

FLORIDA'S CIVIL DEFENSE PROGRAM

Introduction

"The question of relations of the states to the Federal government is the cardinal question of our constitutional system. It is a question which cannot be settled by the opinion of one generation, because it is a question of growth, and every successive stage of our political and economic development gives it a new aspect, makes it a new question."

-Woodrow Wilson-

Woodrow Wilson's classic comment could as well have referred to the states and their political subdivisions. Although in general following the Federal guidelines, the state of Florida's disaster preparedness has been beset with controversy about centralization vis-a-vis local control. The crux of the matter is delegation of some emergency powers by the Governor and greater local control over essentially a State dominated program.

Background

Recognizing the state's vulnerability to natural disasters, the Florida legislature responded in 1941 by enacting the Florida Civil Defense Council Act, Chapter 202.1.2 Florida Statutes. This Act preceded some ten years of general laws intended to regulate disaster preparedness. The 1941 Act authorized the Governor to establish a State Defense Council by proclamation in times of need or emergency. The Governor appointed members to the Council and served as its chairman.

The Council was to perform as a coordinating body for local, state and Federal civil defense activities. Use of existing facilities, and resources was emphasized as well as formation of defense councils at local levels of government. The Council was authorized to establish regional and local councils as well as looking into interplay among emergency services providers. As part of its duties, the Council was to make legislative recommendations to the Governor. Amendments to the law during 1942 left the original intent untouched.

In 1943, Florida Statute (F.S.) Chapter 21797 was enacted to deal with wartime civil defense needs. Law enforcement and fire services personnel were authorized to enter private property to enforce blackout, and air raid orders. A separate Act in the same year, F.S. 21763, provided for mobilization of fire

services to serve the common defense in the event of war. This Act anticipated need for fire services beyond that available in a particular community and specified the rights, powers, and duties of firemen rendering aid outside jurisdictional boundaries.

The Florida Civil Defense Act of 1951

During 1951 the legislature expanded civil defense legislation to include response to and recovery from natural emergencies. This action was in response to lessons learned during a number of hurricanes that threatened or struck the state and an increase in population. The Florida Civil Defense Act of 1951, F.S. 26875, specifically recognized the responsibility of local government in emergency operations. It was consistent with national legislation, the Civil Defense Act of 1950, PL 920, which limited the role of the Federal government in civil defense matters. The Florida Act authorized establishment of a State Department of Civil Defense, retaining a council consisting of the Governor and his cabinet to oversee activities of the new department. Although the Department was responsible for coordinating activities, the council retained a position of authority to assume control of operations beyond local capability, entering into agreements with other states, directing local boards of health, and some regional matters. The Council was provided emergency powers in the event of enemy attack.

The 1951 Act recognized the importance of the role of local government by directing that each county establish a civil defense council. Cities were authorized to take part in the county council or to establish separate councils. Each local council was authorized to appoint a director responsible for all civil defense functions within that political subdivision. Each political subdivision was authorized to spend funds and enter into contracts to provide for the health and safety of local residents in the event of a disaster. Each local organization was responsible for coordinating its plans with those of the state and Federal governments. The local councils were authorized to make, amend, and rescind orders, rules, and regulations found to be necessary for civil defense, consistent with actions of the state council. Orders, rules, and regulations of either the state or local councils had the force and effect of law when filed with the Secretary of State or local clerk of courts.

In the event of a natural disaster, the state council could make available to the affected area any equipment, services or facilities owned or operated by the state or local council. The state and local governments were not liable for damage to persons or property caused by civil defense activity. The legislation prohibited political activity by civil defense organizations.

In 1965, (Chapter 65-504) a statewide Civil Defense Advisory Board was created to advise the Governor, Council, and Department Director on matters concerning civil defense. A section was also added which conferred on governing

bodies of counties and municipalities the authority to declare a state of local emergency within their boundaries. The Governor was given similar power. The local state of emergency was not to exceed 48 hours but could be extended by the Governor. This legislation specifically dealt with emergencies and disasters resulting from natural or accidental causes. During the period of emergency the Governor and political subdivisions could do what was necessary to alleviate suffering and restore public facilities and services. The county civil defense director was charged with coordinating all matters involving civil defense within his county, and with acting as a liaison between the state and other local bodies.

The Reorganization

Between 1965 and 1974 state reorganization occurred. In 1969 the powers and duties of the Department of Civil Defense were transferred to the newly-created Division of Emergency Government in the Department of Community Affairs (Chapter 69-106, Laws of Florida). The legislature also abolished the State Civil Defense Council and the Florida Civil Defense Advisory Board and transferred their functions to the Department of Community Affairs. Violations of provisions of the Civil Defense Act were made second degree misdemeanors.

