational material and training.—State and local officials told us that FEMA's emergency management training program needs improvement. It does not reach enough local officials, particularly elected officials. Due to budget constraints, many State officials cannot afford to travel to FEMA-sponsored training courses. An aggressive program is now underway within FEMA to reach those that cannot attend courses in the Washington, D.C., area. It is too early to measure the impact of these changes at the State and local level.

Coordinating disaster response plans.—FEMA has not fully coordinated the "Federal Response Plan" with State and local emergency operating plans, and has not adequately exercised the Plan with State and local officials.

We are recommending that FEMA increase its efforts to coordinate and exercise the "Federal Response Plan" with the disaster response plans and exercises of State and local governments.

USING RESULTS OF AFTER-ACTION STUDIES

FEMA conducted a very thorough review of lessons learned after Hurricane Hugo and the Loma Prieta earthquake, but did not release the report nor act on all recommendations. Many problems that surfaced after Hurricane Hugo were also evident after Hurricane Andrew.

We are recommending that FEMA heed lessons learned on disasters and exercises and take corrective action quickly and systematically.

Senator MIKULSKI. Thank you very much, Ms. Hart. First of all, to all of the panel, each testimony was excellent and again content rich and pragmatic.

To you, Ms. Hart, from FEMA itself, I wish to say that that is, in the 4 years that I have chaired this subcommittee, the best testimony I have heard, not because it was critical or whatever, but it was crisp, it went to the issues to be solved. I really thank you. I thank you for taking the initiative of doing this report and for the very nature and content of the report itself. If this is what the new FEMA could be, I think it would go a long way to restoring the confidence.

Ms. HART. Thank you, Madam Chair.

Senator MIKULSKI. I'm going to do the wrapup questions.

Senator Mack, how about if I turn to you and then Senator Feinstein? Then I will go over those things that you don't cover or that are unique to the Chair.

Senator MACK. Thank you, Madam Chair.

MILITARY ROLE

I think that there are a couple of areas that I want to focus on. One of those is the military. I don't know that there is a disagreement but, Mr. Fosler, you imply that you would rather not see the military play as major a role as I guess some of us have indicated. Do you believe that the military can play a role if the reorganization that is developed is proper and that civilians, in essence, direct the activities of the military?

Mr. FOSLER. There is absolutely no question that the military has a very major role to play. As we have seen, it can play it in a very effective manner.

The way that we have been approaching this problem and the way that we were asked to approach it by the Congress is to look at the whole system and to try to understand how we can develop a national system—Federal, State, and local. Our feeling is that we should recognize and attempt to build on the capabilities that are already present at the State and local level, both government and nonprofit organizations, private organizations, and continue to emphasize that as a principal response on which we would build.

At the Federal level, we believe that the guidelines have been established by which we can establish a capable civilian agency, such as FEMA, if we worked to really put those guidelines into place, to really build that solid foundation, and that that civilian response should be the principal response, but that we should also recognize that the military can play a major role, especially in catastrophic situations, but that we should be careful about moving to build into the military mission still another nonmilitary role that could any way jeopardize the principal war capability of our Defense Department.

Senator MACK. Mr. Peach, would you like to comment?

Mr. PEACH. Well, the first thing I would emphasize is we are focusing on a catastrophic disaster. You had 200,000 to 250,000 people homeless, transportation cut off for a considerable period of time. From what we have heard and, as our research showed us, the military is perhaps the only game in town that can come in and restore some sense of order and provide the mass care needs.

To take one example, until the military came in, there was a lot that was not known about the depths of the disaster, what people were facing individually. The military brings in the organizational and command structure to go in, break down the area, even into blocks, and tell a particular unit that you have responsibility for these two or three blocks. Go in there and make sure you know the people, you know what is going on, you know what the needs are, and you feed that information in so that we can assure that we are getting the needs met in the right manner. So, I think the point I would emphasize is in the case of a catastrophic disaster, the military is able to meet those needs.

As we talked with the defense people also, they say there is a good deal of similarity between meeting some of those human needs and what they are sometimes tasked to do in other parts of the world. It is just that they happen to do it here in the United States. So, they have the capacity and capability to do it and, again, we understood from them, a willingness, if tasked with that mission, to have that mission. But they want to be carrying it out under the auspices of someone who has tasked them with doing that mission, not that they take over responsibility. They are very cognizant of meeting the mass care needs, not the restoring order type of needs that raise some of the questions of the domestic role of the military, but very cognizant of what they can do to meet the mass care needs and how that could fit in. They could accommodate that within their structure.

PRESIDENT'S AUTHORITY IN DISASTER

Senator MACK. The other area that I would want to pursue is this question about when does the President take control, if you will, that delicate balance between the Governor and the President. What recommendations do you have? Again, we are really talking again catastrophic.

Mr. PEACH. Right. We stopped short in terms of saying the President unilaterally take control and go in. What we have suggested is that there is the capability that can be developed within the FEMA structure, use of resources they have, working together with other agencies, to have a kind of a disaster strike team, a group that can go in, even in a hurricane and may know that you have a likely striking disaster, can do the planning and thinking to understand the magnitude of what it is you are facing, and can then be in a position to advise State and local authorities.

In the case of Florida, Florida was doing some preplanning for the disaster. Once they got the disaster declaration, they stopped with their preplanning. They said we have a disaster declaration. We think the Federal Government will do whatever they need to help. The Federal Government hadn't stepped in by then and said we are going to be doing this type of planning to see just exactly what it is you need. So, you had that breakdown, that gap of time of 2 or 3 days, that was very critical until Secretary Card came in.

To some degree, it was fortunate it was Secretary Card because he is the Secretary of the Transportation. When he came on the scene, having the Coast Guard under his jurisdiction, he could easily, basically, commandeer a Coast Guard helicopter and go down and land in the area and begin to move to different areas and see

what was happening. It was in a short period of time, once he got on the scene, that he began to break through the lines and make the right calls to see that the resources were beginning to deploy and to talk to the Governor and say you need more down there.

But the Federal Government can have that kind of capability to help advise the State and local government as to what they need. It exists. If you just would look at configuring FEMA properly, look at how you could deploy the resources that are already available there, and then work out a more proactive plan for the Federal Government to step in where it is catastrophic in nature.

Senator MACK. My last point is I think this is an area we do need to pursue—

Mr. PEACH. Absolutely.

Senator MACK [continuing]. Because, as we all know, you can get caught in that political circumstance there about whether to move or not to move and stepping on someone's toes and all of that. Losing 1 or 2 days in a catastrophe like this can be very significant, as we all know.

Thank you, Madam Chair.

Senator MIKULSKI. Senator Feinstein.

Senator FEINSTEIN. Yes. I don't know who the poor soul is who is head of FEMA. [Laughter.]

But I feel sorry for them because I think FEMA's mission is to fail, the way it is structured. It is so broad that it's impossible. I think we have to recognize that.

I really like the idea of making a major public official head of disaster preparedness and implementation, whether that be the Vice President or a Cabinet secretary, because I think then when those phone calls come, everybody pays attention to them, and I think that is important. Nobody can say, "Oh, this is just some political appointment that has no training in the area, doesn't know what they're doing." The person is on the line to produce, and I think that is extraordinarily important.

I don't think FEMA can be both a paper-pushing agency and be capable of rapid deployment at the same time. I think they are non sequiturs. I don't think they go together. So, my conclusion is that the mission of FEMA is overly broad, that it needs to be restructured and redefined.

I think that it is appropriate to have one part of this the military. I understand why the military doesn't want to be task-responsible, but rather be task-requested, and I think that is fine too.

RESTRUCTURING FEMA

I also like the comments that were made by Mr. Fosler with respect to the Congress should play a leading role and that there should be a single committee in charge. I would hope that whatever recommendations we come out with, Madam Chair, would have that in mind, that there be a single committee in each chamber that is really responsible and tied into this.

So, let's say if you had the Vice President or the Secretary of Transportation, you had a committee in each House, you had a specific designed role for FEMA, you had mutual aid expanded from the local to the States, that you had Governors and mayors brought carefully on line, each one of them trained, you had a disaster pre-

paredness plan mandated for each community that is rehearsed and known, I think we would have a much better response and that there be a specific time.

One thing is, who does the initial assessment. That I am still not really satisfied on. Within 24 hours, it means getting in there. It means having the helicopters available. It means creating the assessment and functioning it back. I would like to ask that same question to this panel please, and if you would just go down the line. Who should be responsible for that initial assessment?

Mr. FOSLER. We believe, Senator, that there needs to be a joint assessment team that is comprised of Federal, State, and local people and those in the private sector that can move very quickly, bring the resources together, make it a rapid assessment and be able to respond quickly.

Senator FEINSTEIN. Who should be on that team?

Mr. FOSLER. We also recommend the creation of a domestic crisis monitoring unit within the White House so that there is someone in the White House who has clear responsibility and has direct access and immediate access to the President. The joint assessment team should be comprised of people within that unit, people within FEMA, others at the State and the local level, and people in the private sector as well.

Senator FEINSTEIN. Let me ask you something. So, take south central Los Angeles. It began to happen. It actually began to unfold on television. How in your model would that be handled?

Mr. FOSLER. Let me ask Mr. Wamsley if he would want to elaborate.

Mr. WAMSLEY. Senator, we think that you can take some of the component agencies of the Federal response plan that are currently designated with emergency support functions and take representatives of those agencies, plus the State and local officials, and have a trained team that exercises and practices, that could go in on the ground and make that assessment early on. We think that is fully within the capacity of the agency, reorganized agency, to do that kind of operational planning.

Senator FEINSTEIN. So, in other words, when it began to unfold, that team would contact the mayor of Los Angeles, would be on a plane, would be out there.

Mr. WAMSLEY. Correct.

Senator FEINSTEIN. The planes would be waiting and they would do the immediate assessment probably from the air all together?

Mr. WAMSLEY. In the air and on the ground. They need to get out and walk around too. We noticed that in Florida. You can't tell it all from the air.

You could also call in the resources of NASA. There's a lot of resources in the Federal Government that are simply not tapped for this purpose. We haven't given our attention to that kind of response.

Senator FEINSTEIN. So, what you are saying is major natural or civil disasters should be triggered by a White House assessment team.

Mr. WAMSLEY. Now, I wouldn't call it a White House assessment team. We think that a person who is tracking and monitoring these crises shouldn't be the same person that manages it.

Senator FEINSTEIN. Where would that team be generated from?

Mr. WAMSLEY. Well, that team would form around FEMA. FEMA would be the core of it, but then you would have to have other agencies, such as the Corps of Engineers, that are presently tasked in the Federal response plan to work with FEMA in the assessment team. But they have to work together and train together.

Senator FEINSTEIN. Thank you.

Ms. Hart, would you like to comment? Your comments were excellent.

Ms. HART. I'm not sure it matters who does it because right now nobody is trained to do it. So, we are really developing a capability that doesn't necessarily exist. There are pieces of expertise and capability throughout the Federal Government. There is some expertise at the State level. There is some at the local level.

I think we like the idea of this joint team, but as we say in our audit report, should for some reason a part of that team break-down, not be able to make it, the Federal Government—and we recommend that FEMA do this—work with other Federal agencies, work with NASA, work with the Department of Defense, and make sure that they are able to do it and able to do it quickly.

One of the things that Senator Mikulski brought up that I was so glad about was that we do, in fact, have an ability which can be expanded and refined to predict in advance what the likely effects are going to be, and we can begin moving resources before the hurricane ever hits. We don't want to put them in what looks like the immediate path.

Senator FEINSTEIN. Well, then why haven't you? What has stopped it from happening?

Ms. HART. We asked some of those questions of FEMA management. Remember, I'm with the Inspector General's Office. I can't tell you we got totally satisfactory answers to why.

FEMA'S PHILOSOPHY

Clearly, there is a philosophy that FEMA and the Federal Government are the third tier of response. I think what we have learned in recent experience is that that philosophy is no longer going to be acceptable.

Senator FEINSTEIN. Are you saying it is not an agency which is initially proactive, which is willing to take the responsibility on its shoulders?

Ms. HART. That's not a concept that is enshrined in legislation. The Federal response plan embodies the exact philosophy that FEMA and the Federal Government are the third tier.

Now, FEMA has been very outspoken that this is their philosophy and their concept of operations. So, we want that to change. There is going to have to be a clear signal. There is going to have to be the authority that they are confused about whether they have nor not. There is going to have be a working with the State and local government to define what the expectations are of each level of government, some triggering mechanisms for when Federal resources are brought into play. None of those things exist right now.

Senator FEINSTEIN. Because sometimes if you wait to be asked, you're not asked. I mean, you got to go, and you got to have that authority.

Mr. Peach, do you want to comment?

Mr. PEACH. Yes.

Senator FEINSTEIN. Thank you very much, Ms. Hart.

Mr. PEACH. Where we clearly would come down would be that you could have that type of capability in a reenergized FEMA. We talk in our testimony in terms of having an expert unit developed within FEMA that could provide Federal, State, and local officials with information on what is needed to respond to a catastrophic disaster.

As I tried to lay out earlier, there is capability within the National Preparedness Directorate, and within the other areas of FEMA, that FEMA should really take a look at their budget and their resources and how they are used to help begin to create that type of unit. There are modeling and other capabilities that are there. They can tie into NASA or other satellite capabilities that the Federal Government has. Some of those are very sophisticated in terms of being able to predict what may happen in a particular disaster where you have advanced warning.