Current Legislation

During 1974, Chapter 252, Florida Statutes, was completely rewritten as the State Disaster Preparedness Act, and the Division of Emergency Government was renamed the Division of Disaster Preparedness (Chapter 74-285, Laws of Florida).

The 1974 Chapter 252 drafted by the Division of Emergency Government centralized authority at the state level. It reflected the thinking of staff that the effectiveness of the program would be improved by tighter management at the state level. They considered that more was known about "good management practices" or more effective ways to use emergency resources and funds. A state level organization would also be in a better position to learn more about the program and transmit it to the local level. Centralization would permit detailed standards, planning, and other requirements which the locals would have to comply with to be in conformance with the law.¹⁴ This approach was naive and unrealistic as was seen in later developments.

The 1974 Act provided the Division with substantial authority to supervise and control all and any problems arising from a disaster and to promulgate rules and regulations having the force of law. The Division was responsible for coordinating state, Federal and local activities. Detailed planning requirements and other prescriptive regulations were subsequently promulgated by the Division which also performed as a clearinghouse for information. There was no provision for local emergency powers. The authority to declare a local state of emergency was rescinded. All emergency powers were retained by the Governor.

There was no restraint on political participation.

The Act required each political subdivision to create a local organization to support the State's program. The appointment of a local director was subject to state approval. A local director was responsible for coordinating all disaster preparedness functions within the county and serving as liaison with other local organizations. The Governor retained ultimate responsibility for both local and statewide disasters.

An amendment to the law in 1977 (Chapter 77-47, Laws of Florida) gave the Governor authority to use mobilize state forces to assist the private sector in clean-up and recovery measures during disaster/emergencies. There was no provision authorizing entrance onto private property.

In 1979 further reorganization took place and the Division of Disaster Preparedness became a bureau within the newly created Division of Public Safety Planning and Assistance (Chapter 79-190, Laws of Florida).

During 1980 legislation was enacted requiring local agencies to provide for voluntary registration of disabled citizens within the area (Chapter 80-191, Laws of Florida). The purpose of the registration was to determine who would need special assistance in the event of an emergency. The definition of the term "disabled" was never spelled out and counties were left to their own interpretation. As with other legislation and regulations promulgated during the period there were no provisions to make funds available for implementation.

Of some consequence, in response to a challenge of the provisions of the 1974 Act concerning local disaster preparedness directors, the Attorney General (AGO 76-84) rendered an opinion that the director was responsible only to the governing body of the county and the Division of Disaster Preparedness, and could not be placed under supervision of an intermediate county official. This opinion is in consonance with and supported by the stated purpose of the legislation "to provide effective and orderly governmental control and coordination of emergency operations in disasters and emergencies." (FS 252.38) This opinion gets to the very basics of emergency management -continuity of government as the bottom line for the entire program.

The Florida Civil Defense Association

On December 10, 1956, five county Civil Defense Directors met in Orlando to discuss the prospect of organizing an association representing local directors. A meeting was later held in Orlando during June, 1957 to discuss organizational details, select a slate of officers and develop by-laws for the Florida Civil Defense Association.

Although the stated purpose was to work for civil defense and provide for

interchange of information, meetings continued to be oriented toward comradeship and social activities.

Changes in leadership at the state level with Governor Graham's Administration in 1978 led to a cast of characters not previously associated with civil defense and disaster preparedness. This "changing of the guard" resulted in program direction to further centralize power by exercising authorities contained in the 1974 Act. During 1978-1981 a number of administrative rules were promulgated detailing requirements and regulating local activities. The program which stressed detailed planning and detailed administration was not well accepted at the local level. The detailed prescriptive approach did not work for clear enough reasons it is impossible to write detailed rules to fit every emergency case, the differences between counties, lack of expertise at the state level in writing and experience in administering the rules, and lack of consistency between state actions and their own rules, assuming even that an administrative solution was possible.

Insecure with state actions, threatened with increasing administrative state imposed work loads, increased competition for funds at the local level with no funding assistance from the state, and faced with accountability to local elected officials, the local directors looked to the Florida Civil Defense Association (FCDA) to sponsor their cause.

Originally organized for social purposes, the FCDA became the organization for expressing the discontent of the local directors. The feeling which grew like a groundswell broke during the presidency of Mr. Robert A. Lewis from Lake County in 1981. House Bill 189 authored by the FCDA legislative committee was an attempt to correct the imbalance of the 1974 Disaster Preparedness Act. In brief, it would have amended the Act to authorize the declaration of local emergencies, authorized the delegation of certain powers by the Governor and clarified certain sections of the Act by language changes. The Bill was to be sponsored by Representative Everett Kelly of Lake County's legislative delegation. It was opposed by the Department of Veteran and Community Affairs (DVCA) on the basis of weakening the emergency power of the Governor.