You need to have the capability to have that type of team, as you alluded to, in the air and ready to go so within 12 to 24 hours, you have a very thorough understanding of what it is you are looking at and recommendations as to what is needed.

In the case of Hurricane Andrew, communications were cut off with the State and local government. The local officials particularly, they lost their own homes. So, they were affected by the storm at the same time they were trying to respond to very devastating circumstances and cutting off of communication.

From the State level, the communications coming out of there was not so great that they understood that south of Miami, FL, there was tremendous devastation. Perhaps they were relieved that Miami wasn't hit in a central way, but south of Miami, tremendous devastation. It only sunk in 2 days later.

We are talking about building the capability that can help you understand within 12 to 24 hours what is going on. The Government has some assets and capabilities that the 50 States are not going to have to do that, particularly for catastrophic disasters. So, we can see it fitting within FEMA.

Certainly they ought to tie into State and local officials where you can have enough pre-understanding of what is happening, that you can make use of them also and bring them in. But if you can't or if that capacity is lost, you need to have the ability to be able to stand in so somebody can tell the Governor. In my model, you don't take this federalism out of it. You have them being able to tell the Governor here's what has happened. Here's what it looks like you need to be able to deal with the disaster. Here's what we can deliver to help you, not just sitting there waiting and saying, "Well, we don't know, Governor. You tell us if you need anything and we'll respond whenever you tell us."

That has been FEMA's philosophy. We have to wait until the Governor tells us he needs something. If the Governor doesn't know and no one is telling him, then you've got a disconnect. In the case of this storm, this disconnect lasted for virtually 4 days.

Ms. ENGLAND-JOSEPH. When we recommended the disaster unit, we did not contemplate that all the resources for that expert team

would be housed at FEMA. We see FEMA being the structure or support mechanism for allowing that unit to come together, but we really see the capability not just in other parts of FEMA that are currently classified, but also in other agencies such as the Department of Defense. You want public health officials that are experts. You want people that are out there in the Federal Government that have the capability to make up this team.

If I can build on the suggestion you have been talking about about regional structures where you have mutual aid among the States, I can see where this disaster unit would have involved other States that are surrounding the area because then you would be able to determine very quickly what resources exist right over the border or might be available to be called in.

The other thing I would mention is that it is very important to think of this disaster unit as something that happens before the disaster occurs. In the case of earthquakes and some other types of hazards, we may not have any warning, and then we just have to activate at the minute we know that there is a situation that requires Federal attention. But I think that in the case of a hurricane, we want that happening 3 or 4 days before this disaster hits.

There are plenty of opportunities for us through strategic planning and risk-based analysis to be thinking about the what-ifs so that we are not surprised when it lands, so that it doesn't take a rocket scientist to figure out what you are going to need. We typically know beforehand. So, it is a matter of getting us in there quickly enough to provide the right resources for those victims.

Senator FEINSTEIN. Madam Chair, I know my time is expired, and I really appreciate your largess. But I wanted to just add one thing to what that side of the table said because I think it is important.

NEED FOR COMMUNICATION LINK

Let me put on my local official hat. Local officials are reluctant to call in highway patrol, mutual aid, National Guard because it implies they can't handle it. That I think is the value of what Mr. Peach has just said. That, coming from above, is sort of laid out in a way that they have to confront it rapidly. If the Federal response said this is what you have fast, they know if they have 200 police officers and 150 firefighters or whatever, they can't cope with it. So, they've got to ask. So, the key has got to be to build that communication link immediately so that it happens I think.

Ms. ENGLAND-JOSEPH. Well, the other key is that you have to have the information to be able to convince people that a decision is needed.

Senator FEINSTEIN. Yes.

Ms. ENGLAND-JOSEPH. If you don't have information, you cannot assume things are taken care of.

Senator FEINSTEIN. Thank you very much.

Senator MIKULSKI. Senator Mack, you get one little question, and then I'll wrap up.

Senator MACK. Thank you, Madam Chair.

Mr. Peach, this is directed to you. In your testimony at least I thought you said that there was some capability within FEMA that analyzed what they thought the storm was going to do with south

Florida and came within 10 percent of what actually occurred. But I gather from what you said that that was not really shared with anybody. I guess my question is, Why wasn't that shared. Does it go back to the concept of the third tier? Because I did hear that over and over again down there.

Mr. PEACH. No; an appropriate word would be the "compartmentalization" of what is some of the more classified elements of FEMA's mission areas. Yet, there was a capability there. My presumption would be it was done more as an exercise to see how close they could get to what the circumstances were and the use of their model. So, they adjusted the model to deal with the wind velocities or other things that would come up under Andrew, and they got a very close readout of what actually occurred.

It would have been very helpful in terms of understanding; for example, the number of meals that were going to have to be provided because of the number of homeless you had in the area.

Ms. ENGLAND-JOSEPH. Now very few of those resources are used in the natural disaster area. So, when that information was available, there wasn't a mechanism to translate that information into action.

Senator MIKULSKI. Well, that is going to go to my line of questions.

Mr. PEACH. If you want to look at a revitalized FEMA, one of the things is embodying this all hazards concept that needs to be looked at and priority among hazards and use of resources.

Senator MACK. Thank you, Madam Chairman.

Senator MIKULSKI. To my own line of questions, but first some points that have been raised both by Senator Feinstein and by the committee.

ONE-STOP SHOP

Senator Feinstein, this Appropriations Committee is often the one-stop shop because of the fragmented approach of our authorizing committees. Senator, as you enjoy your term on this subcommittee, you are going to find that EPA is responsible to 80 some different subcommittees in both the House and the Senate, and we are the only one-stop shop for all of EPA. You will find that FEMA is in Environment and Public Works, is in the Commerce Committee, is in Government Ops. Senator, some of hazardous Superfund stuff is in EPA. Once again, this subcommittee is its one-stop shop.

That is why this subcommittee and this subcommittee Chair has taken the leadership to convene such a hearing because there is no single authorizing committee to do it, and in the fragmentation and wanting to move in a quick step way, we have assumed this leadership.

I wanted to say to my colleagues on the committee it is not our desire to be an authorizing committee by proxy. We will meet our appropriating role, but we will make recommendations as a result of this hearing, your investigations, and your thoughtful analysis. I am going to task my chief clerk to meet with your respective staff to pull these ideas together for us to approach both the administration, as well as our colleagues on those three authorizing committees, to talk about a legislative framework that is both contem-

porary and effective. But that is kind of where we have all come from.

Senator Feinstein, you asked, well, why are they like that. Well, really, this is by both subculture and by statute. FEMA is really kind of an outgrowth of a Federal agency that was established in the cold war, which was a Federal agency that was established to meet Federal response in the event of nuclear attack.

We are of the same generation. Do you remember when there were bomb shelters and air raid drills and jumping under the desks? Senator Mack is close to that, but we are going to give him a waiver. [Laughter.]

But what then happened, because of other issues facing our society, they then added on the civilian natural and civil disturbance task to it. So, it has been added on without really clear thought.

What has developed at FEMA, and I must say even at State and local levels, is that they are reluctant to act by statute. They are reluctant to act by subculture, and they are reluctant to act because often the leadership of the agencies have not been professional staff, but have been used as dumping grounds for political appointees because of promises incurred by the executive branch.

We want to change that and we want to go to that response. For the political appointees who have been excellent, we acknowledge that, but that has been essentially the historical and subculture nature of it. I think the National Academy of Public Administration would deal with that.

Fundamental to what we have now is there has been no examination by FEMA in light of what it can do now with the coming of the end of the cold war. They have not undertaken the same type of assessment that our own Joint Chiefs, our own Department of Defense led by Colin Powell, have done to look at what is the role of the military in the new world order. Therefore, this is one of the charges that we have to look at with FEMA.

I am going to then focus on you, Ms. Hart, and you, Mr. Peach and Ms. England-Joseph. Without in any way violating national security, what would you think would be those elements of the civil defense function that you think could be translated into movement or be tasked upon specific warnings where we can detect that either earthquake, hurricane, and so on would be coming forth where we could utilize that so that we would come within that 10-percent error?

Everything that has been described, the cutoff of information in Florida, the chaos of the situation, everybody at the same traffic light, responders themselves knowing that their own families are victims of the disaster are exactly what we should have anticipated happening should there be a nuclear attack. What happened, though, was the equivalent of a nuclear attack happened there or in San Francisco.

So, then my question is, Don't we have the plans. Don't we have the mechanisms? Can they be transferred to civilian use or have, in fact, we overanticipated the reliability of even our own civil defense nuclear response? Ms. Hart?

That is a complicated question, but they should have been fit for duty for nuclear war. Could they have then translated it to south

Florida or San Francisco, or do we really need to scrap everything, pick out some elements, and start anew?

Ms. HART. There are assets that currently exist in FEMA and there are capabilities that have not been fully utilized in disaster and emergency response. We have identified some of them in our report. There are others. The Agency needs to take a good look at itself and I know that these other bodies are looking at those things too.

One of the problems may be that in planning for nuclear attack, the focus has been that people at the local level are really going to be largely on their own. That is not a concept that is going to translate into disaster response.

So, FEMA has also concentrated most of its efforts on working with the States, and has limited connection, limited contact with local government other than, for example, in the program that you are quite familiar with where we work with local communities that have nuclear commercial powerplants. That is an atypical example of where FEMA does work directly with local governments in a way that I think all of these groups who have been looking at this problem are now envisioning.

We talk about calling 911. When we do that at the local government level, we know that there are squad cars out there with police officers in them, and we know that there are ambulances, and we know that there are fire trucks, and we know that there are people who know how to use a chain saw. We don't have that at the State level and at the Federal level. What we have are Federal agencies and State agencies who, for the most part, although with some exceptions, write regulations, let contracts, make grants. So, we are not talking about a natural extension of existing capability or your day-to-day job.

Senator MIKULSKI. And in which there has been training or drills.

Ms. HART. Or exercises; exactly right.

Senator MIKULSKI. Ms. Joseph, do you want to respond because I know you have done a lot of the hands-on work here?

Ms. ENGLAND-JOSEPH. We very specifically state in our testimony the types of skills and capabilities that exist on that side of the house that very directly could be used, and I will just quote the phrase that we used. Currently there are skills such as strategic and tactical planning, logistics, command and control, and communications.

Senator MIKULSKI. Where is that in this report?

Ms. ENGLAND-JOSEPH. In our large statement, it is on page 20. We didn't talk about this in our brief statement. It's that second paragraph.

In general, however, the directorate has many of the people and resources that could help form the nucleus of the disaster unit we talked about. Its current rapid response mission places a premium on people with such skills as strategic and tactical planning, logistics, command and control, and communications. Its resources include communications, transportation, life support, and sophisticated computer modeling equipment. They went on to tell us that they maintain such a high level of readiness, that they can in-

stantly deploy people and resources from a number of locations to anywhere in the United States.

Now, anything more detailed than that is obviously classified, but at least at that level, we can talk that there are resources there. They are just hidden behind a black curtain.

Mr. PEACH. There is also one other element too, just to mention. There is a section that deals with the use of the civil defense funds which are largely used for a lot of the planning to help the local level. Again, I think most of these funds are directed and reserved more toward the planning for the nuclear situation as opposed to where I think some of the local and State governments would like to use them more, and that is an all-hazards philosophy to help them plan for the hazards they think will be most prevalent in their area. So, there is an opportunity to look for redirection of that as well.

Senator MIKULSKI. Ms. Hart?

Ms. HART. I just want to mention the fact that in response to Hurricane Andrew, Hurricane Iniki, and this most recent series of disasters, the mobile assets of the National Preparedness Directorate were used to a far greater extent than they have ever been used in the past and were very effective. We think that this represents an early response capability that is definitely on the increase as far as FEMA's ability to use it and use it well.

Senator MIKULSKI. Ms. Hart, recognizing the limits to this line of questioning because of national security reasons, as the inspector general, I know you can operate in both spheres. If you would undertake a review of those elements that have been identified that could be recommended to the President or in our legislative framework for essentially either declassification or dual-use capacity and that be part of the legislative framework.

Ms. HART. Certainly; we would be happy to do that.

I would also just like to note that the classification of some of this stuff wasn't the problem. It was the fact that the responders on the other side of FEMA weren't sure how to use it in a way that was effective.

Senator MIKULSKI. But we want to make sure that from now on nobody says, "Well, we don't have the statute." "Gee, we don't know," and "Oh, well, you know, gee whiz." [Laughter.]

What we are talking about here is an agency for the 21st century and we don't know what our Nation is going to face. We don't know what could befall us. We need to be prepared for an earthquake. We need to be prepared for an urban disturbance. We need to be prepared where a terrorist would do a terrible thing that could immobilize a city or a nuclear powerplant. Each one of those, though, are the core elements of preparedness, response, and something we have not really dwelt on is the rehabilitation and restoration not only of services, but then for the community to be able to go on to its level of self-sufficiency.

I think we have covered a lot of ground today, and I want to thank everyone who has participated, certainly this panel. To those in government, really a special thanks, and to the National Academy of Public Administration because sometimes to operationalize good intentions can have enormous unintended negative con-

sequences. So, we look forward to your final report to us, as well as the others. Again, thank you.

PREPARED STATEMENTS

Before concluding the hearing, without objection, I would like to include in the hearing record, statements received from Senator Lautenberg and Senator Akaka.