The proposed bill never came to vote, and instead was withdrawn so that a compromise could be worked out. Subsequently, the staff of the House Committee on Community Affairs was detailed to study issues involved and make recommendations for legislative action. Details of the study are included in a following section. The study had little influence on the program and was overtaken by other events.

Funding Considerations

Section 252.49 of the 1974 Act addresses authority to accept Federal grants and assistance. Under this authority the DVCA accepts grants from FEMA for

distribution to local communities. Guidelines concerning the grants appear in the FEMA Federal Assistance Handbook, CPG 1-3. Chapter 2.7 of CPG 1-3 notes that funds should be distributed "equitably" between state and local requirements with state policy subject to FEMA review. Responding in part to a state audit report criticizing the rationale and accountability for allocations, the DVCA developed and filed a new rule, 9G-11, Funding Formula, based primarily on capital (Population) which acted to allocate funds with no relation to principles of equity. The FCDA analyzed the rule and posed a number of objections both technically and constitutionally under provisions of the Administrative Procedures Act, FS 120. The same objections were expressed in public hearings. Despite expressions of sympathy, the rule was filed for adoption and a tentative listing of county allocations was distributed -47 of Florida's 67 counties would receive only \$3,800. This was not enough to sustain personnel positions in the counties despite the fact that many had already experienced large scale emergencies and were in a high risk category. Faced with dwindling property tax revenues, some of the rural coastal counties were faced with disbanding their emergency management organizations. The reaction was spontaneous. Legislative representative bombarded the DVCA resulting in delay of adoption date of 9G-11 until February 15, 1982. Finally becoming aware of the controversy, the Governor held an audience with the FCDA, legislative representatives and the DVCA. The state was committed by the Governor to work out the details of a funding formula acceptable to the counties, and the State Association of County Commissioners (SACCO) was enlisted as a coordinating body. The effective date of the rule was set aside until October 1, 1982. In the interim, the FCDA and DVCA worked out details of allocating fiscal year 1982 funds based on a basic entitlement for personnel salaries. Funds available after allocation for salaries was to be distributed through competitive application.

While the tempest raged around Rule 9G-11, the FCDA, with a now alerted and responsive legislature, again entered a bill to amend the 1974 Act. The amendment, House Bill 759, passed the House and Senate Committees unanimously, but was never brought to the floor for a full vote in the waning days of the 1982 legislature where tax and reapportionment issues held the day. With direction from the Governor's office, the DVCA Publicly supported House Bill 759, but succeeded in adding an innocuous amendment relating to the Civil Air Patrol which resulted in returning the bill to Committee.

The House Committee Study

The study resulted from testimony in 1981 during hearings on HB 189. It consisted of a survey of local civil defense directors, meetings with DVCA staff, some information from other states, contact with Federal officials and telephone contact with officials of nuclear power plants in the state. During discussions with the principal investigator, Mr. William Hightower, it was learned that the survey form had been developed with advice from the DVCA staff.

The survey questions primarily addressed degree of county compliance with state rules. Almost a perfect example of designing a survey to produce inclusive answers about the issues at stake. Three recommendations resulted, all relating to increasing staff at the state level. As it turned out, and as discussed in a previous section, the study as well as discussions about amendments to the 1974 Act were overtaken by events. The DVCA action in attempting to make a rule which impacted on county funding and threatened job security did more to bring the local civil defense group together than almost any other previous event. Suddenly, there was strong support in the legislature, and, as the election year approached, there was a receptive audience in the Governor's office and a promise to consider local options.

Personalities and Politics

The man-caused or wartime aspects of civil defense parallel military planning in many respects. Quite naturally, former military career officers whose years in service had given them extensive experience in planning and operations were attracted to civil defense work, not only in Florida, but nationally. As a group, most were apolitical, in the 50 age bracket, had been exposed to education and training at government expense, and enjoyed military retired pay. Returning part of the nation's investment in preparing the civilian populace for disasters, even at low pay, was perfectly logical. The group could be characterized as conservatives who believed in local control and less state interference. Their orientation was toward tracking related disasters. The group trusted and communicated with each other and with their professional contemporaries at the state and regional levels. After all, they had held positions of responsibility and exceptional authority in management and operations in an intensely competitive military environment. They considered themselves professionals with technical training and experience, above political mechanisms, and not subject to political rotation.

All this changed in 1979 after the Graham inauguration. A retired navy veteran who had headed the state disaster preparedness division since 1973 was replaced as the director by the husband of the Lt. Governor's secretary. He had been a public school principal but had no experience in other disaster operations. The division was downgraded to bureau status and the office head then promoted to a position in a newly created Division of Public Safety. The director in turn was replaced as bureau chief by a planner whose personal friendship included an aide to the governor. This individual in turn leap frogged over his predecessor to become the division director where he continued direct involvement in disaster preparedness activities. His position as bureau chief was then filled by a former Department of Environmental Regulation employee during May, 1981. This individual resigned in January 1982 to be replaced from within the bureau by an employee whose expertise was in labor relations. In all, five persons held the top post in disaster preparedness in a 3 ½ year period, of whom only one had any background in civil defense.

Within the bureau, old line administrators, planners, radiological defense officers, communications technicians, and other experienced non-clerical disaster preparedness personnel emptied their desks and headed for the exits. An 85 percent turnover in staff occurred during the same 3 ½ year period mentioned previously. Many of the professionals had been on the job for a number of years and enjoyed good rapport with local directors. They also knew that their replacement--most fresh from college--were planners with no practical experience beyond the academic textbook. Few, if any, had been exposed to the rigors of completed staff work and detail involved in issuing directives or dealing with responsible officials at the local level. Few, if any, had military experience, were in an age group which had been exposed to the Viet Nam controversy, and were liberals in philosophy. Having been educated in the most recent academic management concepts, centralization and tightened guidelines were advanced to improve effectiveness. The conflict between the more mature ex-military group and the new planners was inevitable. During all this change, the ex-bureau chief, now division director, attempt to retain strict administrative control over the whole organization. Nothing was delegated, all correspondence, both outgoing and incoming was referred to the director. Letters prepared by the staff of even routine nature were "kicked upstairs."

Acting in response to new and shifting direction from the Reagan Administration, the director caused administrative rules to be promulgated concerning planning and funding allocation. At the same time, a major emphasis was placed on revision of state plans and meeting the Nuclear Regulatory Commission regulations relating to Florida's nuclear power plants. Failure to complete detailed staff work resulted in conflict between plans and rules, while provision of the state administrative code was interpreted in favor of the state or ignored. The rules were arbitrary and prescriptive as previously mentioned. The requirements for sparsely settled rural counties were the same as those for the densely settled urban counties. There were no provisions for appeal. The economic impact was glossed over as insignificant.

The Feud

The turnover in state personnel caused considerable concern at the local level. The civil defense directors as a group viewed the changes of personnel and direction at the state level with alarm. Attempts to bring their concern to the attention of the Governor were frustrated at the aide level and referred to the division director. Letters to the state were unanswered, replies unresponsive and in some instances, simply lost. For his part, the director attempted to discipline three recalcitrant local civil defense officials by corresponding directly with elected officials in their counties, asking questions relating to the performance of their civil defense organizations. The director also make remarks in public concerning the competence of local officials. This breach of judgment was not lost on local officials. Although purporting to support local efforts, the funding allocation formula previously

described directly impacted on jobs in 47 counties. The only explanation offered for the personnel turnover at the state level was that the staff "lacked educational credentials for planning." The state office also explained that the "Public always complains of ineptitude in state agencies--that bureaucrats don't understand problems of the ordinary citizen, that they lose case files and so forth."

As might have been expected, all this turmoil led to a credibility gap between the state and local officials. A questionnaire sent to members of the Florida Civil Defense Association during the preparation of this report sheds further light on the hiatus. Two-thirds of the respondents felt that the state office didn't understand the work of the local directors; one-third said Tallahassee didn't care either.

Most respondents said that Tallahassee hindered their ability to respond to disasters more than it helped. And 70 percent said that the state office had goals different from their own. Most said that they get more help from neighboring counties during a disaster than from the state, and that the planners should be moved to decentralized area offices where they could come to grips with local realities. One respondent commented: "The Tallahassee office is populated by unemployed sociology majors who evaluate the quality of work by its weight."