[The statements follow:]

STATEMENT OF SENATOR LAUTENBERG

Madame Chair, I want to thank you and the Subcommittee on VA, HUD and Independent Agencies for convening this hearing on the Federal Emergency Management Agency and the federal disaster response policy.

My state of New Jersey was faced with a terrible storm a month ago which ravaged our coast and some inland areas, disrupted the lives of thousands of people, threatened jobs, local economies and our \$18 billion per year tourist industry.

Unfortunately, storms are not a stranger to New Jersey. Last year we suffered two successive blows—we barely had time to catch our breath from the Halloween storm when our coast was hit again with the January storm.

The latest storm has decimated tall dunes from many of our beaches, breached seawalls and bulkheads, and left our coastline dangerously vulnerable to any further storm damage. In addition, many of our inland areas suffered severe flooding.

This storm was the worst to hit my state in three decades. Twelve counties were included in the disaster declaration. Some experts have estimated that damage from this storm exceed estimates from the 1962 storm, which is said to have caused \$122 million in damages, or \$334 million in 1980 dollars.

I inspected first-hand some of the hardest hit areas immediately after the storm. I was deeply disturbed to see scenes of communities reflecting devastation and major damage. In the midst of a recession, the extensive damage from the storm is a double blow to the state and local economies.

I would like to take this opportunity Madame Chair, to let members of this Subcommittee know that, during this most recent disaster in New Jersey, FEMA did not sit back and wait. The job is far from complete, but the message I have gotten from the State is that, at this point, the federal and state officials are working well together to make sure that the job gets done and gets done right.

In saying this, I do not want to be insensitive to experiences of others across our nation. We have all heard criticisms of FEMA's handling of emergency disasters over the last year and I am certain that there is room for great improvement. We must work to ensure the safety of those affected by emergency disasters.

New Jersey recognizes the important role that the state must play in an emergency and will be reassessing its own storm-reaction policies. I strongly support the efforts of the Subcommittee to review the federal disaster response policy and to seek to clarify and improve upon the delineation of roles for federal, state and non-government organizations.

I commend the Chair for her leadership in reviewing this important issue.

STATEMENT OF SENATOR AKAKA

Madame Chair, thank you for this opportunity to present testimony on FEMA's disaster response policy. I appreciate your leadership on this important issue. I know that you have devoted much energy to the examination of FEMA's mission, structure, and operations in light of the agency's performance with regard to recent disasters.

My statement today will lightly sketch over FEMA's immediate response to Hurricane Iniki. With your forbearance, I would also like to add some thoughts regarding the continuing long-term needs of Iniki's victims.

On September 11, 1992, Hurricane Iniki struck the island of Kauai and the Waianae shore of Oahu with the force of a sledgehammer. Sustained winds of 140 miles per hour, with gusts of up to 226 mph, were recorded. In a few nightmare hours, the lives of Kauai's 51,000 permanent residents and thousands of tourists had been radically transformed for the worse. On Kauai alone, four people died and nearly \$1.6 billion in damage was recorded in private and public property loss. More than 14,000 residences were destroyed or damaged, leaving thousands homeless or poorly sheltered from the elements. Five thousand utility poles were knocked down,

leaving residents without electricity or the ability to communicate with themselves or the outside world. The loss of power also meant that no water could be pumped to faucets. Tons of debris blocked roads, shutting down transportation island-wide. Harbors, schools, offices, and other government infrastructure sustained heavy damage. And the local airport, the island's major link with the rest of the state, was knocked out of commission, preventing immediate relief and evacuation.

Despite the tremendous damage caused by Iniki, I am happy to report that, thanks to the quick reaction of Federal, state, and local officials, the energy and enthusiasm of volunteer agencies, and most of all to the courage and fortitude of the people of Kauai, emergency relief efforts proceeded with relative dispatch and efficiency. While it would be impossible to describe fully these efforts in the short amount of time at my disposal, a snapshot of the recovery effort two weeks after the storm may provide you and the other members of the Committee with a sense of the magnitude of the damage caused by Iniki and the rapidity and effectiveness of the response to the disaster. At the end of the second week following the storm:

- Lihue airport, which had been knocked out of commission for two days, had been opened to round-the-clock military and commercial traffic. Relief supplies were being flown in on a constant schedule; other supplies were sent by sea and offloaded at Barking Sands missile facility for distribution.
- All of the estimated 8,000 to 10,000 tourists who were stranded on the island had been evacuated and either sent home or rebooked to alternate vacation destinations within the state.
- Thousands of military personnel, including Marines, Army units, and members of the National Guard were providing security or were helping clear thousands of tons of debris that littered the island.
- 95% of water service had been restored, while telephone services were operating at 80% of normal capacity.
- 20% of electrical service had been restored at this point, but hundreds of local power company workers, supplemented by dozens of crews from the mainland, worked to ensure that the most critical needs were being met.
- Disaster management assistance teams had successfully treated more than 2,000 people for injuries at field hospitals, including 700 inpatients and 1300 outpatients.
- Shelters and tents and other temporary quarters were available for the thousands of displaced residents who had not yet been relocated or otherwise accommodated; five hundred special, family sized tents had been erected for those rendered homeless by extensive damage to homes.
- Millions of square feet of plastic sheeting had been requisitioned to serve as temporary repair material.
- Schools had been inspected for damage and classes had resumed on a half-day schedule.
- The Red Cross and Salvation Army had served 121,000 meals at 16 feeding sites and 3 mobile kitchens; this does not include the tons of food supplies that had been passed out at central distribution centers.
- FEMA had received more than 13,000 applications for individual assistance, nearly the current level of 15,374.
- FEMA had obligated an initial \$1 million for individual and family grants to cover essential personal property loss, medical, dental, funeral, and other necessary expenses not covered by other disaster programs.
- An initial \$1.5 million for disaster unemployment assistance had been obligated.
- The Small Business Administration had issued nearly 3,500 Home and Personal Property applications, of which it had initially approved or accepted 370; the agency had also issued over a thousand business applications, with 32 accepted or approved.

Madame Chair, this quick response in the first two weeks of the hurricane could not have been possible without the highest level of professionalism exhibited by volunteer organizations and local, state and Federal agencies, including FEMA, which worked with Hawaii Civil Defense to coordinate disaster response activities. Virtually all local and state officials with whom I have been in touch have liberally praised FEMA's conduct.

In a recent letter to me, Kauai County Mayor JoAnne Yukimura summarized her assessment of the agency's performance during this critical period:

"In my opinion, FEMA's initial response was timely and well-executed. The first FEMA people arrived on Kauai by early Saturday morning, the day after Iniki struck Kauai. The communication van, which the County had requested prior to the Hurricane, arrived by Sunday. Although limited in its coverage, the 'Commvan' did provide valuable communications links where there had been none.

"Throughout the first two-three weeks and into the following two to three months, FEMA staff, in addition to setting up headquarters on Kauai, were very accessible at the Emergency Operating Center and were present at all our coordinating meetings where they shared valuable information with other agencies and became part of our coordinated recovery efforts. With assistance from the National Guard, the county, and other agencies, FEMA was instrumental in opening and operating the Disaster Application Centers; in facilitating the bringing in of key supplies such as food, tarps, ice, portapotties, utility poles, and other essential materials; in participating in the Power Council, which set priorities for the distribution of generators and the restoration of electricity; in the development of Damage Survey Reports, which provided the basis for funding of critical response efforts."

According to the Mayor, FEMA's greatest successes appear to be in the area of public assistance. Mayor Yukimura tells me that because FEMA personnel were accessible and integrated into local planning and coordination activities, they were able to understand the County's needs and facilitate funding that made important relief activities possible.

If FEMA has any problems, Mayor Yukimura believes these to be primarily in the area of individual assistance:

- The housing staff was sometimes disorganized and not always well informed. They never completed a housing survey she requested, which left her without an adequate information base.
- FEMA's advice that potential applicants contact their insurance companies before coming to the DAC caused numerous misunderstandings which resulted in many individuals failing to seek any assistance early on. (I would note that Patsy Mink, my colleague on the House side who represents Kauai, has been especially diligent in identifying and pursuing these individual cases.)
- A number of applications for assistance were rejected unfairly or overlooked by FEMA, but were reassessed after the applicants brought them to the attention of the County. Mayor Yukimura says, "it haunts me to think that there may be other citizens who somehow have not come our way who haven't gotten their full entitlements in this time of great need."

Aside from the examples that the Mayor provides, there are other areas of concern that have come to my personal attention which I believe should be addressed:

- More needs to be done to accommodate private donations. My office received numerous calls from around the country offering goods and services for Iniki victims. One woman in Colorado, a former resident of Kauai, had organized a charity drive for Iniki victims and eventually obtained enough household goods to fill a shipping container. Unfortunately, she did not have the means to transport the container to Hawaii; she sought assistance from FEMA and some of the voluntary agencies, but was told that they do not accept in-kind donations. I am convinced that there must be a way for FEMA to facilitate the collection and transportation of donations that are volunteered by charitable citizens across the country.
- Assistance provided by neighboring states should be better coordinated. I know that there were significant shortages of important supplies in the early stages of the relief operation. Given Hawaii's isolation, development of a regional mutual-aid agreement with other states would certainly aid in future disasters in Hawaii.
- FEMA needs to better manage its public relations with disaster victims to avoid charges of favoritism or neglect. There is a perception among affected residents of the Waianae Coast on Oahu that, because the major damage had been incurred by Kauai, their needs were not being addressed as promptly or thoroughly as the residents of Kauai. While I have no documentation to support these charges of neglect, the perception nevertheless exists that Waianae residents played second fiddle to their fellow victims on Kauai. In the future, I would suggest that FEMA make every effort to treat all disaster victims equally. This is very important for the psychological well-being of citizens who have experienced significant losses.

Aside from these criticisms, I largely agree with Mayor Yukimura's assessment of FEMA's performance. For the most part, I believe that FEMA performed as well as could be expected. I attribute this to several facts. First, FEMA's Region IX is experienced in responding to disasters in its Pacific jurisdiction. In fact, the Pacific experiences more disasters on average than any other region. The regional staff has developed close working relationships with our local civil defense personnel and is fairly knowledgeable about Hawaii's unique multiethnic culture.

Second, FEMA was heavily criticized for the slow and sometimes inappropriate response to Hurricane Andrew in Florida and Louisiana. FEMA knew that it would have no excuses in responding to another hurricane that occurred so soon after An-

drew. In this sense, Florida and Louisiana's tragedy was Hawaii's gain. Any assessment of FEMA's performance after Iniki must take this into account.

Third, FEMA had ready access to the considerable Federal resources that are concentrated in Hawaii, particularly the naval and military forces under CINCPAC. Furthermore, Hawaii's geographic isolation has created a natural tendency for Federal agencies in Hawaii, as well as state agencies, to cooperate much more closely than they would elsewhere.

Fourth, FEMA had the benefit of working with what I consider the finest civil defense organization in the nation. Perhaps because of the difficulties involved in responding to emergencies in an insular, geographically isolated state, Hawaii's Civil Defense system has evolved into one of the most sophisticated in the country. Thus, when FEMA arrived on the scene, a working emergency infrastructure was already in place for the agency to tie into.

Finally, and perhaps most important, FEMA had the willing and eager cooperation of the people of Kauai. Their optimism, their courage, their eagerness to help each other, provided an ideal working environment for FEMA. The fact that there was little looting, that order was preserved so easily, that smiles could be observed among the wreckage of destroyed homes, is evidence enough that Iniki's victims were determined to help themselves out of disaster long before FEMA or other relief agencies arrived to offer material assistance.

In summary, then, I am largely satisfied by FEMA's performance in addressing the immediate disaster needs of Iniki's victims. The FEMA staff that helped coordinate relief demonstrated a high degree of professionalism, dedication, and compassion.

Madame Chair, I would now like to highlight a number of major areas of concern relating to Kauai's continuing disaster needs. I wish to point out specific ongoing and future requirements in the area of agriculture, health, housing, and tourism. While there are other areas of concern that need to be addressed, these issues are particularly important to Kauai's full recovery.

AGRICULTURE

Iniki's winds had barely subsided before reports of agricultural losses began to roll in. The losses were catastrophic and unprecedented, far surpassing the damage to crops resulting from Hurricane Iwa in 1983. The Hawaii Farm Bureau estimates that 90 percent of the farms visited by their staff experienced total crop losses.

A review of federal agricultural disaster programs quickly revealed that they were not tailored to Hawaii's needs. In an overwhelming number of cases, the federal programs were designed to address the needs of mainland farmers growing seasonal crops which are planted and harvested within a calendar year. The federal program simply overlooked the disaster needs in Hawaii where crops planted in a tropical climate are harvested throughout the year.

The law authorizing farm disaster payments contains a number of caps, limits, and exclusions which have severely curtailed, and in many cases have completely eliminated, disaster payments to Kauai's farmers.

In order to fairly compensate Kauai's farmers for their losses, the special relief provisions of the Drought Assistance Act of 1988 should be extended to crop losses caused by Hurricane Iniki. This will insure that Kauai's farm community will be compensated for their losses and that they can return to productive farming.

HEALTH CARE

Another area of continuing concern is the funding of health care services for Kauai residents adversely affected by Hurricane Iniki. In December 1992, FEMA rejected the Hawaii State Department of Health's request for funding to cover primary health care to the hurricane victims and an anticipated increase in public health care expenditures resulting from the disaster-related increase in unemployment.

The State Health Insurance Program (SHIP) is the state-funded basic benefits insurance program, established in 1989, for low income self-employed workers and others who are without coverage. 18,000 persons are estimated by the State to be laid off as a result of Hurricane Iniki and will lose their employer-provided health insurance. The storm has increased SHIP enrollment by 2,000 people, and another 2,000 are expected to enroll in the program as their work-based health benefits run out.

The State of Hawaii spent about \$1.8 million providing immediate primary health benefits to hurricane victims. An additional \$2.2 million has been expended in providing the disaster-related SHIP coverage. I would like a clarification of FEMA's response to the State's request for FEMA assistance in this area.

HOUSING

There remains a critical need to replace housing destroyed or severely damaged in September.

Prior to Iniki, Kauai had approximately 18,600 residential units. After Iniki, nearly 77 percent of these units were destroyed or damaged. Added to the 14,340 affected housing units is the fact that Kauai already had a housing shortage that would have required an immediate 23 percent increase in its existing housing stock. The immediate need for both short-term and long-term housing remains critical.

Although the Dire Emergency Supplemental Appropriations Act of 1992 authorized HUD to overissue Section 8 rental vouchers, some residents find the vouchers unusable because of the shortage of rental units. A family with a Section 8 voucher must locate housing within 60 days of their contract, or lose certification, thus necessitating the need to reapply for assistance and being placed at the bottom of the Section 8 waiting list.

The State Housing Finance and Development Corporation estimates the cost of developing a multi-family, wood-framed unit at approximately \$120,000. For each \$1 million in HOME funds, about 25 rental units could be delivered with each requiring \$40,000 worth of equity subsidy. HFDC estimates that due to the high cost of construction, the \$4.160 million that Kauai received in HOME emergency funding will produce about 105 units.

I would like to take a moment to commend the Chair and other members of the Appropriations Committee for supporting \$2 million for the Kauai County Housing Agency to acquire and develop affordable rental housing for low and moderate income families on the island in H.R. 5679. And, of course, I applaud your work in passing the Dire Supplemental which provided much to the State of Hawaii and the County of Kauai.

Related to the lack of housing is the cancellation or non-renewal of homeowners insurance for an estimated 70,000 Hawaii residents. This figure is expected to rise as more insurers assess their Hawaii policies. The huge losses suffered by insurance companies have caused many insurers to withdraw from the homeowners insurance market in Hawaii, especially after one local company suffered more than \$300 million in losses and went out of business. Six of the State's 10 largest property insurers, plus smaller ones, no longer write new policies, renew existing ones or have limited coverage or agents' commissions.

One Hawaii insurance company that has withdrawn from the homeowners policy market did so after estimating that if Oahu was hit by a disaster like Iniki, the company stood to pay out up to \$1 billion in damage claims.

The State has responded to this crisis by expanding the Hawaii Property Insurance Association which underwrites policies for volcanic risk zones to cover all homeowners. This is only a short-term solution because insurance purchased through the program will cost three to four times more than normal policies. Financial institutions in the State also warn that they might be affected if individuals buying homes are unable to obtain insurance, thus canceling settlements. And local realtors say there may be a slowing of real estate transactions as potential buyers wait to see whether they will be able to purchase policies with wind or hurricane protection.

Because of the tremendous losses experienced by insurance companies due to hurricanes in Hawaii, Guam, Florida and Louisiana, riots in Los Angeles, water-damage in Chicago and other natural disasters throughout the United States this year, we can expect an increase in all forms of insurance policies. Some insurers warn that they will seek legislation to help limit potential losses, others warn they will no longer write policies in coastal areas. This is an issue which I will carefully review in order to guarantee that those living in hurricane-prone areas or coastal areas will not lack access to homeowners insurance.

In addition to the above-mentioned problems, there remains the need to ensure that companies doing business in hurricane prone areas have access to catastrophic reinsurance. The reinsurance market has shrunk about 25 percent a year since Hurricane Hugo in 1989. Without sufficient reinsurance, insurers doing business in Hawaii will pay considerably more or take on greater risks. Either way, rates will go up for consumers.

TOURISM

Like other industries, Kauai's tourism industry—the island's most important—was severely affected by Iniki. The Hawaii Department of Business and Economic Development and Tourism (DBEDT) estimates damage to the tourism infrastructure on Kauai at \$410 million, of which \$344 million was to visitor accommodations. A recent study conducted by the Hawaii Hotel Association showed that of Kauai's

8,200 visitor rooms (including hotels, resort condos, and bed and breakfast establishments), roughly 650 units had been destroyed, 1,100 units severely damaged, and 2,100 moderately damaged. The study estimated that the number of units that could be expected to receive visitors by the beginning of this year was estimated at 2,000 units, or only 26 percent of the total.

DBEDT

Director Mufi Hanneman recently stated that, "the recovery of the visitor industry is the most critical factor for the long-term recovery of the island. It is the engine that drives the economy. The longer the period before full recovery of the visitor industry, the more likely it is that many Kauai residents will suffer substantial hardship."

Tourism's importance to the island can be illustrated by the following facts: In 1991, Kauai averaged over 19,000 visitors per day who spent an estimated \$1.1 billion over the course of the year. Of the 29,000 jobs on the island, an estimated 10,800, or 37 percent, were directly related to the visitor industry. Another 6,100 jobs were indirectly generated by the industry, for a total of nearly 17,000, or 58 percent, wholly or partially dependent on the industry.

Because Kauai's economic future is so closely tied to tourism's recovery, it is critically important that prospective visitors be lured back to the island. We need to dispel the false, but understandable, notion that Kauai is no longer a destination of choice. This will entail large investments in marketing campaigns; it will require a great deal of time and money to educate visitors and travel operators who have scratched Kauai off their vacation lists.

To this end, the Kauai County government will be requesting nearly \$5 million from state and Federal sources to fund a massive advertising campaign to educate travelers and travel agents alike about the continued viability of Kauai as a desirable tropical destination. I will be strongly supporting this request not only because it is important to Kauai's long-term recovery, but because I recognize that the sooner we get Kauai back on its feet, the sooner we can cease paying millions of additional dollars in extended unemployment and welfare assistance.

That concludes my statement, Madame Chair. I thank you again for allowing me this opportunity to express my views on FEMA's short-term response to Hurricane Iniki as well as my thoughts on some of the major long-term problems faced by the people of Kauai and other islands that will need to be addressed in the coming months and years. I look forward to working with you on these matters in the near future.

ADDITIONAL COMMITTEE QUESTIONS

Senator MIKULSKI. We will submit the balance of the questions for response in the record.

[The following questions were not asked at the hearing, but were submitted to the Agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR INOUIYE

Question. The Federal Emergency Management Agency's (FEMA's) response to recent disasters in Florida, Louisiana, California, and Hawaii has drawn differing opinions of effectiveness even though former FEMA Director Stickney claims his agency responded in a similar manner. Can any member of the panel explain why the results were apparently so different?

Answer. Limited observations show differences involving magnitude of damage, level of expectations on the part of affected State and local governments and residents, and quality of working relationships between affected governments and FEMA. In addition, FEMA did begin moving some supplies and equipment more rapidly in the later disasters. All of these differences influence actual and perceived effectiveness.

Question. FEMA provides a central point within the federal government for disaster assistance. How important is this to state and local governments?

Answer. State and local government representatives have told us that it is important to them to have a central federal point for coordinating disaster assistance. Their recommendations are for improving the way this role is performed.

Question. The Department of Defense and the National Guard have a major role in disaster response by virtue of their resources and deployment capabilities. Should they be assigned full responsibility for the response phase of disasters?

Answer. No. Department of Defense officials we interviewed as part of our audit of Hurricane Andrew told us that disaster response must remain a secondary mission for them. They said that while the Department of Defense has capability that is valuable in disaster response, they should be tasked under the direction of a civilian agency. They also recommended that FEMA explore the use of private vendors as a potentially more cost effective source for some of the tasks that the Department of Defense performed in response to Hurricane Andrew such as logistics, transportation and mass care. They suggested that FEMA look at similar contracts used by Defense to provide support to troops during the Gulf crisis and the deployment to Somalia as possible models.

Question. Handling of donations and volunteers during the response phase seem to be inadequately managed. Do you have recommendations on how this can be improved?

Answer. We are aware of the enormous problems

caused in large disasters by the generous but often inappropriate outpouring of donations and volunteered services. Communities already hard hit by the disaster are inundated with unmarked, unsorted contributions of goods that must be stored, sorted, transported and distributed to be useful. The federal agencies, in cooperation with the Red Cross, have developed a joint policy, incorporated in the Federal Response Plan, encouraging the public to give cash to private non-profit organizations involved in disaster relief in lieu of clothing, food or other goods. In times of disaster, this policy is emphasized in public information efforts. However, in catastrophic disasters, there will undoubtedly continue to be a requirement for voluntary organizations, and local, state and federal government agencies to improve their plans and capabilities for coping with donated goods and services.

Question. Catastrophic disasters have had a profound impact on the insurance industry. Many companies have withdrawn from providing homeowner and other types of insurance. All insurance companies seem to anticipate a need to significantly raise insurance rates. Can a strong mitigation program by the emergency management community in cooperation with the insurance industry produce a solution that will result in natural disaster insurance for all commercial and residential parties at a reasonable rate?

Answer. We have not studied this issue. However we believe that most mitigation efforts are successful only when they are perceived as important and enforced at the local level.

QUESTIONS FOR THE RECORD

FEMA ORGANIZATIONAL ISSUES

Question. How should the agency be restructured to meet a comprehensive all-hazards mission?

Answer. The Office of Inspector General has not studied this issue in depth. However, we support NAPA's testimony before this committee that a major restructuring is required. The restructured agency should have two major objectives. The first is supporting local emergency responders to build the capability needed to address their priority risks through an integrated all-hazards program, including mitigation. The second is building an integrated federal capability to provide response and recovery in disasters.

Question. Should FEMA be set up functionally - training and preparation, response, and recovery - for example?

Answer. Based upon information gathered during our audit of Hurricane Andrew, there is logic to grouping state and local capability building activities in one functional area and Federal response and recovery capability in another. Regardless of what reorganization proposals are implemented, it is essential that FEMA improve internal working relationships and integration of activities. We look forward to commenting on recommendations of the other review groups that have been charged with studying organizational structure in depth.

Question. FEMA currently has half its employees in defense-related programs. What should be the balance of resources between strictly defense-related programs and all-hazards planning and response programs?

Answer. This balance is determined by the extent to which FEMA programs are driven by defense priorities vs. domestic priorities. If half of FEMA programs are defense-related with a corollary all-hazards benefit, it is appropriate that half of the resources be defense-related. If FEMA resources are to focus more specifically on building improved disaster response capability, the overall level of resources required may not change dramatically, but the balance should shift, leaving a very small percentage that are strictly defense-related.

Question. What resources exist on the defense-related side of FEMA that could and should be put to use in disaster preparedness and response?

Answer. FEMA's defense-related resources are located in the Civil Defense and Federal Preparedness portions of the FEMA budget. The following table is derived from the fiscal year 1993 operating plan:

DEFENSE FUNDING (\$K)	WORK YEARS	SALARIES/ EXPENSES	PROGRAM FUNDS	TOTAL FUNDS
CIVIL DEFENSE	368	20,400	138,924	159,324
FEDERAL PREPAREDNESS	<u>909</u>	<u>49,248</u>	<u>60,442</u>	<u>109,690</u>
TOTAL	1,277	69,648	199,366	269,014

The major capabilities supported by Civil Defense resources that should be used in disaster preparedness are: A) State and Local Personnel, B) State and Local Facilities, C) Program Administration, D) Federal Plans, Exercises and Response, E) Training and F) Telecommunications.

The major capabilities supported by Federal Preparedness resources that should be used in disaster preparedness are: A) Communications, B) Life Support, C) Facilities, D) Planning and Operations and E) Situation Assessment.

These capabilities are designed to address hazards up to and including nuclear attack. Since planning assumptions included this worst case scenario, these capabilities have varying levels of utility in preparedness and response to natural and technological hazards. Some capabilities are directly applicable and are being used to support all hazards preparedness and response. Others could be made applicable or used more effectively with some modification or a change in orientation, practices and procedures. Some resources are being used to support systems and capabilities that are not applicable or are excessive to disaster preparedness and response needs.

However, the skills and processes that have been used to build these capabilities are the same skills now required to focus more directly on building disaster response capability. It should be kept in mind that the experience base for disaster response is almost entirely limited to Hurricane Hugo in 1989 and Hurricanes Andrew and Iniki in 1992. Prior to these events, nobody at any level of government had much practical experience against which to determine what catastrophic disaster response capability was needed.

Under separate cover we have described in more detail current capabilities, modifications needed to use these capabilities more effectively in disaster response, and constraints upon the use of these resources. We are also recommending certain areas for further study to determine whether they have any applicability to disaster response.

FEMA Regions

Question. How would you assess FEMA's regions ability to respond to catastrophic disasters?

Answer. FEMA has barely begun to build the disaster response capability that experience now suggests is needed. It should be kept in mind that there is no law or executive order that directs FEMA to develop the Federal Response Plan or a specific level of disaster response capability. FEMA has relied on its powers of persuasion with other federal agencies and the diversion of resources from other programs, primarily civil defense, to achieve current capability. This has been met with some resistance from those who viewed disaster response as an undefined and unfunded mission. Therefore, it should not be surprising that FEMA's response capability needs improvement. In that context, regional capability to respond to catastrophic disasters varies widely depending upon their experience in response operations and exercises and the level of effort and priority assigned to response planning activities in each region.