To the objective outsider, it would appear perfectly logical for the state official to march in lock step, arm-in-arm with local officials to further the program. The locals boast a voting constituency which can be organized to provide political support, while the state can help guide packages through the legislature and obtain state level support. This hasn't happened. In fact, each group lobbied fiercely against each other for money and power. The end result is that no one really wins. A state office is needed to administer the overall program, to act as a conduit for Federal funding, to establish priorities for use and distribution of funds, to provide technical services beyond the capability of local government and to coordinate response and recovery for regional disasters. The program is carried out at the local level by regular emergency services and citizen volunteers. The benefits, impact and constituency to prompt political action through the state legislature are at the local level. Even though the allocation of Federal funds emerged as a sensitive major issue, in reality, major funding support for local emergency management activities in Florida has exceeded State/Federal funding assistance by a factor of 3 to 1 over the last five years. At this point, one might objectively wonder who is supporting whom. In reality, a viable program requires a state/local partnership with mutual trust, confidence and communications among all the players. This may require a change in direction in Tallahassee or at the least, a change in management style. For their part, the old-line local civil defense officials should recognize that emergency management has a broadened scope that includes all kinds of disasters, natural and man-made, under a comprehensive

planning umbrella. Marking and stocking bomb shelters and setting up disaster hospital stock, checking and distributing radiological measuring equipment, albeit important, are only part of an overall system. The emergency management concept also encompasses hazard mitigation. Hazard mitigation in brief, embraces countermeasures to reduce hazard potential through such measures as land-use planning, zoning, building inspection and other types of regulation.

Crisis Relocation

The controversy concerning evacuation or crisis relocation is not new. The East River Study 4 as well as the Gaither Panel Report 5, prepared during the 1950's both addressed the problem of protecting the civilian population during and after a nuclear attack. The administration in charge of civil defense at that time advocated the construction of blast resistant shelters. This concept was rejected primarily on the basis of costs and lack of public support. The idea has been revived from time to time primarily depending on the threat at the moment. The Kennedy Administration considered not only public protection but also encouraging private home shelter construction through tax credits. Aside from a brief flurry of advertising for home shelters, no action was taken. Crisis relocation has been advanced by FEMA as the national policy.

At the present time, Florida contains 18 probable nuclear targets. They come in all sizes from the Miami metropolitan complex to tiny Port St. Joe in the panhandle. Approximately 7 million of Florida's 9.7 million population live in these high risk probable target areas. Aside from the airfields and population centers from the keys to Palm Beach on Florida's gold coast, FEMA has determined that the most likely targets in the state are the Fort Walton Eglin Air Force Base, Tampa/St. Petersburg MacDill Air Force Base and the Miami Homestead Air Force Base. Since these facilities have the capability to mount retaliatory strikes, it is assumed that they would be the first to come under attack. It is also assumed that there would be a period of deteriorating diplomatic relations perhaps occurring over a period of months or weeks that would signal an imminent exchange of nuclear weapons. Faced with a similar situation and basically the same civil protection strategy, the "trigger mechanism" to order evacuation would be a decision on the part of the Russians to start evacuating their cities and mobilization of their armed forces. Sophisticated satellite video systems would provide this information to U.S. decision makers. It is assumed that a 72 hour warning period would precede any attack during which evacuation of target areas would take place.

There is of course no guarantee against a first strike on the part of the United States should it become apparent that an exchange of nuclear weapons is inevitable and imminent. The proliferation of nuclear capability has provided a number of nations the opportunity to launch a nuclear attack. The stability of some of the governments which now have offensive nuclear capability is at best doubtful. Under threat, or perceived threat, there is no assurance such nations

would disdain from its use. Since there is no corner on the technological weapons delivery market, an unexpected attack on the United States is within the realm of possibility. This tends to invalidate the 72 hour evacuation phase. Be that as it may, evacuation is the national policy in the absence of viable alternatives.

At the local level, civil defense directors in both risk and host areas have serious misgivings. Host counties see an influx of unwelcome guests who may stay weeks or even months. The first responsibilities of officials, be they in risk or host areas, is to the residents of their own community. There is also concern that the evacuees would be entirely uncontrolled and would disregard property and rights of others in an attempt to save their own skins.

There is also apprehension by some that preparing for crisis relocation encourages nuclear adventure. This line of thinking looks at the civilian populace as hostage to deter nuclear warfare and would resist any type of population protection or preparedness. Others would freeze nuclear weapons and spend the money in the pursuit of peace. Despite all the discussion, evacuation of the risk areas shakes out as the only reasonable alternative to protect the population. The controversy concerning whether crisis relocation will or will not work may never be resolved in the absence of an actual crisis.