Question. Does FEMA need 10 regional offices and do the locations of the regional offices make sense according to a real risk-based strategy?

Answer. The number and location of FEMA regional offices are based on the standard ten region federal model rather than on consideration of risk. While the Office of Inspector General has not studied the optimum number of regional offices, we know that the Office of Disaster Assistance Programs recommended in a 1984 study that regional Disaster Assistance Programs Divisions be consolidated into three area offices. Another study done in FEMA in 1985 looked at options for consolidating regional offices. We believe that this issue should be re-examined and the advantages and disadvantages of consolidation studied further.

Question. Should FEMA's regional directors all be political appointees as they now are? What impact does that have on disaster response?

Answer. The Office of Inspector General has not studied the impact of political appointees as FEMA regional directors.

Question. There is little headquarters control over the regions' activities. What impact has this had on their ability to respond to disasters and what specific changes do you recommend?

Answer. Many of FEMA's programs, including disaster response and recovery, are largely decentralized, with delegated authority and considerable discretion and latitude at the regional level. While we have not studied the impact of decentralization on disaster response, we are aware that the need for more uniformity and consistency among regions in program and operational areas has been expressed as a concern by State and local officials. We believe that more detailed regulations and guidance from headquarters are needed in certain areas, as well as stronger management and direction from the FEMA Director in achieving more consistency in regional operations.

Question. What should be the relationship between regional management and headquarters management in responding to a disaster?

Answer. In our audit report on Hurricane Andrew we stress the need for a clearly understood, practiced, unified chain of command in disaster response. This would apply to relationships from the field to headquarters as well as within the field activity.

ROUTINE VS. CATASTROPHIC DISASTERS

Question. Should there be a separate category of "major catastrophic disasters," which should trigger a higher level of response by the federal government?

Answer. Yes. In our audit report, we recommend that categories of disasters be determined, with specific triggering mechanisms for federal response actions.

Question. If so, what should the criteria for that category be and should the category be based solely on science (for example, a "category 5" hurricane), or should it include other factors such as location, demographics, and so forth?

Answer. Criteria should include factors such as location and demographics to preclude an automatic federal response to disasters when the impact is not significant because the area is undeveloped or only sparsely populated or where response can be managed with local resources.

Question. Does FEMA have the necessary science, demographic information, and information about the adequacy of state emergency operating plans to make an immediate decision as to whether a disaster should qualify as a "major catastrophic disaster"?

Answer. Most of the basic data and skills are available in FEMA or easily accessible through other federal agencies and need only be assembled into a workable system for needs prediction and assessment. FEMA staff have already begun the development of such a system. The exception is the adequacy of state emergency operating plans. More work needs to be done to evaluate state response capability as opposed to the adequacy of state plans. With some exceptions, states, like the federal government, have little disaster response experience and capability. Therefore, when response requirements exceed the capability of the local jurisdiction, the federal government is expected to quickly respond. More work needs to be done to define expectations for response capability at the local and state level as well as at the federal level.

FEDERAL RESPONSE PLAN

Question. Was Hurricane Andrew an indictment of the Federal Response Plan? Why didn't it work?

Answer. We identified a number of specific recommendations in our audit report for revision to the Federal Response Plan, and outlined additional work, such as development of operational procedures, that is needed for improved response operations. The low level

of priority and resources assigned specifically to federal disaster response planning by FEMA and other agencies has delayed developmental activities as demonstrated by the fact that it took nearly three years to achieve agreement on the basic Plan. An improved response capability will require a better definition of expectations, commitment of the required resources and accountability for performance. Also, with a few exceptions, federal departments and agencies are not operational entities. Therefore, disaster response operations are not a natural extension of their normal duties. Building an improved level of federal disaster response operational capability will take time.

Question. How does FEMA's culture and guiding philosophy impact its ability to coordinate and orchestrate the Federal Response Plan?

Answer. Throughout its history, FEMA has been wracked by internal debates over whether it has a role in response (in addition to recovery) to natural and technological disasters. The publication of the Federal Response Plan would appear to have decided this debate in favor of a disaster response role for FEMA, however the resources (46 workyears) specifically assigned to disaster response are small in comparison with other FEMA missions. The lack of explicit statutory and budgetary basis for a response program, and the uncertainty of Executive Branch support for a more assertive leadership role for FEMA have weakened response planning and operations efforts. In addition, internal organizational competition has been a major barrier to achieving more effective and integrated use of FEMA resources in building response capability.

CHAIN OF COMMAND AND ACCOUNTABILITY

Question. Does the plan establish a clear and logical chain of command? Is authority and accountability clearly defined?

Answer. No. Although the Stafford Act, by delegation, gives FEMA the authority to direct other Federal agencies performing Stafford Act activities, the Federal Response Plan contains very limited and sometimes contradictory information on command and control and accountability. The Plan establishes twelve quasi-independent functional entities with only loose ties to an ill-defined Federal Coordinating Officer. The exact nature of the coordination to be provided by this individual in the context of response operations is unclear in the Plan.

Question. Is FEMA given clear responsibility and accountability for the overall federal response?

Answer. Not in the Federal Response Plan. The Stafford Act and FEMA regulations are somewhat more specific but more clearly defined direction is needed from both Congress and the White House if FEMA has responsibility and accountability for federal response.

Question. Once the plan is activated, should "mission" agencies be able to respond prior to specific requests from FEMA, in order to get aid moving more quickly?

Answer. Pre-defined taskings were part of the original conceptual design of the Federal Response Plan. Concerns with control over expenditures and lack of detailed operational plans and procedures coupled with the limited experience federal agencies have in carrying out response operations resulted in revision of this concept. These concerns have validity and ought to be resolved if it is determined that a swifter federal response is appropriate. A decision must be made weighing the risk of potentially excessive or unnecessary federal expenditures against some standard of swifter federal response. If swifter response is required, controls must be lifted. The development of detailed operational plans and procedures should reduce anxiety about the potential for inappropriate or excessive federal expenditures.

OPERATIONAL PLANS

Question. Is it appropriate that the regional offices are developing 10 separate operational plans?

Answer. As long as FEMA, and most other federal agencies, operate in a largely decentralized way with the bulk of operational responsibility resting with the regions, regional response plans will be required. They are intended to provide specific regional operational details that need to be developed and exercised by the federal responders from FEMA and the other participating agencies prior to deployment to a disaster. While similar across the 10 regions, they are intended to include information about the specific states within their geographical jurisdiction, the most likely threats and their impacts.

Question. Who should review these plans and ensure they are adequate and based on the most pressing needs of the region?

Answer. As long as FEMA is responsible and accountable for federal response planning and operations, then FEMA should be responsible for review of these plans. Federal, state and local responders all have a role in developing and evaluating response plans but a single accountable agency is required.

Question. How should FEMA ensure that the operational plans are compatible operationally with states' emergency operating plans?

Answer. Planning, exercising and evaluation of plans and capabilities must be an ongoing, joint federal, state and local activity to ensure that plans and operations are adequate, compatible, and achievable.

RESPONSIBILITIES OF MISSION AGENCIES

Question. How can FEMA get mission agencies to undertake training and exercising on the Federal Response Plan to ensure that all agencies know their role and are able to carry out their assigned missions? How frequently should comprehensive training exercises take place?

Answer. Multi-agency cooperation has been successful in other federal activities where clear objectives and priorities have been established, resources committed and accountability demanded. Both Congress and the White House can assist in these areas. The frequency and location of exercises should be keyed to an overall risk-based strategy for FEMA activities, with more frequent exercises in higher risk areas.

ROLE OF RED CROSS

Question. Is it appropriate that the Red Cross, a non-government organization, plays such a major role in response to catastrophic disasters?

Answer. In our audit of Hurricane Andrew we questioned the assignment of Red Cross as the primary agency for mass care in the Federal Response Plan. We raised the question not because of any doubt that the Red Cross has an important role to play and valuable resources that will be used in response to catastrophic disasters. We know they do. Our concern is that a non-governmental agency cannot be held accountable for a federal function or for tasking federal agencies that have support roles in mass care.

Question. If not, what role should Red Cross play in catastrophic disasters?

Answer. By virtue of its independent charter, Red Cross plays a major role in disasters of all types and sizes. It is essential that local, State and Federal responders work closely with the Red Cross in order to be fully aware of their plans and capabilities and be prepared to coordinate with them in disaster operations. This coordination is needed to prevent confusion and duplication and make the most effective use of both Red Cross and governmental resources.

Question. Should Red Cross officials be part of the initial needs assessment?

Answer. Yes. Red Cross should be an integral part of disaster planning, exercising and operations at all levels of government including the initial needs assessment activity.

PREPOSITIONING RESOURCES

Question. Should FEMA preposition supplies and materials when it has a warning period such as in a hurricane scenario, or should FEMA rely on the states to keep inventories of necessary resources in the private sector?

Answer. Currently FEMA does not have enough information on whether states are keeping inventories or on the quality and usefulness of inventories that may exist. Therefore, it is necessary for FEMA to preposition some supplies and materials during warning periods for catastrophic disasters. However, FEMA has begun a project to test the feasibility of collecting state and local resource inventories (including numbers and skills of personnel and equipment) and promoting formal mutual aid procedures for their use in disaster response. FEMA has initiated preliminary discussions with the National Association of State Fire Marshalls and the National Fire Information Council to explore pilot testing local and state resource inventory reports using the National Fire Information Reporting System as a model for inter-governmental collection and dissemination of information. If this proves feasible, it could reduce the need for FEMA to preposition supplies and materials.

Question. Should FEMA stockpile essential resources?

Answer. Yes. FEMA already maintains supplies of a number of items for disasters, some used for supporting responders and some for the disaster-affected public. These include mobile homes, travel trailers, plastic sheeting, personal computers, radios, cellular phones, etc... FEMA needs to review these inventories to determine what additional items can and should be stockpiled to meet immediate public needs in catastrophic disasters.

Question. Does FEMA need legislative authority to predeploy resources, before the disaster strikes?

Answer. At a minimum, it appears that FEMA has explicit authority under the Stafford Act to predeploy food. Section 413(a), delegated to FEMA, reads "The President is authorized and directed to assure that adequate stocks of food will be ready and conveniently

available for emergency mass feeding or distribution in any area of the United States which suffers a major disaster or emergency" (emphasis added). Also, FEMA has predeployed staff and some communications equipment to States before disaster strikes to begin preparing for response and recovery operations. FEMA has written into its regulations the pre-deployment of staff for damage assessment prior to a Governor's request for or Presidential declaration of major disaster. This could also be done for predeployment of other resources. We recommended in our audit report on Hurricane Andrew that FEMA seek clarification from its General Counsel if doubts remain on this question and follow up with proposed legislation if necessary.

ROLE OF MILITARY

Question. If the military were to play a more central role in future disasters, what would be the impact of a catastrophic disaster occurring at a time when troops were involved in a confrontation such as the Persian Gulf crisis overseas?

Answer. Department of Defense officials we interviewed as part of our audit of Hurricane Andrew expressed the opinion that they would not have been able to provide the level of support they did in Hurricane Andrew had it occurred simultaneously with the Persian Gulf crisis. They also recommended that FEMA explore potentially more cost-effective private sector sources for some types of support provided by the Department of Defense in Florida.

Question. Once the military arrived in Florida, was the response operation smooth, or was there still confusion? Was there any duplication with other mission agencies?

Answer. As discussed in our audit report, some confusion and duplication was evident. Multiple lines of authority, poor communication, and unfamiliarity on the part of Department of Defense and civilian agencies with each others' plans and practices contributed to this situation.

Question. In times of war, the President moves the Coast Guard out of the Department of Transportation and under the Defense Department with the stroke of a pen. Should there be a "reverse Coast Guard model" for the military -- so when the President declares a disaster, a certain portion of the military goes under FEMA's command?

Answer. Functionally, this would appear to be the intent of Sections 402(1) and 403(a) of the Stafford Act. They authorize FEMA, by delegation, to direct other agencies, including the Department of Defense, to

provide a wide variety of assistance following a major disaster. This authority has been used successfully by FEMA in many disasters, although there have also been problems with FEMA's ability to get Defense acceptance of some tasks in previous disasters.

PROFESSIONALIZING FEMA

Question. Given the highly specialized nature of emergency planning and response, do you believe reducing non-career employees and "professionalizing" FEMA will enable it to gain the credibility and stature needed to respond more effectively to major catastrophic disaster? How many political appointees should FEMA have?

Answer. We have not studied the issue of career employees versus political appointees in FEMA.

TRAINING

Question. FEMA spends only \$20 million a year. Most of this (95%) is for state and local personnel. Does FEMA's disaster relief staff get the training they need to effectively respond to disasters?

Answer. No. In our audit of Hurricane Andrew we found permanent full-time staff from all parts of the agency, as well as disaster reservists and local hires, performing disaster response and recovery activities for which they had received little or no formal or on the job training.

Question. If not, to what extent has this contributed to FEMA's inadequate response to major disasters?

Answer. While we have not attempted to quantify the effect, it undoubtedly has diminished the effectiveness of disaster response and recovery activities.

Question. To what extent are state and local officials getting the training they really need?

Answer. We have received extensive comments from state and local officials recommending improvement in training content and availability as well as increased funding for exercises.

Question. Should FEMA's Fire Academy and Emergency Management Institute be merged into an all-hazards and fire training academy?

Answer. We have survey information from local officials suggesting that FEMA should view local emergency responders as its constituent partners,

rather than dealing with the fire service and the FEMA funded state and local emergency management staff as two separate and distinct entities. Combining the two schools into one should encourage a stronger working relationship among state and local responders and have the added benefit of reducing FEMA overhead costs.

FEMA RESERVISTS

Question. FEMA relies on short-term hires and reservists who get mostly on-the-job-training to staff its disaster relief field offices. To what extent has using untrained people contributed to confusion?

Answer. In our audit of Hurricane Andrew, many disaster workers expressed frustration at their lack of training for the tasks they were assigned. These included reservists and permanent full-time staff. While there are some tasks which require minimal training for successful performance and were successfully accomplished by local hires, temporary agency hires and reservists, other assignments require a trained, stable and accountable work force. FEMA should identify those positions and establish a more professional personnel system for recruiting, training and managing qualified staff to fill them. FEMA's Office of Human Resources Management is investigating with the Office of Personnel Management the potential of a four year temporary hiring authority that may meet a portion of this need. We have also recommended the development of a FEMA-wide automated inventory of personnel for staffing disaster response and recovery assignments.

RESPONSIBILITIES OF STATES

Question. Should FEMA set performance standards for states to ensure emergency planning at the state level gets the attention it requires? Should federal assistance be withheld if states don't meet performance standards?

Answer. Yes. The effectiveness of state and local emergency planning is ultimately most affected by their perception of risk and the level of resources they are willing to commit. However, FEMA preparedness grant assistance should be targeted to high risk areas and dependent upon grant recipients meeting specific performance standards.

Question. Should states be required to peer review each other's plans?

Answer. We have not studied this question but believe that it may be time consuming and costly for the value gained.

Question. Should states be required to pay a greater portion of disaster relief aid if they don't meet minimum standards?

Answer. We have not studied the potential effectiveness of this suggestion on development of state capability, but believe that a post-disaster penalty may be perceived as too harsh for communities already suffering from the effects of a disaster. Reducing preparedness grants for communities that fail to meet minimum standards probably would meet with less resistance.

EVALUATING EFFECTIVENESS OF GRANT PROGRAMS

Question. How should FEMA evaluate its grant programs to ensure that grant funds contribute to demonstrable improvements in state and local governments' ability to meet emergency management responsibilities, and are used according to the state or locality's most pressing, risk-based emergency preparedness needs?

Answer. In our Hurricane Andrew audit report, we recommended that FEMA develop a legislative and budgetary proposal to remove statutory restrictions that prevent or complicate the consolidation of planning and preparedness grants. This would enable FEMA to restructure its grant programs to maximize all-hazards benefits. In addition, grant funds should be allocated using a risk-based and needs-based strategy with more specific performance measures. Grant funds for equipment and facilities could be targeted more specifically to emergency responders for applicability to a wider range of hazards. More frequent and rigorous joint local/state/federal exercises would also offer valuable evaluation opportunities.

EMERGENCY BLOCK GRANT

Question. Would an emergency block grant help states allocate funds more effectively to their most pressing, risk-based needs? How would FEMA ensure that funds were spent effectively if provided through a broad block grant?

Answer. Clearly, state and local governments favor this approach. As we pointed out in our audit of Hurricane Andrew, FEMA's current system of dividing preparedness grant assistance into 19 separate programs is not effective in maximizing the usefulness of the these funds to state and local governments. We recognize that block grants provide increased flexibility for the states and that this would need to be balanced by more effective performance measures and requirements developed by FEMA.

1. FEMA's response to recent disasters in Florida, Louisiana, California, and Hawaii has drawn differing opinions of effectiveness even though former FEMA Director Stickney claims his agency responded in a similar manner. Can any member of this panel explain why the results were apparently so different?

Answer

The disasters in Louisiana and Hawaii were smaller than the one in Florida and required a smaller federal response. As shown in the following table, the storm in Florida was more powerful and affected a more densely populated area than the storms in Louisiana and Hawaii--whose populations were more rural. As a result, the disaster in Florida required a federal response that was much larger and more complicated than at the other two locations.

	FLORIDA	HAWAII	LOUISIANA
Storm Intensity	145 - 175 mph Category 4	130 - 160 mph Category 4	83 - 104 mph Category 3
Population Affected	3.4 mil in 4 counties over 6,194 sq miles: pop density 553/sq mile	51,000 in one county over 620 sq miles: pop density 82/sq mile	3.2 mil in 36 parishes over 23,685 sq miles: pop density 135/sq mile
Homes Destroyed/Damaged	259,350	11,700	21,548
Homeless	250,000	7,000+	53,000
Population w/out Electricity	2,500,000	20,800	599,000
Debris Removal	42 mil cubic yards	58,000 cubic yards	Did not request. (State, NG, & private companies handled)
Federal Troops Deployed	30,000+	3,207	Did not request
FEMA Mission Taskings for Other Federal Agencies	\$232.7 mil	N/A	\$8.1 mil

Note: Population figures are for presidentially declared counties, using 1990 Census figures.

2. FEMA provides a central point within the federal government for disaster assistance. How important is this to state and local governments?

Answer

State officials and experts in disaster response told us that such a central point is important because: (1) it reduces the number of federal agencies with which state and local governments must coordinate; and, (2) it ensures that there is a single accountable senior level official responsible to the president for emergency preparedness and response.

3. The Department of Defense and the National Guard have a major role in disaster response by virtue of their resources and deployment capabilities. Should they be assigned full responsibility for the response phase of disasters?

Answer

No, we do not advocate that DOD have overall management responsibility for directing disaster relief efforts in catastrophic disasters. However, there are significant opportunities for DOD, including the National Guard to take on a greater role in providing relief in catastrophic disasters. Only DOD has both the resources (equipment and personnel) and capability to rapidly respond in the event of a catastrophic disaster. As we discussed in our statement, one of the ways to increase the effectiveness of DOD response capabilities is to expand the legislative authority all federal agencies need to increase pre-disaster efforts, thereby speeding up the entire federal response. Currently, concerns about reimbursement in the event that the President does not declare a disaster may discourage federal agencies from taking many of these actions.

DOD's role in disaster response needs to remain under the direction of a civilian authority outside the military for two important reasons: (1) DOD's first and foremost responsibility is to deal with those military matters affecting national security; if DOD also had the full-time mission of managing disaster preparedness and relief, this could detract from their primary responsibility; and (2) DOD officials strongly believe, and we agree, that assuming overall management responsibility could create the impression that the military is attempting to make or direct domestic policy, running contrary to principles that have guided the role of the military in the United States for years.

4. Handling of donations and volunteers during the response phase seem to be inadequately managed. Do you have recommendations on how this can be improved?

Answer

How FEMA handles donations was not part of the scope of our audit work, however the issue has been addressed generally in the Federal Response Plan and specifically in FEMA's After Action report for Hurricane Andrew.

The Federal Response Plan, issued in 1992, provides vague guidelines for donations and volunteer

efforts. It places responsibility with the American Red Cross for coordinating relief efforts by any and all volunteer organizations actively engaged in providing assistance to disaster victims. However, no specific guidance is provided on how this authority should be used.

In its After Action Report on Hurricane Andrew, FEMA identified several recommendations for better handling donations, including:

- State and local governments need to appoint a donations representative in the Disaster Field Office and, if applicable, at a central donations receiving area to assist in coordinating donations.
 - Staff working in the donations area should be trained and well-versed in donations policy.
 - The federal donations policy needs to include provisions for handling unsolicited donations.
 - There needs to be greater interface and agreement between all parties involved in receiving and distributing donations. One approved, consolidated, and comprehensive policy needs to be created and advertised in the media. Independent activity and lack of coordination creates confusion and presents conflicting messages.
 - FEMA should take a more proactive role in augmenting existing transportation assets for use in donations distribution.
 - Clarification needs to be provided regarding ownership of unsolicited donated goods and authority to designate agencies eligible to receive and distribute these donations.
5. Catastrophic disasters have had a profound impact on the insurance industry. Many companies have withdrawn from providing homeowner and other types of insurance. All insurance companies seem to anticipate a need to significantly raise insurance rates. Can a strong mitigation program by the emergency management community in cooperation with the insurance industry produce a solution that will result in natural disaster insurance for all commercial and residential parties at a reasonable rate?

Answer

GAO's review of Hurricanes Andrew and Iniki was limited to analyzing the initial response phase. As a result, we have not reviewed FEMA's mitigation activities, nor have we addressed the effects on the insurance industry of recent catastrophic disasters.

QUESTIONS FOR THE RECORD

FEMA Organizational Issues

1. How FEMA should be reorganized: half of FEMA's workforce is either in classified programs or civil defense programs. The other half is in natural disasters or management, and there is little, if any, integration between defense and non-defense programs.
 - a) How should the agency be restructured to meet a comprehensive all-hazards mission?
 - b) Should FEMA be set up functionally--training and preparation, response, and recovery--for example?
 - c) FEMA currently has half its employees in defense-related programs. What should be the balance of resources between strictly defense-related programs and all-hazards planning and response programs?
 - d) What resources exist on the defense-related side of FEMA that could and should be put to use in disaster preparedness and response?

Answer

FEMA's national security-related and disaster response staff are located in two separate directorates, each of which reports to its own Associate Director. The State and Local Programs and Support Directorate (SLPS), including the Federal Response Division, directs FEMA's initial response activities and manages its various recovery programs. The National Preparedness Directorate (NP) is responsible for maintaining the federal government's capability to deliver effective emergency management during all phases of any national security emergency.

Officials from FEMA's Federal Response Division (which is a part of SLPS) told us it does not now have sufficient staff to take on a larger role in disaster response. Staffing for disaster recovery has increased substantially in recent years, but response staffing has not. In fact, the disaster

response function was taken on largely by diverting personnel from other SLPS activities, not by personnel increases.

The assets, and possibly staff, necessary for FEMA to be a rapid responder may already exist in NP. Until recently, NP assets have been classified and not available for use in planning for natural disasters. However, with the changing world threat, NP officials have recently identified assets and personnel that can be used to respond to natural disasters. Such assets include experienced event planning personnel, computer modeling capabilities for disasters, life support units, deployable and fixed communications equipment, and operational capability such as power and heating for hospitals, field offices and other critical operations.

We have not performed a detailed management review to determine how FEMA should specifically be organized.

2. FEMA Regions: FEMA's regions play a major role in disaster relief. Regional officials usually head up and staff the effort.
 - a) How would you assess FEMA's regions' ability to respond to catastrophic disasters?
 - b) Does FEMA need 10 regional offices and do the locations of the regional offices make sense according to a real risk-based strategy?
 - c) Should FEMA's regional directors all be political appointees as they now are? What impact does that have on disaster response?
 - d) There is little headquarters control over the regions' activities. What impact has this had on their ability to respond to disasters and what specific changes do you recommend?
 - e) What should be the relationship between regional management and headquarters management in responding to a disaster?

Answer

In looking at FEMA's regional structure in terms of a risk-based strategy, in recent years the larger major disaster declarations have tended to be concentrated along the Pacific, Atlantic, Gulf Coast, and Great Lakes states, and in the Atlantic and Pacific Islands. As a result, some regional offices have more experience with catastrophic disasters than others.

FEMA officials in 4 regions told us that the basic problems identified in our testimony statement-- inadequate damage assessment systems and procedures; excessive compartmentalization between the National Preparedness and State and Local Programs and Support Directorates; and inadequate authority to prepare for disasters--generally limit field flexibility and effectiveness in quickly responding to disasters.

We believe FEMA's headquarters staff need to exercise line authority over their counterparts in the regional offices. FEMA's current management structure does not provide for direct headquarters operational control over corresponding regional activities. Consequently, as events unfolded in the response to Hurricane Andrew, FEMA headquarters officials expressed frustration at their inability to order more proactive steps by the regional staff directing the response effort.

Because FEMA does not provide its headquarters officials with direct line authority, its response to future catastrophic disasters could fail to meet expectations if it continues to rely on regional staff to direct the initial response. This is based on the relative infrequency of catastrophic disasters to which we referred in our testimony, and the corresponding likelihood that any individual region or regional director would not have extensive experience managing disasters of that magnitude. Headquarters officials have some role in every disaster response, whether minor or catastrophic, and can bring more experience to bear when needed.

Ultimately, whether or not FEMA's regional directors should be political appointees is a decision for the Congress and the Executive Branch to make. In our testimony statement, we expressed our preference for leadership from the Executive Office of the President for catastrophic disasters. We also believe it is now time to reconsider FEMA's day-to-day leadership structure. In that regard, several of the experts we consulted during our review prefer modeling FEMA after an agency such as the Federal Bureau of Investigation (FBI). This model would call for FEMA's Director to remain a political appointee, but career senior executives drawn from the professional emergency management community would provide expertise, experience, and continuity.

We have not performed a detailed management review to determine whether 10 is the appropriate number of regional offices for FEMA to have.

Routine vs. Catastrophic Disasters

1. Should there be a separate category of "major catastrophic disasters," which should trigger a higher level of response by the federal government?

Answer

Yes, the massive level of federal assistance required by a catastrophic disaster would be inappropriate for most smaller disasters. We noted in our testimony statement that on the average the President declares about 35 disasters annually, but that only 1 or 2 of them could be considered catastrophic. We define catastrophic as any disaster that overwhelms the ability of state, local, and volunteer agencies to adequately provide victims with such life-sustaining mass care services as food, shelter, and medical assistance within the first 12 to 24 hours. We are currently working with FEMA and others involved in various kinds of disaster response to further refine that definition to better specify the events or characteristics that should trigger a higher level of federal response.