There is little question however, that many residents along Florida's coastlines would be directly impacted if a major hurricane should strike. These are the same areas where most of the nuclear targets are locate. In this respect, there is some experience on which to base predictions. Certain storm paths can be expected to produce a storm surge wave of water as high as thirty feet which would sweep inland after completely inundating coastal areas. The west coast of Florida is more susceptible to storm surge that the east coast because of differences in the ocean floor slopes. Southern sections of the peninsula and adjacent low lying areas will suffer extensive flooding from any hurricane. Storm surge is expected to result in more damage than the hurricane winds. Modeling possible storm tracks, intensities, and coastal points of crossing using data processing techniques, provides levels of storm surge and flooding. Although predictions of storm paths are not precise, storm tracking stations provide good information on storm intensity, current locations, direction of movement, and speed. This all adds up to some advance warning on where the hurricane will strike. As with nuclear crisis relocation, evacuation from the coastal areas is the only reasonable alternative. Evacuation planning would relocate coastal residents to higher land in central Florida. Evacuees would be hosted in the same inland coastal counties. The only real differences are the duration of time sheltering would be required, and the shelter facilities themselves. Hurricane shelters word be occupied during the storm period and while waters abated. This would be approximately three days. Shelters selected for hurricanes are substantial building which could sustain high winds. Nuclear shelters would be occupied for at least the duration of an

attack and until danger from fallout radiation passed, a period of a least three weeks, and perhaps months, depending on the type and yield of the weapons and the nature of the attack. Some facilities selected for nuclear facilities are ungradable, i.e., capable of providing protection by surrounding and covering them with earth. All shelters should provide feeding, lavatory, water and spaces for resting, communications, security, and should be managed by persons with some knowledge of group psychology and training in shelter operations. During peacetime, the Red Cross is the primary agency involved in shelter management. The Red Cross consummates agreements with facilities which have been identified as shelters. The agreements release the owners from liability and insures against damage. In the absence of such an agreement and adequate insurance, most property owners are reluctant to make facilities available as shelters. For the insurance to be effective, the shelter manager must have received Red Cross training. This is a volunteer program organized and conducted in cooperation with county civil defense officials. Identification of shelters for peacetime use is carried out by local civil defense officials working in cooperation with the Red Cross. Occupancy numbers are based on 40 square feet per person.

Surveys to locate shelters for nuclear emergencies are carried out under the National Shelter Survey (NSS) program which is administered by the Army Corps of Engineers. The NSS program updates nuclear shelter information on a seven year cycle by performing physical surveys. Information is made available to counties in computer format listing facility name, address, number of shelter spaces, protection factors and other details. The protection factor (PF) is a measure of the facilities' ability to protect occupants against radiation. The NSS listings also indicate whether the PF could be upgraded by piling earth on the roof and along the sides. The number of occupants which a shelter can accommodate is based on 28 square feet/person. Many of the Red Cross shelters are also on the NSS listing. In a nuclear situation the Department of Health and Rehabilitative (HRS) has been assigned responsibility to man the shelters.

Shelter Planning

Having identified shelter resources in the host counties, it is necessary to analyze shelter demand to determine the adequacy or inadequacy of accommodation. For hurricanes, the storm surge will affect varying numbers of people in the coastal areas depending on storm track and intensity. For purposes of analysis, several scenarios have been developed. In a worst case situation, a paralleling storm would require evacuation of the entire southern section of the state and all coastal residents in the storm path. A hurricane striking the inland area will produce mostly wind damage as well as some freshwater flooding. Because structures such as mobile homes which are susceptible to wind damage are threatened by any high winds (above 40 Knots), the same number of inland residents will require sheltering any time a hurricane strikes the area regardless of its intensity. For Lake County with a population

of 113,000 as an example, the number of residents who will require shelter is approximately 21,000. A total of 83,532 hurricane shelter spaces exist in Lake County. As part of the state's "grand plan" Lake County, as well as Orange and Osceola Counties, have been designated as host counties for evacuees from the Tampa Bay area. Potentially, as many as 330,000 evacuees would enter the three county area. Lake County could expect to receive approximately 194,000, or with its own residents who require shelter, 215,000 shelter spaces are required. This is approximately 132,000 in excess of existing shelter capacity. The excess would have to be passed through to areas farther north, or additional shelters must be found. The state planners have proposed pre-determination of shelters so that evacuees will know before hand exactly where to go. Local officials oppose pre-determination. Their plans would designate shelters on a priority basis first for residents who require shelters, then for evacuees from out of the county on a first come, first serve basis. Local officials say that the operational aspects of pre-assignment are unacceptable. They contend that a rigid shelter plan overlooks the need for flexibility to take into account the myriad of variables (i.e. shelter damage, storm track and intensity, road wash-out, personnel availability, driving conditions, etc.) which require continuing decision making and direction. A rigid plan necessitates separating the "eligibles" from the "ineligibles", requiring extra time and man-power. "ineligibles" would have to be directed to the correct shelter at some hazard to themselves and others on the roadways. There is no reasonable way to control arrival rates of evacuees. A rigid plan would use up some shelters while some might be nearly empty. And finally, there is no assurance that evacuees would voluntarily follow a rigid assignment in the absence of extensive enforcement control which is simply not available. To further complicate the matter, many of the current residents have never experienced a hurricane. Major changes in population have occurred in the last 20 years with extensive building along costal areas. Check points established at entry points of the county would direct evacuees to shelter catchment areas each served by a reception center. The same controversy surrounds nuclear evacuation plans and policy, although of a different magnitude. Lake County as an example, is designated as host for some residents of Hillsboro and Broward Counties. This could result in as many as 450,000 evacuees. The number of shelter spaces in Lake County is proportionally larger; 480,000 spaces have been identified including those which could be upgraded.