2. If so, what should the criteria for that category be and should the category be based solely on science (for example, a "category 5" hurricane), or should it include other factors such as location, demographics, and so forth?

Answer

To the maximum extent possible, the criteria should be specific, objective, measurable, and not dependent on "institutional memory." To date, FEMA officials have described the decision to mobilize and deploy resources in advance of a disaster as a "gut call" and have provided us with general criteria for the circumstances under which they would do so. These include: any event happening in a remote location where it will take longer to send help (such as the Virgin Islands or Puerto Rico); any event that threatens to disrupt the local capability to provide basic support (such as an earthquake in Alaska during the winter, where the capability to provide heat could be destroyed even though heating oil would remain nearby); any event that destroys local resources necessary to respond (equipment or people); and any event that causes or is likely to cause a significant number of deaths.

3. Does FEMA have the necessary science, demographic information, and information about the adequacy of state emergency operating plans to make an immediate decision as to whether a disaster should qualify as a "major catastrophic disaster"?

Answer

Within FEMA, National Preparedness for example, has the capability to do computer modeling of natural and man-made disasters, including nuclear attacks, earthquakes and, (only recently) hurricanes. However, they do not always have the demographic information needed for the modeling but they can get it from county information systems to which they have access. As a predictor of the magnitude of a potential disaster, the modeling system is only as accurate as the information available to feed into it. After the disaster strikes and accurate information is available, the computer can give very accurate estimates of effects of the disaster. FEMA officials in both NP and State and Local Programs agree that NP's model is a good start, but it needs to be improved and refined before it can produce information that is readily usable to responders actually working at a disaster site.

FEMA also can rely on other federal and nonfederal entities to aid in damage assessment. For example, remote sensing satellite and aircraft systems--which can rapidly provide detailed mapping of the overall extent of damages--are available in NASA, U.S. Geological Survey, and elsewhere. Although information such as this is available in FEMA and other federal agencies, as well as state and local governments, FEMA has not developed a system to integrate such information into the capability for a rapid damage assessment.

Generally, state plans do not provide FEMA the information needed to quickly assess a state's readiness in times of disaster. Headquarters emergency management officials have recognized a need to better assess state and local readiness through such activities as more closely reviewing state and local planning monitoring training exercises. FEMA officials told us, however, that they currently have insufficient staff and travel funds to take on a greater role.

Federal Response Plan

1. Is the Federal Response Plan viable? Hurricane Andrew was the first time the Federal Response Plan was ever used. The Federal Government's response to Hurricane Andrew was sluggish, chaotic, bureaucratic.
 - a) Was Hurricane Andrew an indictment of the Federal Response Plan? Why didn't it work?
 - b) How does FEMA's culture and guiding philosophy impact its ability to coordinate and orchestrate the Federal Response Plan?

Answer

As mentioned in our testimony, the Federal Response Plan is a blueprint for responding to all disasters and emergencies. It outlines a functional approach for the federal response effort. We believe the Federal Response Plan is a step in the right direction that needs substantive near- and long-term improvements, including:

- procedures for catastrophic disasters where a rapid federal response is needed;
- contingencies in the event primary agencies are unable to fulfill obligations; and
- performance standards and evaluations for the primary and support agencies.

We believe the addition of the above features, as well as the formation of a federal disaster unit to guide the federal, state, and local response would significantly improve disaster response.

FEMA's dual cultures--national security and disaster response--stem from the organizations that were brought together to form FEMA in 1979. These cultures are still strongly ingrained in the agency, lead to little communication between the two relevant directorates, and have resulted in a generally uncoordinated and ad hoc method of response by its National Preparedness Directorate because it is not part of the Federal Response Plan.

FEMA's guiding philosophy has been to serve as a responder to state requests for assistance in emergencies. This philosophy is the basis for the Federal Response Plan and to some degree contributed to the problems in Florida after Hurricane Andrew. Relying on the state to provide all damage information and specific requests for assistance left FEMA in a weak position to coordinate and initiate activities under the Federal Response Plan in Florida. Indeed, FEMA waited for several days as the state was unable to do adequate damage and needs assessments after the hurricane struck.

2. Chain of Command and Accountability.
 - a) Does the plan establish a clear and logical chain of command? Is authority and accountability clearly defined?
 - b) Is FEMA given clear responsibility and accountability for the overall federal response?

- c) Once the plan is activated, should "mission" agencies be able to respond prior to specific requests from FEMA, in order to get aid moving more quickly?

Answer

The Federal Response Plan is not sufficiently clear or definitive as to FEMA's responsibility and accountability for the overall federal response. In addition, the roles of individual FEMA entities and their relationships with each other under the Plan are vague, and serve to diffuse responsibility rather than assign it. In addition, the Plan does not accommodate special circumstances, such as Hurricane Andrew and the appointment of a Presidential Task Force and a Joint Task Force. The imposition of these structures upon that which was set out in the Federal Response Plan caused much confusion

For example, the Plan does not clearly delineate the role of the Federal Coordinating Officer (FCO). The Plan sets forth certain responsibilities of the FCO, yet these are discussed in very general terms and without much emphasis. Because a clear understanding of command and control is crucial before disaster strikes, a section dedicated to the roles and responsibilities of the FCO should be brought to the forefront of the Plan to eliminate confusion about who is in charge of the federal effort.

If FEMA takes a more proactive role in assessing damages and needs, and in coordinating the federal relief, there will be less need for supporting agencies to respond of their own accord. Such responses without direction and coordination by FEMA may create confusion and duplication of effort.

3. Operational Plans: FEMA needs an operational plan to be the "playbook" accompanying the Federal Response Plan. FEMA's regional offices are developing regional operating plans.
- a) Is it appropriate that the regional offices are developing 10 separate operational plans?
 - b) Who should review these plans and ensure they are adequate and based on the most pressing needs of the region?
 - c) How should FEMA ensure that the operational plans are compatible operationally with states' emergency operating plans?

Answer

FEMA, in conjunction with the other agencies which lead Emergency Support Functions, is in the process of developing overall operational procedures for the Federal Response Plan. Regional response plans are designed to be detailed operational procedures for the specific situations and circumstances faced by a particular region. We believe it is appropriate to develop such plans because they specifically address regional issues and allow the region to tailor the federal response to meet its unique threats. However, because regional plans should only be in support of the overall operating plan, FEMA should complete the overall plan as soon as possible.

Regional plans offer an opportunity to incorporate catastrophic response into exercise drills with state and local responders. These drills will not only afford disaster responders an opportunity to practice their respective roles but they also lend themselves to testing the viability of regional plans and offer a catastrophic disaster unit the opportunity to practice with the states. As a result, the unit will have first hand experience and knowledge of a state's capability.

FEMA can address individual state needs while ensuring compatibility between state and regional plans by conducting full scale exercise drills in which federal and state participants practice their response roles. According to NEMA and FEMA officials, exercise drills are a very effective way of identifying successes and weaknesses in emergency plans. Most important is conducting drills in which local, state and federal participants practice together. Our testimony indicates that most state officials believe that their state exercises do not adequately prepare them to respond to catastrophic disasters. These officials cited such problems as low federal participation in drills. To illustrate, Dade County conducted only one hurricane preparedness exercise in each of the past two years. There were 144 participants for the 1991 exercise-- but none from the federal government.

4. Responsibilities of Mission Agencies.

- a) How can FEMA get mission agencies to undertake training and exercising on the Federal Response Plan to ensure that all agencies know their role and are able to carry out their assigned missions? How frequently should comprehensive training exercise take place?

Answer

The Robert T. Stafford Disaster Relief and Emergency Assistance Act requires an annual evaluation of the activities of federal agencies in disaster and emergency preparedness and assistance in order to assure maximum coordination and effectiveness of such programs. In addition, Executive Order 12148, issued July 20, 1979, describes actions delegated to FEMA for the management of emergency planning and assistance. The Order states (Sec.2-102) "The Director shall periodically review and evaluate the civil defense and civil emergency functions of the Executive agencies. In order to improve the efficiency and effectiveness of those functions, the Director shall recommend to the President alternative methods of providing Federal planning, management, mitigation, and assistance."

FEMA has not performed such evaluations. Any evaluation of agency performance has been limited to after-action reports. Conducting such reviews would provide a periodic status report on agency activities and preparedness and thus give Congress the basis to take action if needed. In addition, if someone within the Executive Office of the President were assigned emergency management oversight, this reporting mechanism may prove effective in motivating agencies to participate in exercises and activities because it would carry the authority of Presidential attention to the issue.

5. Role of Red Cross: The Red Cross has primary responsibility under the Federal Response Plan for mass care.
- a) Is it appropriate that the Red Cross, a non-government organization, plays such a major role in response to catastrophic disasters?
 - b) If not, what role should Red Cross play in catastrophic disasters?
 - c) Should Red Cross officials be part of the initial needs assessment?

Answer

The Red Cross has played a vital role in attending to the care of disaster victims since its inception in the late 19th century. For Hurricane Andrew in South Florida, however, the Red Cross fell short of meeting disaster victims' needs. Red Cross officials attributed this to a lack of good information on the extent of the damage, and not on its capability to perform. FEMA, however, has recognized in its own studies that the Red Cross is not capable of attending to all of the mass care

needs resulting from a catastrophic disaster.

We believe that the federal government needs to take a different approach in responding to catastrophic disasters. Thus, we believe that federal government needs to conduct independent and comprehensive damage and needs assessments. In this regard, FEMA, rather than the Red Cross, should determine what assistance is required from federal agencies--such as DOD--to provide mass care.

In addition, we believe that in the case of a catastrophic disaster, only DOD has the resources and capability required to meet victim's mass care needs. Thus, we would envision the Red Cross playing a supporting role in the delivery of mass care to catastrophic disaster victims.

6. Prepositioning Resources.

- a) Should FEMA preposition supplies and materials when it has a warning period such as in a hurricane scenario, or should FEMA rely on the states to keep inventories of necessary resources in the private sector?
- b) Should FEMA stockpile essential resources?
- c) Does FEMA need legislative authority to predeploy resources, before the disaster strikes?

Answers

No, FEMA should not preposition supplies and materials to be used to provide mass care. The federal government already has the resources it needs to be a rapid responder; duplicating them would be redundant. What FEMA needs to do is create a disaster unit specifically devoted to quickly marshalling those resources based on its own estimates of the likely damage and resulting needs for assistance any impending disaster will cause. Primarily, DOD has the capabilities that will most likely be needed immediately after a disaster--food, shelter, medical care, and urban search and rescue. However, FEMA cannot always count on DOD. It needs to develop a contingency plan for marshalling those resources from elsewhere in the federal government when a catastrophic disaster strikes at the same time the military is heavily involved in meeting its primary responsibility of national defense.

Federal response time to catastrophic disasters could be reduced by encouraging agencies to do as much advance preparation as possible prior to a disaster declaration--especially for disasters, such as hurricanes, when some warning exists. However,

current law does not explicitly authorize such activities. Therefore, federal agencies may fail to undertake advance preparations because of uncertainty over whether costs incurred before a disaster declaration will ultimately be reimbursed by FEMA. Therefore, explicit legislative authority is needed for FEMA and other federal agencies to take actions to prepare for catastrophic disasters.

IV. Role of the Military

1. If the military were to play a more central role in future disasters, what would be the impact of a catastrophic disaster occurring at a time when troops were involved in a confrontation such as the Persian Gulf crisis overseas?

Answer

DOD officials told us that the current use of the military in Operation Restore Hope, the redeployment of troops to the Persian Gulf, and air support assistance to the United Nations in Bosnia would reduce its ability to provide the magnitude of disaster assistance it provided for Hurricane Andrew. If a catastrophic disaster such as Hurricane Andrew occurred today, the airlift support and some units would not be available to assist in relief efforts. Additionally, it is also questionable whether DOD would be able to provide the same types and quantities of supplies that it did in Hurricane Andrew.

The degree to which DOD can become actively involved in catastrophic disaster relief efforts will always depend in part on the demands placed on its time and resources by its primary mission of national security. As a result, any contemplated changes in DOD's disaster response role have to include backup procedures and resources to cover those situations where DOD may not be able to respond.

2. Once the military arrived in Florida, was the response operation smooth, or was there still confusion? Was there any duplication with other mission agencies?

Answer

Overall, the response operation went smoothly once the military arrived in Florida. No significant problems impeded disaster response efforts. Once the President ordered increased military involvement, disaster response to Florida essentially became a military operation even for those missions that were the responsibility of other federal agencies. For example, even though

transportation is the responsibility of the Department of Transportation, DOD quickly became the supplier of transportation.

3. In times of war, the President moves the Coast Guard out of the Department of Transportation and under the Defense Department with the stroke of a pen. Should there be a "reverse Coast Guard model" for the military--so when the President declares a disaster, a certain portion of the military goes under FEMA's command?

Answer

We agree with DOD that disaster response assignments for the military should be developed and communicated by a civilian federal agency. We noted earlier that DOD is very sensitive about creating a perception that it is involved in setting or making domestic policy decisions. Therefore, while DOD is very supportive of and agreeable to providing whatever disaster relief they are asked to provide, they believe that a civilian authority outside of DOD should be the responsible for deciding what DOD should do. However, once that is decided, it should be DOD's responsibility for determining how to do it. Executing its predetermined assignments should remain within its own chain of command and should not depend on further detailed direction by civilian authorities.