Evacuation Experience

Previous paragraphs have provided some insight into the crisis relocation difficulties when large numbers of persons are involved. Differences in outlook between state and local disaster preparedness officials involving not only personalities but also basic attitudes and backgrounds have been factually addressed. As a result of these discussions, problems about evacuation activities should become apparent. There is of course no experience on which to base nuclear evacuation, but the many parallels with hurricanes are obvious.

Actual experience with hurricane evacuation is not entirely relevant to the conditions of the 1980's since no recent major storm has struck Florida. In discussing evacuation with officials who have had experience, they agreed that the relocation process was hampered by lack of institutionalization of operation procedures on a regional basis. As an example, there was no exchange of information between coastal and inland areas about disaster planning. Coast officials failed to notify inland disaster preparedness officials. The inland counties did not know until the evacuees arrived that the coastal counties had issued an evacuation order. Even then, coastal officials provided only limited information about the extent and magnitude of the evacuation. The inland counties had no way of knowing the number of persons to be expected, when they were coming and what shelters would be required in addition to their own needs. The inland officials had no prior knowledge of evacuation routes. As a result, the impact of the evacuees on different parts of the county came as an unwelcome surprise. In brief, crisis relocation in the past can be characterized as a chaotic breakdown of communication and coordination between the risk coastal counties and the host inland counties. In the absence of information, the inland counties were unable to do the necessary pre-planning for routing and to meet the needs of the incoming evacuees. The inter-regional consequences of hurricanes was not understood at the state level and was not being properly addressed in local disaster preparedness planning. Decisions of coastal officials have a significant impact on the services and resources of inland areas. Inland officials are concerned that the coastal evacuees numbering in the thousands will adversely affect their citizens and governmental infrastructure and they feel that they have no real responsibility to these outsiders.

Regional Needs

Hurricanes are an intercounty phenomenon. A hurricane may devastate one county, but the impact does not stop there. The effects on one county may continue to ripple through counties far beyond the point of impact. A storm predicted to strike south Florida may result in hundreds of thousands of evacuees seeking inland shelter. A Broward County resident, for example, might have to travel through eight or ten counties before finding shelter. In each county, there are important ramifications concerning traffic control, shelter operations, food, fuel, all of which must be addressed through an institutionalized organization structure. This not being done by the state and perhaps cannot be done in the absence of trust and confidence of local officials in state administration and effective communications.

Rather than centralization at the state level, past experience points out the need for extensive inter-regional integration of disaster preparedness. In the absence of action by the state, local officials have taken the initiative by prompting changes to the basic legislation, developing mutual aid agreements and exchanging information through the Florida Civil Defense Association.

Primarily, the institutional structure is required to enhance and prompt the exchange of mutual information among and between counties. This communication is required for flexibility in plans and development of operating procedures to meet changing circumstances. In addition an institutional framework is vital to optimize coordinated decision making during the period of the emergency. This cannot be accomplished by centralization at the state level, and a prescriptive rigid planning format wherein a state official arrives to take charge of multi-county activities.

Service Needs

Functionally, various services in varying degrees are required to respond to and cope with any large scale emergency. Police, fire, emergency medical services, welfare, medical, pollution control, public works heavy equipment, and a myriad of volunteers at the least, may all be involved at some time or another. For an evacuation this all takes place within a certain time frame as presented in Figure 4 for a hurricane situation. In brief, a number of governmentally organized if not all services are involved. The initial comments in this paper remarked that special forces to cope with infrequent disaster needs are not economically feasible. What really happens is that all available resources are mobilized and then augmented or supplemented by citizen volunteers to meet the circumstances of the situation. As an example, an influx of 300,000 evacuees into Lake County in a three day period can be expected to create 30 emergency medical services incidents per day, 42 traffic incidents per day, and 10 fire/rescue incidents per day. This demand based on national information would completely overload the available public safety services in the county. With the exception of public schools and some governmental buildings, shelters are privately owned. The same holds true of buses owned by fruit packers, heavy earth moving equipment, pumps, radio stations, newspapers, automotive wreckers and so forth. This equipment and personnel must be voluntarily offered if the evacuation and sheltering operation is to be carried out. Despite the skepticism, experiences indicate that the outpouring of community effort to assist others in distress is overwhelming. Whether the same attitude in an evacuation involving an awesome number of "outsiders" for an indefinite period would hold is an unknown. Much of the same type of methodology would be used in developing evacuation and shelter in the event of a nuclear situation.

The previous discussion is intended to focus on the need for flexibility in coping with wide scale emergencies; and for an institutionalized coordinated mechanism. There is no a-priori prescription or one best way. As the situation progresses, fire services may be in charge, or perhaps law enforcement services or special hazardous material forces at a particular time. To some extent or another the whole community could be involved and certainly would be during a major evacuation. These traditional services are organized around political subdivisions, they are supported by local taxes and constrained from offering services beyond local boundaries. By contrast, an evacuation involves a

regional response. Law enforcement, police, fire, EMS, traffic control, and volunteers should be available to offer services across county lines. Declaration of an emergency directing evacuation by the Governor is not enough in the absence of a formalized coordinative mechanism, standardized operating procedures and cooperative communications. The National Guard and armed forces stationed in Florida have defense responsibilities and may not be available to assist. In the words of Mr. Lee Thomas, Associate Administrator of FEMA: "Communications is the most vital agreement in handling emergencies."

How will it work in Florida? Probably not too well. The technical aspects of developing a sensible program are being lost in the detail of the planning format which overlooks content, and fails to recognize local responsibilities. Dade, Broward, Palm Beach and the Tampa Bay area simply have too many people who would be clogging too few roads to reach havens in central Florida. The geographical location, limited roadways, high population concentration and lack of public transportation make complete evacuation impossible. 16 Dade's problems are most critical because its residents have furthest to go to reach a host area and there is no adequate public transportation. One in five people in Dade County doesn't own an automobile. This means that more than 300,000 persons, many elderly, would have to be transported somehow. But, there aren't enough buses, and there aren't enough drivers. Martin Bishop, assistant director of Dade County's civil defense program remarked in an interview: "Crisis relocation is dumb. We'll do it because we have to, but the chances of it working are mighty slim."

Nuclear Power Facilities

Florida is the home for four nuclear power facilities. A fifth is located adjacent to the state boundary in Georgia. These privately operated for-profit facilities are licensed by the Nuclear Regulatory Commission (NRC). Basic responsibility for licensing rests with the NRC and are detailed in Nuclear Regulation (NUREG)-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. Executive Order 12241 transferred responsibility for review and approval of state plans for nuclear power from the NRC to the Federal Emergency Management Agency (FEMA). It also updated planning criteria, assistance priorities and off-state funding responsibilities.

In addition to detailed safety regulations, safe and fail safe devices, warning systems, plan, exercises site considerations, environmental aspects and other regulations, planning involves communities in proximity to and downwind from the power plants. The underlying philosophy relating to nuclear power in these communities is that the power companies should bear the expense of preparing for and recovering from nuclear accidents. In reality, these costs are passed along to the public consumers whether or not they live in endangered areas.

The state is involved in overseeing the entire planning process and compliance with NUREG 0654. Failure to do so could result in license revocation with a substantial financial impact on the power companies are geared to accept any reasonable cost to insure compliance with regulations. The power companies are an extremely powerful interest group operating under a guaranteed profit monopoly. Understandably every effort is made at the state level to satisfy the power companies. The end result is that nuclear power activities are a high priority effort. For their part, the local communities involved enjoy a subsidy from the power companies which may exceed local funds in those counties hosting nuclear power plants. Other disaster preparedness requirements tend to be overshadowed by nuclear power planning remote as the potential for an accident might be.

A New Outlook

From a position of comfortable security (in obscurity lies our security) Florida's civil defense program has been thrust into the glare of public scrutiny. Local civil defense officials are suddenly faced with a massive task. Not only do they have responsibility for protecting the local populace from hurricanes, nuclear power leaks, transportation accidents, hazardous material spills and lesser horrors, but the state has suddenly required that they also develop plans to evacuate entire segments of the populace in case of hurricanes and nuclear attack. The technical demands in developing a sensible plan appear to be overwhelming to many local directors, and all they see coming from Tallahassee are more demands with no positive direction, empathy or financial support. Many are frustrated and angry, and the anger is being directed at Tallahassee.