V. Professionalizing FEMA

1. Political appointees: given the highly specialized nature of emergency planning and response, do you believe reducing non-career employees and "professionalizing" FEMA will enable it to gain the credibility and stature needed to respond more effectively to major catastrophic disasters? How many political appointees should FEMA have?

Answer

As noted previously, several of the experts we consulted during our review prefer modeling FEMA after an agency such as the FBI. We believe FEMA's Director and Deputy Director should remain political appointees in order to continue to provide direct accountability to the President. Beyond those, we have not conducted any analysis of specific positions to determine whether they need to be political versus career appointments and believe that decision ultimately rests with the Congress and the Executive Branch.

2. Training: FEMA spends only \$20 million a year. Most of this (95%) is for state and local personnel.
- a) does FEMA's disaster relief staff get the training they need to effectively respond to disasters?
 - b) If not, to what extent has this contributed to FEMA's inadequate response to major disasters?
 - c) To what extent are state and local officials getting the training they really need?
 - d) Should FEMA's Fire Academy and Emergency Management Institute be merged into an all-hazards and fire training academy?

Answer

FEMA does not see itself as a rapid responder to a disaster but rather as a responder to state requests for assistance. Therefore, it has developed and conducted little training to fill such a disaster response role.

FEMA has taken limited steps in response to recommendations from lessons learned in Hurricane Hugo to train its staff responding to disasters, such as developing and delivering an "Emergency Response Team" leadership seminar, developing job aids supporting six disaster functions, and training 25 staff to train others in these specialty areas. Some activities such as developing skills training for FCOs and Disaster Recovery Managers were delayed pending the issuance of the Federal Response Plan.

Our review also uncovered shortcomings in the way FEMA helps state and local governments train in anticipation of catastrophic disasters. At the state level, five of six states visited told us that the training received is not adequate for natural disaster preparedness and is not sufficiently focused on natural disaster preparedness. For example, the Chief of Florida's Bureau of Planning said that training is insufficient for initial response and skewed towards nuclear protection.

The county officials we interviewed reaffirmed the states' comments on inadequate training. To illustrate, the director of Dade County's Emergency Management told us that instead of training her in such skills as damage and needs assessments, FEMA typically offered generic management training designed to enhance skills such as keeping program budgets. One of the biggest problems with the

response to Hurricane Andrew in south Florida was the inability of state and local officials to assess damage, translate that assessment into specific needs, and request assistance to meet those needs.

Our work has focused almost exclusively on FEMA's initial response activities, including any training it provides for those activities. As a result, we have reviewed neither the Fire Academy nor the Emergency Management Institute.

3. FEMA Reservists: FEMA relies on short-term hires and reservists who get mostly on-the-job training to staff its disaster relief field offices. To what extent has using untrained people contributed to confusion?

Answer

We found no evidence of problems with FEMA's reservists, although this was not a primary emphasis in our audit work. According to FEMA officials, many reservists are retired FEMA employees with valuable experience and training in disaster management. FEMA often uses such experienced reservists in key positions to supervise short-term hires. However, shortages of experienced reservists have lead to a heavy reliance on inexperienced short-term hires and a subsequent confusion and loss of operational control. FEMA experienced this problem during the response to Hurricane Iniki. According to FEMA officials, the ongoing disasters in Florida, Louisiana, and Guam drained the pool of reservists so they were required to rely heavily on local hires. While many short-term hires were dedicated and enthusiastic, their inexperience and lack of training sometimes resulted in incorrect information being provided to storm victims.

VI. Responsibilities of States

1. Performance Standards.

- a) Should FEMA set performance standards for states to ensure emergency planning at the state level gets the attention it requires? Should federal assistance be withheld if states don't meet performance standards
- b) Should states be required to peer review each other's plans?
- c) Should states be required to pay a greater portion of disaster relief aid if they don't meet minimum standards?

Answer

State performance standards, a concept which is supported by NEMA, would be a first step toward better state accountability but by themselves may not be effective. To be effective, FEMA would need to also develop a monitoring capability which it does not have now. A monitoring activity would need to include some established reporting mechanism to FEMA's Director and the President and/or Congress to increase the usefulness of the standards and to give them credibility. A reporting mechanism would also provide some motivation for states to perform well, provided that the development of such standards is a cooperative effort between the states and FEMA.

FEMA presently has the authority to withhold funds if a state refuses to spend funds according to FEMA requirements. However, withholding funds for noncompliance or not meeting standards is generally considered nonproductive, as it would be expected to result in making unsatisfactory situations even worse. Other methods of encouraging good performance need to be explored, such as: (1) a system of FEMA accreditation of state and local emergency management organizations -- but a means must be found to make obtaining such accreditation a strong incentive to perform -- or (2) offering financial incentives for good performance (as opposed to penalties for poor performance--one method suggested is to reward states that work hard to be prepared by decreasing the state's reimbursement to the Federal government when a disaster is declared and Federal resources are expended.)

We did not specifically address peer reviews in our audit work. However, we would prefer that a single agency, in this case FEMA, have this oversight function. States generally have fewer resources to devote to emergency management, so we do not favor adding an additional requirement for them.

Ultimately, states should pay a greater share of disaster relief aid if they fail to meet minimum standards of preparedness. However, we view this as a long-term goal for FEMA and not one it is at all ready to adopt in the near term. As we noted previously, FEMA does not yet have performance standards for state emergency planning and preparedness or the capability to monitor the states. FEMA needs to have these in place and accepted by the states before it can address the goal of getting them to pay a share of disaster relief aid commensurate with their level of preparedness.

2. Evaluating Effectiveness of Grant Programs: How should FEMA evaluate its grant programs to ensure that grant funds contribute to demonstrable improvements in state and local governments' ability to meet emergency management responsibilities, and are used according to the state or locality's most pressing, risk-based emergency preparedness needs?

Answer

We did not pursue this issue in depth because we were waiting to examine FEMA's "Requirements Study," which should address this same question and was to be completed in late February, 1993.

FEMA's present desire to provide greater flexibility to state and local governments in the use of the funds coincides with a major concern we heard from state emergency managers -- that the limited discretion in use of the funds results in some needs of relatively higher priority going unfunded. However, greater flexibility generally results in less control, and as indicated above, FEMA officials contend that they presently have insufficient staff and travel funds to assess and monitor state and local activities.

3. Emergency Block Grant: Would an emergency block grant help states allocate funds more effectively to their most pressing, risk-based needs? How would FEMA ensure that funds were spent effectively if provided through a broad block grant?

Answer

A block grant program would certainly be advantageous from the states' perspective in terms of dealing with a single program funding source (versus multiple sources). Further, it would signal a much stronger commitment from FEMA to the concept of an all hazards approach to emergency management. In order to ensure that block grant funds are spent effectively, however, FEMA will have to develop the kinds of performance standards and monitoring capabilities we discussed earlier.

We noted previously that FEMA is aware of the benefits that increased flexibility via such a block grant program would provide state and local governments. It has considered merging various programs into broader categories to enable a more diversified use of the funds. However, there is concern that doing so would greatly diminish FEMA's ability to ensure that the funds are spent effectively and properly.

FEMA is currently exploring ways to offer such flexibility within existing programs. Some civil defense programs have been suspended for the current year while awaiting the results of FEMA's study of civil defense requirements, which is nearing completion. This study is intended to identify needs at the state and local level and establish ideal funding levels for civil defense activities.

QUESTIONS SUBMITTED BY SENATOR BURNS

Question. It has been suggested that in the case of a catastrophic disaster such as Hurricane Andrew, the ability of the American Red Cross to lead mass care is quickly overwhelmed by the magnitude of the needs as laid out in the IG report on page 6. Does the American Red Cross share this assessment?

Answer. This assessment is not supported by Red Cross experience in Florida. The Federal Response Plan is based on the assumption that no single agency or organization will be able to meet the needs of the victims of a catastrophic disaster by itself. With regard to mass care, the Plan assumes that Red Cross resources will be supplemented by other organizations, both private and public.

Obviously service delivery by the Red Cross and all other responders was hindered by the level of destruction, blocked roads, lack of security and incomplete damage assessment information. The damage assessment issue was addressed by several witnesses at the subcommittee hearing and there was consensus that improvements in this area would result in improved service delivery by all responders.

Nevertheless, the Red Cross alone sheltered and fed 84,361 people in 229 shelters on the night of August 23-24. Our conservative estimate is that the Red Cross served 100,000 meals on the first day after landfall. On August 24-25, we housed 34,043 people in 61 shelters and served 153,819 meals. On August 25-26, we housed 39,050 people in 51 shelters and served 235,407 meals. Overall, the Red Cross served a total of over 4.7 million meals from August 23 to October 31, 1992, from 88 Emergency Response Vehicles and a varying number of fixed feeding sites including 13 kitchens operated by the Southern Baptist -Convention in cooperation with the Red Cross.

Under the Federal Response Plan, the Red Cross role also includes coordinating the mass care efforts of many other private organizations and providing them with the food, water and other relief supplies they need to operate kitchens and feeding sites. The Red Cross worked in cooperation with the Southern Baptist Convention, the American Evangelical Christian church and many other private organizations. These cooperative activities greatly increased the number of disaster victims who received assistance.

The Red Cross, although challenged by Hurricane Andrew, was not overwhelmed. We effectively carried out our responsibilities under the Federal Response Plan to lead and coordinate the response of many organizations in order to meet victims' needs. The FEMA Inspector General's report correctly pointed out that the military did not view itself as subject to tasking except by the Federal Coordinating Officer. Obviously there is still considerable lack of clarity about what is expected of the lead and the support agencies under the Federal Response Plan.

Question. Under the Federal Response Plan what costs incurred by the American Red Cross are reimbursable from FFFA? What is the current estimate of reimbursements the Red Cross will receive for Hurricane Andrew, and what costs are borne by private contributions or grants from other federal agencies?

Answer. The American Red Cross provides disaster relief to victims of disasters of all sizes. Red Cross relief services, including mass care, are supported by voluntary financial contributions. For example, the Red Cross has committed over \$77 million, to date, to disaster operations in Florida related to Hurricane Andrew. The Red Cross is reimbursed by FEMA only in special and limited circumstances.

For major disasters that receive a Presidential declaration, whether the Federal Response Plan is activated or not, FEMA will reimburse the Red Cross for temporary accommodations provided to disaster victims who are later found to be eligible for FEMA's Temporary Housing Assistance program. Even with regard to this program, FEMA does not reimburse the Red Cross for administrative expenses, expenses prior to the incident, and expenses for victims not eligible for FEMA assistance. The costs of temporary housing after a disaster that does not receive a Presidential declaration are also not reimbursed. We expect to be reimbursed approxi-

mately \$2.6 million by FEMA under the Temporary Housing Assistance Program for Hurricane Andrew expenditures.

When acting under the authority of the Federal Response Plan, the Red Cross is eligible for FEMA reimbursement of expenses related to the specific functions of EF 6, mass care, including coordinating the provision of food and shelter, bulk distribution of relief supplies and first aid. Our mass care expenditures for Hurricane Andrew were approximately \$7.8 million. The Red Cross anticipates but has not yet requested reimbursement for this amount.

Question. Last year Red Cross President Elizabeth Dle wrote to the Appropriations Committee requesting reimbursement for disaster expenditures associated with events which occurred in U.S. territories in the Pacific and the Caribbean. Unfortunately budget limits precluded any appropriations at that time for these needs. Has the Red Cross explored with FMA possible solutions to this problem?

Answer. The Red Cross wrote to Senators Byrd, Hatfield, Mikulski and Garn on July 7, 1992 requesting an increase of \$34.4 million in FEMA funding to reimburse the Red Cross for a series of extraordinary disaster relief operations in the U.S. territories in the Pacific and Caribbean in 1991 and 1992 and for projected offshore disasters in fiscal year 1993. Although the subcommittee was not able to provide relief, our inquiries prompted the Defense Appropriations Subcommittee to authorize the Department of Defense to expend funds in their fiscal year 1993 appropriation for this purpose. While this resolved the problem temporarily, we still need to develop a long-term solution to this on-going problem.

Disasters that strike American territories in the Pacific and the Caribbean often require a significant expenditure of Red Cross funds without any possibility of support from fundraising. The usually generous American public is often unaware of off-shore disasters and their extraordinary cost. Disasters outside the fifty states usually receive very little media attention and the Red Cross has historically had difficulty raising sufficient funds to cover their high costs. Many Americans are not aware that these territories are part of the United States, and that their residents are entitled to the same level of service from the American Red Cross. Island disasters also pose unique logistical challenges and inordinately high relief costs for the Red Cross, when relief supplies and personnel must be transported long distances to help disaster victims, and fewer voluntary organizations are available to lend their resources to the relief effort.

In the last ten years the Red Cross has spent more than \$105 million assisting victims of 27 disasters in Puerto Rico, the Virgin Islands, American Samoa, Guam, Palau and the Northern Mariana Islands. We were able to raise only a small percentage of this amount from contributions. The Red Cross may need to seek Congressional assistance to resolve this critical problem in the future.

CONCLUSION OF HEARING

Senator MIKULSKI. This concludes today's hearing. This subcommittee stands in recess, subject to the call of the Chair.

[Whereupon, at 12:55 p.m., Wednesday, January 27, the hearing was concluded and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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